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A DOUBLE HELIX MODEL FOR UNDERSTANDING THE EVOLUTION OF TECHNOLOGIES AND ASSOCIATED MARKETS

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ABSTRACT

Studies analyzing the impacts of technological innovations on industry development note the different effects radical innovations have versus incremental ones. The studies then mostly proceed to focus on either the technology cycles that take place or the market development cycles without really explaining the interaction of the two. In this paper we present a model of industry development that takes into account the dynamics of industry-level effects on innovation through understanding the interplay between technology development cycles and application development cycles. We argue that these two cycles go through a linked, predictable pattern that we have laid out and call the double helix. We validate the model by presenting a detailed history of the personal computer (PC) industry. PCs have gone through three distinct technology cycles (8-bit, 16-bit, and 32-bit processors) and three distinct application cycles. The model explains how companies can succeed in the various stages of each cycle and refines our understanding of what is the significance of being first to market and why pioneers so often burnout.

INTRODUCTION

Several studies have described the dynamics of radical innovations entering the market. These studies can be divided roughly into two groups: those that describe the changes in the technologies and those that describe the changes in the market. What has been missing, however, are studies on the interplay of the two - the changes in the technology and the changes in the market, which consist of changes both in the types of customers and in the applications that the technology is to perform. We argue that the dynamics of industry-level effects on innovation are better explained through an understanding of this interplay.

Studies on the dynamics of technology development consider issues such as the relationship between product innovation and process innovation [1, 67], the timing of technological transitions [26, 27], the patterns of technology substitutions [19, 58, 59], the pre and post dominant design changes [1, 5, 67], and the differences in radical innovations versus incremental innovations [2, 3, 12, 22, 33, 66]. These studies most often are variants of punctuated equilibrium models, where radical innovation is followed by periods of incremental innovation (for a good review of this literature see Lawless and Anderson [42]). When a period of stability is interrupted by a radical innovation, turbulence ensues and existing competitors can be swept from the market [12, 33, 66, 67]. These studies look mainly at the technology dynamics and cannot really explain why some companies fail in turbulent states while others succeed.

The other main research stream on innovation-market dynamics deals with the diffusion of innovations or how customers change over the diffusion cycle. This literature's main impetus was from the work of Rogers [52, 53] and has been fine tuned recently for high-tech products by Moore [48]. These

studies typically describe how innovative users are different from majority users but do not take into account how the technology and its application are also changing at the same time. An example in Moore is that in going from an early adopter market to a mass market a company must pick the right application, but is given no guidance as to how. In this paper we present a model to describe the interplay of technology development and market development, and then present a detailed history of the personal computer industry to validate the model. We close the paper with managerial implications derived from the model.

THE DOUBLE HELIX MODEL

The model presented in this section is designed to illustrate some of the basic issues that influence the development and adoption of new technologies from both a market and technology perspective. The premise of the model is that the core technologies underlying products inevitably go through both fundamental and evolutionary changes. To uncover the linkage between technologies, applications, and markets, it is useful to view the evolution of different generations of a given technology class as a spiral or helix with each level of the helix representing one specific technology cycle. Technologies without application, however, have no market value. Therefore, each technology helix necessarily has an associated application paradigm that uniquely exploits the technology and creates the initial condition for acceptance of the technology in the marketplace. The changes in the applications that eventually lead to market acceptance create an application spiral or helix. The linking of the two spirals is what is required for a technology to succeed in the market. This unique linking of the two spirals reminds us of a double helix so that we refer to this as the "double helix" life cycle model. It is inspired by the close relationship between the technology helix and the application helix.

Exhibit 1 shows a double helix depicting the major historical technology stages of the computer industry: mainframe, minicomputer, and microcomputer. The initial technology in the computer industry was the mainframe computer, which found its first major acceptance as an organizational record keeper. Using this application concept, mainframe companies such as Burroughs, Honeywell, Sperry and IBM began selling mainframes in volume to corporate and governmental organizations.

Following the mainframe, the minicomputer also had an associated unique application target market: scientific and engineering applications. The calculation intensive and more idiosyncratic world of scientific and engineering computing provided the relatively low priced minicomputer with its initial acceptance and utility. The size of this market opportunity proved to be much greater than if the minicomputer had just been viewed as a low-end replacement for the mainframe.

Finally, the third cycle of computing, the microcomputer, had associated with it a whole new genre of computing, characterized by personal productivity applications. For the computer industry, then, as the technology cycles evolved so did the application cycles to form a double helix.

The double helix model is also scaleable in the sense that it can be used to explore "mini-cycles": small technology cycles that occur within larger technology cycles. For example, the microcomputer cycle itself has had three mini-cycles: the 8-bit generation (i.e., Apple II and CP/M computers), the 16-bit generation (i.e., the original IBM PC with MSDOS), and the 32-bit generation (i.e., 80386/486 PCs with Microsoft Windows). These mini cycles are what we will detail in our historical analysis.

A cross-sectional view of the double helix model provides an understanding of the inner structure of each cycle (Exhibit 2). In this view, the external, side perspective of the double helix shifts to an internal, overhead view, in which one revolution in the double helix represents a complete technology life cycle and a complete application cycle. It is important to note that both views of the double helix model include a time component, making the model dynamic. Exhibit 1 provides a vertical depiction of the time component. Exhibit 2 shows the internal view as two concentric circles that, in combination, represent one complete revolution in the helixes. The inner circle depicts the fundamental technology underlying the technology cycle. The outer circle depicts the associated application cycle, the driving force moving the technology into the marketplace. In this view, the time component runs clockwise.

Failure of either of the two linked and interdependent cycles to achieve completion predicts market failure. The tight integration of cycles becomes clearer if we look at the circles as a clock with 12

o'clock at the top. We can then see how each circle progresses through a full cycle and how one cycle affects the other.

When a new fundamental technology is in the introductory stage, it is seldom obvious how and why it will be used by the market at large [10, 12, 21, 28, 43, 44, 45, 57]. Products based on the new technology typically sell in relatively small quantities to innovators who enter a period of experimentation and exploration. During this period of indeterminateness, which lasts from approximately 12 to 3 o'clock on the model, the innovators and technologists (generally for their own private reasons and passions) attempt to find utility in the technology. The period of experimentation and exploration is often a time of great excitement and promise, when a wide variety of options are explored. It is also a time in the evolution of new technologies when small companies are formed with the aim to either supply other innovators or to begin to commercialize some primitive but, apparently, promising application of the technology.

A company in this technology-driven part of the cycle has limited, if any, salient market information. Simply put, markets for the technology do not yet exist in a tangible and measurable way. The companies who develop new fundamental technologies are forced to bet on a particular model of technology usage. And, most likely, they will be wrong. Only a relatively small percentage of those early explorers actually hit upon the unique application concept that will ultimately foster a complete cycle. In the best cases, companies make cogent and perspicacious assumptions about markets that are forming. Accurate assumptions result from prior knowledge and experience, anecdotal feedback from people who are viewed as leading edge representatives of the formative market, or simple intuitive prescience. Each success gained by the early players reinforces their vision and beliefs.

Thus, the early part of the cycle suffers from the necessary evil of supply-side or empathic marketing [43, 57]. This type of market orientation represents the "I-know-what's-best-for-you" approach to product and market development. A firm with this style introduces itself and its new product by telling the market how important the product is, independent of how the market perceives its own needs. It is a true technology push. While, as noted, this supply-side marketing phase necessarily results from limited access to reliable market information, it also has two significant imbedded risks: The first is that the decisions themselves may be wrong; the second is that the company may perpetuate a decision making style that becomes non-responsive to growing market feedback.

The base technology and the products derived from it will begin to sell in increased volume when one or more of these new companies, often run by inexperienced and undercapitalized entrepreneurs, stumbles upon a use for the technology that has value for early adopters in the marketplace. This point, which occurs around 3 o'clock on the model, marks a significant event in the evolution of the technology: The emergence of a unique concept that differentiates the technology from previous technologies. A new technology and market cycle are truly born when a unique concept arises making it possible to accomplish something not feasible with prior technologies [12, 28].

Yet, even for those innovators who have struck upon the "right idea," the probability of eventual success is fairly low. Timely discovery of the right concept only raises the other critical questions: What is the product? How is it produced? What is the market opportunity? How rapidly will the market mature? Who are the likely first adopters? How is the company financed? How will they sell the product? While these issues, and others, significantly impact the eventual success or failure of a new venture, perhaps the most important is the question of the product: What specific implementation best demonstrates this new technology's unique value?

Getting the correct embodiment of the technology for a particular application, however, is the necessary first step for success but does not guarantee it. To be successful at this stage a company must evolve from a group of technologists to a group with management capabilities. Additional issues for success become: “Has anyone built a company before? How are priorities set? Who has responsibility for what? How do you decide precisely what to make and how to sell it? Where does the money come from?” It is this critical period, between 3 and 5 o'clock, when the issues begin to shift from vision to organizational ability and resources that becomes the next crucible for the evolving industry.

A selection process takes place that ultimately produces a great number of corporate failures. By 5 o'clock in the cycle, only a very small percentage of the original players survive the technology-driven phase and successfully transition to the market-driven phase of the cycle [48, 50, 64]. The important

point is that a company must pass through a number of gates before it can become a viable, cycle-long vendor of new technology. Recognizing a new technology's importance and its promised revolutionary application is only the starting point. Beyond the act of recognition, the companies must be able to correctly gauge the new technology's best use and then must build and evolve products embodying that concept.

Both the companies selling the underlying technology and those selling the applications and products based on it soon will begin to grow rapidly as sales accelerate into the classic "S" curve of market penetration. When the penetration reaches critical mass in the ten to fifteen percent range, one or more technology "standards" usually become established in the marketplace, and a dominant design paradigm is accepted [1, 5, 13, 52, 53, 67]. These standards are not always the apriori standards imposed by organizations. *Rather, a standard is most often established when the market begins to behave as if having the new technology is no longer a competitive advantage for early adopters but, instead, not having it creates a competitive disadvantage for the laggards.* Once this happens, other forms of the technology languish or disappear completely. As an example, the consumer video taping marketplace defined VHS as the standard for VCRs, relegating Beta to footnote status.

A number of interesting things happen within the application cycle when the technology becomes a standard at 6 o'clock on the double helix model. First, the original suppliers begin to deliver new and improved versions of their original products. Second, as the installed base for the fundamental technology (e.g., IBM PCs and compatibles) expands and becomes more ubiquitous, new players enter the market with focused, niche market applications of the basic concept. This is a period of "variation and refinement." Many technologies find that this can be a very long lived period, lasting many years and even decades. The greater the general value the fundamental technology demonstrates, the longer this period lasts.

A growing responsiveness to external input characterizes the market-driven part of the cycle that commences around 5 o'clock on the model. The transition from a technology-driven to a market-driven company is a critical one. The company in transition goes from "inside-out" thinking to "outside-in" thinking. Typically, the technology-driven phase is dominated by an entrepreneur that champions the vision embodied in the initial products. The vision is internally generated and the product springs as "whole fruit" on the market. The accuracy and persistence of the vision of the champion creates the product. The market in this phase has little or nothing to offer by way of direction for product development. In other words, the technology-driven part of the cycle is dominated by a necessary "arrogance of vision". A concern for understanding, expanding, and reselling the now well-defined marketplace dominates the market-driven part of the cycle. Customers are suddenly recognized as having important insight and input into the future direction of the company's products though they were previously considered to be "too dumb" to understand how and why they might gain advantage from the new technology.

Coincidentally, rapid growth in both the revenue and size of the company generally accompanies the transition to a market-driven company. During this phase the old decision makers often give way to new ones and both the market and new employees increasingly associate the company with a specific product or service. Internally, marketing and sales begin to occupy positions of greater importance. Upper level management increasingly relies on these parts of the organization to develop the plans to move the company forward. The original entrepreneurial spirit rapidly declines, replaced by a more process-oriented organizational perspective. The customers and, by association, the company's revenues, become the only important measures of success.

Eventually, however, the underlying technology begins to "mature." Limits on what the technology can reasonably accomplish are reached [26, 27]. This mature stage in a technology's evolution inevitably demonstrates the need for the next cycle of technology and application development. Far sighted individuals may sense the need for a new development well before the limits are reached. As the limits are reached, it becomes obvious to technology and application suppliers that the time has come to prepare for a new period of innovation, similar to the one that originally spawned their company.

We do not mean to suggest in Exhibit 1, that a new cycle cannot be started until an old one is complete - quite the contrary. The 12 o'clock stage of a new cycle may start during the 6 to 9 o'clock stage of the preceding cycle. The minicomputer did not immediately die when the new microcomputer

technology was introduced. In fact, minicomputer technology continues to evolve and service customers twenty-five years after microcomputers began to appear. A more realistic assessment of this phenomenon is that new technologies can limit the available market for older technologies, eventually subsuming significant portions of the old market. In the extreme, new technologies can potentially replace and, therefore, kill the older technologies [19, 58, 59].

Indeed, as the cycles of one technology and marketplace mature, the seeds of the next cycles are already planted. Each successive generation will follow this pattern. Together, the two cycles create a new generation of products that will go through a linked, predictable and evolutionary life cycle with the well-recognized stages identified above. We represent this important linking as a double helix.

The recent and rapid evolution of the personal computer industry provides an interesting test-bed for assessing the double helix model. In many respects, the personal computer can be viewed as one major cycle in the overall development of the computer industry. The personal computer, however, also stands on its own as a series of quickly changing cycles moving from the primitive 8-bit microprocessors of the mid 1970s to the 32-bit based machines of the 1990s. (See Exhibit 3 for a listing of the major milestones in the development of the technology.) The different natures of these cycles and the obvious impact they had on the companies attempting to exploit the market opportunities make the personal computer an ideal subject for analysis using the double helix model.

THE PERSONAL COMPUTER

First Cycle
A new technology in search for an application.

The double helix model suggests that the personal computer industry would arise from the introduction of a fundamentally new technology in search of an application. In support of this expectation, the personal computer industry traces its beginning to the introduction in 1974 of the Micro Instrumentation and Telemetry Systems (MITS) Altair home computer kit based on Intel's 8080, 8-bit microprocessor, which sold for $400. An estimated 10,000 Altairs were sold, making it the first commercially successful microcomputer [15]. Until this point microprocessors, though technically revolutionary, were not thought of as the basis of independent computer systems or the province of the individual computer user. Rather, the earliest microprocessors, whose development started in the late 1960s (notably Intel's 4004 and 8008), were devices developed with the specific purpose to improve the cost/performance characteristics of commercial calculators. In that context, the microprocessor represented an evolution of previous cycles of the calculator industry, not the computer industry. It did not have an independent life of its own. The MITS Altair changed the nature of the microprocessor forever.

The Altair introduced a world of computing under the control of the individual. It was a concept that was previously heretical: The computer was not thought to be the slave of the individual, rather the reverse was assumed to be true. Human time was considered cheaper than computer time so people lined up with their stacks of punch cards waiting for their seconds of computer time. The MITS Altair radically altered this world view. But this was a primitive world that consisted of a computer without a keyboard, monitor, storage, manuals, support or applications. It was a computer for technical enthusiasts on the edge. From a pragmatic point of view, it was without utility. As Bill Gates said in his 1995 Comdex address:

> If we go back 20 years and we think about the earliest personal computer, this MITS Altair with the paper-tape BASIC, I think it's fair to say that this did not help knowledge workers at all. It was a kid's computer; you would go home at night, try and put the thing together--about half the people who bought it actually successfully got it put together. The programs would blink the lights. At best you could play tic-tac-toe, but it was kind of a miracle that individuals could own a computer, and it was fascinating to put it together and figure it out. [16]

While the "calculator" problem gave an initial commercial impetus to the microprocessor, as Bill Gates stated the initial home or personal computer was of no commercial value. Some people, however, simply felt that there was something here of interest. What that thing of interest was, was still to be

discovered, but these people were eager to explore. This was an exciting time for hobbyists and fanatics. It was a time for experimentation and exploration: "What can I do with this thing? Is there a business here? How do I make a better one?"

It was noon on the first cycle of the personal computer industry's double helix. The model presents a view of this stage, from approximately noon to three o'clock, when ideas are explored without being measured against customer value. The experimentation and exploration process, in and of itself, justifies the effort. Discovery is paramount and is driven not by financial returns as much as by the energy of the moment, and dozens of companies jumped in.

The Intel 8080 along with the MITS Altair were only the heralds of this new era of innovation. Established companies like Texas Instruments and Motorola, along with upstarts like Zilog and MOS, rapidly unveiled new and improved 8-bit microprocessors [17]. These chips harnessed into one wafer more power than the original ENIAC at the remarkable price point of under $100. The new products had arrived and were available to anyone who had an idea how they might be used. But what to do with them? These new processors simply represented raw power and undefined potential; their producers did not even put them in a package as primitive as the Altair.

The producers of the first microcomputers did not need to determine the application for their products because the first customers were willing to do so on their own. These innovative users were exemplified by the members of the Homebrew Computer Club.

> The first meeting was held -- where else? -- in a garage in the Silicon Valley on March 5, 1975, just after the introduction of the PC kit, the Altair. Thirty-two "enthusiasts," showed up, ready to exchange information and swap products. [36]

Companies were started in basements and garages to serve the hobbyists' desire for more. These hobbyists, who tended to be disaffected engineers working for large companies and lonely outcasts with nothing better to do, enlivened the years from 1975 to 1979 as a period of pure technical bravado and swagger about what they could do with their own, home computer. The Homebrew Computer Club, and its growing number of emulators, served as the primordial gene pool for the evolution of the personal computer industry. Taking what they could from the more established computer industry, the search was on for the "right" way to use these new little miracles: "Should we build robots? What kinds of games can we make? Can we replace expensive lab and test equipment? Can we automate our homes?" These were the questions that the club members asked. And every time they asked a question, the microprocessor took on new possibilities [41].

These hobbyists, in the main, were not trying to improve the concept, and the actual realities, of the personal computer for some greater societal purpose. They simply wanted to be the first to do something no one else had done before. So advances within the hobbyist community quickly developed. Instead of paper tape, cassette tapes provided programs and data. Instead of toggle switches and machine code, keyboards and assembly language were added. Memory increased. Boxes came pre-assembled. Monitors appeared. Graphics and sound were added. Chassis were created to plug boards in and create even greater flexibility. But to what end? The motives of the original explorers were as varied as those of all explorers: Some wanted wealth, some simply to occupy themselves, and some to achieve greatness. It is with all of these motives, and more, that the initial cycle of the personal computer's double helix was energized, but this was not enough to sustain an industry.

All technology/market cycles are, in the end, measured by their business success. This success is a result of many things but, at its foundation, it must emerge from the entrepreneur's desire for success. The personal computer industry was no different. Many "accidental" companies, such as MITS, Processor Technology, Cromemco, Zilog, and MOS, were jump started during this technology driven period. These were computers with nothing of external value to compute. It was a solipsistic, self-validating world in which the inventors were often also the customers. This was an exciting world to live in but one without long-term business prospects.

The application concept begins to emerge.

In our double helix model of the personal computer industry, we are now approaching the critical point of three o'clock where an idea that provides value beyond the enthusiasts either comes to the fore or the promise of the new technology will remain simply a dream. It is important to understand three things

about the emergence of a seminal idea that drives a new technology into the market as a tool of value to real people.

- First, the technology by itself is not as important as is the application to which it is brought to bear.
- Second, the application idea does not come from a market that is demanding it because the need is latent; instead, it is created out of whole cloth in the mind of a visionary [43].
- Third, the application, in order to truly be able to propel the continuation of the cycle, must accomplish something important that was not possible in previous cycles [12, 28].

The personal computer industry was waiting for its visionary and the visionary was waiting for the right personal computer. In 1978, this alchemy occurred in the brain of Daniel Bricklin, an MBA student at Harvard. The designation of Dan Bricklin (inventor of Visicalc), as the originator of the "idea that launched the personal computer industry" may surprise some. To many, Steve Jobs and Steve Wozniak, the founders of Apple Computer would appear, first and foremost, to deserve this laurel. While it is true that Jobs and Wozniak, with their entrepreneurial decision to design and market a personal computer with both technical and ergonomic aspects likely to appeal to broader markets, in many ways perfected the concept of the personal computer, they were, in the final analysis, still just makers of a basic tool with an unsure purpose.

Probably the clearest indication that Apple, as a company, did not truly grasp the unique potential for its invention is the fact that the first major software product, or application, that was marketed under the Apple label was the Controller. The Controller, an integrated accounts payable, receivable and general ledger accounting product, suggests that the leaders of Apple expected the market to accept their new mighty mite as simply a small big computer providing essentially the same capabilities as were popular on mainframe and minicomputers but in a cheaper and smaller package. By this action, Apple demonstrated that it did not fully grasp the unique position that the personal computer could achieve in the general population; they did not appear to appreciate that the personal computer could be applied to new and valuable tasks that were beyond previous capability.

This is, on the other hand, exactly what Dan Bricklin did grasp. Bricklin, who was already familiar with both traditional and personal computers, developed the idea that perhaps the new, smaller computer could be applied to a more personal form of computing than had previously existed: personal productivity computing. This idea was embodied in a program that could be used to visually and mathematically explore various scenarios in a controlled, "what-if" environment. This program called Visicalc, the first electronic spreadsheet, served as the idea that gave moment to the personal computer [8, 56]. Visicalc took the idea of the personal computer out of the realm of the enthusiastic hobbyist and gave a large market the ability to solve problems, and gain a level of control and assurance, that had never before existed [35]. Personal productivity computing, the paradigm that truly launched the personal computer industry arrived on the market in the Fall of 1979.

It was now three o'clock on the double helix. Up to this point, it is clear that the evolution of the personal computer industry was based on excitement, vision, and arrogance. External input from "the market" was not only not needed but not wanted ("I know what I can make this thing do and, once they see it, they'll want it"). This was a period dominated by technical, not market, forces. The double helix model proposes that this is a natural part of the introduction of a new technology but that, inevitably, the cycle's impetus transitions from being technology driven to being market driven. The model further suggests that this transition occurs not as the market awakens to the new possibilities presented by the new technology but at some later point. The question is when and how this transition took place during the first cycle of the personal computer industry.

The introduction of Visicalc alone did not push the emerging industry from its iconoclastic technology driven period to a more externally oriented, market driven orientation. While there were clear indications that a number of analysts (e.g., Ben Rosen in his Rosen Electronic Letter [54]) realized that Visicalc represented the vanguard of a remarkable new capability, the market was only beginning to wake up to the possibilities. Acceptance of this new genre of computing and the product molding forces that come with acceptance were still on the horizon, but that horizon was not all that far away. In a very real sense, it was not the original innovators of the personal computer industry who developed the initial products that would propel the technology into the market and, thus, create a broader desire for personal computing. This impetus came from a new force - the computer store.

The computer store is representative of a major component in the success of any new technology: the establishment of a distribution channel. A distribution channel is more than a simple conduit for a product from producer to market; it acts in a refining, clarifying and, in many cases, completion role resulting in an ultimate match between product and market. This role is never more critical than during the transition from the technology-driven to the market-driven part of the cycle when the channel becomes the buffer, the explainer and the evangelist as the new technology begins to find its place as an accepted part of the economy. Thus it was with the computer store.

The application gains acceptance.

The earliest computer stores were established around 1976 with the primary purpose to supply hobbyists with the latest in gear and a limited level of support. These stores were generally started by the hobbyists themselves who simply wanted to be able to serve their clubs and get new technology quickly and cheaply. The stores, however, had to deal with business realities that forced them to look for, and serve, a broader range of potential customers. As a result, the focus of innovation began to shift from the garages and clubs to the computer stores [9].

The computer store owners had a few very simple lessons to learn: If potential customers did not quickly perceive value, they were not going to buy. And if customers were confused by what was before them, they were not going to buy either. Neither of these presented particularly high barriers when the customers were hobbyists or engineers who knew what they wanted before entering the stores. This was quite a different problem, though, when the customer was a manager in a company looking for solutions to specific problems or a father trying to understand if this new "toy" was really going to help his son in school. The stores, then, became the new focal point of innovation, and that innovation was integrating components into a complete system package [38].

Before Visicalc, though, the problem was that there was not very much to package. Certainly Visicalc was not the first product to come along that offered a "solution" built around a personal computer. As pointed out earlier, Apple themselves produced an accounting solution. Following this lead, there were other attempts to bring “large-computer” applications to the personal computer. Early word processing programs emulated Wang systems; simple database programs copied larger systems from IBM and DEC. These programs, stuffed in plastic bags and hanging on pegboards in computer stores, were used as the basis for the first attempted commercial sale of personal computers. The shortcoming of all of these attempts, however, was that they neither fit the user nor the computer. Visicalc was the first square peg appropriately put in a square hole.

An Apple II with 48K of memory, two disk drives, a Centronics printer, a monitor and Visicalc created the first ever microcomputer-based product that could be sold to the average accountant, the average manager in a corporation, or the average small business owner, and provide real, unique value. This "product" did not demand any prior computer knowledge (though a certain technical tolerance was helpful). It was a product created in the computer store. Its components came from at least four different vendors, none of which had much value without the others. Throw in a dash of training, and the personal computer revolution was finally on its way [23].

It was now the end of 1979 and the personal computer's first cycle on the double helix was rapidly progressing past four and then five o'clock. The new Visicalc/Apple package was the perfect accountant’s tool and it took only a matter of months before the word spread. But Visicalc was more than the exclusive toy of the accountant. The Visicalc/Apple combination created, in essence, the first "what if?" machine. Anyone who dealt with various scenarios based on numerical assumptions would have a major competitive advantage with this capability: investors analyzing stock data, businessmen developing new budgets, scientists planning parameters for research projects. All of these, and more, stood to benefit greatly. Before the end of 1979, articles started to appear in *Business Week*, the *Wall Street Journal*, the *New York Times* and elsewhere touting the advent of this new personal power tool.

Fledgling computer stores suddenly found themselves swamped. Nascent distributors, usually a side business of the stores themselves, could not keep up with demand. Apple IIs became scarce. And if the computer was available, the disk drives or the monitor or the printer or, perish the thought, Visicalc itself was not. Waiting lists became common. So did bribes and overcharges. If the manager in the office next door had Visicalc, so did everyone else. It is not trite or an exaggeration to say that the industry simply exploded.

Stores quickly noticed that the hobbyist was no longer king. Hobbyists would come to a store, browse and play for hours and then either leave or buy a couple of diskettes. Businessmen called up and asked if three complete systems, with a list price of about $5000 each, could be delivered that afternoon. The focus of the whole industry shifted overnight. What was technically exciting and new was less important than what the customer wanted - solutions to problems. And customers were becoming very vocal about what they wanted, which was a key factor in making possible the broader consumer acceptance of personal computers [47].

Variation and Refinement.

The customer demands became many: more memory was wanted because spreadsheets were running out of room, the Apple II's 40 column wide screen did not display enough data, training was needed to get new users past the arcane command sequences to real productivity, onsite service contracts were needed because Apples tended to break down with indeterminate repair delays, and customers began asking what else could be done with the machine when it was not running Visicalc. By the beginning of 1980, the double helix was at six o'clock and had made the difficult transition from the technology driven side to the market driven side of the cycle.

As the model would predict, the personal computer industry entered an exciting period of refinement and variation. Refinement came from the Visicalc/Apple product's need to satisfy the increasing demand for enhancement from the growing installed base. Variation came from taking the underlying concept of Visicalc, personal productivity machines, and extending it to new applications fulfilling different needs. Since the Apple II was quickly grabbing the public's imagination as the first personal computer "for the rest of us," one could assume that it would dominate the remainder of the first cycle of the personal computing helix. This was not to prove completely true. To be sure, the acceptance of the Apple/Visicalc combination as a viable mass market product did represent a major transition for the industry. Among the effects of this transition was the death of many of the initial pioneering personal computer and software firms and the birth of a slew of new ones. Companies like IMSAI, MITS and High Technology disappeared because they were not prepared to service a market broader and more demanding than the traditional hobbyist market. The vacuum they left, though, was quickly filled by companies established with the goal of servicing the emerging broader market.

The underlying nature of the double helix suggests a balanced and linked evolution over time between a basic technology and a specific application of that technology. During the initial cycle of any new double helix, this relationship appears to take on two major characteristics. The first is that the market driven side of the cycle is relatively short in comparison to future cycles of the helix. The second is that even with a compelling new application and market acceptance, the cycle remains fundamentally technology centric. Both of these characteristics may well derive from the simple fact that the new technology is, in relation to future cycles, always very primitive. This naturally leads to both the rapid evolution of a more advanced version of the technology and an unavoidable and constant awareness by the user of the limitations imposed by the primitive technology.

While the Apple II, with its built in capabilities, promised simplicity and market acceptance, it was also constraining. To many, the Apple II was not seen as the pinnacle of possibilities for the personal computer but only the vanguard of what could be. The Apple II was a closed system: Software or hardware designed for it could not be used on any other system and there were clear limits to what you could do within the Apple II world. If you wanted better graphics for an engineering project or a game, or you needed more than two floppy disks, more memory, or a faster processor, in every case you had the same choice: Wait for Apple to, maybe, add the feature to a future version or find a way to do it without Apple. There were two ways to do it without Apple. The first was to develop add-ons for the Apple that created the feature you wanted; a thriving cottage industry (e.g., Videx with its 80 column video card) sprang up to do just that. The second was to reject Apple completely and develop a new standard that allowed entrepreneurs and customers to create exactly the productivity oriented capability they wanted but with different hardware, which is how CP/M entered the fray.

CP/M (Control Program for Microcomputers), from Digital Research, was the first real personal computer operating system. It was the anti-Apple. It was, for most intents and purposes, an open environment, mostly independent of the hardware on which it ran. Software written for CP/M, then, might be able to run on computers from a variety of vendors. Computer systems could be designed that

were suited to specific applications. CP/M provided Apple with the competition necessary to drive the rest of the first cycle and establish the groundwork for the second major cycle in the personal computing double helix. The battle that ensued was to prove a classic one, still evident today, between simplicity and flexibility [11].

To a software developer, the Apple II was an intellectual delimiter; it told you what you could not do with the trade-off that what you could do would be relatively simple and easy to understand. CP/M allowed more flexibility and was, as a result, much more messy. CP/M said, if you follow a few rules (like using either the Zilog Z80 or Intel 8080 microprocessor), you can try to do whatever you would like. This was exciting but also more demanding on both the developer and the user than the Apple model. The promise, though, of new markets and applications created excitement around CP/M and began to generate a multitude of variations on the basic theme of productivity computing. The first cycle of the personal computer was in full swing.

New computer systems using the CP/M operating system arrived from established electronics names like Radio Shack (using a CP/M variant called TRS-DOS) and Zenith who quickly shifted from a hobbyist to a commercial focus [4]. The growing demand for industrial strength micros (with more memory, better graphics, hard disks, more reliability, and specialized interfaces) for military and corporate use mobilized Vector Graphic, Alpha Micro, Altos, Cromemco and NorthStar. Durango saw the need for a complete system package and introduced integrated computers with a built-in monitor and printer. Commodore and Atari (with their own operating systems) recognized the possibility of a true home computer market. And Osborne aimed to satisfy the needs of the mobile executive with the first fully portable personal computer.

This is not to say that software ventures were unimportant or absent. As the double helix suggests and Visicalc demonstrated, the most cost effective, feature laden and reliable hardware was useless without applications to make it valuable. Hardware was also relatively slow and difficult to modify. Software, on the other hand, had direct utility and was written and brought to market quickly. Clearly, software developers, especially those who saw with amazement the impact of Visicalc quickly jumped in with their own ideas about how to leverage the new microcomputers.

The battle raged on the two clear and separate fronts: Apple and CP/M. Almost overnight a raft of new software products were introduced for the Apple. VisiTrend and VisiPlot, from Visicalc publisher Personal Software (soon to be renamed "VisiCorp") became companion analysis and graphics products for Visicalc. DBMaster gave the Apple the ability to easily store whatever personal or business information the user desired and exchange information with Visicalc. Apple Writer became the first successful mass market word processor. And for those periods when one needed a break, scores of games challenged both mind and body. Even though these applications might have been simplistic and limited as dictated by the Apple environment, they also offered a vast audience a glimpse into new worlds of possibility.

But all was not quiet on the CP/M front. Armed with the ability CP/M afforded to produce more complex and "serious" applications, products like Ashton-Tate's dBase 2 [24], were quickly arriving on the scene. While presenting the user with a true challenge that demanded tolerance and skill well beyond that of the average Apple user, dBase also delivered on the promise of allowing the user to build complete database applications that solved critical, real world needs. If users had the ability and the time, or the money to hire a consultant, dBase would almost always give them a lot of what they wanted. What was true for CP/M database applications was also true for word processing (e.g., WordStar from Micropro and Magic Wand), accounting (e.g., MCBA and Peachtree) and spreadsheets (e.g., Sorcim's Supercalc) [34]. All of these CP/M applications provided a more technically savvy audience with the ability to do much more of what they wanted on hardware of their choosing.

For the next two years, the battle between simplicity and limitation, on one side (the Apple), and complexity and flexibility on the other side (CP/M) raged. While most people cede to Apple the mantle of victor for the early years of the true personal computer industry, the truth is somewhat more informative. It is true that Apple was the single largest supplier of personal computer products in 1982 and that it was also the fastest growing company in the history of American business. What is also true is that, in 1982, Apple only had about 23% of the personal computer market share [25, 37]. The vast majority of installed machines were, in fact, based on the CP/M operating system. If a referendum had been held the message would have been clear: the broader market wanted control and power over ergonomics and simplicity.

Though Steve Jobs would tout that the world wanted simple "information appliances" the evidence showed that the world was choosing more powerful "information toolboxes". While a certain percentage of the rapidly expanding market wanted to get their computing in small, digestible bites, the vast majority were ready to tear off chunks of computing and swallow what they could. The stage was being set for the second cycle of the personal computer double helix.

Pushing the limits.

The first cycle of the personal computer industry had a fundamental and inherent limitation that foreordained its end: It was based on the 8-bit microprocessor. With a maximum of 64 kilobits of random access memory (RAM), slow speed and limited "on board" services, this class of processor could show the future but could not deliver it. The more savvy a user became about his needs, the more pressure was placed on the computer to try to deliver what it could not. Increasingly, the answer from the development department to marketing, the new lightening rod for consumer demand, was "no"! As the double helix model would predict, though, the personal computer cycle did not come to a crashing halt when market demands hit up against the limits of the available technology. Instead, the proprietors of the technology did what they could to fill the gaps and compensate for the limits. This was the dominant theme for the years 1980-2.

Apple first tried to address this problem with an advanced version of the II, the II+, by improving speed, putting more capabilities into stable memory (ROM) and by increasing reliability [60]. Along with this effort, Apple made larger floppy drives, upgraded their operating system and improved graphics. While sales continued to skyrocket, Apple could not help but hear the message that what they were offering was not enough [63]. Increasingly, the Apple II's limitation was relegating it to a place in the home and school [51], and it was becoming clear that the largest battlefield would not be in the home or the school but in the office.

But CP/M class machines, though more suited for the tasks of business, also had their limits: They were slow, they did not have the memory larger applications demanded, they were not reliable, and worst of all, they came from companies that had no established track record with big business. By the middle of 1982, the expansion of personal computers into the business world was beginning to lag. As soon as 1981, both the Apple II family and the initial CP/M machines were starting to "push the limits" of the 8-bit microprocessor. They were attempting to accomplish tasks that were fundamentally beyond the technology's capability. Similarly, software developers were trying to design and implement programs that could accomplish things that really needed more horsepower and a different architecture. Failure and frustration were as common as success and excitement. The industry was rapidly approaching 10 o'clock on the personal computer's first cycle of the double helix.

As discussed earlier, the double helix model does not suggest a sequential relationship between consecutive cycles. One should not expect the introduction of a new technology to be coincident with the disappearance of the prior technology. Rather, there is always a period when a new technology coexists with the old technology. In fact, because the new technology starts out in an introductory phase without a clear, unique application, quite often the old technology continues to thrive even in the presence of the new innovation [19, 58, 59]. It would be best to think of noon for a new cycle to be equivalent to 9 o'clock for the previous cycle. This was certainly the case as the first cycle of the personal computing helix drew to a close and a new element was about to be introduced.

Second Cycle

A new technology in search for an application.

At the end of the summer of 1981, the sleeping giant of the computer industry, IBM, finally decided to shed its corporate disdain for a device that, by its own definition, could not be a computer. IBM announced that it had built a personal computer that overcame the limits of the Apple II and its companions [39]. It incorporated a much faster 16-bit processor, could handle ten times as much memory as the 8-bit machines, was a balanced blend of open and packaged, and, most importantly for the business world where the battle for personal computer supremacy would be waged, it had IBM's name on it. Even though this was a shock to the fledgling but established PC industry it should not have been. In a poignant example of the effects of being overly caught up in the stages of the double helix, the leaders of the PC

industry did not pay adequate attention to the fact that successors to the 8-bit processors, which were rapidly becoming the bane of their existence, had already begun to arrive on the scene.

As early as 1979, the year Visicalc was introduced, Texas Instruments had debuted the TMS9900 and Motorola had shipped the 68000, both more powerful and capable 16-bit microprocessors. Since none of the more popular personal computers were using technology from either of these companies, it is at least understandable why they ignored the chips. But how could they ignore Intel? Intel had been working on a successor for the 8080 (a Z-80 equivalent) for years. They delivered it to market in 1981, in the form of the 8088/6 family, just in time for IBM to make it the heart of computing for the next 15 years!

The early personal computer vendors, almost to a company, were stuck with old technology while new competitors prepared to jump in with the next generation of technology. Now this did not happen overnight. There was still time to recover. The IBM PC, though exciting and impressive, was only a limited answer to personal computer users' prayers. It was a machine without software. Old CP/M did not work on it and surely Apple would not support it. A new version of CP/M, CP/M86 made especially for it, did not support most of the old CP/M software and, in the rare cases it did, did not run the software any better than a NorthStar. The operating system of choice, PCDOS from Microsoft, did not have any application software at all!

IBM, with its massive resources and an intent to win in this new, evolving world, did what it could to convince the established companies such as Micropro and VisiCorp to "port" their successful personal computer software applications to the IBM PC to give it a necessary shot in the marketing arm. So in the beginning of 1982 the market began to see the appearance of IBM PC versions of WordStar, Visicalc, dBase 2 and other popular CP/M and Apple products. This, however, was not an indication that the second cycle had taken hold and reached the critical 3 o'clock point. These applications were unchanged in their functionality from their earlier versions except for the simple fact that they were made to run on the IBM PC. If a spreadsheet in Visicalc could only be 64 kilobytes large on an Apple, the same was true on the IBM even though the IBM had at least 128 kilobytes of memory available. As far as these "established" software vendors were concerned, the IBM PC was nothing more than a faster NorthStar or Apple; there was nothing unique about it, nothing new to accomplish.

With such limited value in a more expensive box, at least initially, the market was not buying. The 8-bit world continued to thrive [49]. So was the arrival of the IBM PC a threat or an opportunity to the proven PC leaders? We just saw that the software vendors viewed it as not much of either. The established personal computer hardware vendors (e.g., Cromemco, NorthStar, Apple, Zenith, Durango, Processor Technology, Vector Graphic) also seemed to greet the new entrant with a yawn. This despite the fact that they keenly knew the need for more power and more features than the 8-bit computer could deliver. They were as aware as anyone that there were new processors available that held the promise of developing systems that would overcome current customer problems and help create new customers. But, for whatever reason, they initially paid limited attention and then, finally, paid dearly.

The application concept begins to emerge.

By the end of 1982, the second cycle of the personal computer double helix was about to change the world, and the change came in the form of 1-2-3 from Lotus Development Corporation. Lotus 1-2-3 was the representative of the new paradigm needed to jump start the second cycle. It was a product as uniquely suited to take advantage of the IBM PC as Visicalc was to the Apple II. Where Visicalc delivered an island of personal productivity to a tolerant and technically savvy market, 1-2-3 provided a broad continent of productivity to a more technically naive market. Some might not consider Lotus 1-2-3 to be the vanguard of a new cycle since, on its face, it may appear to have simply subsumed much of what had been developed during the first cycle of personal computer software development. A closer look, though, clearly shows that it took the major step that is emblematic of a new cycle.

> Once the Lotus 1-2-3 spreadsheet program was introduced, the IBM PC became the de facto leader. Personal computers were now machines that businesses could use. Individuality now didn't count for much. [23]

A characteristic of the first cycle of a fundamental new technology, such as the personal computer, is that it provides a capability that is dramatically, almost shockingly new. This is not usually the case for subsequent cycles of the double helix. Instead, the succeeding cycles are characterized by

some capability that extends the original paradigm in a way that could not be accomplished in the previous cycle [28]. The Wright brothers shocked the world by flying a flimsy, low powered device at Kittyhawk. The introduction of single winged craft with enclosed cockpits and multiple, powerful engines was not nearly as dramatic but it heralded a whole new age of practical flight for the average person. Such was the case with 1-2-3.

Beyond simply "slamming" together the features of the more popular Apple II software products (a feat that, in and of itself, could not be accomplished in the Apple II), 1-2-3 created a fundamentally new style of computer interaction for a new type of computer user. Using all of the power available in the IBM PC, Lotus 1-2-3, the first integrated software product, appealed to novice and "power users" alike [7]. For the novice user, Lotus used the larger memory and speed to provide a smooth on-ramp to personal computing including a range of helpful features including an on-screen tutorial, a context sensitive help facility and full word menu options. No longer did using a personal computer demand a degree in electrical engineering or the passion of the hobbyist.

It was the power user, though, the already knowledgeable Visicalc user who really triumphed. 1-2-3 provided the ability to accomplish all that anyone would want in an advanced spreadsheet while combining most of the abilities of VisiPlot and DBMaster into a single package. Beyond that, 1-2-3 was programmable. Like dBase 2, advanced users could develop full applications for novices [29]. A secretary could now do scheduling for her departments using a template developed on 1-2-3 by her boss. A bookkeeper using another template could monitor his division's cash flow against pro-forma. A CFO could quickly and automatically combine into one spreadsheet the budgets of every department for the board meeting. A physicist could capture data on the behavior of neutrons in magnetic fields, do analysis, view charts of the analysis and even write an article all without turning 1-2-3 off! Personal computing would never be the same [65].

The application gains acceptance.

When 1-2-3 shipped in January of 1983, the second cycle had truly begun to leave the exploration stage. By 1984, the IBM PC/Lotus 1-2-3 "machine" was the juggernaut of the industry, capturing 70% of the personal computer market [18]. And what became of the hardware leaders of the first cycle? Sadly, but predictably, almost to a company they declined or disappeared. Within a mere two years NorthStar, Cromemco, Vector Graphic, Alpha Micro, Altos, Durango were all either in serious decline or had already disappeared. Even Apple, with its almost religious following and iconoclastic (and therefore difficult to dislodge) software base was in trouble, being increasingly relegated to the home and school while it struggled to develop an IBM PC competitor.

Variation and Refinement.

It might be assumed that this corporate decimation was a direct result of IBM's dominance but this would be a simplistic and erroneous conclusion. Within a very short amount of time a whole new range of variations on the IBM theme reached the market with names previously unheard of or new to computing (e.g., Compaq, Hyperion, Eagle, Convergent, MAD, Panasonic, Gavillan, and Olivetti). Some of the participants in the first cycle tried to adapt but none of them ever succeeded in again leading (e.g., Osborne, Zenith, and Radio Shack). On the hardware side the baton had been passed and most of the success stories of the first cycle receded into fading memory [55]. On the software side, the changing of the guard was not quite as dramatic. Many of the established players quickly saw the errors of their ways and scrambled to adapt to the new reality. Some even prospered from the changed world. Perhaps this is an illustration of the old venture capital dictum that "hardware companies fail hard and software companies fail soft".

Microsoft (PCDOS and Multiplan), Micropro (WordStar) and Ashton-Tate (dBase 2) found the new environment to their liking and thrived [30]. It should be noted that each of these vendors had products previously aimed at CP/M, providing applications that often ran up against the limits of the 8-bit technology so they were natural candidates for success in the new era. But there were casualties. VisiCorp (the most successful first generation software vendor), DBMaster, Software Arts, High Technology, Software Resources and a raft of others fell by the wayside, unable to leverage their success as the market changed.

False Start Cycle

Lotus 1-2-3 and the IBM PC (and its clones) dominated the second cycle of personal computing that saw the number of users expand as unit sales grew from a comparatively paltry 700,000 [27, 61] in 1981 to an astonishing 9,850,000 [62] by 1990, the life of the second cycle of personal computing. Some might question this statement that the second cycle lasted eight years. If the segue from the first to the second cycle was the introduction of a computer based on the more powerful 8088 processor, then should not the end of the second cycle be predicted by the introduction, in 1984, of computers based on the 80286? Clearly, these machines had capability that seemed to dwarf those of the older PCs. The 80286 was not only many times faster than an 8088 but it had a special mode that would allow it to use at least 20 times more memory [32]. The 80286 was introduced with the expectation that it was a truly revolutionary machine. Unfortunately, it did not become one.

The possibilities were endless in that all sorts of applications could be attempted that even the 1-2-3 class of integrated products could not approach: multiple applications running at the same time and a graphical capability that would make computing even more fun and productive. In fact the Apple Macintosh, a machine based on a chip similar to the 80286, was introduced in 1984 with many of these features. Unfortunately, by this time Apple had already retreated into a niche role with a rabid audience but with also a gradually diminishing presence in the all important business market. The reality, though, for the 80286, is that it gave only wasted promise as the new watershed for computing. Instead of bringing new power and capability to the rapidly growing and demanding market, virtually no software products were ever developed using the chip's real capabilities. As a result, the 80286 became nothing more than a faster 8088 that allowed users to run their 1-2-3 spreadsheets quicker.

The answer to why this happened is instructive. While it is possible to criticize the 80286 as being a bit too underpowered to provide a solid platform for the next cycle of personal computing, it is more accurate to look at what the market was doing with the current state of the art. The 1-2-3/IBM machine was still providing more than most people could want. There was no clamor for yet another style of computing. A fundamental pre-requisite for the successful introduction of a new cycle had not been fulfilled: software developers and the market had not yet begun to "push the limits" of what they had. There was still a massive amount of innovation and excitement about, what for most people, was still a new technology. Simply put, no one created a unique application that would use the extra powers of the 80286 in a way that the market desired. The future was not yet wanted.

So for the rest of the decade, the juggernaut continued. The IBM PC architecture gained bigger hard disks and better graphics, software companies refined the message from the success of 1-2-3 and the market continued to grow. Software applications that combined relative simplicity of use and robustness began to permeate niches that not only had not been satisfied by previous computing cycles but had not even been addressed. Billion dollar companies, such as Lotus, WordPerfect, Borland, Novell, Compaq, Dell and 3Com appeared on the scene, virtually overnight. The future could not have appeared more rosy.

And for many, this was true; but for others the seeds of the end of the cycle, and their prosperity, had already been planted. 1984 was too early for people to know they wanted to do multiple things at once or that they wanted an even easier to use computer or that they wanted to have certain things done the same way by everyone because they would all be sharing information over networks. But it was not too early to begin to understand that, ultimately, these were the things that people would want. So while the hardware that was becoming available in 1984 could do a variety of new and remarkable things, the software industry saw no ground swell, no low level grumbling from the market, that justified the effort to do more than it was doing. In this way, we see clearly that a potential cycle that is only supported by technology alone and not accompanied by the application side will be doomed to die. The 80286 was such a "virtual cycle", but a virtual cycle with lessons for the future.

Pushing the limits.

Visicalc had over 80% market share for spreadsheets in 1982; by 1984 its market share was minuscule while 1-2-3 achieved the same lofty position [40]. In 1989, 1-2-3 was still the ubiquitous product, despite a spate of missed deadlines and unfulfilled promises. By 1991, 1-2-3 was a rapidly fading also ran. What had happened was Microsoft's Windows 3.0, the scion of the third cycle of personal

computing. During most of the 1980s, the PC software industry was ruled by a tacit agreement among the major players to respect each other's territories. Lotus owned spreadsheets, Ashton-Tate had databases, Micropro and WordPerfect ruled in the word processing arena and Microsoft did operating systems. But what was an operating system?

From a technical point of view, an operating system is a layer of software that provides mediation between a user application and the physical computer. Every computer has one. From a more practical and user centric point of view, however, an operating system is the level of the computer that the user develops the most comfort with: It is the level of the system where the user operates. During the first cycle of personal computing it was irrelevant which definition was used because the operating system had to be addressed by the user. To use a machine it was imperative that the user became fundamentally comfortable with the lowest level of the computer because the applications that were available, including Visicalc, did nothing to shield a user from the basic realities of the computer.

During the second cycle, however, a subtle shift occurred. The operating system, from a practical perspective, was not MSDOS but, rather, 1-2-3. It was possible to turn on one's computer and have it automatically launch into 1-2-3 without ever seeing the dreaded 'C:' prompt in DOS. In fact, many experienced and competent users, though aware that the 'C:' prompt existed, became completely lost and confused when confronted with it. As a result, for many, 1-2-3 became synonymous with using a PC. Rather than attempt to exit 1-2-3 and traverse the operating system to get to another program, as early users had eagerly done on CP/M and the Apple, second cycle users would try to do everything they could within 1-2-3. They regularly found ways to make 1-2-3 do things that even its developers did not think it could do; e.g., because of a simple label command, Range Justify, 1-2-3 became one of the most used word processing products. 1-2-3 on an IBM PC was a world onto itself. A world about to be invaded.

Microsoft was in a very fortunate position. While not being the leading player in the second cycle, it was a major beneficiary of its success. Just as Lotus made money just about every time an IBM PC, or a clone, was sold, so did Microsoft. Though users tried to avoid it, the MSDOS software was a critical component. So Microsoft had a cash generator and also was in a powerful position to see the trends that were emerging. They also had the luxury of not having a leading application that would be threatened when the new trends emerged.

Third Cycle

A new technology in search for an application.

The third cycle of the microcomputer double helix occurred with the merging of the 32-bit generation PCs with Microsoft Windows in 1990. The radical computing power that lay in the heart of the 80386 processor, which succeeded the 80286, was like the 80286 in that it was viewed as truly revolutionary. No doubt, it is true that this was the case but it is also true that the 80386 made its introduction in the Compaq Deskpro in 1986 [14]. PCs based on the 80386 could support massive amounts of memory and do many tasks at once and they were blazing fast. But for four years the 80386, like the 80286 before it, was viewed as nothing more than a faster version of the original IBM PC.

The introduction of Windows 3.0 in 1990 was the watershed event that allowed the third cycle of the PC industry to move beyond the exploration stage. Why did it take four years for the application cycle to catch up with the technology? What forces acted to stymie or foster the 80386's application cycle? The answers to these questions are interesting because they point to how prior market evolution can affect how a new technology is viewed and leveraged, independent of its unique fundamental capabilities.

When the 80386 was introduced, the market acceleration of the 8088/80286 application cycle was in full swing. Sales and market penetration of both the basic computers and new varieties and versions of productivity applications were still accelerating. The market was not ready to shift from its tried and true operating system, 1-2-3, because its needs were being met [31, 46]. And the new business interests in the PC industry were more than happy to take advantage of the situation. Established market players, on both the hardware and software sides, were expanding, becoming profitable, building market dominance and going public, creating massive wealth for founders and investors alike. There was limited market or organizationally sponsored creative impetus to push new technology into new realms as opposed to using new technology to simply support established demand.

PC manufacturers saw the 80386 in the same light as the 80286 – a faster version of what they had always been selling. Software vendors followed suit recognizing that faster speed allowed them to cram more features into already successful applications. Innovation was limited to making what already existed more usable, more complex, more readily acceptable to larger populations and to address already understood demands from more advanced, and often vociferous, "power users".

Slowly, though, the rapidly expanding market was also becoming more dependent on and, thus, more educated about computing and began to demand things that 1-2-3 and its brethren could not deliver. "Kludges" were developed (such as little pop up programs that appeared to give one the ability to do two things at once, and add-on graphical interfaces) that seemed to fill the gap. Products like QuarterDeck's DesqView provided the first glimmers of multi-tasking (if not multi-processing) computing to the growing PC installed base, though with little fundamental capability that was not possible with the older, slower processors. Even Microsoft's introduction of Windows 1.0 could not catalyze the market because the market both was not ready and the implementation was difficult, slow, error prone and, most critically, did not support the previous work and knowledge of PC users. By the late 1980's, however, it was becoming clear that 10 o'clock on the second cycle was rapidly approaching.

The application gains acceptance.

As 1-2-3 undermined Visicalc by both providing what Visicalc could not and changing simultaneously the paradigm of computing, in May, 1990 Windows 3.0 was poised to do the same to 1-2-3. It supplied the market with a new face, a new, intuitive way of doing the things the market had already become convinced it wanted to do and it did it without demanding that established users abandon all they knew or had already done. In short, it provided the world with a new operating system. The almost seismic events that followed the introduction of Windows 3.0, not only ushered in the rapid decline of Lotus's dominance but also set the stage for the eventual decline of other software industry leaders such as Ashton-Tate, Borland, Micropro and WordPerfect. Whereas the transition from the first cycle to the second brought the most havoc to the hardware vendors who had led the first cycle, the transition from the second to the third cycle took its greatest toll on the software vendors who had dominated the second cycle. Once again, though, the prediction held true: Those companies who experienced the greatest success in one cycle were least prepared to prosper in the next.

DISCUSSION

The history of the personal computer industry follows closely the model of the double helix. Each cycle began with an exploratory period of 3 to 5 years in which the technology was in search for an application. Technologies that found a unique application that went beyond what was doable before expanded into the broader market of a new cycle. Technologies that did not find a new application either disappeared as a fad or continued as a "better mouse trap" within an already existing cycle, as did the 80286. As shown in Exhibit 4, the exploratory stages of later cycles overlapped the market-driven stages of the earlier ones. The market-driven stages of later cycles lengthened from 3 to 8 years and then to greater than 8 years in the third cycle. This lengthening occurred for two inescapable reasons. First, with each successive turn of the application and technology helixes, the technology subsumed a greater part of the potential market increasing the time needed for a technology generation to penetrate its ready market. Second, the natural maturation of the application of the underlying technology during successive cycles created greater functionality thus satisfying the needs of a larger percentage of customers for a longer period of time. The net result was increased inertia and the siphoning off the impetus for both the investment in and acceptance of new innovation and change. (Exhibit 5). The managerial implications for the above patterns are many.

Entry of new companies into the earlier cycles was much less costly than entry into later cycles because the market served, and therefore the concomitant capital requirements, were much smaller. The initial PC companies started in garages with no money while the third cycle companies needed tens of millions of dollars to enter. This also meant that the first cycles, even when they got to a broader, market-driven stage, were most likely not true mass markets. One can argue that for PCs, it took until the third cycle for them to become a true mass market attraction rather than one for early adopters.

Entry and exit points arose at three distinct stages of each cycle: at the exploratory stage, at the transition to market-driven stage, and at the transition to a new cycle. Hundreds of companies entered the market during the first cycle exploratory stage. They provided many different embodiments of their vision of what the PC might do. Neither the first companies to enter nor the companies with the "best" technology eventually won. Rather, the first companies to find the right applications set themselves up to succeed. The companies with the incorrect visions had difficulty remaining in the industry.

The companies with the correct applications became the winners and often dominated the rest of the market-driven stages. They still encountered risks, however, because at the market-driven transition (5 o'clock) more companies entered the market with skills more related to marketing and manufacturing than to product R&D. These new companies provided product variation to slice off segments of the market and/or provide better value through marketing and manufacturing. Companies that could not make the switch to the new market realities failed [48]. Those that did were more likely to keep market dominance to the end of the cycle even if their market shares diminished, as happened to Apple.

The third entry/exit point was at the start of a new cycle. The companies established in an earlier cycle found it difficult to leap to a new cycle or, in effect, to cross a second chasm that was probably more difficult than the one at 5 o'clock [48]. The number of companies we listed in the history of the PC market that prospered in one cycle just to vanish in the next was large. The companies that unseated the leaders of an earlier cycle were often new entrants or minor players in the earlier cycle. Lotus was a startup that unseated VisiCorp, for example. The companies with the new technology attempting to create a new cycle, moreover, had been in the market for several years in parallel with the established companies in their cycle. The established companies, therefore, had several years of warning to what the new companies were attempting but still could not make the leap to the new cycle [19].

Not all the exciting new technologies that were brought to market created new cycles. If the companies were using their new technology to perform the same applications as the old, the new technology did not start a new cycle. Rather, it either withered away or became a follow on technology that did not disrupt the existing industry. Likewise, if the customers were not pushing the limits of the old technology, the new technology was ahead of its time because customers did not shift over.

The double helix model, therefore, raises strategic issues such as what does it mean to be first to market. Companies that entered the market first had no advantage over the companies who found the first accepted application. Companies who had entered an earlier cycle had no apparent advantage over those that came in on later cycles. Where first-mover advantages did seem to come in, however, was in being a leading company in the market-driven stage. The companies looking for explosive growth were better served entering the exploratory stage of a later cycle than challenging the established leader in the market-driven stage of an earlier cycle. The risk, however, was that a new application had to be found, the limits of the earlier cycle had to be reached, and sales remained small until the 3 o'clock point was reached. In other words, they were taking on the risk of creating a product ahead of its time. On the other hand, taking on an established leader in an earlier cycle meant the expense of unseating a first-mover and ending up as little more than a "better mouse trap." [20]

The insights of the double helix are generalizable to other industries. We have not contradicted earlier technology development and market development models, on the contrary we have used them to support our model. What we have done is to provide a broader and dynamic framework in which to incorporate the other models. The industries these models were based on, therefore, should fit our model. In addition, studies of other industries that we have undertaken, such as the development of microwave ovens, VCRs, and the internet also support the model. What we have demonstrated is that understanding the dynamics of industry-level effects on innovation is made clearer through understanding the interplay between technology development cycles and application development cycles. These two cycles go through a linked, predictable pattern that we have laid out and call the double helix.

Exhibit 3:

25-year history of microprocessor

Year	*Microprocessor*	*Transistors*	*Description*
1971	Intel 4004	2,300	It was the world's first general purpose microprocessor
1972	Intel 8008	3,500	The first 8-bit microprocessor. Eight-bit data allowed to manage alphanumeric data.
1974	Intel 8080	6,000	The 2-MHz, 6000-transistor microprocessor with 16-bit addressing that was eventually to become the heart of the MITS Altair.
1974	Motorola 6800	4,000	It was mainly used in automotive controls and small-business machines.
1975	Zilog Z80	8,500	The Z80 was seen as an improved version of the 8080. An 8-bit, 8,500-transistor processor with 16-bit addressing that ran at 2.5 MHz, it hosted CP/M, the first standard microprocessor operating system.
1976	MOS Technologies 6502	9,000 (aprox.)	An 8-bit processor with very few registers and a 16-bit address bus.
1978	Intel 8086	29,000	It was a 16-bit chip. It introduced the x86 instruction set that's still present on x86-compatible chips today.
1979	Intel 8088	29,000	It was based on the earlier 8086. It had a 16-bit internal architecture, but it communicated with other components through an 8-bit bus.
1979	Motorola 68000	68,000	It had a new 32-bit instruction set and was the platform for some of the early Unix system.
1982	Intel286	134,000	The first x86 processor to support general protection and virtual memory. The 286 ran at speed of 8 to 12 MHz and delivered up to six times the power of the 8086.
1985	Intel386	275,000	This 32-bit design with 4GB address space was the first mainstream Intel chip to support linear addressing.
1986	MIPS R2000	185,000	MIPS ships its R2000, the first commercial RISC microprocessor.
1987	Sun SPARC	50,000	this chip and its offspring defined several generations of RISC-based workstations.
1989	Intel486	1.2 million	Intel ships its 486 processor, an enhanced 386 design. Its more than 1 million transistors included a

			built-in floating-point unit and 8K of internal RAM cache.
1993	Intel Pentium	3.1 million	It incorporated a superscalar architecture whose dual-pipeline design could execute two instruction at once.
1993	IBM/Motorola PowerPC 601	2.8 million	It was one of the first microprocessors to implement out-of-order execution of instructions.
1995	Intel Pentium Pro	5.5 million	It uses an aggressively superscalar design that can execute up to three instructions simultaneously.

Source: PC Magazine – December 17, 1996, *Milestones of a Quarter-Century*.

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A NEW GENERAL THEORY OF NEED SATISFACTION FOR THE STUDY OF CONSUMER BEHAVIOR AND SALESPERSON MOTIVATION

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ABSTRACT

This paper covers a new theory of need satisfaction. It is done by applying basic economic concepts to the Maslow-Herzberg- Alderfer theories. This new theory can be used for research in the areas of consumer behavior and salesperson motivation.

INTRODUCTION

Theories of need satisfaction are important in understanding consumer behavior and salesperson motivation. Probably the three most popular need theories are Maslow's (1954) Hierarchy of Need, Herzberg's (1959) Motivational-Hygiene Theory and Alderfer's (1972) Existence, Relatedness and Growth Theory.

These three theories are closely related to each other. Alderfer seeks to improve on Herzberg and Maslow, and Herzberg seeks to improve on Maslow. The basic problem seems to concern the order in which the needs are fulfilled. The actual number of needs seems more a function of how the theorist describes the fulfillment process. For a complete discussion of this aspect of these three theories see Berl (1983, Ch. 2).

In this paper basic economic concepts are applied to need satisfaction. The result is a different approach to the subject. This approach is more realistic. It better lends itself to testing concepts in consumer behavior and salesperson motivation. Maslow is universally accepted but his theory has not been proven (Wahba & Bridwell, 1976). There is no support for any of these theories. Berl (1983) showed weak support for Alderfer and no support for Maslow or Herzberg in an experiment on salesperson motivation.

The economic concepts themselves are simple, standard, well known and widely accepted so they are not elaborated on or discussed here. See the Appendix for the relationship between some common economic terms and the terms used here for the new need-satisfaction theory.

NEED SATISFACTION

Individual behavior (B) is a function of motivation (M). Motivation is a function of the satisfaction (S) of needs. Satisfaction is achieved by fulfilling needs (N). Needs are fulfilled as a function of effort (E). The effort required to fulfill a need is a function of ability (A) and incentives (I). Individuals with more ability can use less effort to fulfill a need. The effort required to fulfill a need can be reduced by using incentives. Incentive is narrowly defined here. Incentive is anything that reduces the amount of effort required to satisfy a need.

B = function (M) (1)
M = function (S) (2)
S = function (N) (3)
N = function (E) (4)
E = function (A, I) (5)

Society can increase positive behavior of its members by using the right incentives. Management can increase positive behavior (job performance) of employees by using the right incentives. Sellers can increase positive behavior (purchase) of customers by using the right incentives. There are negative behaviors and negative incentives. Thus if all other factors are held constant behavior is a function of incentives.

$$B = \text{function } (I) \qquad (6)$$

Ability is an important factor because a certain level of ability is necessary for some kinds of performance (behavior) and good performance itself can aid need satisfaction. Also, people with more ability can satisfy more needs. Ability can be changed over time. The goal (of society or management) is to maximize satisfaction and motivation, to maximize positive behavior.

ONE APPROACH - DIMINISHING MARGINAL SATISFACTION

Total satisfaction refers to the total satisfaction from fulfilling all needs. Marginal satisfaction refers to the change in satisfaction resulting from fulfilling a little more or a little less of a need.

Proposition 1:

Individuals are assumed to be total satisfaction maximizers.

Proposition 2:

Real choices between fulfilling different needs are rarely conditioned by total satisfaction. It is marginal satisfaction that determines choices about the fulfillment of a little more or a little less of a need.

Proposition 3:

The satisfaction one receives from fulfilling successive units of a given need will diminish as total fulfillment of the need increases, the fulfillment of all other needs being held constant. With increases in the fulfillment of a given need, total satisfaction rises but marginal satisfaction falls for that need.

Proposition 4:

The individual who maximizes satisfaction will distribute effort among needs so the satisfaction gained from the last unit of effort spent on fulfilling each need is equal.

This is the basic relationship in this new theory of need satisfaction. One satisfies each need up to the point at which the marginal satisfaction per unit of effort exerted on fulfilling one need (x) is equal to the marginal satisfaction per unit of effort exerted on fulfilling another need (y). When this condition is met, one cannot shift a unit of effort from one need to another to increase total satisfaction.

This new need-satisfaction theory of motivation involves the following additional propositions.

Proposition 5:

Individuals have many needs.

Examples are food; clothing; shelter; other goods and services, including luxuries; physical and economic security; leisure; recreation; social needs, such as belonging, acceptance and having an influence; psychological needs, such as status, recognition, prestige and self-esteem; and self-actualization needs, such as importance, achievement, accomplishment, challenges, new experiences, growth and advancement.

The number of needs and the names given to these needs is not important to this discussion. In this new theory, the focus is on the order that needs are fulfilled. How needs are identified (number and relative importance) is critical to the order in which needs are fulfilled, but one does not need to know this to either present or understand the new theory.

Proposition 6:

The amount of satisfaction one gains from fulfilling a given need differs from individual to individual and from need to need.

Proposition 7:

One has a certain level of ability to satisfy needs. This level varies among individuals.

Individuals with more ability require less effort to satisfy a need. Ability can change over time.

Proposition 8:

Sales managers should vary incentives.

The effort required to satisfy a need varies with the incentives provided by management, so that management can increase certain incentives that decrease the amount of effort required to satisfy a need. The right incentives depend on where one is concerning marginal satisfaction. An incentive that reduces the effort to fulfill a given need may not be right because one has no current interest in that need.

Proposition 9:

There does not have to be a relationship between the amount of effort required to fulfill a need and the amount of satisfaction derived from fulfilling that need.

Obviously some needs that yield lots of satisfaction can be fulfilled with little effort (even less with the proper incentive) while there are other needs that yield less satisfaction but require more effort.

Proposition 10:

Some needs must be satisfied repeatedly.

Proposition 11:

When a given need must be satisfied again can vary depending on the need.

Proposition 12:

All basic needs should be at least minimally satisfied.

There can be five basic needs (Maslow), three basic needs (Alderfer), or two basic needs (Herzberg). See the comment after Proposition 5. Some individuals cannot satisfy all needs.

Proposition 13:

The amount of effort required to satisfy a given need can vary over time.

Proposition 14:

The satisfaction gained from fulfilling a given need can vary over time. This can be related to what stage one is in the life cycle.

Proposition 15:

A change in the amount of satisfaction to be gained from satisfying one need can result in a change in the amount of satisfaction to be gained in satisfying some other need.

These fifteen propositions make this point. Some part of a need is fulfilled first. Then some part of a second need is fulfilled. Now there is a choice. One can fulfill some part of a third need or go back and fulfill some more of the first need.

Rather than fulfill a higher need some individuals may want to fulfill even more of a lower need. Others may fulfill a bare minimum of the lower need to fulfill more of a higher need.

ANOTHER APPROACH - INDIVIDUAL CHOICE

What one does is determined by what one can do and what one wants to do. What one can do is determined by ability. That determines the total amount of effort one has to spend (or is not required to spend in the case of needs such as leisure) during a period. If the available total effort is spent on two different needs (assuming there are only two needs), the level of each need fulfilled can be shown by a total effort line (iso-effort line).

Points on the total effort line represent combinations of the two needs, which exactly use all the available effort. The total effort line depends on the total available effort and the effort required to fulfill each need. What one wants to do is determined by the amount of satisfaction to be gained from fulfilling various needs, which depends on the needs and the period. This can be represented by an indifference curve. An indifference curve for two basic needs is a curve of equal satisfaction for different combinations of the two needs.

Total effort lines (iso-effort lines) and indifference curves requires these propositions.

Proposition 1:

The x-y intercept of the total effort line is determined by ability and incentives.

Parallel total effort lines represent different levels of ability. Different levels of incentives are represented by a shift in the intercept for the need whose incentive level has been changed. This is because a change in incentives changes the effort required to fulfill the need.

Proposition 2:

For each level of total satisfaction there is a separate indifference curve.

Proposition 3:

The amounts of need x and need y that are satisfied occur at the point where the effort line is tangent to the indifference curve.

Proposition 4:

As the ability level changes, the relative amounts of need x and need y that are satisfied follow an ability-need satisfaction line.

Proposition 5:

As the relative incentive level changes, the relative amounts of need x and need y satisfied follow an effort-need satisfaction line.

Proposition 6:

One's demand for a need is a function of the effort required to fulfill the need.

DEMAND CURVE

The net result of these two models is a demand curve for each need. The curve is negatively sloped so increases in the amount of effort required to fulfill a need will result in decreases in the amount of the need demanded (and vice-versa). With all other factors held constant, (effort required to fill other needs, the overall desire for a given need that can change over time and ability), the quantity of a need demanded is a negatively sloped function of the effort required to fill that need.

CONCLUSION

A new general theory of need satisfaction is presented here that is built on the work of Maslow, Herzberg and Alderfer using well-known, generally accepted economic concepts. The basic difference among the three traditional need-satisfaction theories is in the order or in the importance of the various needs and the movement through the need hierarchy. The needs themselves are the same in all three of these theories.

The new theory presented here uses both the marginal utility approach and the indifference curve approach used by economist. See the Appendix for further details.

The individual who is only motivated by money or the individual who sacrifices the satisfaction of lower needs to satisfy higher needs is better explained by the new theory presented in this paper.

The next step would be to quantify and test this new theory. The suggestion is made in the introduction that the approach described in this paper, "better lends itself to testing concepts in consumer behavior and salesperson motivation."

The advantage of this approach is it describes many different types of behavior. There is a chance this approach explains so many different types of behavior that it is too general to be useful. The same complaint has been expressed about the economist's traditional demand curve, yet many find this economic analysis useful. Can anything be done with this new method of analysis in studying motivation?

APPENDIX

To illustrate the relationship between the traditional economic theory referred to in this paper and the new theory of need satisfaction it is useful to look at the relationships outlined in Table 1. These substitutions are simplistic but they help explain how the new need-satisfaction theory was developed from traditional economic theory.

TABLE 1

TERMINOLOGY

Traditional Economic Theory	New Theory of Need Satisfaction
Price	Effort
Goods	Needs
Utility	Satisfaction
Total Income	Total Effort
Income Changes	Ability
Price Changes	Incentives

REFERENCES

Alderfer, Clayton P. (1972), Existence, Relatedness and Growth, New York: The Free Press.

Berl, Robert L. (1983). An Empirical Study of the Motivational Content Need Theories in an Industrial Field Sales Management Setting, Ph.D. dissertation, Georgia State University.

Herzberg, Frederick, et. al., (1959). The Motivation to Work, New York: John Wiley and Sons.

Maslow, Abraham H. (1954). Motivation and Personality, New York: Harper and Row.

Wahba, M. A. & L. G. Bridwell, (1976). Maslow Reconsidered: A Review of the Research on the Need Hierarchy Theory, Organizational Behavior & Human Performance, 15, pp 212-240.

A QUANTITIATIVE ANALYSIS OF OPHTHALMOLOGISTS, OPTOMETRISTS AND OPTICIANS

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INTRODUCTION

Literature regarding research on eye care from a marketing perspective is almost non-existent. And, according to Blair (1994), the services offered by ophthalmologists and optometrists have been difficult to discern existing differences. Traditionally, ophthalmologists have been caregivers who specialize in the medical and surgical care of the eyes and visual system as well as the prevention of eye disease and injury. This Doctor of Osteopathy has completed four or more years of college premedical education, four or more years of medical training, at least one year of internship and three or more years of specialized medical/refractive training with experience in eye care. An ophthalmologist is therefore a medically trained specialist who can deliver total eye care primary, secondary and tertiary (i.e., vision service, contact lenses, eye examinations, medical eye care and surgical eye care), diagnose general diseases of the body and treat manifestations of systematic diseases.

An optometrist, however, is a health service provider who is involved exclusively with vision problem They are specifically educated and trained by an accredited optometry college in a four year course, but have not attended a medical school. They are, of course, state licensed to examine the eyes and to determine the presence of vision problem. Optometrists determine visual acuity and prescribe glasses, contact lenses and eye exercises. They may perform all services listed under the definition of an optician and only in some states are they permitted to provide limited treatments of some eye conditions. (*American Academy of Ophthalmology*, 1999).

While opticians are obviously more discernable than are ophthalmologists and optometrists, they still should be studied from a marketing perspective. For clarification , an optician is a technician who makes, verifies, and delivers lenses, frames, and other specially fabricated optical devices and/or contact lenses upon prescription to the intended wearer. The optician's functions include prescription analysis and interpretation, determination of the lens forms best suited to the wearer's needs, the preparation and delivery of work orders for the grinding of lenses and the fabrication of eye wear, the verification of the finished ophthalmic products and the adjustment, replacement, repair, and reproduction of previously prepared ophthalmic lenses, frames, and other specially fabricated ophthalmic devices (*American Academy of Ophthalmology*, 1999).

Today, there appears to be a movement toward a "blur" of which specialist provides which type(s) of service. To illustrate, many ophthalmologists are tremendously expanding on-site dispensaries for glasses and contact lenses in an effort to increase their practice cost enhancement, while optometrists in many states are being permitted to write more prescriptions for eye infections/diseases. This is due to President Clinton's Health Care Reform Proposal (*Consumer Reports*, 1984). Further, Continuing Education courses/seminars (e.g., Lighthouse International) to further educate and/or sustain licensing privileges are encouraging attendance by ophthalmologists, optometrists and opticians even though educational backgrounds and services offered differ among the three groups (www.info@lighthouse.org., 1999).

METHODOLOGY

Two pretests were conducted and only minor changes were warranted for each. The final test instrument was comprised of 22 dichotomous questions, some of which included "Why" and "Why Not" questions and six Likert statements. Five hundred and fifty consumers were surveyed who resided in a large southeastern city in the United States for a 100% response rate. The purpose of the study was three-fold: (1) to ascertain if respondents knew the difference between an ophthalmologist, an optometrist and an optician (2) to determine which service provider they preferred, and visited, for eyecare treatment; (3) to learn if they had ever visited an optical eye care chain retailer; and (4) where they would have a prescription filled.

RESULTS

When respondents were asked if they perceived a difference between ophthalmologists, optometrists, and opticians, a majority (94%) indicated that they did. For routine eye care, 33% preferred an ophthalmologist because they felt s/he were more educated. Fifty-four percent preferred an optometrist for several reasons; they felt the provider was more thorough, respondents believed s/he charged less, and felt s/he was more specialized in eyecare treatment. The remainder of the population surveyed (17%) indicated that they felt this type of provider offered more reasonable prices. And, 13% revealed they had visited an optician (Figure 1). Further analysis on preference was analyzed based on respondents who held a college degree. Of those sampled, 37% preferred an optometrist, 34% preferred an ophthalmologist, while 29% preferred an optician. Clearly, those with a college degree did not prefer a practitioner with higher training (Figure 2).

Figure 1: Preference for routine eyecare

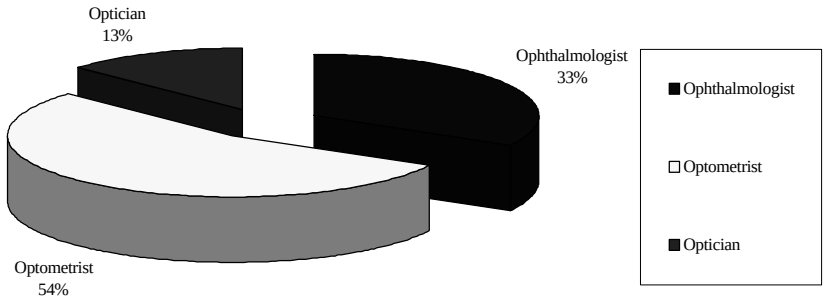
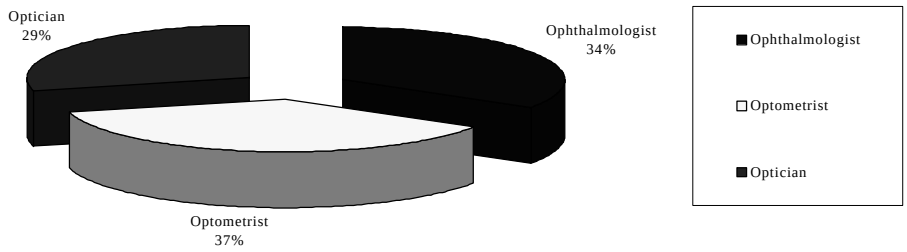
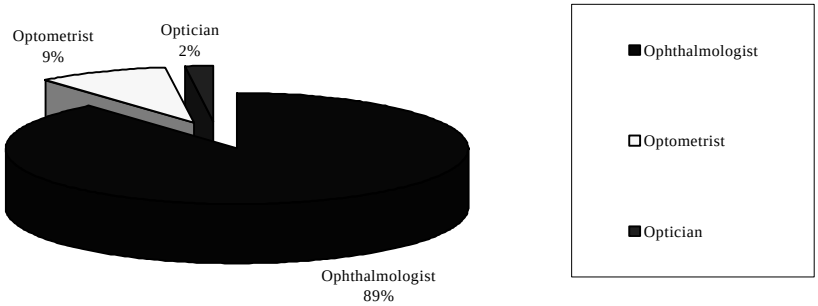


Figure 2: Preferred for routine eyecare and education



The sample was asked as to whom they would visit for specialized eyecare (e.g., pink eye, viral infections, cataracts, etc.) Eighty-nine percent revealed they would choose an ophthalmologist for the following reasons: because s/he was a medical doctor, for surgical reasons, and the respondents felt they were more educated. Nine percent of them indicated they would visit an optometrist because, if needed,

Figure 3: Preference for specialized eyecare



s/he could refer--if necessary---and that s/he charged less. The remaining who were sampled (2%) indicated that they would choose an optician because they were more familiar with this type of practitioner and the provider's charges were perceived to be much lower than the other two (Figure 3).

Those sampled were asked to whom they would visit to have an eye glass or contact lens prescription filled. Seventeen percent revealed that they would visit an ophthalmologist, 33% indicated a choice of an optometrist, while over half (56%) indicated they would choose an optical retail outlet (e.g., LensCrafters, Pearle, Wal-Mart). Respondents were asked if they had visited an ophthalmologist, an optometrist, or optician in the last year. Fifty-six percent indicated that they had. The percentages for each were broken out as follows: ophthalmologist, 10%; optometrist, 70%; and optician, 20%. Clearly, optometrists were greatly favored. When asked if they were satisfied with the service they received, 90% indicated yes. The remainder indicated they were not satisfied because of the receipt of poor glasses. Next, the consumers were asked if they were satisfied with the price(s) paid for the service(s) received. Eighty percent indicated that they were, while 20% indicated they were not as the price(s) was/were too high. Also, respondents were asked what was the usual eyecare fee per visit. Over half (61%) indicated that it ranged from $50 to $79, 22% indicated the visit ranged from $20 to $49, and the remainder revealed the fee ranged from $80 to over $110.

Respondents were asked if their eyecare provider's practice was located in their hometown. A majority (66%) indicated that s/he was, while the remainder indicated that their providers were located from approximately 50 to 150 miles away from their home base.

The sample was specifically asked if they had ever visited an optical eyecare retailer (e.g., Pearle, H. Rubin, LensCrafters). The results were equally split (50%; 50%). Fifty-six percent indicated that they preferred LensCrafters, while 33% indicated a preference for H. Rubin, and 11% indicated various other in-store retailers such as Wal-Mart and Sears. When asked if they were satisfied with the service and the price of such stores, all respondents indicated yes (Figures 4 and 5).

Figure 4: Visited Optical Retail Outlet Satisfied with Service

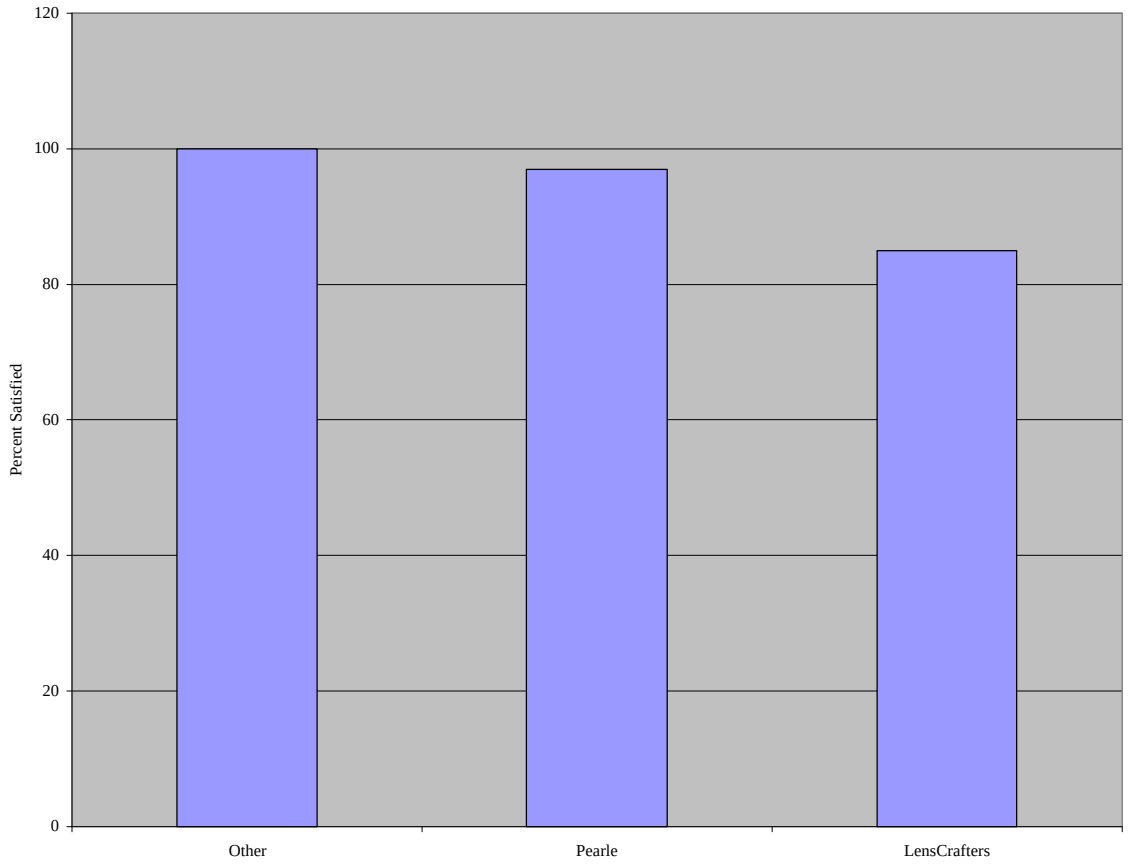
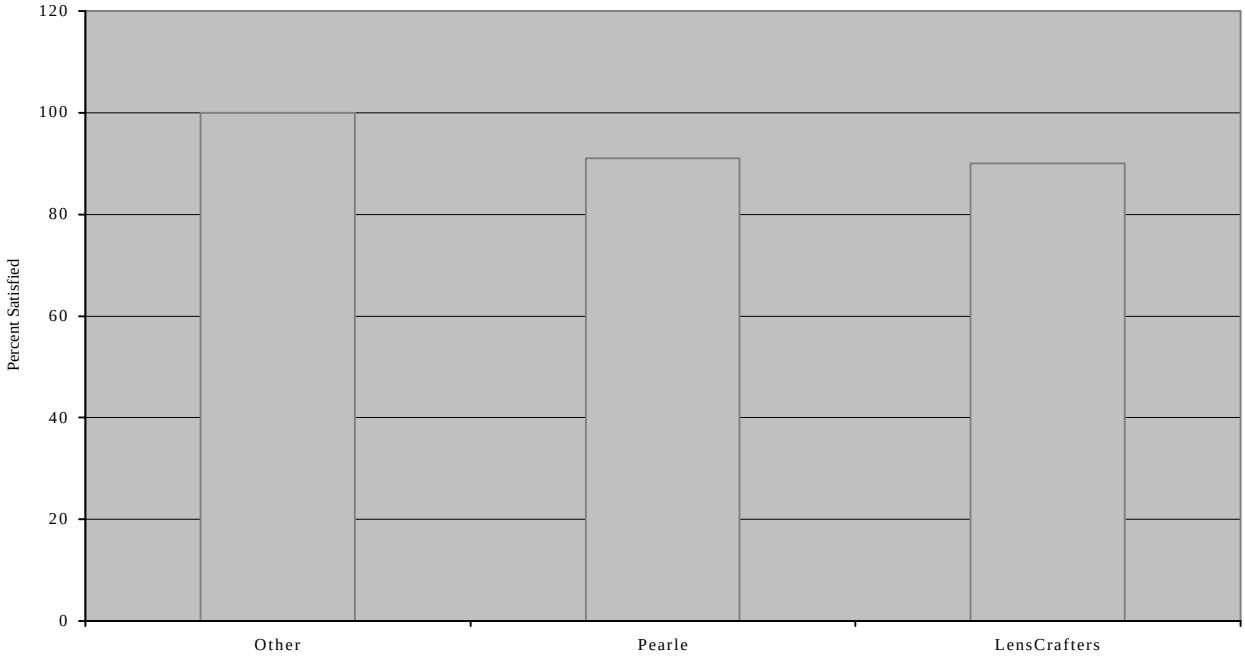


Figure 5: Visited Optical Retail Outlet -- Satisfied With Price



Regarding the Likert scales used, the following was found: (1) over 61% preferred lower prices with less personal service; (2) only 44% indicated they preferred personalized service with higher prices; (3) Eighty-three percent indicated that "little" extras (e.g., magazines, coffee, television, etc.) would not influence their decision as to which provider they would use; (4) over 78% of the respondents, in general, felt the optical retail outlets (e.g., Pearle, LensCrafters, Wal-Mart) definitely charged less than ophthalmologists, optometrists and opticians. This partially supports earlier reported results; (5) Fifty percent agreed that an ophthalmologist gave a more thorough examination than did an optometrist or an optician. These results partially support the question as to whom they would visit for specialized eyecare, but does not support whom they would choose for routine eyecare; (6) Seventy-eight percent agreed that an optometrist gives a more thorough exam than does an ophthalmologist. This finding supports the respondents' choice of an optometrist for routine eyecare.

In summary, it appears that ophthalmologists, optometrists, and opticians need to heavily increase advertising to not only further educate consumers about educational differentials but to also inform the public with regard to the services they offer. Further, the three groups should consider pricing competitiveness, keeping in mind special price offerings, discounts, and payment plans. In addition, informational public relations newspaper inserts would further increase visibility.

BIBLIOGRAPHY

"Buying Glasses," (1993). *Consumer Reports*. (August), Volume Fifty-Eight ,495-503.

Altucher, B. (1990). "Optical Confusion," *Health*. (November), Volume Thirty-Four, 42-43.

Blair, A. (1994). "Optometry Poised for Growth," *20/20*. (January), Volume Four, 44.

DeGeroge, G. (1993). "Contact Lens Sellers Just Don't See Eye-to-Eye," *Business Week*. (July), 29-29.

Herrick, T. (1994). "Working Harder, Selling Higher," *20/20*. (January), Volume Four, 37-38.

Norton, R. (1993). "An Antidote to Health Costs," *Fortune*. (April), 24.

Soroka, M. (1991). "Comparison of Examination Fees and Availability of routine Vision Care by Optometrists and Ophthalmologists," *Public Health Reports*. (July-August), Volume One-Hundred Eight, Number 4, 485-489.

Spencer, P. (1993). "Contact Lens Shopping," *Consumers' Research*. (September), Volume Seventy-Six, 38.

Williams, Carl (1999). Telephone interview on November 10, 9999, to American Academy of Ophthalmology (www.info@lighthouse.org).

A STUDY OF FIVE YEARS OF COURSE GRADE AND COURSE EVALUATION DATA

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ABSTRACT

The literature relating to student course evaluations is extensive, bordering on the overwhelming with literally thousands of studies since the first work in the 1920s. The emphasis or research direction of the studies is extremely broad, from anecdotal and descriptive, to controlled experimentation aimed at identifying or characterizing specific predictor variables. This paper provides a summary of the main research areas and results as well identifying areas where no general consensus is available. Secondly, a study to investigate the correlations, or otherwise, between course evaluations and course grades is described. Five years of data from (1993 – 1998) for all courses taught in the College of Business Administration at Loyola Marymount University were analyzed by testing for differences across departments, faculty, semester, undergraduate and MBA courses and core and elective courses. Also, the correlation between the average course grade and the average course evaluation for this data was investigated. A web site was developed to provide easy access for reviewing the basic results for an interested user before any summarization took place as well as for final dissemination of the results.

INTRODUCTION

The literature relating to student course evaluations is extensive, bordering on the overwhelming. Literally thousands of studies have been carried out in the area since the first work in the 1920s. (Remmers and Brandenburg, 1927, Brandenburg and Remmers, 1927; Remmers, 1928). The emphasis or research direction of the studies is extremely broad, from anecdotal and descriptive, to controlled experimentation aimed at identifying or characterizing specific predictor variables. The benefits, disadvantages, appropriateness of student course evaluations as a measure of course effectiveness and learning have also been discussed exhaustively. In the 1980s meta studies appeared, their sole purpose being to categorize and summarize the vast array of available research (e.g., Aleamori and Hesner, 1980; Stumpf and Freedman, 1979). The amount of research is probably not surprising given the importance many academic institutions often place on course evaluations for annual reviews and tenure and promotion decisions. Nevertheless, in spite of this large volume of research, at grass roots level (e.g., at formal and informal faculty meetings) topics such as "grade inflation", "differences in grade distribution between professors, between departments, between part time and full time faculty, between upper and lower division courses", "correlation of student course evaluations to course grades" and related other topics usually lead to animated and/or emotive discussions, which are often based on some preconceived ideas which, may or may not be supported by actual data.

LITERATURE REVIEW

A recent review by Wachtel (1998) contains some 150 references of earlier studies. He states that "the majority of researchers believe that student ratings are a valid reliable and worthwhile means of evaluating teaching" (see e.g. Centra, 1977; Koon and Murray, 1995; McKeachie, 1990; Ramsden, 1991). Nevertheless, he notes that many authors expressed reservations about their use for personnel and tenure decisions or opposed them outright (Dowell and Neal, 1982; Goldman, 1993; Seldin, 1993; Zoller, 1992). Considerable anecdotal evidence of faculty hostility and cynicism toward the use of student ratings has been also documented (e.g., Ryan et al, 1980).

Numerous variables and issues related to course evaluations have been studied. Wachtel's synthesis of the literature is divided into four sections relating to the administration of the evaluation itself, and characteristics of the course, instructor and students respectively. In order to illustrate the breadth of the research in this area Wachtel's summaries are précised in the following. Exceptions or caveats are documented to nearly all of the conclusions, so, it is implied that any stated results should be prefixed by "in general…" or "most studies found that..."

1. Administration of the evaluation
   The results of course evaluation were not significantly affected by when it was administered (e.g., the middle, or end of the semester, or beginning of the following semester), but some noted distortions on exam days, etc. Instructor presence in the classroom tended to produce somewhat higher ratings and anonymity of the forms tended to produce somewhat lower ratings (e.g., Frey, 1976; Blunt, 1991; Pulich, 1984).
2. Characteristics of the course
   Instructors in elective or non-required courses were rated higher than those in required courses. Similarly, higher level courses tended to receive higher ratings. The class meeting time (i.e., time of day) was not related to ratings. Class size was studied extensively without a general consensus emerging. Some studies indicated that class size was linearly related to student ratings whereas others proposed a curvilinear relationship with small and large classes receiving higher ratings than medium sized ones. The subject matter of the course affected the student ratings with the mathematics, science and quantitative disciplines ranking among the lowest (e.g., Aleamoni, 1987; McKeachie, 1990; Marsh, 1987).
3. Characteristics of the instructor

Professors ranked above teaching assistants but academic rank as well as age and experience were not significantly co-related with course evaluations. Similarly, most studies showed little or no relationship between research productivity and teaching evaluations. No consensus emerged on the impact of gender on course evaluation with widely conflicting results being reported (e.g., Brandenburg et al, 1977; Perry et al; 1974; Perry et al, 1979; Tatro, 1995; Feldman, 1992; Feldman, 1993).

4. Characteristics of students
   Students with greater interest in the subject matter prior to the course tend to give more favorable evaluations. Conflicting results were reported in studies between student gender and ratings. A moderate positive correlation was reported between expected grade and student rating. However, there is some controversy in the explanations proposed for this: is it that higher evaluations can be obtained by lenient grading; or that more effective instructors motivate students to work harder and achieve higher grades; or indeed some other variables (e.g., student prior interest) that affects both the course evaluation and expected grade (e.g., Prave and Baril, 1993; Aleamoni, 1987; Koshland, 1991; Goldberg and Callahan, 1991).

Based on meta studies and reviews such as Wachtel's a consensus has emerged on some, but by no means all, issues pertaining to course evaluations. The existing body of work has not been sufficient to quell discussion or controversy regarding the uses of course evaluations by administrators. For example, Cantor (1998) discusses the "tyranny of course evaluation" (i.e., teaching towards the course evaluation) in the context of tenure and the bureaucratic character of American higher education. A recent empirical study that continued to investigate the reliability and validity of student course evaluations is found in Jirovec et al., (1998) who concluded that student evaluations of teaching ability are "closely linked to concrete, identifiable teaching skills." They found that the key predictor of student ratings were the organization skills of the instructor.

Finally, Williams and Ceci (1997) make the observation that although many studies have examined the internal consistency and statistical properties of evaluations, there is little research on the "basic fairness" of student evaluations. They conducted an experiment to examine the degree to which students' evaluations of instructors vary due to changes in instructor behavior that do not affect a course's information content and learning value. As part of a faculty development effort at Cornell University, one of the authors was encouraged to attend a teaching skills workshop during the break between the fall and spring semesters. The authors took this opportunity to set up a controlled experiment where the faculty member attending the workshop made every effort to teach the same course twice, once before and once

after the workshop. The only systematic difference being "a more enthusiastic presentation style" (i.e., more gestures, voice pitch variability, etc.,) as presented in the skills workshop. Extensive measures and precautions were taken to ensure validity. These included taping the lectures during the fall semester and the instructor listening to the tape prior to lecturing each class and "memorizing the delivery" for the spring semester. Independent raters evaluated tapes of lectures from both semesters for consistency. The two courses used the same textbook, exams, etc. The authors note that for obvious ethical reasons, the study is not double blind. Substantial and significant improvements in student ratings were noted in the spring semester on instructor characteristics such as accessibility, degree of organization, tolerance, and knowledge, all of which were meticulously held constant over the two semesters. Similarly the results for "amount learned," course expectation, grading policy, text used were significantly higher. Acknowledging the limitations of the study the authors conclude that student evaluations are "far from bias-free indicators of instructor effectiveness."

The present study intends to contribute to the research by providing a longitudinal investigation as well as cross-sectional investigation of the course evaluation--course grade relationship. The course grade is based on the actual course grade received, as opposed to the expected course grade used in most studies.

The data for this study focuses on the examination of the second area of Wachtel's categorization, namely characteristics of the course. The specifics regarding the LMU situation are as follows: course evaluations are administered during the last three weeks of the semester, the exact date being the choice of the professor, but never on exam days. The professor is not present during the evaluation and the evaluations are anonymous. The LMU data distinguishes between core vs. elective courses and undergraduate vs. graduate courses. Class meeting time and class size was not addressed in this study. As far as investigation of the subject matter is concerned all courses were business school courses. However, these were administered through the departments of Accounting, Management, Marketing, Finance and Computer Information Systems and these distinctions are investigated.

The methodology used follows on from Sailor et al., (1997) who examined correlations between mean instructor rating and mean class grade for all 625 course evaluations during an academic quarter at Utah State University. They found small positive correlation's (0.29 and 0.28) for lower division and upper division undergraduate courses and a correlation of 0.20 for graduate courses.

OBJECTIVES OF STUDY

The objectives of this study are to examine to what extent the research findings in the literature are supported by five year's of data in a college of business administration at a liberal arts university. Specifically, the average course grade and average course evaluation data from spring 1993 to summer 1998 for all courses taught in the College of Business Administration (CBA) at Loyola Marymount University (LMU) will be examined by looking at differences across departments, faculty, semester, undergraduate and MBA courses. Finally, the correlation between the average course grade and the average course evaluation will also be examined.

METHODOLOGY

Data regarding course grades and course evaluations from spring 1993 through spring 1998 was obtained from the Registrar's Office. Data pertained to courses in the College of Business Administration only. Information Services merged the data from two databases (course grades and course evaluations) and provided it electronically arranged by course for each of the 17 semesters.

LMU's academic year consists of the fall and spring semesters and a summer school semester. Course evaluations are required in the fall and spring semester but not during summer school. The CBA has four departments (Accounting, Management, Marketing, Finance and Computer and Information Systems). At the MBA level some courses (e.g., regional studies, special studies etc.) are not associated with any one of the four CBA departments. For the purpose of this study these courses were considered to be as if they were from a fifth department.

All faculty in the CBA gave their permission to use the course grade and course evaluation data provided it was stripped of specifically identifying characteristics. Therefore, fields that contained specific identifying information, relating to courses and to faculty were replaced by randomly assigned codes as shown in Appendix 1.

The data clean up phase had two distinct stages:

A. Cross-listed courses: A cross-listed course is one that has more than one course prefix associated with it, i.e., the course contributes to the curriculum of more than one department. In the original data each section of a cross-listed course appeared as a separate instance (i.e., a separate record) on the course grade side, but only as one class on the course evaluation side. This is because course grades are given, and recorded, under the course section in which the student was registered, whereas course evaluations are recorded for "the complete course," arbitrarily taken to be one of the sections of the cross listed course.

Since the subsequent analysis would investigate the correlation between course grades and course evaluations all sections of a cross-listed course, on the grade side of the data, were combined into one course to match the course evaluation record. The following terminology was introduced:

Exclusive courses: stand alone courses that are not cross-listed with any other course.

Combined courses: a course that consists of the combination i.e., sum total of all grade information of all its cross-listed sections.

B. Inconsistencies in the data: Several errors and inconsistencies were present in some data records. The most frequent were

1. The number of letter grades assigned is less than the number of students registered at the end of the semester.
2. Course enrolment as provided by the faculty evaluation side of data is often not consistent with number of students registered on the grade side of the data.
3. Errors/inconsistencies related to cross-listed classes e.g., professor ID's listed on grade and evaluation side of data do not match, classes indicated as cross-listed do not exist or do not match.

There are several explanations for these inconsistencies, the main two being:

1. The time when the data was "frozen" on file (especially relating to incomplete, withdrawal, audit, credit/no-credit etc., information) was not the same for the grade and evaluation databases
2. The different procedures for coding cross-listed course data prior to summer 1994 were not consistent from semester to semester.

Data records with errors or inconsistencies were not included in the analysis.

After the data clean up the final data set used in the analysis consisted of 1662 records (i.e., courses) as shown in Table 1. Note that course evaluation data are not available during the summer school semester, so the correlation analysis is based on the fall and spring semester data (1250 records in total).

Table 1: Number of Records in Data Used in Analysis

	Including Summers	Excluding Summers
Undergraduate	1107	916
MBA	555	334
Total	1662	1250

The Average Course Grade is calculated by

(4.0 * the number of grade A awarded
+ 3.7 * the number of grade A- awarded
+ 3.3 * the number of grade B+ awarded
+ 3.0 * the number of grade B awarded
+ 2.7 * the number of grade B- awarded

+ 2.3 * the number of grade C+ awarded
+ 2.0 * the number of grade C awarded
+ 1.7 * the number of grade C- awarded
+ 1.0 * the number of grade D awarded
+ 0.0 * the number of grade F awarded)

divided by the number of students in the class at the end of the semester
i.e., AU (audit), CR (credit), W (withdraw), I (incomplete), etc., "grades" were not included.

Calculation of the Average Course Evaluation:

On the LMU course evaluation form there are five questions concerning demographic information followed by eight questions which attempt to pick up course related information. Each of these eight questions has five responses, 5 (= "Consistently") through 1 (= "Almost never") plus a not applicable/no response option (see Appendix 2 for a summarized version of the course evaluation form).
The average course evaluation is calculated in two stages:
(a) Calculation of the weighted average for each question:

$$= (ix_i) / x_i \qquad (1)$$

where i = the response value (either 1, 2, 3, 4, or 5 only)
x_i = the number of responses with response value i

Note that x_i, the number of responses to a question may be < number of evaluation forms, since for some there may be no responses.

By using equation (1) the "not applicable/no responses" are essentially ignored (as opposed to treating them as a "zero response" i.e., worse than a "1 response").

(b) Calculation of overall average of all questions on the evaluation form**:**
This is a straight average of the eight weighted average values calculated in (a) above for each question.

During the early stages of data preparation it became apparent that due to the many variables in the data (which provided for multiple analyses) a systematic recording and storing framework for the results would have to be developed. A web site was developed partly in response to this requirement and partly in anticipation of any future dissemination of the results, especially within the CBA and LMU. The web site is intended to provide easy access to the results for the interested reader at various levels of summarization and is available on http://www.lmu.edu/colleges/cba/faculty/zprzasny/grades&evals/.

The analysis of the data had a three pronged approach by examining

1. course grades,
2. course evaluations and
3. correlations between course grades and course evaluations. Correlations between the overall average course evaluation as well as specific questions on the evaluation form were studied.

Results were recorded for undergraduate (U/G), and MBA subsets of the data, as well as for the complete data set. The examination of course grades and course evaluations each consisted of two phases:

a. descriptive statistics and time series. These results are too numerous to include here but can be viewed on the website at http://www.lmu.edu/colleges/cba/faculty/zprzasny/grades&evals/
b. hypothesis tests for differences across the following characteristics:
   departments
   faculty
   course prefix
   semester (fall, spring, summer)
   years (1993-1998)
   core and elective courses
   undergraduate vs. MBA courses.

The Kruskall Wallis test (a non parametric equivalent to ANOVA) was used for the hypothesis tests since most distributions in the data were not normal. Since the Kruskal-Wallis test looks for differences among population medians the results and comments below refer to the medians of the variable under consideration (i.e., the average course grade or the average course evaluation)

RESULTS: COURSE GRADE

(Results are valid at all significance levels between 4% and 10%).

There are significant differences in the average course grade across all but one of the characteristics considered (i.e., across departments, faculty, course prefix, semester (fall, spring, summer), core and elective courses, and undergraduate vs. MBA courses. The only instance where no significant differences are observed in the average course grade is when they are viewed over time (i.e., 1993-1998) at the MBA level, which tends to refute grade inflation concerns. (The average course grade at the U/G level has a very slight increasing trend).

Differences across departments are quite pronounced (0.56 and 0.34 of a grade point at U/G and MBA levels respectively) and should perhaps call for some intervention on the part of the administration. At both U/G and MBA levels the ranking is the same if we arrange the departments in increasing order of the median of the average course grade: at U/G level: Dept A (median=2.37), Dept C (median=2.57), Dept B (median=2.88) and Dept D (median=2.93),
at MBA level, Dept A (median=3.36), Dept C (median=3.38), Dept E (median=3.68), Dept B (median=3.69) and Dept D (median=3.70). Perhaps not surprisingly, the higher grades are obtained in the non quantitative subject matter courses.

The average course grade is significantly lower in the fall and spring semesters (median=2.67 for U/G and 3.52 for MBA) than in the summer school semester (median=3.00 for U/G and 3.68 for MBA). On the one hand this may appear not particularly surprising since (i) there are no course evaluations and (ii) classes are generally smaller in the summer (and hence presumably, students can get more personal attention and master the material better). On the other hand, delivering a regular semester's (15-weeks) material in the 6-week summer school semester may lead one to expect poorer student performance, simply because they have not had sufficient time to absorb and become experienced in the material. The reasons for the distinctly higher summer school grades are a potentially a cause for concern and warrant further analysis.

The following three results are consistent with studies in the literature:

The average course grade is significantly lower in the core courses than in the elective courses (median=2.57 and 2.90, respectively at the U/G level; median=3.40 and 3.67, respectively at the MBA level).

The average course grade is significantly higher in combined courses than in exclusive courses (median=2.93 and 2.70, respectively at the U/G level; median=3.67 and 3.55, respectively at the MBA level).

The average course grade is significantly lower at the U/G level (median=2.72) than at the MBA level (median=3.57).

RESULTS: COURSE EVALUATION

(Results are valid at all significance levels between 4% and 10%).

The U/G average course evaluation is steadily increasing over the years 1993-1998: the median of the average course evaluation increases from 4.48 (1993) to 4.68 (1998). However, there is no significant difference in the average course evaluation at the MBA level in 1993-1998 (median = 4.5). Although the increase for the U/G course evaluations is statistically significant it is not readily explained: have professor's abilities improved during these years or have U/G student's become more liberal in their evaluations?

There is no significant difference in the average course evaluation between the fall and spring semesters, at both the U/G and MBA levels.

At first sight it is perhaps somewhat surprising (and not consistent with the literature) that there are no significant differences in the average course evaluation for core vs. elective courses, at both the U/G and MBA levels, since students should have higher motivation and interest in the subject matter of elective courses. Is this because the core course professors are doing such an outstanding job? A possible explanation may lie in the fact that most professors in the CBA teach at both the core and elective levels

and when taken over the five years of the study the evaluation form may actually indicate an equivalent level of ability.

Consistent with results in the literature U/G students appear less demanding or critical in that the average course evaluation (median=4.6) is significantly higher than the MBA average course evaluation (median=4.5).

The ordering of the average course evaluation, when arranged by department is different for U/G and MBA courses. At the U/G level, arranging the departments in increasing order of the median of the average course evaluation we get: Dept D (median=4.54), Dept C (median=4.54), Dept B (median=4.64), and Dept A (median=4.69).

At the MBA level we get: Dept B (median=4.40), Dept D (median=4.43), Dept C (median=4.54), and Dept A (median=4.57) and Dept E (median=4.67).

Excluding department E, these orderings are almost the exact reverse to those obtained for the course grades. The highest course evaluations are obtained in the more quantitatively oriented courses, which is contrary to the results in the literature.

Lastly, it is interesting to note the following two results: the lowest average course evaluations at U/G and MBA level were obtained by faculty for whom data are available for one semester only (during the period 1993-1998). These were part-time faculty who presumably were not invited back in subsequent semesters. At the other extreme, the highest average course evaluation at the U/G level was obtained by faculty for whom data are available for two semesters only (during the period 1993-1998). At the MBA level the highest average course evaluation is for faculty for whom data are available for one semester only (during the period 1993-1998). Once again it appears that these "stars" were part-time faculty who moved elsewhere. It is interesting to speculate whether they could have maintained such high scores consistently or was this simply some reflection of novelty value?

For faculty for whom data are available for 2 or more semesters the ranges for the medians of the average course evaluation (U/G and MBA combined) are as follows:

Number of semesters for which course evaluations are available (by faculty)	Minimum	Maximum
≥ 2	2.96	4.92
≥ 4	3.53	4.77
≥ 6	4.04	4.87
≥ 8	4.21	4.69
≥ 10	4.19	4.72
≥ 12	4.35	4.85
≥ 20	4.23	4.79

This shows, perhaps not surprisingly, that the more experienced faculty, with a long track record (at least at LMU) have the highest course evaluations.

There is no significant difference in the average course evaluation between combined (median=4.46) and exclusive (median=4.51) courses at the MBA level. At the U/G level combined courses have a higher median average course evaluation (4.68) compared to 4.60 for exclusive courses, (but note that the p-value=0.03).

RESULTS: CORRELATIONS

(Results are valid at all significance levels between 4% and 10%, unless otherwise noted).

There was a weak positive correlation (0.07, p-value=0.034) between the average course grade and the average course evaluation at the U/G level, but no significant correlation at the MBA level.

There were some differences in correlation between the average course grade and the average course evaluation when viewed by departments. For three departments there was little or no correlation:

No significant correlation was found at both the U/G and MBA levels for Dept A. (This is the department with the lowest average course grade ranking). Dept B had no significant correlation at the U/G level but

a weak negative correlation (-0.209, p-value=0.079) at the MBA level (i.e., significant for > 8%). Dept D had a weak positive correlation (0.157, p-value=0.012) at the U/G level, but no significant correlation at the MBA level. However, for the remaining two departments we have: Dept C exhibiting a moderate positive correlation (0.356, p-value=0.000) at the U/G level, but no significant correlation at the MBA level and Dept E exhibiting positive correlation (0.639, p-value=0.014). {Note that data for Dept E are only available at the MBA level - this is the "fifth" CBA department, created for data convenience}.

When viewed by semester there was no significant correlation between the average course grade and the average course evaluation for the fall semester data at both the U/G and MBA levels. A weak positive correlation (0.095, p-value=0.032) was exhibited at the U/G level for the spring semester, but none at the MBA level.

In most years (1993-1998) there was no significant correlation between the average course grade and the average course evaluation at both the U/G and MBA levels. The only exceptions were 1995 (0.178, p-value=0.020) and 1997 (0.133, p-value=0.097) where a weak positive correlation was exhibited at the U/G level. (Note however, that the latter result is only significant for > 9.7%).

At the MBA level there was no significant correlation between the average course grade and the average course evaluation for both core and elective courses. At the U/G level a weak positive correlation (0.125, p-value=0.003) was exhibited for core courses, but none for elective courses.

There was no significant correlation between the average course grade and the average course evaluation for both exclusive and combined courses at the MBA level. At the U/G level a weak positive correlation (0.066, p-value=0.048) was exhibited for exclusive courses (only significant for > 9.7%), but none for combined courses.

No strong correlations were found between the average course grade and specific questions on the evaluation form at both the U/G level (Table 2) and MBA level (Table 3).

Table 2: Correlation Of Average Course Grade with Questions on Evaluation Form
Undergraduate Courses

Evaluation Form Question	Pearson Correlation Coefficient	p-value	Correlation				
			Strong Negative	Weak Negative	None	Weak Positive	Strong Positive
Q1	0.061	0.063				X	
Q2	-0.030	0.364			X		
Q3	-0.083	0.012		X			
Q4	0.105	0.001				X	
Q5	0.105	0.001				X	
Q6	0.168	0.000				X	
Q7	0.141	0.000				X	
Q8	0.020	0.553			X		

Q1: The professor was available for consultation during office hours
Q2: The classroom presentations appeared organized with a sense of direction to the instruction
Q3: Class time was used effectively
Q4: Out of class assignments or projects were relevant to defined course content
Q5: The professor's presentations facilitated learning of the course content
Q6: Tests were representative of the course content
Q7: The professor provided helpful and timely oral or written evaluation regarding tests, assignments and/or performances
Q8: The professor provided a description of grading standards and procedures at the beginning of the course

At the U/G level there was a weak positive correlation (only significant for > 6.3%) between the average course grade and Question 1 (The professor was available for consultation during office hours), Question 4 (Out of class assignments or projects were relevant to defined course content), Question 5 (The professor's presentations facilitated learning of the course content), Question 6 (Tests were representative of the course content), and Question 7 (The professor provided helpful and timely oral or written evaluation regarding tests, assignments and/or performances) on the evaluation form. A weak negative correlation was obtained for Question 3 (Class time was used effectively).

Table 3: Correlation of Average Course Grade with Questions on Evaluation Form
MBA Courses

Evaluation Form Question	Pearson Correlation Coefficient	p-value	Correlation				
			Strong Negative	Weak Negative	none	Weak Positive	Strong Positive
Q1	0.008	0.883			X		
Q2	-0.225	0.000		X			
Q3	-0.206	0.000		X			
Q4	0.104	0.057				X	
Q5	-0.024	0.658			X		
Q6	0.107	0.050				X	
Q7	-0.052	0.341			X		
Q8	-0.178	0.001		X			

Q1: The professor was available for consultation during office hours
Q2: The classroom presentations appeared organized with a sense of direction to the instruction
Q3: Class time was used effectively
Q4: Out of class assignments or projects were relevant to defined course content
Q5: The professor's presentations facilitated learning of the course content
Q6: Tests were representative of the course content
Q7: The professor provided helpful and timely oral or written evaluation regarding tests, assignments and/or performances
Q8: The professor provided a description of grading standards and procedures at the beginning of the course

At the MBA level there was a weak positive correlation (only significant for > 5.7%) for Question 4 (Out of class assignments or projects were relevant to defined course content), and Question 5 (only significant for > 5.0%) (The professor's presentations facilitated learning of the course content). Weak negative correlation were obtained for Question 2 (The classroom presentations appeared organized with a sense of direction to the instruction), Question 3 (Class time was used effectively), and Question 8 (The professor provided a description of grading standards and procedures at the beginning of the course). Overall, little or no correlations were obtained between the average course grade and the average course evaluation, which is consistent with the results reported in the literature. By and large the LMU data appear to confirm the results reported in earlier studies, irrespective of which cut or view of the data is taken.

However, an observation worthy of note occurs when the data is viewed by professor. For 67% of professors there was no significant correlation between the average course grade and the average course evaluation, which is consistent with the majority of results quoted in the literature. However it is interesting to note that for the remainder of the professors positive as well as negative correlations were observed. A weak negative correlation was observed for 11% of the professors and a strong negative correlation was observed for 9% of the professors. A weak positive correlation was observed for 6% of the professors and a strong positive correlation was observed for 6% of the professors. (Percentages do not sum to 100% because of rounding). These two extremes may in some way explain the strong opposing feelings and discussions on this issue in the corridors of academia for approximately one third of professors who are at either extreme of the distribution.

CONCLUSIONS

In general the results reflected previous studies recorded in the literature but with some interesting exceptions. MBA courses received higher grades than undergraduate courses but had lower evaluations, presumably reflecting the higher abilities and expectations of the graduate students. Course subject matter appeared to produce differences in course grade and course evaluation across departments. These differences appeared to be inversely related. Course grades were significantly higher during the summer semester (when course evaluations were not required). Contrary to most of the results in the literature there was no significant difference in the average course evaluation between core and elective courses at both undergraduate and MBA levels. Little or no correlation was found between course grades and course evaluations. However, an interesting finding relates to the observing both positive and negative correlations between the average course grade and average course evaluation for about a third of the faculty.

REFERENCES

Aleamoni, L.M. (1987). "Student Rating Myths Versus Research Facts." *Journal of Personnel Evaluation in Education*, (1), 111-119.

Aleamoni, L.M., & Hexner, P.Z. (1980). "A Review Of The Research On Student Evaluation And A Report On The Effect Of Different Sets Of Instructions On Student Course And Instructor Evaluations." *Instructional Science*, (9), 67-84.

Blunt, A. (1992) "The Effects Of Anonymity And Manipulated Grades On Student Ratings Of Instructors." *Community College Review*, 18(4), 48-54.

Brandenburg, D.C., Slinde, J.A., & Batista, E.E. (1977). "Student Ratings Of Instruction: Validity And Normative Interpretations." *Research in Higher Education*, (7), 67-78.

Brandenburg, G. C., & Remmers, H. H. (1927). "A Rating Scale For Instructors." *Educational Administration and Supervision*, (13), 399-406.

Cantor, P.A. (1998). "It's Not The Tenure, It's The Radicalism." *Academic Questions*, Winter 97/98, 11(1), 28-37.

Centra, J.A. (1977). "Student Ratings Of Instruction." *American Educational Research Journal*, 14(1), 17-24.

Dowell, D.A. & Neal, J.A. (1982). "A Selective Review Of The Validity Of Student Ratings Of Teaching." *Journal of Higher Education*, 53(1), 51-62.

Feldman, K.A. (1992). "College Students' Views Of Male And Female College Teachers: Part I—Evidence From The Social Laboratory And Experiments." *Research in Higher Education*, 33(3), 317-375.

Feldman, K.A. (1993). "College Students' Views Of Male And Female College Teachers: Part II—Evidence From Students' Evaluations Of Their Classroom Teachers." *Research in Higher Education*, 34(2), 151-211.

Frey, P.W. (1976). "Validity Of Student Instructional Ratings: Does Timing Matter?" *Journal of Higher Education*, 47(3), 327-336.

Goldberg, G., & Callahan, J. (1991). "Objectivity Of Student Evaluations Of Instructors." *Journal of Education for Business*, (66), 377-378.

Goldman, L. (1993). "On The Erosion Of Education And The Eroding Foundations Of Teacher Education (Or Why We Should Not Take Student Evaluation Of Faculty Seriously)." *Teacher Education Quarterly*, 20(2), 57-64.

Jirovec, R.L., Ramanathan, C.S., & Alvarez, A.R. (1998). "Course Evaluations: What Are Social Work Students Telling Us About Teaching Effectiveness?" *Journal of Social Work Education*, 34(2), 229-237.

Koon, J. & Murray, H.G. (1995). "Using Multiple Outcomes To Validate Student Ratings Of Overall Teacher Effectiveness." *Journal of Higher Education*, 66(1), 61-81.

Koshland, D.E. (1991). "Teaching and research." *Science*, 251-249.

Marsh, H.W. (1987). "Students' Evaluation Of University Teaching: Research Findings, Methodological Issues, And Directions For Future Research." *International Journal of Educational Research*, (11), 253-258.

McKeachie, W.J. (1990). "Research On College Teaching: The Historical Background." *Journal of Educational Psychology*, 82(2), 189-200.

Perry, R.P., Abrami, P.C., Leventhal, L., & Check, J. (1979). "Instructor Reputation: An Expectancy Relationship Involving Student Ratings And Achievement." *Journal of Educational Psychology*, (71), 776-787.

Perry, R.P., Niemi, R.R., & Jones, K. (1974). "Effect Of Prior Teaching Evaluations And Lecture Presentation On Ratings Of Teaching Performance." *Journal of Educational Psychology*, (66), 851-856.

Prave, R.S., & Baril, G.L. (1993). "Instructor Ratings: Controlling For Bias From Initial Student Interest." *Journal of Education for Business*, 68(6), 362-366.

Pulich, M.A. (1984). "Better Use Of Student Evaluations For Teaching Effectiveness." *Improving College and University Teaching*, (32), 91-94.

Ramsden, P. (1991). "A Performance Indicator Of Teaching Quality In Higher Education: The Course Experience Questionnaire." *Studies in Higher Education*, 16(1), 129-150.

Remmers, H.H. (1928). "The Relationship Between Students' Marks And Students' Attitudes Toward Instructors." *School and Society*, (28), 759-760.

Remmers, H.H., & Brandenburg, G.C. (1927). "Experimental Data On The Purdue Rating Scale For Instructors." *Educational Administration and Supervision*, (13), 519-527.

Ryan, J.J., Anderson, J.A., & Birchler, A.B. (1980). "Student Evaluation: The Faculty Responds." *Research in Higher Education*, 12(4), 356-358.

Sailor, P., Worthen, B.R., & Shin, E.H. (1997). "Class Level As A Possible Mediator Of The Relationship Between Grades And Student Ratings Of Teaching." *Assessment and Evaluation in Higher Education*, 22(3), 261-270.

Seldin, P. (1993). "Rating Student Ratings Of Professors." *Education Digest*, 59(2), 70-72.

Stumpf, S.A., & Freedman, R.D. (1979). "Expected Grade Covariation With Student Ratings Of Instruction: Individual Versus Class Effects." *Journal of Educational Psychology*, 71(3), 293-302.

Tatro, C.N. (1995). "Gender Effects On Student Evaluations Of Faculty." *Journal of Research and Development in Education*, 28(3), 169-173.

Wachtel, H.K. (1998). "Student Evaluation Of College Teaching Effectiveness: A Brief Review." *Assessment and Evaluation in Higher Education*, 23 (2), 191-212.

Williams, W.M., & Ceci, S.J. (1997). "How'm I Doing?" *Change*, 29(5), 13-25.

Zoller, U. (1992). "Faculty Teaching Performance Evaluation In Higher Science Education: Issues And Implications (A 'Cross-Cultural' Case Study)." *Science Education*, 76(6), 673-684.

Appendix 1: Camouflaging of identifying information

Fields containing identifying information	Replaced by randomly assigned codes
Course prefix (e.g., ACCT, BLAW, MBAA, etc.,)	A, B, C
Course number (e.g., 211, 377, 409, etc.,) 000-299 courses 300-599 courses 600-609 courses 610-699 courses	 three random digits in range 000-299 three random digits in range 300-599 three random digits in range 600-

	609 three random digits in range 610-199
Faculty name	Ignored
Faculty ID	Five digits in range 80000-99999
Department information (course prefixes relate to courses taught through the four CBA departments). At the MBA level some courses (e.g., regional studies, special studies etc.) are not associated (or cross-listed) with any one of the four CBA departments. These were considered to be as if they were from a fifth department.	Dept A, Dept B, Dept C, Dept D, Dept E

Appendix 2: Course Evaluation Form Questions

Demographic Information - - Questions A-E on Evaluation Form

A. Class Year: 5. Freshman 4. Sophomore 3. Junior 2. Senior 1. Graduate 0. Other Major? _____
B. LMU Accumulated GPA: 5. Under 2.0 4. 2.0-2.49 3. 2.5-2.99 2. 3.0-3.49 1. 3.5-4.0
C.Your Class Attendance: 5. Always 4. Almost Always 3. Usually 2. Occasionally 1. Rarely
D. Was this course in your major department? 2. Yes 1. No
E. Was this course required by your major or the University core? 2. Yes 1. No

Course Related Information - - Questions 1-8 on Evaluation Form

Q1	The professor was available for consultation during office hours.
Q2	The classroom presentations appeared organized with a sense of direction to the instruction.
Q3	Class time was used effectively.
Q4	Out of class assignments or projects were relevant to defined course content.
Q5	The professor's presentations facilitated learning of the course content.
Q6	Tests were representative of the course content.
Q7	The professor provided helpful and timely oral or written evaluation regarding tests, assignments and/or performances.
Q8	The professor provided a description of grading standards and procedures at the beginning of the course.

Each of these eight questions (Q1-Q8) has five responses:
5: Consistently 4: Most of the time 3: Some of the time 2: Seldom 1: Almost never 0: N/A

ADDING VALUE: THE POTENTIAL ROLE OF ART GALLERIES IN FINE ARTS MARKETING

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ABSTRACT

Fine art marketing represents a multibillion-dollar global business and is worthy of study by academicians and practitioners. The area of fine arts marketing has not been studied as thoroughly nor reported as fully as many other fields of market concentration. This is unfortunate not only because of the financial size of the industry, but also because of the expressive nature of fine art works and the continuous consumer satisfaction provided by the product. The tangible and intangible content of the fine arts expression provides a unique opportunity to extend the marketing exchange inquiry into the realm of study referred to as symbolic and social values. Whereas symbolic and social values may stand alone in exchange situations, in the case of fine arts marketing, symbolic and social values become an intrinsic aspect of the product with transactions being carried out in both monetary and social terms. This paper draws on anecdotal evidence to develop a conceptual framework from which to view marketing exchanges involving the marketing of fine art. Consideration is given to the nature of fine art as a product, the artist as producer, the art buyer as a consumer, and the art gallery is a marketing intermediary. The art gallery adds value to the product by reducing the perceived risk of consumers' and brokering a client/customer relationship.

INTRODUCTION

Fine art is a multibillion-dollar global business. However, business schools and academicians have largely ignored the fine arts as an area of concentration. This is unfortunate because of the financial size of the industry and because the expressive nature of fine art works which provides a unique opportunity to extend the marketing exchange inquiry into the realm of study referred to as symbolic and social values (Bagozzi, 1975). Whereas symbolic and social values may stand alone in exchange situations, in the case of fine arts marketing, symbolic and social values become an intrinsic value of the product which impacts the monetary value of the individual transaction. In this paper we use the term "fine arts" to refer to painting in all media including watercolor, oil acrylic and "mixed media," as well as sculptor and ceramic works including carvings, castings, and hand-constructed objects. Further, in this paper we view decisions to purchase fine art as intrinsically risky with most market valuations being fraught with uncertainty. Standards for valuation are ambiguous and little consensus exists outside of the work of recognized masters and gallery experts. The position taken here is that operators of commercial galleries facilitate trust by providing social definitions that legitimate artworks by setting standards through categorizing and evaluating process. Consideration is given in this article to the nature of fine art as a product, the artist as the producer, the art buyer as a consumer, and the art gallery as the marketing intermediary. It is the theme of this article that the art gallery adds value by reducing buyers' perceived risks through expertise attribution.

FINE ART AS A PRODUCT

The fine art product is conceived here as having at least four dimensions; the tangible (physical) work of art, and three intangible dimensions. These in include: 1) the social definition of the art industry and its components; 2) the artist's experience in producing the work which the artist intends to share with the art consumer; and 3) the buyer's experience in consuming the work of art which may or may not be capable of being shared with others and which may or may not correspond to the experience intended by the artist. Of these, the intangible dimensions of a work of art may most heavily influence the monetary market value of that specific piece except in cases where the artist has reached high levels of notoriety. However, even then the notoriety of the artist is an element of the art product and lends to the industry's social definition of the artists' work. Essentially, the market value of the artist and art products becomes a function of social definitions of reality (Berger and Luckmann, 1967).

Bagozzi (1975) introduced the concept of "symbolic exchange" to refer to the "mutual transfer of psychological, social or other intangible entities between two or more parties." (P. 36). Bagozzi goes on to cite Levy (1959) in regard to symbolic exchange and emphasized Levy's words "... People buy things not only for what they can do, but also for what they mean." In regard to art, the socially defined symbolic meaning of the work of art by the industry becomes the key influence on the monetary value. A second set of meanings addresses the existential experience of the buyer or consumer of the artist's work. While both sets of meanings involve communication of social symbols, the first entails the social definition created by the industry market forces while the second entails the communication of social symbols shared by the artist and the observer who experiences of the art.

An example of a distinction made on the basis of the intended purpose of the work is "commercial art" which would include "advertiser" and "banner art" which was produced for the original purpose of promoting a product or service. An important example of "banner" art today is the work of Johnny Meah whose banner art was originally developed to promote circus performances. Meah's work is now shown in numerous galleries in cities such as New York and Chicago, having been recognized as fine art and has been assigned a fine art status and prices. However, in Meah's case the transition from being socially defined first as a commercial artist and then a fine art artists has moved through gallery definitions of Meah's form of art as "folk art" and "outside art", although these labels are not appropriate given his formal background and training. Galleries, for the convenience of understanding and sales may have assigned such labels as a means of introducing Meah's banner art to the fine art community. Such labels can enhance the acceptance of the new artist by easing the traditional art consumer's "social definition" of a different art form as valid art. Over time, greater exposure of such an artist's to the fine art community can lead to recognition as a full member of the fine art set (based on conversation with Johnny Meah, 1999). While the industry definition of a work of art becomes the market definition of the work of art, the assigned definition underlies and establishes the works market value. This change in social definition may motivate an observer to recognize the value of the work of art and become a buyer as the perceived risk is mitigated.

The second set of symbolic meanings addresses the existential experience of the observer of the artist's work and may motivate the observer to become a buyer for symbolic purposes. These existential experiences involve the social sharing of symbols between the artist and the observer. The resulting experience in the observer depends on the observer's recognition and definition of symbols provided by the artist and such reactions on the part of the observed depend upon the observer's prior experiences with the physical and social world. Where such experiences on the part of the artist and observer correspond, the artist may succeed in an intended communication with the observer and the work of art produces the intended experience in the consciousness (cognitive or evaluative) level of the observer. Where such prior experiences of the artist and observer do not correspond, communication between the artist and the observer fails and the observer has an experience different from that intended by the artist. In either case the observer's experience becomes part of the art product and influences motivation to purchase the work of art. Where the observer believes that there is a shared experience, the motivation to buy the artist's work may be greater and the buyer may even become motivated to follow the artist's career. In such a case an ongoing marketing relationship may develop between the artist and buyer and the buyer may become a collector of the artists products.

THE ARTIST AS PRODUCER

Fine art artists differ from most other producers of marketed products in several ways. First, the fine art artist is involved in single unit production in which each product is unique. While an artist may go through artistic stages during which many similar works are produced, the artist's intention is not to replicate products in either large scale or small batch production runs. Instead, the artist's motivation is to experiment with several - even many - variations in theme, style and technique. Second, the underlying motivation of the fine art artist is to produce works of art that are satisfying to the artist herself or himself. While monetary rewards may be desired and recognition by colleagues may be desired and appreciated, the purity of the creation process expressed by the often repeated phrase "art for art's sake" is typically a paramount concern and the artist may even hold and express disdain for the commercial aspects of the art industry (Koretz 1999). Even the notion of art as an industry would be repulsive to the dedicated fine arts artist. Regardless of social definition in the marketplace, the fine art artist holds issues of skill in design and technique and the experience of art as sacred. Thus the artist exists in a constant position of tension between what Durkhiem (1954) referred to as the world's of the sacred and the profane. Without at least some level of reward from the profane world of the marketplace, the artist cannot survive as a full time, dedicated professional. But exposure to the marketplace and the experience of market success may be feared both because the artist believes it may constrain future artistic development and because it may lead to alienation from and suspicion by other artists on whom the artist depends for self-definition and social belonging. In effect, the artist resists what Marx (1962) referred to as the "alienation of man from his labor."

This situation was underscored by an experience of one of the authors in a gallery in a popular tourist town that also has a vibrant art community. The owner of the gallery was unusual in that he was an artist (painting. using various media and photography). The gallery was devoted for the most part to offering the owners own works to the public, although other artists were represented. In an informal interview, he offered this advice to other artists "Paint what your customers will recognize and identify with." (Paraphrased). On several occasions the author has shared this advice with fine art artists and has frequently had the advice rebuffed with such words and phrases as "crass," "exploitative," "commercial," "prostitution," and "That's OK if he wants to do it, but I am not going to give up my art for money."

This tension places the fine art artist in the unusual position of being a producer attempting to create, without concern for the market while depending on the market for the ability to create. As a result, the artist is at a disadvantage in establishing a base for carrying out market transactions and becomes largely dependent upon marketing intermediaries such as galleries that can represent the artists work and insulate the artist from the marketplace. This is not to say that the artist is completely adverse from participating in the marketing effort. Artists often attended their own gallery showings, especially opening nights, and even look forward to these events as opportunities to hear and observe reactions to their work by art consumers and other artists. As with most people, artists appreciate social praise and acceptance, although they struggle not to let their "art" be influenced by such motivations.

Such a high-minded philosophical perspective places the artist at a disadvantage in the marketplace. Unable to actively and openly promote their own work, they depend upon others to sell and in so doing they depend upon others to create the social definitions of their work which will become the basis for potential buyers' experiences and establishing market value. Artists, to the extent that they adhere to such a purist view, surrender control of the representation of their work to market intermediaries. Such intermediaries, themselves motivated by monetary success, are in a position to exploit artists with high commission rates despite low levels of marketing services and efforts. Moreover, intermediaries often distance the art buyer from the artists with the result that the artist may not be able to identify their own best "customers" and thus lose the ability to capitalize on their own success in terms of the equity they achieved through market development and brand (name) recognition.

THE ART BUYER AS CUSTOMER

Art buyers may be roughly classified into three general categories; personal experience buyer who wishes to have a particular work because of the desire to perpetuate the experience evoked in him or her by the work of art. The collector who seeks to have an array of representative works of a certain artist or of a certain style or theme. The Ogburn collection is a good example of an excellent collection devoted to the theme of artists from the Southern United States (Durkheim 1996). And the investor who buys in anticipation of appreciating value as the fine art artist becomes more widely recognized. Elements of all three motivations may be active in all three types of buyers, but the labels indicate the primary motivation. Still, given the costs of fine art works, even the personal experience buyer must be concerned about the proper market valuation of a work of art. Buyers, particularly personal experience buyers, must make purchase decision under conditions of great uncertainty of potential monetary value. Except in the case of long established artists, little is known about either the true current value of art works or their future value. Even collectors and investors operate in very uncertain territory when considering new and emerging artists and there does not appear to be a set of firm rules by which art may be evaluated and valued before an artist has developed a documented reputation. Rules of traditional artistic design may contribute to higher valuations if works of art can be said to represent good or bad technique. While such guidelines may prevent a purchaser from losing money on "bad" art, they do not guarantee that examples of "good" art will hold value or appreciate in value. Such conditions of uncertainty increase risk and therefore reduce prices (Houston and Gassenheimer, 1987).

THE ART GALLERY AS MARKETING INTERMEDIARY

The commercial art gallery functions as a "broker intermediary" by accepting works of art, establishing value through the development of a social definition of the products, exposing the works to the public in gallery's, and promoting the works to potential consumers at high profile shows. The commercial art gallery as broker attracts potential buyers primarily through dealer reputation as developed over time and by the development of a customer database. The reputation of the art gallery rests on the expertise of the gallery personnel and their ability to instill confidence to the customers symbolic universe reducing the perceived risk associated with that work of art.

From a strategic assessment standpoint, the art gallery as a marketing intermediary is in a particularly strong position in relation to both the customer and the artist. Drawing on Porter's (1980) conceptual framework for assessing the strategic attractiveness of an industry, gallery owners are in a strong position relative to their suppliers. The artists have little power and are essentially unorganized relying on the commercial art galleries to produce the income to support their work. The consumers or art buyers are also unorganized and have relatively little specific knowledge from which to make valuation decisions or judge risk. Therefor participants at both ends of the channel of distribution in the traditional art market transaction are highly dependent on the galleries; the artists to gain market exposure without sacrificing idealism and dignity, and the buyers to establish appropriate financial valuations for their investment. To the extent that uncertainty increases risk and risk reduces monetary value, the art gallery, as a marketing intermediary, may substantially add value to a work of art by providing "social definitions of reality" through which the work of art is "framed" in the buyer's symbolic universe. By facilitating and reinforcing social definitions of works of art, the art gallery operator enhances the potential buyers' confidence in the monetary value of specific works of fine art, reducing the buyers perceived risk, consequently affect the income of the artist.

The degree to which a gallery effectively serves this market function will depend upon its ability to establish its image as being authoritative by providing the social definitions which have the potential to effect symbolic and monetary valuation of work of art in the buyer's social context. Galleries use several techniques to reduce uncertainty such as: classification of the artist into outsider or insider, works of art into popularly recognizable categories; providing educational information to make consumers aware of specific features of good design and or the credentials of the artists'. The gallery also endeavors to provide

the artist with "celebrity" status, and to associate the buyer's decision with similar decisions by reputable collectors and investors. While marketing intermediaries typically perform similar functions in many personal selling situations, such value enhancing roles may be especially important in fine arts marketing as there is a high dependency of the product on personal experiences, definitions, and reputation by the gallery.

CONCLUSION

The commercial art gallery is in an unusually strong position in the channel of distribution as a result of the artist attitude toward being involved in commercial transactions. The lack of a large enough seller base and/or the existence of a central organization to bargain for the artists' best interest adversely affect the artist income and their ability to sell their art. The value in a work of art is highly dependent upon the reputation and expertise of the art gallery, which is the most significant exchange element in an exchange transaction. This is point at which the art gallery must be most effective as the broker for the artist. It is anticipated that the gallery as the channel leader will bring the social definition to the work of art to the marketplace for the artist. It appears only well known artist have the ability to impact the value of their art by name recognition. The combines of the artist's reputation along with the social definition as previously developed, provides the greatest amount of value to both the artist and the buyer.

The "Gallery" is an especially effective value added reseller of art performing a multitude of tasks to elevate the work of art to a favorable status level in the eyes of the buyer by affecting several intangible dimensions of the work. The commercial art gallery uses the social definition of the art industry and art, the artist production experience, and the potential buyer's consumption experience to establish the value of the work of art. This creation of wealth by the commercial art gallery industry provides them a strong power base and establishes the gallery as the leader in the channel of distribution.

REFERENCE

Bagozzi, Richard P. (1975), "Marketing as Exchange," *Journal of Marketing*, Vol. 39 (October): 32-39.

Berger, Peter L. and Thomas Luckmann (1966), *The Social Construction of Reality*, Doubleday and Company, Garden 'City, NY.

Durkheim, Emile (1954), *Elementary Forms of the Religions Life*, Translated by Joseph W. Swain, The Free Press, Glencoe, IL.

Delehanty, Randolph (1996), Art in The American South: Works from the Ogden Collection, Louisiana State University Press, Baton Rough, LA.

Houston, Franklin S. and Jule B. Gassenheimer (1987), "Marketing and Exchange," *Journal of Marketing*, Vol. 51 (October), 3-18.

Koretz, Gene (1999), "Portrait of the Artists," *Business Week*, May 3, 1999, p. 27

Kotler, Phillip (2000), *Marketing Management*, Prentice Hall, Upper Saddle River, NJ.

Marx, Karl (1962), "Alienated Labor," in Eric Josephson and Mary Josephson, *Man Alone: Alienation in Modern Society*, Dell Publishing Company, New York, 93-105.

Meah, Johnny (1999) A conversation with the artist, November 14, 1999.

Porter, Michael (1980), *Competitive Strategy: Techniques for Analyzing Industries and Competition*, Free Press, New York.

AN EMPIRICAL EXAMINATION OF CROSS-CULTURAL RISK TAKING FOR PHYSICAL RESOURCES

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ABSTRACT

The propensity for risk taking between Japanese and Americans was examined this study. An experiment was administered where the timing of either winning or losing a physical resource (i.e., free dining) was varied. Overall, the Japanese tended to feel more negatively about physical risks than the Americans. While the Japanese tended to be more risk averse, the Americans were more willing to accept the prospect of losses in the future.

EXECUTIVE SUMMARY

An experiment was conducted to analyze differences between Japanese and American risk taking propensity. Japanese were found to be more negative or risk averse.

The study involved the gain or loss of a physical resource. That is, the subjects in the study could either win a free dinner, or wash dishes if they lost in a gamble. The result was that the Japanese were more negative than Americans about the prospect of losing in the present as well as in the future.

The managerial implications of the study may be that the Japanese are less optimistic than Americans in viewing the probability of a loss occurring. The Japanese subjects seemed to dwell on the occurrence of negatives, especially for the future and may also have a different perception of time duration. That is, the Japanese may have a longer time horizon for viewing the future than Americans and see future events as being more immediate. Numerous business examples support this notion that the U.S. is short-term focused.

INTRODUCTION

Consumers and marketing managers alike commonly make decisions where good and bad outcomes may occur either in the present or in the future. For example, overconfident American automotive executives in the 1970's gambled on domestic consumer preferences and lost when U.S. automakers avoided short-term costs by delaying the redesign of their cars for fuel economy. In turn, Japanese automotive executives carefully made lower risk decisions to enter the U.S. automobile market with inexpensive, gas efficient cars at a time when economy was quickly becoming paramount.

The example above illustrates that decisions may be influenced by the perceived level of risk (Bauer, 1960), the timing of the outcome (Mowen and Mowen, 1991), and how the outcome is framed (Kahneman and Tversky, 1979). While the relationships between risk, outcome framing, and timing of outcomes have been previously studied in the behavioral decision literature (e.g., Lipschitz, 1989; Mowen, Bristow, and Amyx, 1994), they have been virtually ignored within the cross-cultural literature. Risk perception has been identified as a salient dimension to compare individuals and organizations across cultures (Clark, 1990). However, there is scant evidence of any theoretical underpinnings in cross-cultural research as the studies tend to be fragmented and isolated (Clark, 1990).

Given the need to develop more integrative, theory-based cross-cultural research, the authors propose a study which compares individuals from Japan and America to understand whether culture significantly influences one's assessment of a choice involving a known level of risk. Time and Outcome Valuation model (TOV) is used to explain and predict the differences between individuals from Japan and America given culture-based propensities for risk in combination with varying time duration's between one's decision and the outcome of that decision.

THEORY DEVELOPMENT

The TOV model describes the impact of time on the valuation process by integrating Kahneman and Tversky's (1979) prospect theory and Miller's (1959) approach-avoidance conflict theory. Like prospect theory, TOV forwards that how gains or losses are framed (e.g., negatively or positively) influences how they are psychologically valued, where losses are weighted more heavily than gains. TOV adds a time dimension to prospect theory and proposes that time systematically influences how individuals value the worth of losses and gains, such that the psychological value of a loss is discounted over time more quickly than that of a gain (Mowen and Mowen, 1991). In addition, the TOV model incorporates approach-avoidance conflict theory (Miller, 1959) by proposing that the delay of a gain is considered a loss, while the delay of a loss in viewed as a gain. Other researchers (Benzion, Rapoport, and Yagil, 1989; Loewenstein, 1988) agree with the claim that individuals discount losses more quickly than gains.

Cross-cultural research has yet to develop any paradigms (Nasif, Al-Daeaj, Ebrahimi, and Thibodeaux, 1991) but in an effort to move forward, research here should be more integrative and theory-based (Ricks, 1985). Realizing these concerns, the authors seek to integrate a model of decision making with cross-culture based issues of risk taking

RISK AND CULTURE

Researchers have identified that ethnic culture significantly impacts both consumer and managerial decisions under conditions of risk and uncertainty (Tse, Lee, Vertinsky, and Wehrung, 1988; Kleinhesselink and Rosa, 1991; McDaniels and Gregory, 1991). Cross-culture risk decision making is a compelling area of research full of potential to understand the influence of cultural norms on individuals' assessments of risky options (McDaniels and Gregory, 1991). Although cross-cultural research on risk is a relatively new field of inquiry (McDaniels and Gregory, 1991), the pervasiveness of risks and its prominence in the peoples' minds has spurred increased research effort to understand how individuals view risks (Kleinhesselink, and Rosa, 1991) and additional research is required (Tse et al., 1988).

The influence of culture on decision-making involving risk is quite strong (Tse et al., 1988). In fact, Douglas and Wildavsky (1982) forwarded that risk perceptions are determined by culture. Some cultures value the decision process while others emphasize the quality of the decision. Culture may influence business decisions by discouraging gambling or prescribing a tradeoff between risk and return (Tse et al., 1988). In sum, perceptions and decisions about risk are considered to vary systematically across different cultures (Kleinhesselink and Rosa, 1991).

Cultural Assessment

In generalizing about each of the cultures in this study (Japan and America), the focus will be on describing the individuals' capability to assess probabilities, make financial/managerial decisions, and perceive risks. These criteria are consistent with three major areas of individual decision research identified by McDaniels and Gregory (1991).

American Culture

The use of probabilities to assist decision making under conditions of uncertainty is an important assumption within decision theory (McDaniels and Gregory, 1991). Within decision theory, risk is typically a reflection of the variation in the distribution of possible outcomes, their probabilities, and their subjective values (March and Shapira, 1987).

Assess Probability

Research about Americans' ability to use probabilities to make decisions has been somewhat mixed. In a study by Kahneman, Slovic, and Tversky (1982), North Americans were considered to be poor users of probabilistic material. However, other research (Phillips and Wright, 1977; Wright and Phillips, 1980) appears to contradict Kahneman et al. (1982). In a study using British students, these subjects were able to express uncertainty in calibrated, well-defined degrees of probability. Although the subjects were not American, strong similarities between British and U.S. cultures based on managerial decision-making ability exist (Haire, Ghiselli, and Porter, 1966).

Financial/Managerial Decisions

In terms of financial/managerial decisions, Americans may be generalized with an emphasis on individual responsibility rather than group responsibility. It is common for individuals to be singled out for management errors (Sullivan, Suzuki, and Kondo, 1986). In addition, American managers may tend to emphasize innovation and creativity, with strongly emphasized and explicitly written short-term profitability goals (Lazer, Murata, and Kosaka, 1985).

Perceive Risk

In terms of risk, Americans seem to be more concerned with unknown risks, while other cultures seem to be more concerned with known risks (Kleinhesselink and Rosa, 1991). However, there is evidence that American perceptions of risk may be changing (Keown, 1989).

In addition, Americans may be viewed as possessing risk-like qualities. In a study by Barnlund (1975), American students rated themselves and were rated by Japanese students on a number of individual characteristics. Interestingly, American students were perceived in a composite cultural profile as being very "spontaneous," "impulsive," as not seeking "a protective relationship," and not at all "cautious."

Japanese Culture

Assess Probability

In terms of the ability of Japanese to use probabilities to help make risky decisions, Asians have been found to exhibit more extreme and unrealistic views regarding estimates of risk (Wright, 1984). One possible explanation for such findings could be the relative "fate-orientation" found in Asian cultures (Phillips and Wright, 1976).

Financial/Managerial Decisions

Concerning financial/managerial decisions, Japanese tend to plan and think for the long term (Neff, 1989) but have been criticized for emphasizing implementation over change, creativity, and innovation. Japanese emphasize group decisions and consensus building where individual behavior is merged with group functioning (Befu, 1980; McDaniels and Gregory, 1991; Lazer et al., 1985; Sullivan, Suzuki, and Kondo, 1987) and the employees are the firm's shareholders as well (Lazer et al., 1985). That is, there is no distinction between the firm's employees and the firm's shareholders.

Perceived Risk

The extensive use of "groupism" (Befu, 1980) and consensus building may be a mechanism to share risk and reduce any ambiguity or perceived risk (McDaniels and Gregory, 1991; Sullivan et al., 1987). For example, the effect of a "risky-shift" has been observed for members working together in groups. Sims, Harley and Weiner (1974) noted a tendency toward risk-taking behavior in group decisions compared to risk levels taken by the same people individually. Thus, the use of groups by Japanese should be considered as a potential influence on decision making given risky alternatives.

Japanese appear to be most concerned with known risks. In a study of risk perceptions by Kleinhesselink and Rosa (1991), Japanese students viewed nuclear issues as "old and known," compared with American students who viewed them as "new and unknown." The cumulative findings seemed somewhat of a "mixed bag" of similarities and preferences but the greatest differences between U.S. and Japanese students were between "known" and "unknown" risks (Kleinhesselink and Rosa, 1991).

Japanese have been viewed as possessing risk-averse qualities. In a study by Barnlund (1975), Japanese students assessed themselves and were also profiled by American students as being very "cautious" and seeking "a protective relationship."

In sum, Japanese seem to have some distinct differences in their outlook on managerial decision making and attitudes toward risk. Compared to Americans, Japanese appear to be more averse to known risks. They have been generalized as more cautious, and more likely to look to the long term, rather than the immediate future. Based on the review of the U.S./Japanese cross-cultural decision making literature, the final hypothesis is forwarded.

HYPOTHESIS

H1: Where known risks are given, Japanese subjects tend to be less willing to take risks toward physical losses and more risk averse toward physical gains, when compared to American subjects.

Study: Exploratory Experiment of Physical Gains/Losses

This exploratory study examined differences between Japanese and American students given known probabilities of winning or losing a physical resource. More specifically, this second study focused on risk taking where in a pencil and paper scenario, the subjects risked the chance of either winning a free dinner at their favorite restaurant or losing in a similar drawing where they would wash dishes at their favorite restaurant. The purpose here was exploratory research, to assess cultural differences given variations in the timing of the outcome for physical risks.

The study employed a 2 x 2 x 2 between subjects full factorial design. The independent variables in the study were the outcome of the drawing (gain; loss), time outcome is received (3 days; 6 months), and national origin of the subjects (U.S.; Japan). The dependent variables were (1) feeling if name is selected, (2) overall feeling about drawing, and (3) perceived risk of drawing. Each dependent variable was measured on a 100-point scale from "Very Bad" to "Very Good."

The subjects in the study were 109 undergraduate students. There was a total of 45 Japanese students, of which 30 were enrolled at a university in Tokyo, Japan and 15 were enrolled at a Midwestern university. All 64 U.S. students were enrolled at a Midwestern university. All subjects were randomly assigned to the following conditions: (1) win drawing or (2) lose drawing; and (1) outcome occurs in 3 days or (2) outcome occurs in 6 months.

Each subject read one of the following scenarios:

<u>Physical Gain (U.S. Version)</u>
(Scenarios 1 and 2)
Imagine you have a chance to win a free dinner at a favorite restaurant in a drawing at a bazaar sponsored by a club you belong to. (The dinner is to reward people who have helped a worthwhile charity.) 8 of the 24 people in the contest will win free dinner at a favorite restaurant. The drawing is tonight. The 8 winners will get their dinner in (3 days; 6 months).

<u>Physical Gain (Japanese Version)</u>
(Scenarios 5 and 6)
Imagine you have a chance to win a free dinner at a favorite restaurant in a drawing at a bazaar sponsored by a club you belong to. (The dinner is to reward people who have helped a worthwhile charity.) 8 of the 24 people in the contest will win free dinner at a favorite restaurant. The drawing is tonight. The 8 winners will get their dinner in (3 days; 6 months).

<u>Physical Loss (U.S. Version)</u>
(Scenarios 3 and 4)
Imagine you have a chance to spend one night washing dishes at a favorite restaurant in a drawing at a bazaar sponsored by a club you belong to. (The time spent washing dishes benefits a worthwhile charity.)

8 of the 24 people in the contest will each spend one night washing dishes at a favorite restaurant. The drawing is tonight. The 8 names chosen will wash dishes in (3 days; 6 months).

Physical Loss (Japanese Version)
(Scenarios 7 and 8)
Imagine you have a chance to spend one night washing dishes at a favorite restaurant in a drawing at a bazaar sponsored by a club you belong to. (The time spent washing dishes benefits a worthwhile charity.) 8 of the 24 people in the contest will each spend one night washing dishes at a favorite restaurant. The drawing is tonight. The 8 names chosen will wash dishes in (3 days; 6 months).

Please note that the subjects had a one in three probability of having his/her name drawn. After reading the scenario, the subjects rated their attitudes about the drawing in the scenario. The following dependent measures were used.

Dependent Variable 1: Feeling if Name is Selected
How would this drawing make you feel if your name were drawn?
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
Very Neutral Very
Bad Good
Dependent Variable 2: Overall Feeling About Drawing
Overall, how do you feel about this drawing?
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
Very Neutral Very
Bad Good
Dependent Variable 3: Perceived Risk of Drawing
How risky do you feel that this drawing is?
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
Very Neutral Very
Bad Good

RESULTS OF STUDY

The results of the study yielded main effects for the variables "national origin" and "outcome of the drawing" for each of the three dependent measures of risk taking. The results indicated that in all cases, Japanese viewed the drawing more negatively and risky than the Americans. In addition, the subjects viewed losing significantly more negative (at the 0.05 level) than winning.

Of particular interest was an interaction between national origin and outcome of the drawing for the dependent measure of "feeling if name is selected" ($F:4.24$, $p<0.05$). Given the chance of a physical loss, the Japanese (mean=42.7) viewed such a prospect significantly more negatively than the U.S. subjects (mean=61.7). Other differences were noted between the cultures regarding the prospect of a physical loss. The Japanese felt significantly more negative about losing in the present (i.e., in 3 days) than Americans for each of the three measures of risk taking (feeling F:10.14; overall feeling F:5.54; perceived risk F:6.12). However, there were no statistical differences regarding a physical loss 6 months in the future.

A major difference between the two cultural groups was noted based on how the members felt when the outcome of losing or winning was delayed over time. For the Americans, there was significant difference between winning or losing in the present (F:9.76), yet they held no preference regarding a gain or loss in the future. In contrast, the Japanese felt significantly worse (i.e., if their name was drawn) about losing both in the present (F:16.64) and the future (F:4.71).

DISCUSSION

The tentative findings from the study offer support for the idea that Japanese and Americans have different views about the timing of outcomes and the probability of those outcomes occurring. Most interestingly, the study found some consistency in the Japanese' aversion to losses. In addition, the Japanese felt more negatively about a physical loss versus a gain in both the present and in the future while the Americans indicated negative feelings toward a physical loss versus a gain only in the present.

Immediate physical losses are often preferred to delayed losses as there may be a "dread" effect in waiting for the negative event (Loewenstein, 1987). However, the Japanese were less optimistic about such losses than the Americans. Thus, the valuation and rate of discounting of losses over time may vary based on cultural factors. Consequently, further effort should be made to investigate the differences between physical gains and losses in combination with differences in cross-cultural valuation of such resources over time.

LIMITATIONS AND FUTURE RESEARCH

One concern of the studies was the manipulation of the outcome timing (i.e., 3 days and 6 months). It may be that the time duration of 6 months was not long enough since there were no main effects for the timing of the outcome in the study. Future research should consider alternative manipulations of the timing of the outcome in cross-cultural comparisons. Also, an attempt to specifically measure cross-cultural differences in time perception should also be considered.

A second concern was the probability of the outcome occurring. Future researchers should consider different probabilities for outcomes. Further efforts should be made to determine what probabilities the sample would consider risky for the purpose of gambling.

Another concern was the use of a college student sample. Methodologically, it is preferred to make cross-cultural comparisons using samples with similar demographic characteristics. In this study, all of the subjects were students, although the slight age difference between the groups could be of some concern. Although students may later become managers and executives, their perceptions of time and risk may likely change as they become older. Thus, future research should consider using an older or more diverse sample for comparison, preferably managers if possible.

CONCLUSION

In conclusion, the study found significant differences between Japanese and American students on measures of risk taking. The study found the Japanese to view physical losses in the present more negatively than Americans. These findings have implications for managerial planning horizons, and lay a foundation for further study in cross-cultural comparisons of risk using an integrative theory.

BIBLIOGRAPHY

Barnlund, D. (1975). *Communicative Styles of Two Cultures*, Kinseido, Tokyo.

Bauer, R. A. (1960). Consumer Behavior as Risk Taking. In R. S. Hancock, (Ed.), *Dynamic Marketing for a Changing World* (pp. 380-398). Chicago: American Marketing Association.

Befu, H. (1980). A Critique of the Group Model of Japanese Society. *Social Analysis*, 5/6, 29-43.

Benzion, U., Rapoport, A., & Yagil, J. (1989). Discount Rates Inferred From Decisions: An Experimental Study. *Management Science*, 35(3), March, 270-284.

Clark, T. (1990). International Marketing and National Character: A Review and Proposal for an Integrative Theory. *Journal of Marketing*, 54, October, 66-79.

Douglas, M. & Wildavsky, A. (1982). *Risk and Culture*, Berkeley: University of California Press.

Haire, M., Ghiselli, E. G., & Porter, L.W. (1986). *Managerial Thinking: An International Study*, New York: Wiley.

Kahneman, D., & Tversky, A. (1979), Prospect Theory: An Analysis of Decisions Under Risk. *Econometrica*, 47, March, 363-391.

Kahneman, D., Slovic, P., & Tversky, A. (1982). *Judgment Under Uncertainty: Characteristics and Biases*. New York: Cambridge University Press.

Keown, C. F. (1989). Risk Perceptions of Hong Kongese vs. Americans. *Risk Analysis*, 9, 401-405.

Kleinhesselink, R. R., & Rosa E. A. (1991). Cognitive Representation of Risk Perceptions. *Journal of Cross-Cultural Psychology*, 22, March, 11-28.

Lazer, W., Murata, S., & Kosaka, H. (1985). Japanese Marketing: Towards a Better Understanding. *Journal of Marketing*, 49, Spring, 69-81.

Lipschitz, R. (1989). Either a Medal or a Corporal: The Effects of Success and Failure on the Evaluation of Decision Making and Decision Makers. *Organizational Behavior and Human Decision Making*, 44, December, 380-395.

Loewenstein, G. F. (1987). Anticipation and the Valuation of Delayed Consumption. *Economic Journal*, 97, 666-684.

Loewenstein, G. F. (1988). Frames Of Mind In Intertemporal Choice. *Management Science*, 34(2), February, 200-214.

March, J. G., & Shapira, Z. (1987). Managerial Perspectives On Risk And Risk Taking. *Management Science*, 33(11), November,1404-1418.

McDaniels, T. L., & Gregory, R. S. (1991), A Framework For Structuring Cross-Cultural Research In Risk And Decision Making. *Journal of Cross-Cultural Psychology*, 22(1), March, 103-128.

Miller, N. E. (1959). Liberalization of Basic S-R Concepts: Extensions to Conflict Behavior, Motivation, and Social Learning. In S. Koch, (Ed.), *Psychology: The Study of a Science* (pp. 196-292), New York: McGraw-Hill Book Company, Inc.

Mowen, J. C., Bristow, D. N., & Amyx, D. A. (1994). The Resource Management Model: Time and the Gain/Loss of Wealth vs. Physical Resources. 1994 Behavioral Decision Research in Management Conference, Massachusetts Institute of Technology, Cambridge, Massachusetts.

Mowen, J. C., & Mowen, M. M. (1991). Time and Outcome Valuation: Implications For Marketing Decision Making. *Journal of Marketing*, 55, October, 54-62.

Nasif, E. G., Al-Daeaj, H., Ebrahimi, B., & Thibodeaux, M. S. (1991). Methodological Problems in Cross-Cultural Research: An Updated Review. *Management International Review*, 31(1), 79-91.

Neff, R. (1989, November 20). And Now, Another Form of Japanese Hardball: Lowball Pricing. *Business Week*, 50.

Phillips, L. D., & Wright, G. N. (1976). Group Differences in Probabilistic Thinking. *Technical Report 76-4*, Uxbridge, Middlesex, Decision Analysis Unit, Brunel Institute of Organization and Social Studies, Brunel University.

Phillips, L. D., & Wright, G. N. (1977). Cultural Differences in Viewing Uncertainty and Assessing Probabilities, H. Jungermann & G. deZeeum (Eds.), *Decision Making an Change in Human Affairs*, Amsterdam, Reidel.

Ricks, D. A. (1985). International Business Research: Past, Present, and Future. *Journal of International Business Studies*, 16(2), 1-4.

Sims, T. K., Harley, C., & Weiner, E. A. (1974). Risk In Decision Making Across College Students' Major Fields. *Psychological Reports*, 34, 145-146.

Sullivan, J. J., Suzuki, T., & Kondo, Y. (1986). Managerial Perceptions of Performance: A Comparison of Japanese and American Work Groups. *Journal of Cross-Cultural Psychology*, 17 (4), December, 379-398.

Tse, D. K., Lee, K., Vertinsky, I., & Wehrung, D. A. (1988). Does Culture Matter? A Cross-Cultural Study of Executives' Choice, Decisiveness, and Risk Adjustment in International Marketing. *Journal of Marketing*, 52, October, 81-95.

Wright, G. N. (1984). Organizational, Group, and Individual Decision Making In Cross-Cultural Perspective, George Wright (Ed.), *Behavioral Decision Making*, New York, Plenum.

Wright, G. N., & Phillips, L. D. (1980), Cultural Variation In Probabilistic Thinking: Alternative Ways Of Dealing With Uncertainty. *International Journal of Psychology*, 15(4), December, 239-257.

AN INVESTIGATION OF THE RELATIONSHIP BETWEEN CONSUMER SHOPPING ORIENTATION AND ONLINE PURCHASE BEHAVIOR

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ABSTRACT

This paper examines the influence of consumer shopping orientations on the purchase of products via the Internet. Proprietary and anecdotal evidence suggests that convenience is the primary motivation for consumers purchasing online. In addition, it has been suggested that consumers who enjoy the shopping process are unlikely to purchase in a computer-mediated environment. Results from an online survey of US Internet users indicate that, contrary to popular belief, an individual's shopping orientation does not appear to significantly influence online purchase behavior. It is proposed that a key factor contributing to this result is the increased diversity of Internet shoppers. As the Internet user population has grown, it has come to resemble more closely the mainstream retail buyer market. Managerial implications are discussed and directions for future research are suggested.

INTRODUCTION

Internet retail sales have escalated dramatically in recent years and this rapid growth looks set to continue. Estimates indicate that US online retail sales will reach US$20 billion in 1999 and soar to US$184 billion in 2004 (Forrester Research Inc., 1999). Accordingly, retailers are beginning to understand that the key to assessing potential online sales of their products is by gaining a deeper insight into the characteristics and behavior of Internet users (Reynolds, 1997). Examining consumers' shopping orientations is one way of achieving this. It has been suggested that shopping orientations are a consumer characteristic with significant influence on retail outlet choice (Neal, Quester, and Hawkins, 1999). Shopping orientations have been used in a variety of retail contexts to identify groups of consumers who have a preference for particular types of shopping behavior (e.g. Darden and Ashton, 1975; Dholakia, Pedersen, and Hikmet, 1995; Gehrt and Carter, 1992; Lesser and Hughes, 1986; Lumpkin, 1985; Moschis, 1976; Reynolds, 1974; Westbrook and Black, 1985; Williams, Painter, and Nicholas, 1978).

The purpose of this research is to examine the extent to which shopping orientations influence consumer purchase of products via the Internet. Although the retail literature has a considerable history of research regarding shopping orientations and selection of retail patronage mode, no prior study has empirically investigated the relationship between shopping orientation and online purchase behavior.

SHOPPING ORIENTATIONS AND RETAIL PATRONAGE MODE

Consumers go shopping for a variety of reasons and the underlying objective is not always the procurement of goods (Blankertz, 1950; Tauber, 1972; Westbrook and Black, 1985). Such reasons may include social interaction, sensory stimulation, physical exercise, role enactment, diversion from one's daily routine, keeping up with trends, and physical exercise to name a few (Tauber, 1972).

Retailers recognize that shoppers differ with respect to how they approach the shopping task. If consumers were identical in their shopping behavior, a single strategy could be used for targeting all

potential customers. In reality, this is not the case. Due to consumers' diverse shopping preferences, it has been suggested that retailers should develop strategies contingent upon consumers' shopping orientations (Gehrt and Carter, 1992). Shopping orientations refer to the general predisposition of consumers toward the act of shopping (Gehrt, Alpander, and Lawson, 1992).

A consumer's shopping orientation influences both the general type of outlet selected and specific store choice. For example, a person who is primarily concerned with convenience and time-saving may be more inclined to shop at a local store with fast service. Another individual who enjoys browsing or window shopping may prefer to spend their leisure time in a mall with numerous types of stores. Studies of shopping orientation have provided useful insights into the behavior of certain groups of consumers and have a valuable role to play in the future of retail management (Neal, Quester, and Hawkins, 1999).

EXTANT SHOPPER TYPOLOGIES

Throughout the retail literature, multiple taxonomies of shopper types have emerged, beginning with the seminal work of Stone (1954) that investigated the shopping orientations of urban dwellers. Subsequent studies have examined both general shopping orientations and more specific orientations relating to product type, store type, gender, and age group to name a few (e.g. Darden and Ashton, 1975; Darden and Reynolds, 1971; Dholakia, Pedersen, and Hikmet, 1995; Lesser and Hughes, 1986; Lumpkin, 1985; Moschis, 1976; Reynolds, 1974; Westbrook and Black, 1985; Williams, Painter, and Nicholas, 1978). The objective of such efforts has ostensibly been to extend consumer shopping behavior theory and to accurately identify segments that can be targeted with differentiated marketing strategies. This study deals with general shopping orientations so that results may be compared to other retail settings, purchase situations, and products.

It is to be expected that shopping orientations will differ for different products or consumer groups, certainly in terms of the proportion of shoppers falling into each shopper category. Inherent problems arise when comparing shopper typologies as the diversity of research has been great. Studies have differed with respect to their emphasis on products, consumer characteristics, patronage modes, geographic location, and sample size, making effective comparison difficult but not impossible. Nevertheless, it is likely that some of the research findings will indicate a degree of congruency, with a set of core shopper types emerging. This view is supported by Westbrook and Black (1985) and Lesser and Hughes (1986) who have previously conducted analyses of different shopping orientation studies and argued that common segments can be found. Commonalities were found by comparing the detailed descriptions of each segment with those found in other studies. A similar approach is undertaken in this study.

Stone (1954) provided one of the earliest segmentation studies of retail buyers in terms of their shopping orientation. He proposed the existence of four different shopper types. Respondents who were predominantly concerned about relationships with store personnel were characterized as personalizing shoppers. Economic shoppers were primarily concerned with price, quality, and variety of merchandise. Ethical shoppers felt compelled to shop at certain stores as a result of their moral philosophies such as helping out the "little guy" or avoiding the big chain stores. Apathetic shoppers were mostly interested in minimizing shopping effort as the task held little interest for them.

In contrast to Stone, a subsequent study by Stephenson and Willett (1969) focused not on the psychological characteristics of consumers but on their actual search and patronage behaviors. They suggested four fundamental "shopping styles" based on consumers' purchase activity, the degree to which they concentrated their purchases among competing firms, and the number of outlets searched before completing a transaction. These segments were labeled: 1) store-loyal shoppers, 2) price-bargain-conscious shoppers, 3) compulsive and recreation shoppers, and 4) convenience shoppers.

Store-loyal shoppers demonstrated a high concentration of patronage and low level of searching whereas price-bargain-conscious shoppers engaged in diverse patronage with a high degree of search. Compulsive/recreation shoppers tended to restrict their shopping to fewer merchants but spent considerable time searching for products. Convenience shoppers behaved in approximately the opposite manner, patronizing a wide range of firms with little search effort.

A more simplified approach to segmenting consumers on the basis of shopping orientation was proposed by Bellenger and Korgaonkar (1980). Based on earlier work by Bellenger, Robertson, and Greenberg (1977), they conceived a shopper typology consisting of two general groups: 1) the recreational shopper and 2) the economic-convenience shopper. The recreational shopper is defined as a person who "enjoy[s] shopping as a leisure-time activity" (Bellenger and Korgaonkar, 1980, p.78). In the current study, this recreational approach to shopping is termed shopping enjoyment.

For a detailed review of other shopping typologies, see Westbrook and Black (1985) and Lesser and Hughes (1986). A summary of the findings of several important shopping orientation studies is presented at Table 1.

Table 1: Summary of Major Shopper Typologies

Author(s)	Sample Size	Sample Makeup	Analysis Method	Shopper Types
Stone (1954)	124	Department store shoppers	Cluster Analysis	Economic Personalising Ethical Apathetic
Stephenson and Willett (1969)	315	Buyers of apparel, shoes, and toys	Cluster analysis	Store-loyal Compulsive/recreational Convenience Price-bargain-conscious
Darden and Reynolds (1971)	167	Female heads of households	Canonical correlation	Economic Small store- personalising Chain store-depersonalising Ethical Apathetic
Darden and Ashton (1975)	116	Female grocery shoppers	Cluster analysis	Apathetic Demanding Quality Fastidious Stamp preferer Convenient location Stamp hater
Moschis (1976)	206	Buyers of cosmetics	Factor analysis	Special Brand-loyal Store-loyal Problem-solving Psycho-socialising Name-conscious
Williams,	298	Grocery	Cluster	Low-price

Painter, and Nicholas (1978)		shoppers	analysis	Convenience Involved Apathetic
Bellenger and Korgaonkar (1980)	324	Adult shoppers	Discriminant analysis	Recreational Economic-convenience
Lumpkin (1985)	373	Elderly shoppers	Cluster analysis	Apathetic Economic Active
Westbrook and Black (1985)	203	Adult shoppers	Factor analysis	Shopping process involved Choice optimisation Shopping process apathetic Apathetic Economic Nondescript
Lesser and Hughes (1986)	6808	Heads of households	Q-Factor analysis	Inactive Active Service Traditional Dedicated fringe Price Transitional
Gehrt and Carter (1992)	297	Heads of households	Factor analysis	Catalog convenience Store recreational Catalog recreational Merchandise intensive Impulse
Shim and Mahoney (1992)	872	Elderly shoppers	Factor analysis	Instrumental clothing usage Fashion conscious Price conscious Shopping interest Shopping confidence Credit user Catalog preference Brand conscious Time conscious

Source: Developed by the author for use in this paper.

CORE SHOPPER TYPES

The array of shopper types listed in Table 1 seems at first bewildering. However, a closer inspection of the characteristics of each segment reveals many similarities. It is apparent that some of the studies have expanded upon Stone's original typology, which consisted of four prime segments, while others have reduced the number of shopping orientations. While the same orientations were not identified in each study, the shopping enjoyment, price-conscious, loyalty to local merchants, apathetic, personalizing, and convenience orientations (or their terminological equivalents) were identified with some degree of frequency. With the exception of the personalizing shopper, which was found on three occasions, the remaining shopper types have appeared in at least five of the thirteen studies reviewed for this paper, and can be considered core shopper types that occur across a range of retail contexts.

This classification of core shopper types may exclude other, perhaps equally important, orientations. However, the six core orientations represent those that have been most frequently discussed in the retailing literature. It is also important to note that the shopping orientations identified are relatively independent of one another, thereby reducing the potential for redundancy among consumer shopping characteristics.

The multitude of additional dimensions identified throughout the shopping orientation literature can also be largely accounted for by the type of psychographic statements employed by researchers. Questions relating to entirely separate constructs may have been asked in one study but not in another. It is undeniable that there is an array of traits possessed by consumers that influence their shopping orientation. In addition, specific shopping situations may demand specific questions, such as whether the consumer likes to use grocery stamps (Darden and Ashton, 1975). Of course, this is likely to yield an entirely new shopper type.

The intention of the current research is to investigate only those shopping orientations that occur with some degree of consistency throughout the literature. Selection of these common orientations as the basis for investigating Internet shoppers is also justified by the fact that they are semantically sensible in the context of online purchasing.

SHOPPING ORIENTATION AND INTERNET SHOPPING

Although there is an absence of empirical literature examining the shopping orientations of Internet shoppers, the existence of relationships between shopping motivations and online purchasing has been implied through anecdotal, proprietary, and scholarly evidence. For example, convenience has been proposed as an obvious benefit associated with any form of in-home shopping (Gillett, 1976; Reynolds, 1974). It is no surprise then, that the most common assumption regarding Internet retailing is that consumers buy online because it is convenient (APT Strategies, 1998; Burke, 1998; Ellsworth, 1995; Georgia Institute of Technology, 1998; Jarvenpaa and Todd, 1997). It is hypothesized that:

H1: There will be a significant positive relationship between convenience and the prior purchase of products via the Internet.

The ability to conduct price comparisons has also been cited as a major reason why consumers use the Internet (Wallace, 1995). Therefore:

H2: There will be a significant positive relationship between price-consciousness and the purchase of prior products via the Internet.

Some commentators have argued that people who enjoy the shopping process are unlikely to buy online and that purchasing via the Internet is a poor substitute for the leisure experience associated with

conventional shopping (Rowley, 1996). Conversely, it is implied that individuals who dislike the shopping process (i.e. apathetic shoppers) may be more amenable to purchasing online.

H3: There will be a significant negative relationship between shopping enjoyment and the prior purchase of products via the Internet.

Consumers who feel an obligation to purchase from merchants in their local community may also demonstrate less willingness to buy from vendors over the Internet.

H4: There will be a significant negative relationship between consumer loyalty to local merchants and the prior purchase of products via the Internet.

In addition, if consumers enjoy personalised relations with store personnel they may be even more unlikely to purchase via the Internet. The face-to-face service encounter is unavailable to most online shoppers, at least until real-time video communication technology becomes more sophisticated, affordable, and widespread. Some consumers may be resistant to new ways of purchasing products, especially when the new way represents loss of personal contact (Moutinho, 1992). Support for such a view comes from Moutinho and Meidan (1989) who, in a study of services in the banking industry, found that many consumers placed considerable importance on the "human factor" in commercial transactions.

H5: There will be a significant negative relationship between the importance of a personalised shopping experience and the prior purchase of products via the Internet.

Research has suggested that there is a strong correlation between Internet usage rate and online purchasing (APT Strategies, 1998), with the majority of online shoppers accessing the medium on daily basis. It is therefore expected that Internet usage rate will covary in the effect of shopping orientation and online purchase behavior. In addition, it is expected that individuals who are innovative in the domain of technology products will be more likely to purchase products via the relatively new distribution medium of the Internet than less innovative technology users. Those consumers who are less innovative in the use of technology products may be more inclined to seek for product information only and commit their purchasing to conventional retail outlets. To allow for the anticipated mediating effects of Internet usage rate and technological innovativeness, it is hypothesised that:

H7: Internet usage rate and technological innovativeness will be significant covariates in any main effect from shopping orientation to prior online purchase.

METHODOLOGY

Sampling and Data Collection. A total of 964 US Internet users were randomly selected from a mailing list owned by a US online market research firm, then contacted by e-mail and requested to participate in the research. Two groups of 482 potential respondents were each directed to one of two Web addresses. In order to reduce the order effect of survey items, a separate questionnaire was used for each group so that the order in which constructs and items were presented could be manipulated.

To complete the questionnaire, participants were required to fill out the form online. In an effort to minimize the number of missing responses, an on-screen message was presented to respondents if they filled out the questionnaire incorrectly. They were then given the option of amending their responses or submitting the questionnaire in its current, incorrect format. Participants were not compelled to amend their responses in order to avoid the possibility of them becoming offended and dropping out of the study altogether.

A total of 440 responses to the online questionnaire were received of which 437 responses were useable. This represented an overall response rate of 45.64%, which is favourable by comparison with mail surveys (Yu and Cooper, 1983).

Demographic Profile of Respondents. Of the 437 useable responses, 302 were from males (69.11%) and 135 from females (30.89%). Males therefore outnumbered females more than two to one. Several recent studies of Internet users indicate that the number of women using the Internet is almost as high as that of men (Georgia Institute of Technology, 1998; Iconocast, 1998). Age distribution was measured using seven categories ranging from under twenty years of age to older than sixty-five years. There was a relatively normal distribution across age categories with the majority of respondents (approximately 75%) falling between the ages of twenty-five and fifty-four.

In terms of the education level of survey participants, the vast majority (86.96%) of respondents confirmed that they have attended or graduated from college or a higher education institution. Examination of respondents' income revealed no unusual patterns, with decreasing numbers of survey participants earning increasingly larger incomes. The exception was those individuals reporting income below $30000 per annum, who constituted 18.54% of the sample. The majority (64.29%) of consumers indicated annual earnings of between US$30000 and $80000.

The sample was separated into five broad employment categories: 1) computer-related (23.74%), 2) education (21.23%), 3) professional (14.62%), 4) management (15.98%), and 5) other (24.43%). This classification method is consistent with methods used in previous research on Internet users (e.g. Georgia Institute of Technology, 1998).

With the exception of gender, no substantial bias exists within the demographic makeup of the sample to indicate it is unrepresentative of the Internet user population in general. Estimates of the gender ratio vary widely with some studies (e.g. Georgia Institute of Technology, 1999) putting the percentage of female users as low as 35.8%. The gender ratio for the current study is not especially skewed given that most research acknowledges that male Internet users outnumber female.

Measurements. *Shopping enjoyment.* Shopping enjoyment was operationalized using a multi-item, summated scale developed by Bloch, Sherrell, and Ridgway (1986). The instrument consists of five Likert-type statements with responses ranging from strongly disagree (1) to strongly agree (5). In the study by Bloch, Sherrell, and Ridgway (1986), the authors reported a Cronbach's alpha coefficient of 0.84, indicating good reliability.

Personalizing Orientation. To assess the extent to which individuals possess a personalizing orientation toward shopping, a three-item scale, first used by Hawes and Lumpkin (1984), was included in the questionnaire. Hawes and Lumpkin showed that the scale is reliable with an alpha of 0.84 recorded in their original study. Factor analysis of the items indicated the scale was unidimensional and exhibited evidence of discriminant validity.

Convenience. Convenience was operationalized in this study using a three-item, summated, Likert-type scale initially employed by Shamdasani and Ong (1996) to measure the importance of convenience to in-home shoppers. Their research resulted in a Cronbach's alpha of 0.86 for the scale and was therefore considered appropriate for the current research.

Loyalty to Local Merchants. The degree to which consumers patronize local stores out of moral obligation to their community was referred to by Hawes and Lumpkin (1984) as "loyalty to local merchants". The itemized scale used to measure this construct consisted of three Likert statements. In the Hawes and Lumpkin research, the instrument exhibited reliability with a Cronbach's alpha of 0.76.

Price Consciousness. Consumers' propensity to be price conscious when engaging in shopping activities was measured using a four-item, Likert-type scale developed by Tat and Schwepker (1998). The summated scale was a modified version of the original instrument used by Wells and Tigert (1971). Reliability testing resulted in alpha coefficients of 0.71 and 0.70 for both studies respectively.

Apathetic Orientation. In this study, the apathetic shopping orientation was not measured directly but was implied by low scores on the shopping enjoyment orientation.

In this research project, it was expected that Internet usage rate and technological innovativeness might influence the relationship between shopping orientation and purchase behavior. To control for this influence, analysis of covariance was used as the method of analysis and the variables were treated as covariates in the main effects.

Technological Innovativeness. Consumer innovativeness in the domain of high technology products was measured using a modified version of Goldsmith and Hofacker's scale (1991). Suggested high technology products included computers, modems, mobile phones, pagers, personal organizers,

Internet accounts, cable TV, and hand-held computers. The multi-item scale consisted of six Likert-type statements of which three were reverse scored. Goldsmith and Hofacker (1991) reported high reliability across a range of product categories with coefficient alpha levels above 0.80.

Internet usage rate. Internet usage rate was measured by asking respondents to state how many hours per day, on average, they use the Internet.

Prior Purchase. Prior purchase was measured by asking respondents how many purchases they had ever made completely via the Internet.

Pretest. To test whether the final questionnaire could be completed in its present form or required modifications, a pretest was conducted using a sample of 40 students from an undergraduate marketing class. The intention of the pilot study was not to analyse relationships between variables but to assess the questionnaire's overall performance in terms of wording, ease of completion, and reliability of multi-item scales. No modifications to the final instrument were required.

RESULTS

A total of six summated variables were used in the study. Each was tested for internal consistency reliability using Cronbach's alpha and all exceeded the minimum recommended by Nunnally (1978) of 0.70. Descriptive statistics outlining the reliability of the scales as measured by Cronbach's alpha, are presented at Table 2.

Table 2: Reliability Coefficients of Scales Used in Research

Scale	Number of Items	*Cronbach's Alpha*
Shopping Enjoyment	5	0.79
Convenience	3	0.70
Personalizing Shopper	3	0.87
Loyalty to Local Merchants	3	0.80
Price Consciousness	4	0.74
Innovativeness	6	0.82

n=437

Source: analysis of survey data.

Analysis of covariance (ANCOVA) was used to test Hypotheses 1 to 5. Hypothesis 6 proposed that technological innovativeness and Internet usage rate will function as mediating variables in the main effects of these hypotheses, therefore ANCOVA was the most appropriate analysis technique to use. In addition, the ANCOVA method was employed because it allows for co-variation and is able to test not only the main effect but also the interaction between independent variables.

Hypotheses 1 to 6 were rejected on the basis of the ANCOVA results. As shown in Table 3, shopping enjoyment (F=0.257, p>.05), personalizing (F=0.605, p>.05), convenience (F=0.637, p>.05), price consciousness (F=0.050, p>.05), and loyalty to local merchants (F=0.000, p>.05) appear to have an insignificant effect on prior Internet purchasing. In addition, no interactions were observed between the independent variables.

Table 3: Results of Five-Way Analysis of Covariance

Effect	df	MS Effect	MS Error	*F*	p
Main Effects					
Shopping Enjoyment	1, 386	3.146	12.244	0.257	0.613
Personalizing	1, 386	7.412	12.244	0.605	0.437

Convenience	1, 386	7.795	12.244	0.637	0.425
Price-Consciousness	1, 386	0.611	12.244	0.050	0.823
Loyalty to Local Merchants	1, 386	0.000	12.244	0.000	0.997
Covariates					
Technological Innovativeness and Usage Rate	2, 386	911.046	12.241	74.407	*0.000

n = 437
* Significant at p < .001
Source: analysis of survey data.

To test for any significant interaction between the covariates and the main effects, a within cells regression was performed for each of the two analyses of covariance. Results of the within cells regression for the main effect of shopping orientation and purchase intention appear at Table 4.

Table 4: Within Cells Regression Analysis for Covariates of Technological Innovativeness and Internet Usage Rate

Covariates	Standard Error	Beta	*t*	p
Innovativeness	.0252	0.172	3.952	*0.000
Usage Rate	.090	0.485	11.171	*0.000
		$R^2 = 0.28$		

n = 219
* Significant at p < .001
Source: analysis of survey data.

It is evident from Table 4 that both innovativeness and usage rate are significant covariates. The results confirm that the relationship accounts for a relatively large proportion of the variance ($R^2 = 0.28$). Hypothesis 7 is therefore accepted.

DISCUSSION

The significance of this study lies in exposing the erroneous assumption that consumers who purchase products online are primarily convenience-oriented shoppers. The results are in apparent contradiction to the findings of several other studies (APT Strategies, 1998; Burke, 1998; Georgia Institute of Technology, 1998; Jarvenpaa and Todd, 1997), which suggest that convenience is the primary motivation of those who use the Internet for purchasing. It also contradicts the popular belief that people who enjoy the shopping process itself are less likely to purchase products in an online environment. Based on the findings, it might be suggested that the population of online purchasers is coming to resemble that of many mainstream retail buyer markets, wherein a range of shopping orientations have been observed.

The results are also consistent with the retail literature on catalog shopping that suggests consumers do not necessarily purchase solely for convenience purposes. Based on these findings, it might be suggested that online retailers whose primary strategy is based on appealing to consumers' perceptions of convenience, may be misguided. Efforts directed at facilitating price comparisons or enhancing enjoyment of the online shopping experience could prove to be equally effective.

The outcomes of this study may be of use to managers of firms who currently engage, or are planning to engage, in retail trade via the Internet. It has been widely assumed that the majority of consumers who purchase online do so primarily for convenience. This perhaps overly simplistic view is not supported by the research presented here. The results indicated that consumers who shop online do not predominantly exhibit any one type of shopping orientation.

There are challenges to online retailing and profitable Internet retailers are said to be among the minority. Rather than conceptualizing the Internet as a purely convenience-oriented patronage mode, retailers may be better served by taking a more holistic approach with their marketing strategies. By acknowledging that multiple groups of Internet shoppers exist and appreciating that they are driven by fundamentally different shopping motivations, online vendors can employ tactics that meet the needs of each of these consumer groups. For example, although convenience is clearly important to many Internet shoppers, the design of a Web site might also incorporate elements that enhance the enjoyment of the product acquisition process or the ability to compare prices with other firms.

LIMITATIONS AND FUTURE RESEARCH

As revealing as the results are, the study is not without its limitations. These limitations are founded on both practical and theoretical issues. One practical limitation of this study is that only Internet users from the United States were recruited for testing, so generalizations about the entire population of Internet users are inappropriate. It would be of value to conduct similar research on other nationalities to obtain a clearer picture of online consumer behavior via what is, essentially, a global medium. However, the United States comprises the overwhelmingly largest group of Internet users in the world and is the source of considerable Internet-based technology and practice. As a consequence, the use of such a sample would appear to be justified in its own right. In addition, extrapolations from the research were only extended to the population of US Internet users.

One major theoretical limitation to the research was also evident. General shopping orientations were measured rather than orientations specifically aimed at Internet users. The choice was deliberate, with the intention being the application of fundamental shopping motivations of Internet users regardless of whether they use the Internet during the purchase process. It is possible that shopping orientations specifically tailored to Internet shopping, product categories available online, or different online purchase situations might be employed with considerable effect. This is likely to be a rich area for future research, even to the extent of examining individual Internet retailers and products.

However, it has been suggested that retail research should investigate the existence of retail shopping types that can be generalized across retail institutions (Darden and Ashton, 1974). Research that is too specific may suffer from the inapplicability of results to a wider range of circumstances. By treating the sample as consumers first, and as Internet users who use the Internet for purchasing second, online retailers can make assumptions about the types of consumers they should be targeting with their marketing efforts.

It may be that the Internet, as a retail patronage mode, is still in a state of relative infancy with purchase efficiency and product assortment perceived by consumers to be less than that of conventional stores. However, from these findings, it can be reasonably suggested that Internet users and Internet shoppers are a diverse consumer group who should be treated as such by online retailers.

REFERENCES

APT Strategies ((1998)), *APT Strategies Newsletter July (1998)*, http://www.aptstrategies.com.au/junk/newsletters/july(1998).htm

Bellenger, D.N. and Korgaonkar, P.K. (1980), "Profiling the Recreational Shopper", *Journal of Retailing*, Volume Fifty-Six, Number Three, 77-92.

Bellenger, D.N., Robertson, D.H., and Greenberg, B.A. (1977), "Shopping Center Patronage Motives", *Journal of Retailing*, Volume Fifty-Three, Number Two, 29-38.

Blankertz, D.F. (1950), "Motivation and Rationalization in Retail Buying", *Public Opinion Quarterly*, Winter, 659-667.

Bloch, P.H., Sherrell, D.L., and Ridgway, N.M. (1986), "Consumer Search: An Extended Framework", *Journal of Consumer Research*, Volume Thirteen, June, 119-126.

Burke, R. (1998), "Real Shopping in a Virtual Store", in Bradley, S.P. and Nolan, R.L. (eds), *Sense and Respond: Capturing the Value in the Network Era*, Harvard Business School, Boston.

Darden, W.R. and Ashton, D. (1974), "Psychographic Profiles of Patronage Preference Groups", *Journal of Retailing*, Volume Fifty, Number Four, 99-112.

Darden, W.R. and Reynolds, F.D. (1971), "Shopping Orientations and Product Usage Rates", *Journal of Marketing Research*, Volume Eight, November, 505-508.

Dholakia, R.R., Pederson, B., and Hikmet, N. (1995), "Married Males and Shopping: Are They Sleeping Partners?", *International Journal of Retail Distribution Management*, Volume Twenty-Three, Number Three, 27-33.

Ellsworth, J.H. (1995), "Boom Town: Businesses are Rushing onto the Net at Warp Speed", *Internet World*, June, 33-35.

Forrester Research Inc. (1999), *Online Retail To Reach $184 Billion By 2004 As Post-Web Retail Era Unfolds*, September 28, http://www.forrester.com/ER/Press/Release/0,1769,164,FF.html.

Gehrt, K.C. and Carter, K. (1992), "An Exploratory Assessment of Catalog Shopping Orientations: The Existence of Convenience and Recreational Segments", *Journal of Direct Marketing*, Volume Six, Number One, 29-39.

Gehrt, K.C., Yale, L.J., and Lawson, D.A. (1996), "The Convenience of Catalog Shopping: Is There More to It than Time?", *Journal of Direct Marketing*, Volume Ten, Number Four, 19-28.

Gemunden, H.G. (1985), "Perceived Risk and Information Search: A Systematic Meta-Analysis of the Empirical Evidence", *International Journal of Research in Marketing*, Volume Two, Number Two, 79-100.

George, W.R., Weinberger, M., Tsou, B., and Kelly, P. (1984), "Risk Perceptions: A Re-examination of Services versus Goods", in Klein, D. and Smith, A. (eds), *Southern Marketing Association Proceedings*, Florida Atlantic University, Boca Raton.

Georgia Institute of Technology (1998), *Graphic, Visualization, and Usability Center"s (GVU) 9th WWW User Survey*, http://www.cc.gatech.edu/gvu/user_surveys/survey-(1998)-04/reports/(1998)-04-Netshop2.html.

Gillett, P.L. (1970), "A Profile of Urban In-Home Shoppers", *Journal of Marketing*, Volume Thirty-Four, Number Three, 40-45.

Goldsmith, R.E. and Hofacker, C. (1991), "Measuring Consumer Innovativeness", *Journal of the Academy of Marketing Science*, Volume Nineteen, Summer, 209-221.

Hawes, J.M. and Lumpkin, J.R. (1984), "Understanding the Outshopper", *Journal of the Academy of Marketing Science*, Volume Twelve, Number Four, 200-218.

Iconocast (1998), *The Internet at a Glance*, November 1, http://www.iconocast.com.

Jarvenpaa, S.L. and Todd, P.A. (1997), "Is There a Future for Retailing on the Internet?", in Peterson, R.A. (ed), *Electronic Marketing and the Consumer*, Sage, Thousand Oaks, CA, 139-54.

Lesser, J.A. and Hughes, M.A. (1986), "Towards a Typology of Shoppers", *Business Horizons*, Volume Twenty-Nine, Number Six, 56-62.

Lumpkin, J.R. (1985), "Shopping Orientation Segmentation of the Elderly Consumer", Journal of the Academy of Marketing Science, Volume Thirteen, Number Two, 139-151.

Moschis, G.P. (1976), "Shopping Orientations and Consumer Uses of Information", *Journal of Retailing*, Volume Fifty-Two, Number Two, 61-70.

Moutinho, L. (1992), "Customer Satisfaction Measurement: Prolonged Satisfaction with ATMs", *International Journal of Bank Marketing*, Volume Ten, Number Seven, 30-37.

Moutinho, L. and Meidan, A. (1989), "Bank Customers' Perceptions Innovations and New Technology", *International Journal of Bank Marketing*, Volume Seven, Number Two, 22-27.

Neal, C., Quester, P., and Hawkins, D. (1999), *Consumer Behaviour: Implications for Marketing Strategy*, 2nd Edition, McGraw-Hill, Sydney.

Nunnally, J.C. and Bernstein, I.H. (1994), *Psychometric Theory*, 3rd Edition, McGraw-Hill Publishing Company, New York.

Reynolds, J. (1997), "Retailing in Computer-Mediated Environments: Electronic Commerce Across Europe", *International Journal of Retail and Distribution Management*, Volume Twenty-Five, Number One, 29-37.

Rowley, J. (1996), "Retailing and Shopping on the Internet", *International Journal of Retail and Distribution Management*, Volume Twenty-Four, Number Three, 26-37.

Shamdasani, P.N. and Ong, G.Y. (1995), "An Exploratory Study of In-Home Shoppers in a Concentrated Retail Market", *Journal of Retailing and Consumer Services*, Volume Two, Number One, 15-23.

Shim, S. and Mahoney, M.Y. (1992), "The Elderly Mail-Order Catalog User of Fashion Products: A Profile of the Heavy Purchaser", *Journal of Direct Marketing*, Volume Six, Number One, 49-58.

Stephenson, P.R. and Willett, R.P. (1969), "Analysis of Consumers' Retail Patronage Strategies", in McDonald, P.R. (ed), *Marketing Involvement in Society and the Economy*, American Marketing Association, Chicago, 316-322.

Stone, G.P. (1954), "City and Urban Identification: Observations on the Social Psychology of City Life", *American Journal of Sociology*, Volume Sixty, July, 36-45.

Tat, P.K. and Schwepker, C.H.Jr. (1998), "An Empirical Investigation of the Relationships Between Rebate Redemption Motives: Understanding How Price Consciousness, Time and Effort, and Satisfaction Affect Consumer Behavior", *Journal of Marketing Theory and Practice*, Volume Six, Number Two, 61-71.

Tauber, E.M. (1972), "Why Do People Shop?", *Journal of Marketing*, Volume Thirty-Six, October, 46-49.

Wallace, D. J. (1995), "Shopping Online: A Sticky Business", *Advertising Age*, April 10, 20.

Wells, W.D. and Tigert, D. (1971), "Activities, Interests, and Opinions", *Journal of Advertising Research*, Volume Eleven, August, 27-35.

Westbrook, R.A. and Black, W.C. (1985), "A Motivation-Based Shopper Typology", *Journal of Retailing*, Volume Sixty-One, Number One, 78-103.

Williams, R.H., Painter, J.J., and Nicholas, H.R. (1978), "A Policy-Oriented Typology of Grocery Shoppers", *Journal of Retailing*, Volume Fifty-Four, Number One, 27-42.

Yu, J. and Cooper, H. (1983), "A Quantitative Review of Research Design Effects on Response Rates to Questionnaires", *Journal of Marketing Research*, Volume Twenty, February, 36-44.

DOING BUSINESS IN EUROLAND

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ABSTRACT

The purpose of this paper is discuss the advantages and disadvantages of the introduction of the Euro to American businesses, with an emphasis on smaller, regional firms. The positive and negative impacts of the Euro on business are explained within an historical and macroeconomic environment. The paper describes the positive results associated with the success of the Euro, as well as the implications associated with failure. Finally, the paper details some specific areas of business operations that managers must address in order to successfully compete in Euroland.

INTRODUCTION

With the increasing pace of globalization over the past decades, it is imperative that firms in the international arena fully comprehend the dramatic changes underway in Europe. The movement towards a unified economy and a common currency, the Euro, will have a significant impact on the way businesses in the United States must compete. Particularly challenged will be small to mid-sized regional businesses who have become increasingly affected by global business, but are limited in their ability to analyze the changes underway.

Experience has demonstrated that for businesses to be successful globally, it is essential that there be a cadre of well-trained business professionals fluent in the languages of the countries in which trade is conducted and who are sensitive to cultural nuances that underlie their social and political fabric (Weathersby, 1997). It is also critical that these business leaders understand the dramatic changes that are shaping the underlying economic principles upon which international business is based. Unfortunately, there is a shortage of such business professionals at the entry level and only limited numbers of highly trained experts having knowledge of the economies and markets of foreign countries (Leonidou, 1997). This is particularly true for smaller regional firms with access to large commercial centers. Of all the economic events that have taken place on the international scene, the one that has the potential for the greatest impact, yet probably the least understood, is the introduction of the Euro.

The purpose of this paper is to describe the changes currently underway in the European Community which will have lasting impact upon those American businesses who wish to initiate or expand their involvement with European markets. Specifically, the paper discusses the advantages and disadvantages of the introduction of the Euro to American businesses, with an emphasis on smaller, regional firms. An overview of the context of the development of the Euro is presented, as well as some of the potentially positive and negative impacts on global business. Finally, the paper details some specific areas of business operations that managers must address in order to successfully compete in Euroland.

WHAT IS THE EURO?

Contrary to popular belief, the Euro is not the latest luxury automobile from across the Atlantic! Rather, it is the European monetary unit, which made it's debut in 1999. While the advent of the Euro has been overshadowed by other international economic and political events, it will have an enormous impact on business and economic developments for many years to come. For not only will the Euro transform Europe, but it will also have important repercussions on the U.S. economy. Indeed, the Euro is likely to affect nearly every American as either consumer, tourist, worker, and ,most importantly, as businessperson.

To be more specific, the Euro is the monetary unit that has been adopted as the official unit of account by the member countries of the European Monetary Union, or EMU. The EMU members countries are: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain. These EMU member countries have all met or are in the process of meeting certain macroeconomic conditions, and they have adopted the Euro as their official unit of account. In the future, four other countries, which currently have chosen not to meet the conditions for belonging to the EMU or have not yet been able to meet them, are ultimately expected to join the EMU and to adopt the Euro. They are: Denmark, Great Britain, Greece, and Sweden.

The events that led directly or indirectly to the introduction of the Euro go back many years and take many forms. However, it was the Maastricht Treaty of 1992 that drew the blueprint for the development of a single European currency under the aegis of the EMU, with the intention of advancing the purposes of the more broadly based European Union. Maastricht specified a number of criteria that countries must meet in order to belong to the EMU. These criteria include limits on inflation, interest rates, government budget deficits, and national debts.

An essential element in the process was the establishment of the European Central Bank, or ECB. Although it may be tempting for Americans to think of the ECB as the "Federal Reserve" of Europe, its design is most similar to the central bank of Germany, the Bundesbank. In particular, like the Bundesbank, and unlike the Fed, the ECB's prime directive is to maintain price stability (Association for the Monetary Union of Europe). As with any currency, the success of the Euro will hinge critically on the success of the central bank.

At the beginning of this year, the Euro made its debut as a unit of account for use in non-cash transactions. As of this point in time, all debts and investments are denominated in both Euros and the national currencies of the EMU members. Consumers can write checks on Euro-denominated bank accounts and buy products with Euro-denominated credit. Alternatively, they can also use their own national currencies or use checking accounts and credit card accounts denominated in these national currencies.

This awkward but necessary dual monetary denomination process will continue until the year 2002. At the beginning of that year, Euro coins and paper currency will begin circulation, side-by-side with the existing national currencies. After a six-month transition, the national currencies will no longer be legal tender, and the Euro will be the only circulating form of currency, as well as being the sole European unit of account. The member countries' own historical currencies will disappear.

For instance, as of July 1, 2002, we'll bid "au revoir" to the French franc. Say "arividerci" to the Italian lire. The German Mark will be erased. The Spanish peseta will be passé. The Dutch guilder will be a goner. And the Irish punt will be booted out! The consequences of all of this are mind boggling in many ways. Not the least of these is the very fact that a group of sovereign nations agreed to eliminate their national currencies. From an economic psychological perspective, this is almost unheard of, particularly on so broad a scale by countries with such long and rich histories. Now that the Euro is here, what impacts, advantages, and disadvantages can we expect from it?

GENERAL IMPACTS OF THE EURO

The principal impact of the Euro is that it presents Europe as a single international financial entity with about the same size population and economy as the U.S. Over the past several decades, the

U.S. dollar has reigned supreme as the world's default medium of exchange, challenged only occasionally by the Japanese yen. Now the dollar will, in all likelihood, have to share the stage with the Euro, also. A weaker dollar may mean more inflation and higher interest rates in the U.S.

One of the most widely touted benefits of the Euro is that it will greatly simplify many aspects of traveling and doing business in Europe. When the Euro is fully operational, tourists will no longer have to endure multiple currency exchanges and price/exchange rate comparisons. An American traveler can convert dollars to Euros at the prevailing exchange rate and then can spend those Euros anywhere from Lisbon to Helsinki for products priced in terms of a single currency.

The simplification of exchange rates will also eliminate the need for businesses to involve themselves in complex currency market transactions or to pay financial institutions to do this for them. For small companies doing business in Europe, the cost saving from avoiding such transactions is estimated to be around 1% to 2% of their sales and purchases (U.S. Department of Commerce). However, even more important than these savings is that companies can focus more of their attention on production and marketing decisions, rather than exchange rate considerations.

Some of the advantages of the Euro to Europeans can also have indirect benefits to businesses in America and elsewhere. For instance, a single pricing unit will allow European consumers to compare prices across the continent as easily as they compare prices across town. This will enhance competition, helping to lower prices, and expand purchasing power. Lower interest rates can also be expected as a result of the lessened price pressures and increased competition within the financial system. Lower interest rates tend to spur economic growth. And, to the extent that the Euro promotes faster economic growth and enhanced consumer affluence, it will expand export opportunities for the EMU's trading partners, including the U.S.

Against these and many other expected benefits, there are also some very real and potentially frightening risks associated with the new European monetary regime. Simply put, the monetary policy structure that underlies the Euro is designed to deal with economic problems that affect the entire currency area in a fairly uniform way. This monetary structure may not be so effective in situations where there are wide discrepancies in the type of problems that the EMU nations experience. In fact, the Euro structure may actually exacerbate such problems.

In general, if a country is in a recession, it can use monetary policies to lower its interest rates and exchange rates, in order to provide domestic and international stimuli to the economy. A country can also marshal the government's tax and spending system to stimulate the economy with fiscal policy. Likewise, restrictive monetary and fiscal policy combinations can be used to keep a healthy expansion from turning into an inflationary spiral. The U.S. can do this and so could the member nations of the EMU -- prior to their joining the EMU.

Consider the potential difficulties if some EMU member countries experience economic weakness, while rapid growth threatens to create inflationary pressures in some other member nations. Under terms of the EMU, countries cannot pursue independent monetary policy to adjust interest rates and exchange rates to deal with problems in their own economies. Also, countries with weak economies may be prevented by the EMU's deficit/debt limitations from using independent fiscal policy to stimulate business conditions.

Other forms of adjustment are also unlikely. Language and cultural differences in Europe remain a significant barrier to workers' ability to move from where labor demand is weak to where it is strong. At the same time, long-standing inflexible regulatory structures make wage and price adjustments difficult.

A pessimistic assessment would suggest that the Euro will cause higher unemployment in Europe, political unrest, and ultimately will lead to the painful disintegration of the EMU and the European Union itself. The optimistic counterpoint would suggest that the Euro will actually engender a process of institutional reform that will eliminate the sources of rigidity, resulting in a win-win situation for the members of the EMU. Which of these scenarios is correct is impossible to predict. Suffice it to say that neither the success of the Euro nor its failure is a foregone conclusion.

IMPACTS OF THE EURO ON AMERICAN BUSINESS

For American businesses competing in Europe, the development of the Euro represents a real and significant change to the way in which business will be conducted. In particular, this will not be an easy or inexpensive challenge for those businesses with European operations. Learning to deal with the Euro will be difficult, particularly during the transitional period when transactions continue in the historical national currencies, as well as in the Euro. Adjusting to the Euro will involve every aspect of a company's strategic operational components including: pricing, packaging, marketing, accounting, financing, and information systems. While each of the areas will be significantly affected by the Euro, a good example of how businesses must change their orientation can be seen in pricing strategies (Altis Conseil on Management).

Most consumer products are priced with regard to certain "psychological thresholds." For instance, a company selling a product in the U.S. would price a product at $19.95, rather than $20. In this example, $20 is the "psychological threshold." If the same company were to sell this product in Germany, it also has to be priced below a "psychological threshold" in deutchmarks (DM). In order to make this product profitable at a price below the psychological threshold in DM's, the company may need to repackage it, change the size, or modify other characteristics of the German version of its product. If the company wants to price the product in Euros, it also must take into account the "psychological threshold" for that currency. Does this mean still more product modification?

Decisions about issues like this will need to be made. As will decisions about when to begin pricing in Euros. And when and how will the company publish its Euro price schedules and communicate them to its existing and prospective customer base? If the company has been selling its product in only one or a few European countries, is it now time to expand its target market to all of Europe?

In conclusion, there are many issues that must continually be examined with respect to the Euro. The many positive and negative impacts of the Euro will take years to be fully addressed. And the affects of the Euro on American business has generated a number of additional issues which must be addressed in the operational strategic planning for each firm competing in Europe. The point is that the Euro is here and, good idea or not, is going to be here for awhile. We all have to cope with it, and regional businesses who already do business in Europe, or those who wish to begin, will be on the front lines of the process.

REFERENCES

"Are you Ready for the Upcoming Euro", Altis Conseil on Management, http://www.altis.fr/us

"Euro-Europe United Through a Single Currency", Association for the Monetary Union of Europe, http://amue.lf.net/q_a/qa_index.htm

Leonidou, Leonidas C. (1997). "Stimuli and Barriers to Global Business: Exporters Versus Importers", ***Journal of Global Business***, Volume 8, Number 15, Fall 1997.

U.S. Department of Commerce, http://www.mac.doc.gov/Euro/benefitquestions.htm#1

Weathersby, George B. (1998). "Competing in a Global Economy", ***Management Review***, Volume 87, Number 7, July-August 1998.

ATHLETES AS ROLE MODELS: DETERMINING THE INFLUENCE OF SPORTS-RELATED ROLE MODELS ON ADOLESCENT CONSUMER BELIEFS AND BEHAVIORS

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ABSTRACT

A large number of companies around the world are increasingly utilizing athletes and sports-related individuals as endorsers for a variety of products and services. Although it has been suggested that famous athletes influence the self-views of young adults, research analyzing the effectiveness of utilizing athletes as product endorsers has been relatively scant. Therefore, the purpose of this study is to determine if athletes are seen as role models for adolescent consumers, and to determine if these athletes have an influence on the consumer behavior of young adults.

INTRODUCTION

Organizations around the world spend millions of dollars every year to secure the rights to certain athletes and sports figures, believing that, by utilizing these famous individuals in advertisements and promotions, adolescent consumers will attempt to emulate these athletes and buy the products being endorsed (Ohanian 1990). Although it has been suggested that famous athletes influence the self-views of young adults (Lockwood and Kunda 1997), and that sports stars are a popular choice among national advertisers today (Lafferty and Goldsmith 1999), research analyzing the explanation for, and effectiveness of, utilizing athletes as product endorsers has been relatively scant.

The teenage market in the U.S. represents tremendous opportunity to advertisers. Recent figures estimate that teens spend nearly $100 billion a year (Zollo 1995). Projections indicate that by 2010, the teenage population will have grown to approximately 31 million, exceeding their number in any of the baby boom years of the 1960s (Miller 1994). Moreover, Zollo (1995) posits that teens are extremely important targets because: 1) they influence the monetary outlays made by their parents, 2) of the money they will spend in

the future, and 3) they are trendsetters.

Teenagers are more involved with trends than probably any other age group. They are not only trendsetters for one another, but are also trendsetters for the population at large. Current trends in clothing and music, for example, are results of teens perceiving an idea or brand as "cool." According to Zollo (1995), some of the top reasons that make a brand a "cool brand" among teens are : "quality, its for people my age, advertising, if cool friends or peers use it," and "if a cool celebrity uses it." Thus, it appears that advertising, peers, celebrities and/or role models contribute to brand choice among teens.

Hence, the objective of this research is to explore the impact that vicarious role models, or sports celebrities, may have on teenagers. First, the concept of role model influence is introduced into the marketing literature. Next, we will investigate the perceptions of teenagers regarding their favorite sports stars and the role model influence of these celebrities. The impact of role model influence will be assessed via our research questions. Implications from this research will be given for advertisers and future advertising research in the area.

THEORETICAL FOUNDATIONS

Adolescents are often influenced by a variety of outside interests while adopting their own set of self-image, lifestyle, and consumption patterns. A significant amount of research in the social sciences has been devoted to determining how consumers develop these particular consumer behaviors and what variables or factors influence consumers. Two models of human learning, the cognitive-psychological model and the social learning model, have been utilized extensively to explain and predict how consumers make consumption-related decisions (Moschis and Churchill 1978). In communication and advertising research, the social learning model has often been a popular choice for explaining consumer behavior (Moschis and Smith 1985). Proponents of social learning theory suggest that individual consumers develop consumption-related attitudes and behaviors through learning experiences. These experiences can occur in a variety of contexts as consumers are exposed to a multitude of different influences and adventures, and are extremely important in shaping the consumer behavior of young adults and adolescents (King and Multon 1996).

Previous research has established that these learning experiences may be vicarious, indicating that consumers learn or model behaviors, values, attitudes, and skills through the observation of other individuals, or through observations of electronic or print media (Bandura 1977). Positive reinforcement from these outside individuals or media can reinforce preferences in deciding which behaviors, values, attitudes, and skills are appropriate or accepted in a social context (Mitchell, Jones, and Krumboltz 1979). Hence, previous research recognizes that people acquire a significant portion of their behavioral tendencies through the observation and imitation of others in a social context (Bandura 1986), and that these individuals are often considered role models (King and Multon 1996).

Included in the social learning process is the more specific acquisition of consumption-related behaviors. Through exposure to social models, consumers acquire the knowledge, skills, and dispositions needed to make purchase decisions (Ward 1974). The concept of consumer modeling or socialization has been utilized to determine, among other things, how consumers learn thought processes and consumption behaviors through modeling (Moschis and Churchill 1978). Role models for consumers can be anyone the individual consumer comes in contact with that potentially can influence the consumer's consumption decisions (Bandura 1977). From this conceptual definition of role models, it is obvious that parents, teachers, peers, or relatives can all be considered role models. In fact, many recent research studies have analyzed how parents and/or peers influence the consumption attitudes of individual consumers (Bush, Smith, and Martin 1999; Carlson et al. 1994; Keillor, Parker, and Schaefer 1996; Laczniak, Muehling, and Carlson 1995).

What many current research studies ignore, however, is the impact of role models with which the adolescent has little or no direct contact. A recent study examining the impact of role models on the self-views of young adults recognized that "individuals of outstanding achievement can serve as role models to others," motivating young adults to adopt certain self-images and lifestyle patterns (Lockwood and Kunda 1997, p. 91). Included in this category of role models would be models from electronic or print media that

influence consumer consumption attitudes and patterns without ever directly contacting or meeting the consumer. These role models are the vicarious role models acknowledged by Bandura (1986).

IDENTIFICTION OF ROLE MODELS AND THEIR INFLUENCE

A role model for an adolescent can be anyone the individual comes in contact with, either directly or indirectly, that potentially can influence a consumption decision made by the adolescent (Bandura 1977). This definition of role models allows a variety of individuals to be considered role models, including parents, siblings, peers, teachers, entertainers, and athletes. In other words, anyone that can possibly influence or impact the buying attitudes or decisions of a consumer can be considered a consumption role model. Recent research has examined the impact of each of the aforementioned role model categories on a variety of different dependent variables.

The influence of television role models has been examined in terms of their impact on adolescent occupational goals (Christiansen 1979) and career aspirations (King and Multon 1996). Other studies utilized parents or teachers as role models, and tested their influence on sex-role attitudes and educational choices of college students (Basow and Howe 1980), and the influence of same-race or same gender role models on self-efficacy and aspirations of certain races and genders (Parker and Lord 1993). Another class of projected role models, superstars, were analyzed to determine if they influenced the self-views of young adults (Lockwood and Kunda 1997). Overall, the general consensus of these studies on the influence of role models indicated that role models have a significant effect on the career aspirations, educational choices, and the self-views of young adults.

Although each of the aforementioned studies identified areas where role models have potentially significant influence on young adults, none of the studies is done from a marketing or advertising point of view. This statement is not made to detract from the previous studies. It simply shows that, while modeling behavior has been identified as an integral point of development for adolescent attitudes and behaviors, little research has been completed to determine who specifically is considered a role model by young adults from the professional sports community, and how these role models influence young people.

RESEARCH QUESTIONS

Most previous analyses of adolescent role models have concentrated on direct role models, or role models with whom the adolescent has some type of direct contact. Therefore, direct role models include fathers, mothers, teachers, and peers, each of which has been analyzed in previous adolescent role model research studies (Laczniak, Muehling and Carlson 1995; Keillor, Parker and Schaefer 1996; Bush, Smith and Martin 1999). What many current research studies ignore, however, is the potential impact of vicarious role models, or the group of individuals with whom the adolescent has no direct contact. A recent study proposes that these vicarious individuals can be very influential on adolescent consumer behavior and attitudes (Lockwood and Kunda 1997). Included in this category of vicarious role models would be the athletes and sports figures utilized in various television and print advertisements targeted to the adolescent consumer. Therefore, our first research question seeks to determine if the favorite athletes of adolescent consumers are seen as role models.

Research Question 1: Is the favorite athlete of an adolescent consumer seen as a role model?

An important distinction to recognize in terms of role model influence is that adolescents are free to choose their own vicarious role models, as opposed to the assigned role models of parents. Previous investigations into the concept of role models indicate that vicarious role models, including athletes, are likely to be selected as role models based on specific demographic characteristics with which the adolescent can identify. In simpler terms, the adolescent consumer will likely select vicarious role models that are similar to himself or herself. This predisposition usually leads adolescents to select vicarious role models of a similar ethnic background and gender (Dates 1980; King and Multon 1996). As organizations continue to utilize athletes and sports figures in their commercials and product endorsement spots, identifying why adolescents select certain athletes as their favorites becomes extremely important (Ohanian 1990). Therefore, the following research questions attempt to determine if adolescent consumers select their favorite athletes based on certain demographic characteristics.

Research Question 2: Do adolescent consumers consistently select favorite athletes of a similar ethnic background?

Research Question 3: Do adolescent consumers consistently select favorite athletes of a similar gender?

Previous research has shown that adolescents seek and receive information about consumption from a variety of different sources. An in-depth analysis of the impact of family communication on adolescent purchase behaviors has been completed (Moschis, Moore and Smith 1983; Moschis 1985; Keillor, Parker and Schaefer 1996). However, few research studies have examined how individuals outside of the immediate reference group of the adolescent consumer influence the purchase behavior and consumption patterns of the adolescent consumer. Previous research has shown that vicarious role models, such as athletes and entertainers, are perceived as positive product endorsers in certain situations (Ohanian 1990), and that these vicarious role models do have the ability to influence the consumer attitudes and purchase intentions of interested consumers (Lafferty and Goldsmith 1999). Therefore, research is needed to determine if, in fact, favorite athletes can impact the purchase behaviors and consumption patterns of young adults.

Research Question 4: Does the favorite athlete of an adolescent consumer significantly influence the purchase behavior of that adolescent consumer?

METHODOLOGY

The respondents for the present study were 218 adolescents, ages 13 to 18, recruited to participate in a role model study. The respondents were enrolled in 74 different high schools from a large metropolitan area. Respondents were first asked to identify their favorite athlete by writing the name of this individual on the questionnaire. Respondents then answered questions centered around the overall role model influence of their favorite athlete, and the influence of their favorite athlete on their purchase decisions. The role model influence scale was adapted from Rich (1997), was a five-item scale anchored by a seven-point strongly disagree to strongly agree continuum, and had a reliability of .93. The influence of the favorite athlete on purchase decisions was measured by a one-item response adapted from the purchase intentions scale of Zeithaml, Berry and Parasuraman (1996), and utilized the same seven-point continuum as the previous scale.

RESULTS

To answer research question 1, the summated mean of the five-item role model scale was examined. As the scale was answered on a seven-point strongly disagree to strongly agree continuum, an overall mean value greater than 4 (the midpoint of the scale, indicating indifference or no response) would indicate that the adolescent respondents viewed athletes as positive role models. Each of the five items from the scale had a mean of at least 5.41, with an overall summated mean of 5.57. Therefore, it appears that adolescent consumers do, in fact, perceive their favorite athletes as positive role models.

Research questions 2 and 3 attempt to investigate the relationship between the ethnic background and gender of the adolescent, and the ethnic background and gender of their favorite athlete. As African-American and Caucasian adolescents were the most predominant ethnic groups examined in the study, these two groups of adolescents were the only ones utilized for comparisons in analyzing research questions 2 and 3. The results indicate that adolescents do select favorite athletes based on similar ethnic backgrounds. Of the 59 African-American adolescents providing their favorite athlete, 53 (90%) chose an African-American athlete. There were 125 Caucasian adolescent responses, with 66 of these individuals selecting a Caucasian favorite athlete (53%). Hence, African-American adolescents almost exclusively selected favorite athletes of the same ethnic background, while Caucasian adolescents selected favorite athletes of similar ethnic background slightly more than one-half of the time. A chi-square analysis indicated that there is a significant difference between the two races in terms of the ethnic background of their favorite athletes ($X^2 = 37.17$; $p < .00$), lending further evidence to the conclusion that adolescents

select favorite athletes of a similar ethnic background.

The results for research question 3, examining the gender of the favorite athletes chosen, were not as clear-cut as the results from the previous research question. Although the responses indicate that males adolescents tend to select male athletes as their favorites, females adolescents do not consistently select females as their favorite athletes. Eighty-nine out of 93 (96%) males selected a male as their favorite athlete, whereas only 24 out of 107 (22%) female adolescents listed a female athlete as their favorite. Although a chi-square analysis ($X^2 = 12.98$; $p < .00$) indicates that there is a significant difference between adolescent males and females in terms of the gender of their favorite athletes, the small percentage of adolescent females selecting female athletes as their favorites indicates that most female adolescents perceive greater interest in, and follow the athletic pursuits of, male athletes much more than they do for female athletes. Therefore, while it can be proposed that male adolescents acknowledge a strong inclination to align themselves with male athletes, female adolescents do not exhibit a similar disposition toward female athletes. Additionally, to reinforce the aforementioned results, a list of the most popular favorite athletes named by the respondents in the present study, separated by gender and ethnic background, is provided in Table 1. The number beside the name of each athlete indicates the total number of times he or she was listed by respondents in that particular category.

Table 1
Favorite Athletes Selected - Separated by Ethnic Background and Gender

Female Respondents
Top 5 Athletes Named

1.	Michael Jordan	33
2.	Mark McGwire	12
3.	Mia Hamm	5
4.	Brett Farve	4
4.	Dominique Dawes	4

Male Respondents
Top 5 Athletes Named

1.	Michael Jordan	26
2.	Mark McGwire	7
3.	Grant Hill	3
3.	Shaquille O'Neal	3
3.	Dennis Rodman	3

Caucasian Respondents
Top 8 Athletes Named

1.	Michael Jordan	33
2.	Mark McGwire	9
3.	Mia Hamm	5
4.	Grant Hill	4
4.	John Elway	4
4.	Jeff Gordon	4
4.	Dennis Rodman	4
4.	Brett Favre	4

African-American Respondents
Top 6 Athletes Named

1.	Michael Jordan	26
2.	Terrell Davis	3
2.	Dominique Dawes	3
4.	Karl Malone	2
4.	Sheryl Swoops	2
4.	Shaquille O'Neal	2

Research Question 4 was analyzed using an individual regression analysis, utilizing the athlete's overall role model influence as the independent variable, and the purchase decision response as the dependent variable. This was done to determine if the perceived influence of the athlete as a role model was influential in predicting the purchase behavior of the adolescent consumer. The results, listed in Table 2, appear to indicate that the favorite athlete of an adolescent does significantly influence his or her purchase behavior, as the model is significant ($p < .002$), and has a strong standardized beta coefficient and t-value.

IMPLICATIONS

The findings from this study can provide important information for organizations attempting to develop mass communication programs aimed at adolescents. The results of this study strongly indicate that athletes are not only seen as role models, but that these individuals have a strong influence on adolescent purchase behavior as well. Past research indicates that many adolescents receive their consumer socialization learning through watching television (Keillor, Parker, and Schaefer 1996). Therefore, organizations wanting to establish brand loyal adolescent consumers can concentrate their efforts on utilizing appropriate athletes as product endorsers.

The identification of appropriate endorsers to utilize has also been a focus of this research investigation. It appears that adolescents identify with favorite athletes of a similar ethnic background. This behavior suggests that organizations wanting to reach certain ethnically-similar adolescent target markets should concentrate on identifying which ethnically-similar athletes are the most popular within that sub-culture. This will likely allow greater penetration into the desired target market.

The results also suggest that utilizing male athletes might be the optimal strategy for organizations attempting to target adolescents in general. While some female adolescents have favorite athletes who are also female, the majority of the female respondents chose a male athlete as their favorite. However, organizations must be careful in their approach of utilizing predominantly male athletes as product endorsers. Do the female respondents in the present study list predominantly male athletes as their favorites because they actually admire the male athletes to a greater degree than they do female athletes, or because they have many more opportunities to view male athletes, both in action and in product endorsements? The contradiction in gender effects observed in the results of the present study could stem from the argument that there are few well-known female athletes present in the United States. The results might suggest that female adolescents are searching for female athletes with which to identify. If this is the case, the first organization to provide such an opportunity for female adolescents will likely reap significant rewards in terms of purchase loyalty from the adolescent female.

CONCLUSIONS AND FUTURE RESEARCH

Future research should focus attention on other possible role model influences of adolescent attitudes and behaviors. The present study has examined the impact of an adolescent's favorite athlete and found that favorite athletes are seen as role models, and that they have a significant influence on the purchase behaviors of adolescent consumers. Additional vicarious role models could possibly include the large group of entertainers, including television and film stars, who are consistently appearing in television commercials and print advertisements endorsing many products and services. A strong future stream of research could also be built around the utilization of vicarious role models versus the utilization of direct role models, such as fathers and mothers, and the determination of which group has the strongest influence on the purchase intentions and beliefs of young consumers. Until that is completed, however, based on the results of the present study, it appears that organizations can feel secure in their use of athletes as product endorsers.

REFERENCES

Bandura (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall, 1977.

Bandura (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice Hall, 1986.

Basow & Howe (1980). "Role-Model Influence: Effects of Sex and Sex-Role Attitude in College Students." *Psychology of Women Quarterly*, 7, Summer 1980, 558-572.

Bush, Smith, & Martin (1999). "The Influence of Consumer Socialization Variables on Attitude Toward Advertising: A Comparison of African Americans and Caucasians." *Journal of Advertising*, (forthcoming).

Carlson, Walsh, Laczniak, & Grossbart (1994). "Family Communication Patterns and Marketplace Motivations, Attitudes, and Behaviors of Children and Mothers." *Journal of Consumer Affairs*, 28, Summer 1994, 25-53.

Christiansen (1979). "Television Role Models and Adolescent Occupational Goals." *Human Communication Research*, 5, Summer 1979, 335-337.

Dates (1980). "Race, Racial Attitudes and Adolescent Perceptions of Black Television Characters." *Journal of Broadcasting*, 24, 4, 549-560.

Keillor, Parker, & Schaefer (1996). "Influences on Adolescent Brand Preferences in the United States and Mexico." *Journal of Advertising Research*, 36, May/June 1996, 47-56.

King & Multon (1996). "The Effects of Television Role Models on the Career Aspirations of African American Junior High School Students." *Journal of Career Development*, 23, Winter 1996, 111-125.

Laczniak, Muehling, & Carlson (1995). "Mothers' Attitudes Toward 900-Number Advertising Directed at Children." *Journal of Public Policy & Marketing*, 14, Spring 1995, 108-116.

Lafferty & Goldsmith (1999). "Corporate Credibility's Role in Consumers' Attitudes and Purchase Intentions When a High Versus a Low Credibility Endorser is Used in the Ad." *Journal of Business Research*, 44, February 1999, 109-116.

Lockwood & Kunda (1997). "Superstars and Me: Predicting the Impact of Role Models on the Self." *Journal of Personality and Social Psychology*, 73, 1, 91-103.

Miller (1994). "That is Where It's at for Today's Teen Market." *Marketing News*, (August 15), 6-7.

Mitchell, Jones & Krumboltz (1979). *Social Learning and Career Decision Making*. Cranston, RI: Carroll Press, 1979.

Moschis (1985). "The Role of Family Communication in Consumer Socialization of Children and Adolescents." *Journal of Consumer Research*, 11, March 1985, 898-913.

Moschis & Churchill (1978). "Consumer Socialization: A Theoretical and Empirical Analysis," *Journal of Marketing Research*, 15, November 1978, 599-609.

Moschis, Moore, & Smith (1983). "The Impact of Family Communication on Adolescent Consumer Socialization," in *Advances in Consumer Research, Volume 11*, Thomas C. Kinnear, Editor. Chicago: Association for Consumer Research, 314-319.

Moschis & Smith (1985). "Consumer Socialization: Origins, Trends and Directions for Future Research," in *Historical Perspective in Consumer Research: National and International Perspectives*, Chin Tiong Tan and Jagdish N. Sheth, eds. Singapore: Association for Consumer Research, 275-281.

Ohanian (1990). "Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness." *Journal of Advertising*, 19, 3, 39-52.

Parker & Lord (1993). "Characteristics of Role Models for Young African-American Men: An Exploratory Survey." *Journal of Multicultural Counseling and Development*, 21, April 1993, 97-105.

Rich (1997). "The Sales Manager as a Role Model: Effects on Trust, Job Satisfaction, and Performance of Salespeople." *Journal of the Academy of Marketing Science*, 25, Fall 1997, 319-328.

Ward (1974). "Consumer Socialization." *Journal of Consumer Research*, 1, September 1974, 1-16.

Zeithaml, Berry, & Parasuraman (1996). "The Behavioral Consequences of Service Quality." *Journal of Marketing*, 60, April 1996, 31-46.

Zollo (1995). *Wise Up to Teens*. New Strategists Publications, Inc., Ithaca, NY: 1995.

BUSINESS IN OPTIMAL CURRENCY AREAS: CONCEPT, EXAMPLE AND IMPLICATIONS

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ABSTRACT

This paper focuses on the concept of an optimal currency area and its development in one region of the world through the advent of the euro, a new pan-European currency. The concept of an optimal currency area is examined, a case example of operationalizing an optimal currency area is presented through a critical examination of the launch of the euro, and implications for management are presented across the strategic marketing variables of product, price, promotion and place.

INTRODUCTION

The concept of an optimal currency area appeared in the literature in the 1960s (Mundell, 1961; McKinnon, 1963; Ingram, 1969; Kenen, 1969). The concept posits that as nations in a region of the world experience similar economic conditions and develop similar economies, it may be possible to harmonize the fiscal and monetary policies of the individual countries and to develop a single pan-regional currency. The concept of an optimal currency area is operationalized by the nations of a region enacting a treaty for economic cooperation and developing convergence criteria for the formation of an economic union with a common currency.

The development of the European Union and the new pan-European euro currency is a case example of the formation of an optimal currency area. As an optimal currency area develops, there are significant implications for management of firms operating in the area or exporting to the area.

This manuscript describes the concept and development of an optimal currency area, examines the European Union as a case study of an optimal currency area, and develops implications for the management in product, price, promotion, and place when operating in an optimal currency area.

OPTIMAL CURRENCY AREA

The origin of the concept of an optimal currency area (OCA) generally is credited to the economist Robert A. Mundell of Columbia University, who received a Nobel Prize in Economics in 1999 (Coy, 1999). According to Mundell (1961, p. 657), an optimal currency area is "a domain within which exchange rates are fixed." McKinnon (1963, p. 717) defined an optimal currency area as "a single area within which monetary-fiscal policy and flexible external exchange rates can be used to give the best resolution of three objectives: the maintenance of full employment, the maintenance of balanced international payments, and the maintenance of internal average price level."

In this research, an optimal currency area is defined as a geographic area in which nations have or will develop similar economies through convergence criteria, similar fiscal and monetary policies, and have, as in the case of the euro, fixed national currency conversion rates irrevocably in the process of introducing a new currency as legal tender alongside national currencies, with an intention of eventually phasing out all national currencies for the new currency. The greater the economic similarities of nations in a region, that is, the more the nations approach the conditions of an optimal currency area, the higher is the likelihood that a single monetary policy, and therefore a single currency, will be effective in a region.

Among the economic similarities expected in nations comprising an optimal currency area are similar inflation rates in the area's countries, similar employment rates as well as similar unemployment rates, similar fiscal policies (i.e., countries having similar government spending levels and similar taxation policies), similar monetary policies (i.e., countries and their central banks having similar policies about the creation of money and about control of a nation's money supply by its central bank), similar current account deficits, similar wage rates, free movement of labor throughout an area, and an absence of the potential for asymmetric shocks in the nations of the area (Davis, 1994; Euro Brief, 1998a). Put simply, an optimal currency area is a region in which the nations follow similar economic policies based on low inflation, healthy public finances, and stable monetary conditions and policies, so as to exhibit low interest rates, a strong climate for investment growth, and, as a result, a potential for high economic growth and job creation (Santer, 1997).

ARGUMENTS THAT EUROPE IS NOT AN OPTIMAL CURRENCY AREA

The literature is mixed on whether or not Europe qualifies as an optimal currency area. Those who argue that Europe is not an optimal currency area, known as the Euroskeptics and predominate particularly in the United Kingdom, argue that the countries of Europe are so dissimilar culturally and economically that development of an optimal currency area is not possible. Those who favor Europe as an optimal currency area point to similarities across the European nations.

The arguments that Europe is not an optimal currency area are many and varied. The skeptics in the United Kingdom are loath to adopt the euro and thereby yield sovereignty by abandoning the British Pound Sterling. They argue that by adopting the euro, the UK may experience potentially higher inflation, higher interest rates, and higher individual and corporate taxation. They point out that the UK has the lowest rate of corporate taxation in Europe, the most flexible labor market in Europe, relatively incorruptible public servants, a flexible exchange rate, and a solid currency (Edwardes, 1998). Their conclusion is that the UK is not like the rest of Europe, and, therefore, should not join a pan-European currency union. If these skeptics are correct, their arguments add credibility to the view that Europe is not an optimal currency area.

A skeptic outside of the UK is exemplified in Lars Jonung, former chief economic advisor to the Prime Minister of Sweden. Jonung (1998) argues that Europe is not an optimal currency area for three reasons. One, there is no common European business cycle. Two, members of the European Monetary Union maintain control over their fiscal policies. Three, the goal for monetary policy in the EMU is defined too restrictively as price stability, rather than also being concerned with full employment and economic growth in the OCA's member nations.

Other critics argue that Europe is not an optimal currency area due to significant differences in economic structures, labor immobility across countries, different cultures and languages, differences in countries' histories, and the lack of a central fiscal authority to transfer funds from bountiful areas to depressed areas of Europe. Additionally, external asymmetric shocks could have differing impacts on Europe's national economies and the economies likely will respond to asymmetric shocks differently.

ARGUMENTS THAT EUROPE IS AN OPTIMAL CURRENCY AREA

Those who support the concept of Europe as an optimal currency area point to the similarities present and emerging throughout Europe. At a macro-regional level, supporters argue that the European nations are enhanced as they agree to coordinate their trade, fiscal, and monetary policies in various types of economic integration arrangements.

At the simplest level, economic integration involves Preferential Trade Agreements among nations. More sophisticated levels include Free Trade Area Agreements, Customs Unions, and Common Markets, a situation in Europe enabled by the 1957 Treaty of Rome (Costin, 1996) that today facilitates common European passports and greater mobility of labor and capital across Europe. More complex levels of economic integration, levels that impact national sovereignty, are an Economic Union and a Monetary Union that establishes a common currency among a group of countries. Presently, Europe is about the experiment of establishing an Economic Union. Its supporters argue that, as an optimal currency area,

Europe should move toward full Monetary Union by adopting the euro as the currency-in-use across all of Europe.

NOT AS YET AN OPTIMAL CURRENCY AREA

In the opinion of the authors, Europe is not as yet an optimal currency area. This conclusion is based on the following evidence:

- First, the arguments of the critics and skeptics are compelling and well reasoned enough to support a conclusion that Europe is not as yet an optimal currency area.
- Second, an optimal currency area may be reasoned to be a territory in which all the participants react in much the same manner to a shift in the international exchange value of a common currency. For the countries in an area not to react similarly is to define conceptually an area as a being a suboptimal currency area. In the case of the euro area, an issue yet to be clarified is how the euro countries will adjust to movements (i.e., appreciation and depreciation) in the price of the euro. Countries that sell price-sensitive products/services to non-EU members may be hurt by an appreciating euro, while countries that import from non-EU members may be hurt by a depreciating euro. It is not understood fully how the nations of the euro area will react to currency movements. Given the potential for differing reactions, Europe is not as yet an optimal currency area.
- Third, an optimal currency area typically has common, pan-area fiscal and monetary policies. The nations of Europe, in the past and most recently, have had very different fiscal and monetary policies (Andrews, 1996; Colchester, 1996; Franklin, 1996). Now, as euro-land emerges, the nations are moving toward a common monetary policy by shifting monetary responsibility from national central banks to the European System of Central Banks (ESCB) consisting of the EU's 15 national central banks and the European Central Bank. Monetary policy is the sole responsibility of the ESCB, but each country continues to control its own fiscal policy under an obligation to avoid excessive government deficits (European Parliament, 1998). A true optimal currency area has common monetary and fiscal policies across the area, which obviously is not the situation in Europe. Hence, additional evidence that Europe is not as yet an optimal currency area.
- Fourth, the European countries have significant differences in economic structures, labor immobility across countries, different cultures and languages, differences in countries' histories, and the lack of a central fiscal authority to transfer funds from bountiful areas to depressed areas of Europe.
- Fifth, as noted by Jonung (1998), there is no common European business cycle.
- Sixth, a troublesome difference in Europe, a difference not as yet resolved and one that has received little discussion among critics and supporters of the European OCA, concerns the pension situation in Europe. The European countries differ significantly in their unfunded pension liabilities. These unfunded liabilities are reported by the European Research Group (1999) to amount to 19 % of GDP in the UK, 98 % in France, 113 % in Italy, and 137 % in Germany. A likely scenario from these disparate liabilities is that Germany and Italy will seek funding through borrowing and/or taxation, leading to higher interest rates across the area and/or taxation imbalances. Unfunded pension liability is a serious problem across Europe as well as in other areas of the world. The authors posit unfunded pension liability to be a major problem for countries and organizations throughout the world in the new millennium and believe it is a compelling indicator that Europe is not as yet an optimal currency area.

EURO CONVERGENCE CRITERIA: TOWARD AN OCA

While Europe is not as yet an optimal currency area, it is moving in that direction. Such movement is about what are known as the euro convergence criteria, established in the Treaty on European Union enacted in Maastricht, The Netherlands in December 1991 (European Parliament, 1998). The Maastricht Treaty, as it is known, requires euro-member countries to achieve the following stringent goals for inflation rates, size of budget deficits, exchange rate fluctuations, and government indebtedness levels as conditional for admittance to the euro:

- Inflation less than 1.5% higher than the average of the rates of the three countries in the euro area with the lowest inflation
- Long-term interest rates less than 2% above the average of the rates of the three countries in the euro area with the lowest long-term rates
- A country's exchange rate must have remained within the normal fluctuation margins of the ERM & no devaluation of its currency
- Budget deficit less than 3% of a country's GDP
- Outstanding government debt must be no more than 60% of a country's GDP.
- An independent national central bank.

As the European countries strive to achieve the convergence criteria, Europe, in the opinion of the authors, is moving toward becoming an optimal currency area. As evidence, there has been remarkable convergence among the European economies in preparing to meet the criteria for admission to the euro. In the several years after the Maastricht Treaty (Holling, 1993; Buiter, 1995) and prior to introduction of the euro, the countries of Europe enjoyed relatively stable exchange rates and lower inflation. Additionally, European interest rates have moved toward lower levels, as have budget deficits. In sum, Europe is approaching being an optimal currency area as its countries focus on the convergence criteria in order to be eligible to participate in the euro currency. Of the 15 euro-land countries, 11 satisfied the convergence criteria to join the euro at its launch in January 1999.

INTRODUCTION OF THE EURO

In what has been called a transforming event in the world's financial landscape (Kamm, 1999), an event that may be the most significant in world monetary history since the collapse in the 1970s of the Bretton Woods fixed-exchange rate system (Reed, 1999), eleven member states of the 15 member European Union - Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Holland, Portugal, and Spain - on January 1, 1999 initiated phase one of the launch of a new currency – the euro. Four member states – Denmark, Greece, Sweden, and the United Kingdom – elected not to join the new currency union initially. Britain, Denmark, and Sweden, the Euroskeptics (Stecklow, 1999), elected to wait before adopting the new currency. Greece did not qualify under the euro convergence criteria, but is taking steps to reduce its deficit, public debt, and inflation to qualify for entry to the euro.

In introducing the euro on January 1, 1999, conversion rates (Kehoe, 1999) for the European currencies were fixed and the euro was authorized for non-cash transactions, including European stock and bond trading, bank transactions, business-to-business invoicing and payments, and payments by European consumers in euros by check, by credit card, or by bank transfer. Beginning on January 1, 2002, euro bank notes and coins will be introduced throughout Europe as legal tender alongside national currencies, with a July 1, 2002 target for a phase out of national currencies.

The currency conversion rates among the euro countries on the introduction of the euro are shown below. The rates were adopted by the EU Council on December 31, 1998 upon a recommendation from the Commission of the European Communities and after consultation with the European Central Bank for effect at 00:01 hours on January 1, 1999 (European Central Bank, 1998). In terms of the US $, the euro was introduced at 1 euro = US$1.19. From January to July 1999, the euro to dollar conversion rate dropped to 1 euro = US$1.01. As of November 24, 1999 at 2:15 p.m. CET the rate is 1 euro = US$102.15. Current rates are available at the web site of the European Central Bank at http://www.ecb.int.

Country	Conversion Rate, 1 Euro =
Austria	13.7603 ATS
Belgium	40.3399 BEF
Germany	1.95583 DEM
Finland	5.94573 FIM
France	6.55957 FRF
Ireland	0.787564 IEP
Italy	1936.27 ITL

Luxembourg	40.3399 LUF
Netherlands	2.20371 NLG
Portugal	200.482 PTE
Spain	166.386 ESP

The euro-11 countries closely match the United States as an economic entity. The euro-11's combined 1997 GDP is US$6.5 trillion, compared to a United States 1997 GDP of US$8.1 trillion. The euro-11's share of international trade outside the euro area is 19%, larger than the 17% experienced by the United States. (Euro Brief, 1998b) At 290 million people, euroland is slightly larger than the United States. It accounts (Briones, 1998) for 19.4% of world GDP, compared with 19.6% for the U.S.

ENLARGING THE EURO AREA AND THE EUROPEAN UNION

Will the euro area be enlarged from its present 11 member countries to include other countries in western, central and eastern Europe? The answer, in the judgment of the authors, is euro-land likely will be enlarged. The western European countries that elected not to join the euro union initially, are posited as likely to join, possibly prior to 2002. Further, many central European countries are applying for euro-land membership including Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia (The Euro, 1999). Some of these countries are considering abandoning their national currencies for the euro as a short cut to European Union membership (Euromoney Report, 1999). So, it is very likely that euro-land will be enlarged (Boone and Maurel, 1999). Additionally, it is very likely that the European Union itself will be enlarged from its 15 countries to 27 or more countries. In this regard, the EU expects to admit 12 or more members starting in 2003, most coming from central and eastern Europe (Euro Brief, 1999).

On August 31, 1999, the European Central Bank released a report entitled, *Payment Systems In Countries that have Applied for Membership of the European Union* (European Central Bank, 1999). Better known now as the *Blue Book On EU Accession Countries*, the report informs member and non-member countries about economic conditions, payment systems, and securities-settlement systems in applicant countries. The report shows significant fiscal and monetary differences exist among the applicant countries and between the applicant countries and the current euro-11 countries. In the judgment of the authors, an enlarged euro area, defined to include the applicant countries listed above, will not be an optimal currency area.

IMPLICATIONS FOR MANAGEMENT

Kehoe (1999) generalized implications for management on the advent of the euro. He generalized particularly that a shrinking profit base in European firms due to the euro's introduction brings implications for management concern. First, there are likely to be reductions in scale and reductions in scope in European firms. Second, an increase in business failures is posited, particularly for undercapitalized firms. Third, there likely will be an increase in merger and acquisition activities in Europe. Fourth, there will be heightened pressure to simplify and homogenize product lines and to develop similar products that sell at similar prices throughout Europe.

An era of brand switching by consumers for price arbitrage like reasons, downward pressures on prices, and narrowing revenue and profit margins are posited (Kehoe, 1999) to accompany the introduction of the euro. All of this suggests that strong and visionary management will be needed in the strategic areas of product, price, promotion, and place. Management, in particular, will face a strategic issue in pricing in response to the euro as to whether or not to continue price disparity across European countries. At one end of a strategic continuum is to continue a policy of price disparity across the European countries. The other approach is to move rapidly toward harmonizing prices across the countries. Edmondson (1998, p. 68) suggested that European firms that use "low pricing and economies of scale to build a continent-wide presence have the best shot at becoming the new Europe's corporate winners." This implies that harmonization of prices across European countries may be a better strategy than price disparity.

IMPLICATIONS GENERALIZED BY CHIEF EXECUTIVE OFFICERS

Whitten, in research for this manuscript, surveyed Chief Executive Officers concerning implications for business on the advent of the euro in the strategic areas of product, price, promotion, and place. Methodologically, the implications were gathered in a small, purposive sample of Chief Executive Officers from major US consumer-goods companies with subsidiaries in Europe and were derived by asking a question – What do you believe to be the implications for business in Europe in the strategic areas of product, price, promotion, and place as the result of the euro?

In the strategic area of product, the CEOs identified the following implications:

- The euro brings implications in the cost/price relationship. If a product is manufactured and sold in countries using the euro, costed in euros, and priced in euros, the management implications are less complex than if a product is sold to countries in Europe not converting to the euro.
- A single currency will streamline and enhance product R&D. Particularly, by not having to consider changes in currency values, it will be easier to consider revenue potential and cost in a project. A potential for changes in currency value provides for an uncertain business environment and makes product R&D, as well as all business activities, more difficult to manage.
- A single currency provides an opportunity to simplify products across Europe and to move production facilities to a single or fewer locations in Europe.
- Budgets for products and for product management will not be subject to constant variations and currency swings. Foreign exchange instability and/or volatility contribute a level of uncertainty to budgeting and make product management and planning more difficult.
- Product component procurement will become smoother, more dependable and secure.
- Inventories of raw materials may be reduced dramatically due to more predictable costing as well as confidence in achieving JIT deliveries from suppliers throughout Europe.
- Certain non-profitable SKU's (items such as 1-liter container vs. 2-liter container) in different countries may be eliminated.

In the strategic area of price, implications identified included:

- The most important element of a single currency is the improvement in the management of pricing. A single currency will eliminate different costing across countries, eliminate inventory buildups, and prevents costly hoarding, all of which will reduce prices significantly.
- Saves management time as well as the expense of a constant search for lower product component costs in order to maintain a stable and predictable profit margin within a pricing structure.
- Provides the consumer a more stable pricing situation and prevents price inflation or gouging by various middle elements such as wholesalers and government (taxation).
- Stimulates equitable price competition.
- Enables ease of price comparison for consumers across countries due to increased transparency and the elimination of the need to calculate exchange rates for different currencies.
- Enables the measurement of price elasticity more accurately.
- May bring pressure to reduce prices across Europe as consumers increasingly seek the lowest price no matter where in Europe a lowest-price product is located. If this occurs, margins across Europe will be eroded.
- Allows companies to manage the real business instead of constantly monitoring currencies and price changes induced by currency rate changes.
- Eliminates a significant portion of a firm’s treasury department for currency or at least dramatically reduces the department's work on currency-related issues. (A CEO

reported that 60-70% of treasury's work was from currency rate adjustments from surrounding European countries).

Implications identified in the strategic area of promotion included:

- A single European currency will create a more rational basis for promotional development. Promotional costs will become fairly stable, particularly if companies are able to standardize promotional messages across Europe.
- A single currency should provide a more competitive arena in the sourcing of promotional development and services.
- Enables the grouping of creative promotional messages to specific multinational and multicultural targets.
- A single currency may better enable target marketing and positioning.
- On price-related promotions, a single currency will allow deals to run longer or become more specific because currency swings are eliminated.
- Provides for more strategic and long-term promotional planning across the euro area instead of planning for each of the individual European countries.
- Reduces the overall cost of promotion.

In the strategic area of place or distribution, the following implications were identified:

- All specific elements of distribution definitely will be stabilized if not reduced due to the elimination of dramatic currency swings.
- Distribution costs within various countries can be rationalized, adjusted or replanned.
- Costly distribution points within and between countries may be eliminated.
- Time consuming and costly monitoring of distribution costs will be brought down to manageable levels.
- A single currency will stabilize distribution. Stabilizing distribution also contributes to stabilizing pricing.
- Should distributors be involved as part of the distribution chain, a one currency situation will assist in eliminating or reducing protected territories and pricing inflation.
- The playing field will be leveled across countries and more and better competition will be stimulated.

CONCLUSION

The euro hopefully will contribute significantly toward a unified market in Europe. In that unified market, the euro should enable simplification of products and of branding, price transparency across national borders, more unified advertising and promotional approaches, and simplified distribution channels. Companies will no longer be able to mask price differences with currency exchange rates. Consequently, price transparency is likely to erode revenues and profit margins (Kehoe, 1999), particularly in the short run. Firms that are successful in the new euro regime will have harmonized prices across the euro-11 countries.

The euro links the countries of Europe in a community of solidarity and creates a "zone of monetary stability" for Europe (Randzio-Plath, 1998). It removes exchange-rate risks from the internal European market, reduces the cost of transactions throughout Europe, and leads to greater certainty in business planning, forecasting, and strategy.

Over the long run, the benefits of the euro may ameliorate concerns about its initial implementation difficulties. Among its benefits are that the cost of currency conversions, significant in Europe, should be reduced substantially, there should be greater stability in exchange-rate movements across Europe, and capital markets should flourish. Additionally, marketing in Europe should be less cumbersome and less costly as the range of prices under management is reduced; reporting and control activities should be less cumbersome; advertising should be easier to design, implement, and manage; distribution cost should be reduced significantly; and the many business and marketing functions previously in place in each of the euro-11 countries should be consolidated, making it easier to do business across Europe as the result of the euro.

REFERENCES

Andrews, John (1996). "The European Union: Family Frictions," in Harry Costin, *The European Union: Managing in the Global Economy.* Fort Worth, TX: The Dryden Press, 1996, 201-225.

Boone, Laurence and M. Maurel (1999). *An Optimal Currency Area Perspective of the EU Enlargement*. London, UK: Centre for Economic Policy Research, 1999, 1-14.

Briones, M.G. (1998). "The Euro Starts Here." *Marketing News*, July 20 1999, 1and 39.

Buiter, Willem H. (1995). *Macroeconomic Policy During a Transition to Monetary Union*. London, UK: Centre for Economic Policy Research, 1995, 1-56.

Colchester, Nicholas (1996). "The European Community: Into the Void," in Harry Costin, *The European Union: Managing in the Global Economy.* Fort Worth, TX: The Dryden Press, 1996, 149-176.

Costin, Harry (1996). *The European Union: Managing in the Global Economy.* Fort Worth, TX: The Dryden Press, 1996.

Coy, Peter (1999). "Why Mundell Won the Nobel: For Work that Led to the Euro, Not for his Supply-Side Theory." *Business Week*, October 25, 1999, 46.

Davis, Mary (1994). "Unsustainable Parties: The Exchange Rate Mechanism in Turmoil." *Bank of Ireland Treasury Group Policy Paper 94/3*, (http://www.economics.tcd.ie/TEP/Pp943.htm).

Edmondson, Gail (1998). "The Euro: Ready, Set, Retool." *Business Week*, December 14, 1998, 68-69.

Edwardes, Michael (1998). "The Business Implications of the Single Currency." The Bruges Group, May 21, 1998, (http://www.eurocritic.demon.co.uk/bg-rsrc2.htm).

Euro Brief (1998a). *The Economist*, October 24, 1998, 1-4.

Euro Brief (1998b). *The Economist*, November 14, 1998, 89-90.

Euro Brief (1999). *The Economist*, November 13, 1999, 51.

Euromoney Report (1999). "The Quick and Dirty Way Into EMU." *Euromoney*, October 1999, 28-31.

European Central Bank (1998). "Determination of the Euro Conversion Rates." (http://www.ecb.int/press/pr981231_2.htm).

European Central Bank (1999). *Blue Book on EU Accession Countries*. (http://www.ecb.int/press/pr990831.htm).

European Parliament (1998). *The Single Currency and the European Parliament*. London, UK: Information Offices of the European Parliament, 1998.

European Research Group (1999). "The Euro: Bad for Business." (http://www.eurocritic.demon.co.uk/bad4bis.htm).

Franklin, Daniel (1996). "The European Community: A Rude Awakening," in Harry Costin, *The Europea Union: Managing in the Global Economy*. Fort Worth, TX: The Dryden Press, 1996, 177-200.

Holling, Wilhelm (1993). *Monetary Policy After Maastricht*. London, UK: The Macmillan Press, 1993.

Ingram, James (1969). "The Currency Area Problem," in Robert A. Mundell and A. K. Svoboda (eds.), *Monetary Problems of the International Economy*. Chicago, IL: University of Chicago Press, 1969.

Jonung, Lars (1998). "Euro: The Great Experiment." Euro Debate Series, (http://www.cnn.com/Specials/1998/euro/euro.debates/jonung.html).

Kehoe, William (1999). Summary Brief – The Euro: Implications for Pricing Policies & Management." *Advances in Marketing Theory*, Society for Marketing Advances, 1999, 98-100.

Kenen, P.B. (1969). "The Theory of Optimum Currency Areas: An Eclectic View," in Robert A. Mundell and A. K. Svoboda (eds.), *Monetary Problems of the International Economy*. Chicago, IL: University of Chicago Press, 1969.

McKinnon, Ronald I. (1963). "Optimum Currency Areas." *American Economic Review*, Volume Fifty-Three, Number Four, September 1963, 717-725.

Mundell, Robert A. (1961). "A Theory of Optimum Currency Areas." *American Economic Review*, Volume Fifty-One, Number Four, September 1961, 657-665.

Randzio-Plath, Christa (1998). "With the Euro into the 21st Century." *The Single Currency and the European Parliament.* London, UK: Information Offices of the European Parliament, 1998, 24-25.

Santer, Jacques (1997). "External Aspects of the Euro." Speech at the Global 24 Conference, Frankfurt, July 1, 1997, (http://europa.eu.int/en/comm/js/js010797.html).

The Euro (1999). "Ready Money." *The Economist*, November 6, 1999, 79.

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CALM VS. E-CALM CONSIGNMENT AUCTION LIQUIDATION MARKETING VS. ELECTRONIC CONSIGNMENT AUCTION LIQUIDATION MARKETING METHODS OF PRODUCT DISTRIBUTION:A COMPARTATIVE/DESCRIPTIVE ANALYSIS

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ABSTRACT

This comparative analysis focuses on two forms of consignment auction marketing opportunities. The more traditional consignment auction liquidation marketing method is compared with the more recently developed electronic consignment auction liquidation marketing method.

The researcher draws upon his own experiences as a merchant wholesaler utilizing both methods. In addition, input from secondary sources adds further expertise to the comparative/descriptive analysis.

Variables for analysis include general nature, target markets, consignment fees, diversity of outlets, promotion, distribution, financial performance and legal variables.

The distribution of merchandise throughout our society and throughout the world largely takes place through traditional channels of distribution. Nontraditional forms of product distribution which offer promising distribution results include the consignment auction liquidation marketing method in either the traditional form or the more recently established electronic consignment auction liquidation marketing form.

Regardless of form, current marketing distribution curricula do cover some nontraditional distribution channel forms but not the distribution of products via consignment auction liquidation. Nontraditional channels currently covered include “off-price” retailers and “warehouse clubs”. (Kotler & Armstrong, 1996). Likewise, electronic consignment auction liquidation is also ignored in current marketing curricula. Although, more emphasis is currently placed on other forms of electronic commerce and interactive marketing (Berkowitz, 2000).

Although current curricula ignore consignment auction liquidation, perhaps marketing firms and individuals should not. The Uniform Commercial Code defines an auction as “a public sale of property to the highest bidder” (Willner, 1996). Traditional consignment auction outlets exist in almost every community in the United States. The National Auctioneers Association estimates that 23 million people attend auctions in the United Sates every year (Keefhaver, 1997). A Gallup Organization study (1993) estimated the number of auction firms nationwide at 11,000, with personal/general merchandise sales totaling over $70 Billion annually. Electronic or online auctions continue to grow. The National Auctioneers Association estimates the number of online auctions at 1,500 and forecast further growth throughout the next four years. eBay, the online auction industry leader, reported sales of $47.4 Million in 1998 marking a growth of 272 per cent over 1997 figures (NAA, 1999).

Traditional consignment auctions vary regarding whom they target their sales toward. Some target only antique buyers; others target heavy equipment buyers. It is important that any merchandise sent to a traditional consignment auction should compliment its target market well. Electronic auctions also target their sales in two ways. First of all, there are two main forms of consignment auctions currently online. One is the more “personal” type providing opportunities to market general merchandise

in relatively small quantities to the final or ultimate consumer. A second form of electronic consignment auction is the more "wholesale" oriented, large quantity types of auction sites.

Common Personal Type Electronic Consignment Auction Sites:
eBay.com
Amazon.com
Yahoo.com
Excite.com

Common Wholesale Type Electronic Consignment Auction Sites:
Processors.com
Ubid.Com
Merchandise-online.com
Tradeout.com

Regardless of the form of electronic consignment auction site, each also allows the seller to choose from various categories of merchandise to be listed under. eBay, for example, provides an opportunity to market merchandise in more than 1,600 categories including collectibles, antiques, sports memorabilia, computers, toys, dolls, coins, stamps, books, music, pottery, photography, electronics, jewelry, and more.

Auctioneers or electronic auction site providers subtract or withhold a percentage of the highest bid refereed to as a consignment fee. Consignment fees vary from one consignment auction outlet to another. For traditional consignment auction outlets, consignment fees start as low as 10% and may exceed 35%. The national average consignment fee is approximately 23%. For personal electronic consignment auctions, the consignment fees are usually 5% but various mandatory and optional fees exist. For example, most personal consignment auctions charge 25 cents to list a given item. Optional fees include bold face enhancements, which may require the seller to pay an additional $1.00 fee. To include a picture of an item, a fee of $2.00 is commonly required. Enhanced placement of an item, such as in a special electronic auction gallery may require a fee of as much as $100.00. Effective electronic consignment auction sales results can be accomplished without the optional fees for the minimal item insertion fee of 25 cents and the consignment fee of 5% of the highest bid. Wholesale type electronic auctions commonly waive any insertion or listing fees but commonly require a 10% consignment fee.

Promotion is a vital concern for the effective consignment of merchandise. For the traditional consignment auction, an initial verbal presentation regarding the merchandise to be sold will promote the merchandise into the outlet. With each shipment, a well-written description of each item consigned should be included. These verbal and written descriptions should be presented in a way to attract the consignment auction liquidation outlet's attention and desire. Specifically mentioning various positive selling features and benefits will accomplish this need. Descriptions can assist the auctioneer in more effectively promoting merchandise whether in auction advertisements or in their verbal descriptions during the actual auction. For the electronic consignment auction, a well-written description of each item consigned is even more important as bidders are not able to physically handle and inspect merchandise consigned. As mentioned earlier, for additional fees, promotional enhancements can include a picture of the merchandise, the use of boldfacing to attract attention and the inclusion of merchandise within special auction sites/galleries.

Whether selling merchandise through the traditional consignment auction outlets or the electronic consignment auction outlets, a number of optional physical distribution options are available. However, the electronic consignment auction liquidation marketing method allows the seller to assign shipping costs to the highest bidder. Regardless, when shipping merchandise, ground transportation modes are recommended in order to provide an au affordable and yet timely delivery of merchandise. The two primary variables, which determine the cost of shipping merchandise, are weight and distance.

Achieving enough revenues sufficient to exceed expenses and to provide profitability is challenging for all business enterprises including consignment auction liquidation operations. Cashflow analysis, the tracing of cash disbursements and receipts is somewhat more predictable for electronic consignment auctions as the seller has possession of the merchandise until sold. The average number of days an item is placed on the electronic "auction block" is 7 days. It takes an average of 23 days from the

first day an item is listed electronically until the seller receives payment. Cashflow analysis for the traditional consignment auction is somewhat unpredictable due to the fact that merchandise shipped to a consignment auction may be sold immediately or perhaps much later. The average number of days between shipping merchandise to a consignment auction liquidation outlet and receiving a payment is approximately 45 days.

Financial performance analysis indicates that electronic consignment auctions provide bids that average 15% higher compared with bids on then exact same merchandise consigned through traditional consignment auctions. Videos, for example, resulted in 19% higher bids. Toys resulted in 15% higher bids. Specialty items such as porcelain dolls and sports memorabilia items resulted in 11% higher bids when auctioned online. Furthermore, traditional consignment auctions require a consignment fee, which is 78% higher, and require the seller to pay for all shipping costs.

The Uniform Commercial Code provides insight into the governmental regulations covering consignment auctions. In order for purchasers attending auctions to not be imposed on nor the owners of property sold at auction to be defrauded, reasonable regulations are imposed (Willner, 1996). A unique method of self-regulation exists within the electronic consignment auction community whereby both sellers and buyers of merchandise are encouraged to leave public comments regarding electronic auction transactions. These comments may be positive or negative and result in a long-term historical profile of each bidder and seller. This self-regulatory mechanism helps provide protection against fraud or other unreasonable behavior.

The consignment auction liquidation marketing method, whether traditional or electronic, yields the opportunity for profitable liquidation of merchandise. In comparing the two methods advantages and disadvantages of both arise. The electronic consignment auction liquidation method does yield significantly higher bids and allows freight out costs to be diverted. The costs of electronic consignment can also be much less. Two primary disadvantages include the lack of quantity, which can be liquidated at a time, often only one item. Secondly, electronic consignment auction opportunities for wholesaling large quantities of merchandise is newer and therefore currently less responsive. An advantage of traditional consignment auction liquidation includes the opportunity to sell in higher quantities by shipping multiple units of multiple items to multiple consignment auction outlets. Disadvantages include lower bids received, shipping costs required of the seller, and a lack of control over merchandise shipped.

In summary, at this point, due to the quantity advantage, traditional consignment auctions may be preferred by wholesale and large quantity sellers while sellers of personal, individual items may benefit more from electronic consignment auction liquidation marketing opportunities. Although this researcher traditional consignment auction is somewhat unpredictable due to the fact that merchandise shipped to a consignment auction may be sold immediately or perhaps much later. The average number of days between shipping merchandise to a consignment auction liquidation outlet and receiving a payment is approximately 45 days.

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REFERENCES

Berkowitz, Kerin, Hartley & Rudelius, Eric (2000) *Marketing*. (6th ed.) Boston, Massachusetts: Irwin McGraw-Hill.

Gallup Organization. (1993) *National Auctioneers Association Market Research Report*. Princeton, New Jersey: The Gallup Organization.

Keefhaver, Joseph G. (1997) Interview and Promotional Materials: From The National Auctioneers Association. Overland Park, Kansas.

Kotler, Philip & Armstrong, Cary (1996) *Principles of Marketing*. (7th ed.) Englewood Cliffs, New Jersey; Prentice Hall.

National Auctioneers Association. (1999) *The Auctioneer*. April 1999. The National Auctioneers Association. Overland Park, Kansas.

Willner, Lara L (1996) *The Uniform Commercial Code Legal Forms*. (3rd ed.) Clark, Boardman, and Callaghan: Deerfield, Illinois.

COMPARATIVE ANALYSIS OF ONLINE ADVERTISING: THE CASE OF KOREAN VERSUS AMERICAN NEWSPAPERS

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ABSTRACT

With the growth in popularity of the World Wide Web, online advertising has become a powerful marketing medium. More and more, marketers worldwide are recognizing the importance of online advertising in selling their goods and services. Especially, the number of internet users in the USA and Asia is growing at a fast rate, providing online advertisers bigger opportunities to use the internet as their advertising tool. While newspapers have been a traditional advertising source for marketers, online versions of newspapers have become a new advertising source for marketers. This paper analyzes and compares the nature of online advertising across online versions of daily newspapers in Korea and the United States. These two countries were selected mainly because of their different cultures and economic background. The advertisements from the online versions of national daily newspapers' main web pages and business section web pages from Korea and the United States were selected as the data set. These were analyzed and compared in terms of product content, information type, and web design techniques. The analysis of the data also explored the similatities and differences of the advertisements from each country.

CONDITIONS AND CHALLENGES OF GLOBAL FRANCHISING IN THE NEW MILENNIUM: A RESEARCH AGENDA

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ABSTRACT

A current focus for highly developed U.S. franchisors is expansion into overseas markets with high potential. This paper assimilates the literature to date on global franchising and offers a review of the field and recommendations for future research. The establishment of a new research paradigm is drawn from gaps in the findings of a large group of empirical studies. The paper details and examines conditions of global franchising that have been previously studied—including the evolution of global franchising, types of global franchisors, capabilities required for global expansion, and determinants of success. The paper also examines the impact of emerging international franchise development associations on established capability requirements and the choice of global franchise locations.

INTRODUCTION

International franchising has seen explosive growth in the last quarter of the twentieth century. According to the International Franchising Association (IFA), one half of all U.S. franchisors without foreign units plan to expand internationally; and 93 percent of current international franchisors plan to increase their foreign operations (IFA, 1992). Moreover, Aydin and Kacker (1990) say that U.S. franchisors added foreign outlets at twice the rate of domestic outlets from 1970 to 1990; and U.S. Department of Commerce records show that 94 percent of all foreign outlets of U.S. franchisors are established through the use of foreign franchisees. By 1999, IFA statistics indicate that just over 13 percent of U.S. franchisors now have foreign operations (*International Herald Tribune*, 1999).

As a result of this sustained growth, a research stream attempting to understand global franchising has emerged concurrent with its development. Various aspects of the global franchising phenomenon have been studied—most prominently, the characteristics that distinguish global franchisors from their purely domestic counterparts (Lindquist, 1996; Shane, 1996; Kedia, et. al., 1994; Huszagh, et. al., 1992; Aydin and Kacker, 1990).

This paper assimilates the literature to date on global franchising, tracing its origin and evolution as a research stream, and offers a research paradigm to guide future study.

THE HISTORY OF RESEARCH ON INTERNATIONAL FRANCHISING

Research on international franchising appears to stem from the conclusions and paradigms that have emerged in two distinct research streams to which it is inherently related: (1) research on domestic franchising and (2) studies of international expansion strategies.

The former has historically concerned itself with understanding franchising within a domestic context. Three models have surfaced to explain the emergence of franchising as a viable organizational structure: (1) the resource constraints model, (2) the administrative efficiency model, and (3) the risk management model. The resource-constraints perspective suggests firms use franchise agreements to expand because franchisors are unable to generate the capital and other resources (e.g., expertise) needed to grow themselves (Oxenfeldt and Kelly, 1969). This is an attractive explanation that has received both

early (Hunt, 1973) and subsequent research support (Brickley and Dark, 1987; Combs and Castrogiovanni, 1994; and Carney and Gedajlovic, 1991).

The administrative efficiency theory derives primarily from agency theory. It suggests that firms use franchise agreements to expand because managers (agents) of company-owned units are less motivated to perform efficiently than owners (agents) of franchise units whose interests are better aligned with those of the franchisor. This perspective has also received empirical support (Mathewson and Winter, 1985; Carney and Gedajlovic, 1991; and LaFontaine and Kaufmann, 1994) but has been studied less.

The risk management theory states that firms use franchising agreements to expand into locations that have higher risk due to such factors as geographic distance or cultural differences. This is a newer paradigm which more recent study has shown to be separate from administrative efficiency--although it is a complementary idea under the agent monitoring approach (Combs and Castrogiovanni, 1994)—and which has been used to empirically explain the expansion rate of domestic franchises (Miller, 1992).

The second research stream to contribute to the understanding of global franchising is that which concerns international expansion strategies. Historically, this research stream has focused on the decision to export versus the use of foreign direct investment. In summary, early research showed that firms progress in their commitment to and involvement in a foreign market as they gain experience in its business traditions and culture (see e.g. Contractor, 1984). Ultimately, the increased involvement and understanding gives the firm the confidence to extend itself by foreign direct investment. Yet changes in the global business environment make this progression less applicable today. More recent research shows that international new ventures altogether forego the lengthy life cycle of domestic development (Oviatt and McDougall, 1994) and that international firms may take a variety of forms—including that of franchises—depending on host country responsiveness and the need for global integration (Bartlett and Ghoshal, 1989).

Both streams of research have produced theoretical underpinnings for the study of global franchising. The following sections of the paper discuss the study of global franchising from the perspective of each of the franchising-emergence models and its evolution relative to the theories of international expansion.

GLOBAL FRANCHISING AND RESOURCE CONSTRAINTS THEORY

Resource constraints theory postulates that franchise expansion occurs in under-resourced firms that are looking for a way to grow. To explain the emergence of global franchises, researchers have sought to show that international franchises have distinct resource characteristics when compared to domestic-only franchises. For example, Aydin and Kacker (1990) found that firms most receptive to future global expansion had a distinct profile. They were “small” in total annual sales volume, and their corporate structure contained a high overall percentage of franchisee-owned outlets as compared to company-owned outlets. Similarly, Shane (1996) found that firms exhibiting “well established overseas expansion” enjoyed more overall years in franchising and a greater number of franchisee-owned outlets as a percentage of total outlets. These results closely parallel those of Huszagh, Huszagh, and McIntyre (1992) who had earlier found that international franchises in both 1967 and twenty years later in 1988 exhibited greater experience (number of years in operations) and size (percentage of franchisee-owned domestic outlets and total number of outlets) than their domestic-only counterparts.

As compelling as these findings appear, however, a dissenting study by Kedia, et. al. (1994) found managerial attitudes toward expansion and increased profits to be superior to any firm characteristics—namely, sales volume, number of company-owned versus franchisee-owned outlets, and number of years in business—in predicting entry into the international franchising arena.

CONCLUSION: Although international expansion seems to be dominated by well-developed and experienced domestic franchisors, firm characteristics and nature of the resource base do not adequately explain why some franchisors pursue foreign markets and others do not.

GLOBAL FRANCHISING AND THE ADMINISTRATIVE EFFICIENCY MODEL

The administrative efficiency model postulates that expansion occurs via franchising because firm managers realize it is easier to grow through licensing of a process to another owner (whose interests are similar or identical to the original manager) than to entrust growth to paid subordinate managers whose livelihood is independent of the success of the new firm. In other words, it is more administratively efficient to grow via franchisee outlets than company-owned outlets or chain ownership. Yet, when the company chooses to expand via franchisee outlets, the problem of franchisee evaluation occurs. Monitoring may be difficult or expensive and exacerbated by the different risk preferences between principal and agent (Fladmoe-Lindquist, 1996).

This theory in the context of global franchising expansion has been studied very little. Not until the mid-1990s when researchers became stymied in their attempts to explain participation in global franchising in terms of firm resource characteristics did studies begin to examine the nature of the relationship between principal and agent. Shane (1996) first demonstrated that the ability to monitor foreign franchisees was an important capability distinguishing international from domestic-only franchisors. Fladmoe-Lindquist (1996) further clarified Shane's findings by integrating them into a research framework underpinned by previous studies that postulate administrative efficiency to be composed of the dimensions of franchisee monitoring capabilities, distance management, and cultural adaptability. This is by far the most complete clarification to date of the theory, but its new dimensions are yet to be empirically tested.

CONCLUSION: Not all large, experienced domestic franchisors seek overseas expansion. The desire to expand internationally is more adequately predicted by the franchisee monitoring capabilities of the franchisor than its overall size or experience level.

GLOBAL FRANCHISING AND RISK MANAGEMENT THEORY

Risk management theory suggests that franchise expansion is governed by the desire to manage risk. Firms use the safety inherent in franchise expansion to offset the risks associated with moving into risky locations, usually those that are a greater distance from the headquarters organization or that are culturally different.

The basic premise of this theory appears very attractive in explaining the growth in global franchising. Unfortunately, nothing more than anecdotal evidence exists to suggest its predictive ability. Recent U.S. Department of Commerce statistics show that 94 percent of all foreign outlets of U.S. franchise systems are established through foreign franchisees (Commerce Department, 1987). Furthermore, both Norton (1988) and Martin (1988) found that franchisors prefer to expand by franchising in geographically distant locations, while Martin (1988) found the more remote the location the greater the preference for franchising. However, neither study explicitly focused on global franchising or the location to sites outside the United States.

In an attempt to integrate risk management theory into the current body of knowledge on global franchising, Fladmoe-Lindquist (1996) identifies specific risk management capabilities of the international franchisor drawn from a variety of anecdotal sources. She suggests that capabilities associated with the understanding of host country policies and exchange rate management are the most salient in managing risk. Neither variable has been empirically tested in its power to predict entry into international franchising.

CONCLUSION: The least developed discriminator of international franchisors is the franchisors' preferences for managing risk and risk management capabilities.

TYPES OF GLOBAL FRANCHISORS

A small group of researchers has attempted to classify international franchisors. Two models have resulted: one distinguishes types of franchisors according to their "reason(s) for

internationalization"; the other suggests types that follow from franchisors' existing levels of international franchising capabilities.

The first taxonomy of franchisors was produced by Carney and Gedajlovic (1991). To classify franchisors, they examined thirteen variables associated with the resource constraints and administrative efficiency models of franchise development. Their analysis of these thirteen variables revealed five significant factors (eigenvalues greater than one) which they used as the bases for distinguishing five franchisor types: (1) rapid growers, (2) expensive conservatives, (3) converters, (4) mature franchisors, and (5) unsuccessfuls.

Castrogiovanni, et. al. (1995) tried to replicate the study using a much larger sample of U.S. franchisors but failed to produce consistent results. Only two factors emerged—those that closely resembled the rapid growers and converters from the previous research. These researchers concluded based on *a posteriori* cluster analysis given the factor solution that "franchisors generally are concerned with both administrative efficiency and resource scarcity, though their concern with one relative to the other may vary with circumstances" (p. 53) and that "researchers need not account for franchisor type until further evidence is generated" (p. 52).

Somewhat later, as new evidence surfaced showing international franchisors may be distinguished by their international franchising capabilities—particularly the ability to monitor franchisees and reduce opportunism—(Shane, 1996), a new taxonomy emerged. Fladmoe-Lindquist (1996) argues that not all franchisors possess capabilities to the same degree. She then uses resource-based theory to show the importance of not just possessing capabilities, but the capacity for learning or developing new capabilities (Amit and Schoemaker, 1993). The resulting combinations of high/low existing capabilities with high/low capacity to develop capabilities produce four types of international franchisors:

1. Integrating Franchisors - have few existing international capabilities but considerable capacity to develop them;
2. Conventional Franchisors - have existing international capabilities but diminished capacity for further development;
3. Worldwide Franchisors - have a high level of existing capabilities and a significant capacity for further development; and
4. Constrained Franchisors - have little or no existing capabilities and little capacity to develop them.

The framework is a first step toward integrating the existing information regarding international franchising capabilities into a taxonomy. The model has not yet been empirically tested.

CONCLUSION: Not all international franchisors possess international franchising capabilities to the same degree. Franchisor types may be linked to the extent to which franchisors exhibit levels of international franchising capabilities.

METHODOLOGICAL ASSESSMENT

While the theory of international franchising has seen significant development over the last quarter century, much improvement stands to be made in the area of research methods applied within the field. First, all the studies produced throughout the 1980s and 1990s have been descriptive studies of international versus domestic-only franchisors. Now with the identification of a fairly large set of descriptive characteristics of international franchisors, we should turn our attention to identifying factors that contribute to international franchise profitability or effectiveness. Studies that attempt to discover causal relationships may necessarily require the greater use of field studies or experiments rather than the reliance on secondary data exhibited for the past decade within the field.

Along a similar vein, past studies have relied almost exclusively on data from the U.S. franchisors' perspective rather than that of the foreign franchisee. Indeed, with the exception of a single study focused on the differences in ethics codes of franchise associations around the globe (Preble and Hoffman, 1999), research using international samples is virtually nonexistent.

Finally, as researchers derive a host of antecedent variables that lead to a predisposition for international franchising (Shane, 1996; and Fladmoe-Lindquist, 1996), there is a need for more rigorous

operationalizations of constructs such as "risk preference," "exchange rate management," and "environmental uncertainty."

CONCLUSION: The relative youth of the field has produced an abundance of descriptive research findings based on secondary data. Movement toward more causally based research and more rigorous operationalizations of constructs is needed.

RECENT DEVELOPMENTS

Anecdotal information from international trade associations portends two recent trends that raise questions related to the development of international franchising: (1) the effect of economic and political turmoil on the choice of global franchise locations, and (2) the effect of host country franchise development associations and matchmaker trade missions on the choice of global franchise locations.

Halford (1998) suggests the economic turmoil in both Asia and Russia has made Latin America an attractive alternative for international investment including global franchising. Years of economic reform programs and political changes that have strengthened democracy have made the countries of Argentina, Brazil, Chili, Colombia, Costa Rica, Ecuador, Mexico, Panama, Peru, and Venezuela relatively more attractive as of late than countries in the Eastern Hemisphere.

Additional industry trade data shows a particularly strong upsurge of franchising activity in Pakistan (*Economic Review*, 1998), Honduras (*Journal of Commerce and Commercial*, 1997), and India, China, Poland, Indonesia, Malaysia, and Vietnam (*Success*, 1995) due to the removal of trade barriers and other legal restrictions in these countries. Nike has also found franchising to be the solution to the risks of operating in the Ukraine (*Business Eastern Europe*, 1998).

In a separate trend, the *Journal of Commerce and Commercial* (1997) reports staggering growth in the formation of host-country franchise development associations and their sponsorship of matchmaker trade missions. The development associations and matchmaker programs help U.S. franchise companies gain a foothold in foreign markets by bringing together franchisors with potential franchisees. There is no evidence to date to suggest how effective these networks are in locating suitable franchisees. However, industry reports indicate that U.S. franchising in Morocco, for example, is growing at a rate of 50 percent annually largely as a result of the Moroccan Trade Association (*Journal of Commerce and Commercial*, 1996).

CONCLUSION: Exploratory empirical studies employing international samples are needed to document the impact of political and economic host-country factors and international networking opportunities on the growth and development of global franchising.

IN SUPPORT OF A NEW RESEARCH PARADIGM

Taken altogether, the findings of the last three decades have contributed substantially to our understanding of global franchising. The various theories have coalesced to produce a more unified and developed paradigm. This paradigm suggests that the tendency toward global franchising involves both internal (firm-level) factors and response to external forces (Shane, 1996). The primary internal factors associated with international franchising are franchisee monitoring capabilities and level of risk preference (Fladmoe-Lindquist, 1996). The ability of these factors to predict a tendency toward global franchising may be moderated by the resource characteristics of firm size, experience, and percentage of franchisee-owned outlets (Huszagh et. al., 1992; Aydin and Kacker, 1990). New and unsubstantiated internal variables that appear to influence the use of global franchising are capabilities in distance management, cultural adaptability, host country policy evaluation, and exchange rate management (Fladmoe-Lindquist, 1996). External forces shown to contribute to international franchise expansion are the saturation of the domestic market (Hackett, 1976; Aydin and Kacker, 1990) and the presence of a large potential for profit in the foreign market (Kedia et. al., 1994). New and unsubstantiated external forces that appear to influence the tendency toward global franchising are the levels of economic and political turmoil in the host country (Halford, 1998) and the presence of international franchise development associations.

This paradigm may be furthered by the following recommendations for future research:

- Studies are needed to operationalize and clarify the concepts of "franchisee monitoring" and "risk management" and assess the extent to which they portend global franchising.
- Studies are needed to operationalize the constructs of "distance management capability," "cultural adaptability," "host country policy evaluation," and "exchange rate management capability" and relate them to the requirements for overseas expansion.
- Studies are needed to operationalize the constructs of "level of economic turmoil," "level of political turmoil," and "level of activity of a franchise development association" and relate them to the tendency toward global franchising.

Finally, several global franchise researchers have noted the need to study the effects of telecommunications and information technology advancements on a firm's franchisee monitoring capabilities (Huszagh et. al., 1992; Bergen et. al., 1992). As technology increases the exchange of information and the ease of that exchange, it should become easier for franchisors to monitor the behavior of franchisees, reducing the risk of global franchising while simultaneously increasing administrative efficiency. Hence the old theories of franchise evolution may eventually be supplanted by new, technology-based theories. What a wonderful world!

REFERENCES

Amit, R. and Schoemaker, P. J. H. (1993). "Strategic Assets and Organizational Rent." *Strategic Management Journal*, Volume Fourteen, Number One, 1993, 33-46.

Aydin, Nizamettin and Kacker, Madhav (1990). "International Outlook of US-based Franchisers." *International Marketing Review*, Volume Seven, Number Two, 1990, 43-53.

Bartlett, C. A. and Ghoshal, S. (1989). *Managing Across Borders: The Transnational Solution*, Harvard Business School Press, 1989.

Bergen, Mark, Dutta, Shantanu, and Walker, Orville C. Jr. (1992). "Agency Relationships in Marketing: A Review of the Implications and Applications of Agency and Related Theories." *Journal of Marketing*, Volume Fifty-six, July 1992, 1-24.

Brickley, J. A. and Dark, F. H. (1987). "The Choice of Organizational Form: The Case of Franchising." *Journal of Financial Economics*, Volume Eighteen, Number Two, 1987, 401-420.

Carney, M. and Gedajlovic, E. (1991). "Vertical Integration in Franchise Systems: Agency Theory and Resource Explanations." *Strategic Management Journal*, Volume Twelve, Number Eight, 1991, 607-629.

Castrogiovanni, Gary J., Bennett, Nathan, and Combs, James G. (1995). "Franchisor Types: Reexamination and Clarification." *Journal of Small Business Management*, January 1995, 45-55.

Combs, J. G. and Castrogiovanni, G. J. (1994). "Franchisor Strategy: A Proposed Model and Empirical Test of Franchise Versus Company Ownership." *Journal of Small Business Management*, Volume Thirty-two, Number Two, 1994, 37-48.

Commerce Department (1987). *Franchising in the Economy*. Washington, DC; U.S. Government Printing Office, 1987.

Contractor, F. J. (1984). "Choosing Between Direct Investment and Licensing: Theoretical Considerations and Empirical Tests." *Journal of International Business Strategy*, Volume Fifteen, Number Three, 1984, 167-188.

Fladmoe-Lindquist, Karin (1996). "International Franchising: Capabilities and Development." *Journal of Business Venturing*, Volume Eleven, 1996, 419-438.

"Foreign Food Franchises (Pakistan)." *Economic Review*, January 1998, Volume Twenty-nine, Number One, 50.

Hackett, D. (1976). "The International Expansion of U.S. Franchise Systems: Status and Strategies." *Journal of International Business Studies*, Volume Seven, 1976, 65-75.

Halford, Richard (1998). "Business Opportunities Abound" (Outlook 1999 in Latin America). *Journal of Business Strategy*, November-December 1998, Volume Nineteen, Number Six.

"Honduras: Franchising (Investment Prospects)." *Journal of Commerce and Commercial*, April 9, 1997, Volume 412, Number 28947, 6C.

Hunt, S. D. (1973). "The Trend Toward Company-Operated Units in Franchise Chains." *Journal of Retailing*, Volume Forty-nine, Number Two, 1973, 3-12.

Huszagh, Sandra M. and Huszagh, Fredrick W. (1992). "International Franchising in the Context of Competitive Strategy and the Theory of the Firm." *International Marketing Review*, Volume Nine, Number Five, 1992, 5-18.

International Franchising Association (IFA) (1992). *Franchising in the Economy: 1989-1992*, Washington, DC: IFA Educational Foundation, 1992.

"International Franchising: Setting Up Shop, Globally." *International Herald Tribune*, April 9, 1999, 8.

Kedia, Ben L., Ackerman, David J., Bush, Donna E., and Justis, Robert T. (1994). "Determinants of Internationalization of Franchise Operations by US Franchisors." *International Marketing Review*, Volume Eleven, Number Four, 1994, 56-68.

Lafontaine, Francine and Kaufmann, Patrick J. (1994). "The Evolution of Ownership Patterns in Franchise Systems." *Journal of Retailing*, Volume Seventy, Number Two, 1994, 97-113.

Martin, R. (1988). "Franchising and Risk Management." *American Economic Review*, Volume Seventy-eight, 1988, 954-968.

Mathewson, G. F. and Winter, R. A. (1985). "The Economics of Franchise Contracts." *Journal of Law and Economics*, Volume Twenty-eight, Number Three, 1985, 503-526.

Miller, K. (1992). "A Framework for Integrated Risk Management in International Business." *Journal of International Business Studies*, Volume Twenty-three, Number Two, 1992, 311-322.

"Morocco: Franchising." *Journal of Commerce and Commercial*, November 20, 1996, Volume 410, Number 28854, 6-7c.

Norton, S. (1988). "An Empirical Look at Franchising as an Organizational Form." *Journal of Business*, Volume Sixty-one, 1988, 197-217.

Oviatt, B. and McDougall, P. P. (1994). "Toward a Theory of International New Ventures." *Journal of International Business Studies*, Volume Twenty-five, Number One, 1994, 45-64.

Oxenfeldt, A. R. and Kelly, A. O. (1969). "Will Successful Franchise Systems Ultimately Become Wholly Owned Chains?" *Journal of Retailing*, Volume Forty-four, 1969, 69-87.

Platt, Gordon (1997). "International Franchise Association Sponsors Matchmaker Trade Missions." *The Journal of Commerce*, December 3, 1997, 9c.

Preble, John F. and Hoffman, Richard C. (1999). "The Nature of Ethics Codes in Franchise Associations Around the Globe." *Journal of Business Ethics*, Volume Eighteen, 1999, 239-253.

"Running Total: Franchising Has Eased Nike's Headaches—but It's Not an Option for Everyone." *Business Eastern Europe*, February 16, 1998, Volume Twenty-seven, Number Eight, 5.

Shane, Scott A. (1996). "Why Franchise Companies Expand Overseas." *Journal of Business Venturing*, Volume Eleven, 1996, 73-88.

Tomzack, Mary E. (1995). "Ripe New Markets: Emerging Economies with Little Competition and Big Payoffs." *Success*, April 1995, Volume Forty-two, Number Three, 73-77.

COUNTRY AND CULTURAL DIFFERENCES IN THE MARKETING OF ORGAN DONATION

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ABSTRACT

This paper reviews organ donation and transplant research and perspectives from a variety of scientific and religious sources. It focuses on what legal, religious and cultural similarities and differences exist across borders with regard to organ donation and transplantation. Several marketing approaches to increasing the numbers of donors and donated organs are evaluated and conclusions are offered.

INTRODUCTION

The problem of too few organs available for needed organ transplants is one which is increasing worldwide. This is due in part to the advancing transplant technology which has resulted in numerous medical diagnoses suggesting organ transplant as a viable and desirable means of treatment. This is complicated by the fact that rates of organ donation have not demonstrated a comparable increase during the same period of time.

The U.S. is not alone in these problems, nor has it been alone in attempts to market the idea of organ donation to its resident population. Such organized marketing efforts exist in virtually all advanced countries as well as a large percentage of newly industrialized and emerging nations. Not only do the relative needs for organ donation differ across countries, but so do the success rates of their marketing efforts to increase donations.

Very little writing or research in this area has penetrated the marketing literature to this point, though there are a few notable exceptions (Pessemier et al., 1977; Cosse and Weisenberger, 1997; Cosse and Weisenberger, 1998). As the problems being addressed are those of educating, attitude creation and attitude change, and behavior stimulation, examining and applying the relevant marketing dimensions seems to be a natural and compelling progression.

This paper reviews a variety of literature from medical journals and behavioral science periodicals to investigate the nature of these differences. The primary dimensions to be examined are: 1) varying legal dictates regarding organ donation, 2) religious and other cultural influences on organ

donation, and 3) differing approaches and success rates in organ donation marketing programs. From this some preliminary conclusions and hypotheses may be formed about countries similarities and differences in the identifiable obstacles to organ donation as well as the appropriate marketing strategies and tactics.

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LEGAL ISSUES AND OBSTACLES

A first assumption which is common when considering differences between countries in organ donation and transplant is that religious beliefs are the biggest barrier to progress in this area. However, legal barriers are generally the most problematic. Legislation is sometimes a reflection of a country s primary religion, but this is not universally true. Laws do reflect the attitudes and values of a culture, and therefore can be difficult to change.

One important issue to examine is the system legislated within a country to determine whether someone is willing to be an organ donor or not. This determination is not problematic when live donations are made because the live donor is able to express his/her wishes. However, with cadaveric donations, the family may not be clear about whether the person wanted to be a donor, or the family may refuse consent even if the potential donor had indicated a willingness to donate organs.

One approach used is called presumed consent . Presumed consent laws state that everyone is assumed to be a donor unless specific objections and refusal are submitted and documented. Most European countries have traditionally used presumed consent. However, few countries adhere strictly to this, often acting in line with family wishes (Wolfslast, 1992). European countries employing presumed consent include Austria, Belgium, France, Greece, Italy, and Switzerland. Presumed consent is not used in the U.S. or Canada, nor in
Saudi Arabia, Turkey, Hong Kong, or Japan. China s method is unique and highly debatable. All organs transplanted in China come from executed prisoners, about two to three thousand per year. Practically speaking, presumed consent is being applied to the prison population, but not to the rest of China s citizens. The Chinese claim that prisoners who provide organs have been willing to do so, but in pre-execution prison conditions, the extent of true free will is questionable. Probably for this reason, the United States does not permit organ donation by prisoners, regardless of their expressed willingness. (Wallach & Mukerjee, 1996).

Presumed consent is still widely debated in the countries where it exists. This may result in presumed consent systems being repealed in one or more of these countries (Cohen at al., 1997). The trend is Europe is toward an opting-in system. Under this system, organs are only removed if the deceased had consented while living or the next of kin consented after death. Among the many European countries implementing an opting in system are the United Kingdom, the Netherlands, Italy and Germany. Turkey and Saudi Arabia also use opting in, although the Saudis also require consent of family members.

Canada uses an opting in approach of some kind, the specifics of which are determined by each province individually. In Ontario, the Human Tissue Gift Act legislates donations for transplantation, medical education, and research. It specifies who can give consent and prohibits the selling of organs. The United States uses an opting in system, however there is one unique aspect. The Uniform Anatomical Gift Act provides for required request which mandates that hospitals and doctors must inform patients and/or patients families about the possibility of organ donation. Additionally, the Washington-based Communitarian Network is pushing for legislation for mandatory organ donation after death (Wolfslast, 1992).

Sweden uses voluntary consent, however it enacted a law requiring citizens to declare their intentions regarding the use of their organs upon death. Denmark had a similar campaign which increased the donors registry by 150,000 people. This movement was aided by a massive media advertising campaign. This approach solves problems which occur when the family has to make a decision without knowing the wishes of the deceased. This is of significant help since 40% of refusals were attributed to these types of family decisions (Awuonda, 1996). Hong Kong has a computer based central registry which is not mandated, but voluntary. Donors can withdraw their consent at any time by mail. This type of registry makes it no longer necessary to carry donor cards (Hong Kong Medical

Association). Central registries also allow coordination in the matching and exchange of donor organs both within and across countries (Cohen et al., 1997).

The other very significant legal issue affecting organ donation is the determination of when a cadaveric donor is actually dead. In many Asian countries people are only considered dead when the heart stops beating. This however leaves the heart, as well as most other organs, unsuitable for transplant (Wallach & Mukerjee, 1996). This has been *the* major obstacle to organ donation in Japan as the government refuses to recognize brain death as the determining criterion (Jordan, 1996). In Italy, which has one of the poorest organ donation rates, a newer definition of cerebral death has brought about an increase in these gifts. (Mirone & Triolo, 1996). Declaration of death is also an issue outside the law but within different religious groups. However, that subject is addressed in the following section on religion and culture.

Finally, there is the issue of financial payment in exchange for transplantable organs. In most countries this is not a legal practice. In India, until 1995, a kidney could be bought from a doctor for $30,000, while the doctor only paid the donor $1,000. Understandably such incidents fostered widespread allegations of organ stealing and inequity to donors (Wallach and Mukerjee, 1996). However, the issue of whether financial or other incentives should be offered in exchange for organ donation is frequently raised in debates over how to increase the number of donors and organs (i.e., Krauthammer, 1999).

RELIGIOUS AND CULTURAL ISSUES AND OBSTACLES

Many people believe that there are numerous religious objections to organ donation and organ transplants. Some of these people falsely believe their own religion has some prohibitions about this, when in fact it does not. Very few religions flatly reject organ donation and transplant. Yet religious nuances can affect
who may participate and the conditions under which such activity would take place. Additionally, major tenets of most religions are compatible with the idea of organ donation, and therefore these tenets should be identified and appealed to when marketing organ donation.

The Jewish religion makes an important distinction between live donation and cadaveric donation.
Live donations may be prohibited if there is a significant risk to the health and life of the donor. Therefore there are reservations about the donation of kidneys and partial livers from live donors. Not only are these operations
rather risky, but the risk is enhanced since the person cannot function if the other kidney fails or the liver does not regenerate properly (Simon, 1995; Dobrusin, 1996). Two exceptions can be blood and bone marrow donation. If a person s blood type is very rare, he or she may be forced to donate blood or bone marrow. With other organs and tissue, most medical risks are so small that this does not prevent live donation from members of the Jewish religion (Simon, 1995).

Juridical laws regarding cadaveric donation are much more flexible. The Jewish criteria for death is that the person is no longer breathing. Brain death is recognized in conjunction with this because a brain dead person would not be able to breathe without life support. Therefore Jewish law permits post-mortem donation of kidneys, hearts, livers, corneas, skin, and embryo cells. Life enhancing donations may be made in addition to live saving ones. Restrictions are that organs must not be stolen, the body must not be mutilated, and the body must be buried (Simon, 1995). Donations must be intended to benefit some specific recipient. Organs should not be removed to store in banks for use at some indefinite future time. These restrictions also effectively preclude the donation of one s body for medical research, except in extreme cases where the condition under study is so rare that the research will be the primary contributor to saving people s lives. (Dobrusin, 1996). Jewish law also prohibits the exchange of organs for monetary or other compensation (Simon, 1995).

The major tenet of the Jewish faith which supports and even encourages organ and tissue donation is pikauch nefesh which states that the obligation to save human life if it is in our power to do so takes precedence over every other command. Many Jewish leaders are now actively promoting organ donation among those of the faith.

Within the Middle East, religious beliefs significantly decrease public willingness to donate organs, and Egyptian fundamentalists are strongly opposed (Nasto 1996). In the Muslim tradition, it is forbidden to violate the human body which would preclude organ donation. However the law of Islam declares that necessities always overrule prohibition, and that choosing the lesser of two evils must be done if both cannot be avoided (www.islamicity.org/science/organ.html). Saving a life clearly overrides restrictions against body mutilation.

Additionally, Islam believes that the soul ascends and does not require the body to be burned as some religions may (Rashed, 1997). As for the Islamic definition of death, brain death has been made the criterion. This decision was based on an old rule which recognized the concept of fatal injury, and brain death meets that classification.

Very similar to that of the Jewish religion, the Quran says that whoever saves a life, it would be as if he saved the life of all people (www.islamicity.org/science/organ.html). Thus a major tenet of Muslim faith also supports and encourages organ donation, although many Muslims are not clearly aware of it. It has been suggested that those who can influence the general public and solve the problem are religious scholars and leaders. Many Muslim scholars not only approve of donating organs, but also appeal to people to do so (Rashed, 1997).

Christianity as a faith is consistent with organ donation, and no Christian denominations forbid it. The Catholic Church supports organ donation and most protestant denominations promote organ donation. Many have formal statements to this effect. Indeed, Jesus said that the second of the two great commandments was to love our neighbors as ourselves. Buddhists and Hindus honor those who donate but consider it an individual decision and do not make appeals for people to donate. Gypsies are possibly the only group which specifically rejects organ donations and transplants because they believe that a person spends a year retracing his/her steps after death. All body parts must be intact as the soul maintains a physical shape (Smith).

Other cultural beliefs, norms, values and traditions can affect the success of increasing the numbers of organs and organ donors. In Argentina, Brazil, and Chile, such cultural resistance appears to be changing, and rates of donation have steadily increased (Nasto, 1996). In the Middle East, it is particularly necessary to respect the grief period after informing relatives of brain death occurrence, though this is an issue which generally needs attention worldwide (Shaheen et al., 1996).

Given the vast diversity and numbers of cultures across the globe, it would be impossible to elaborate on how every culture s nature would directly impact the success of stimulating organ donation. As such, one example will be used to illustrate how cultural values and norms do make an impact. The resistance of Indian Sikhs to organ donation seems to be more a function of lack of knowledge and understanding than with religious factors, although Indian Islamic leaders can be hostile towards the practice. Lack of awareness and knowledge is attributed in part to the cultural belief that issues of death and dying are inappropriate subjects for open discussion. Elders in this culture are given a great deal of status and feelings were strong that Sikh elders would be less receptive to organ donation. Therefore arises the fear that while younger Sikhs would be more sympathetic to organ donations and transplants, they would be reluctant to agree to it because it would require going against the wishes of elders. Given the strong family ties among the Sikhs, live donations to benefit family members would probably be received more positively than organ donation in general. Finally, Sikhs also indicated that campaigns should be tailored to emphasize the giving culture of the Sikh faith (Exley et al. , 1996). These observations do give justification to the idea that individual cultures must be considered in developing the most effective marketing approaches.

MARKETING APPROACHES AND SUCCESS RATES

Several programs and campaigns designed to increase organ donation have achieved positive results, while other have failed miserably. Sometimes an approach which is very successful in one or more countries achieves nothing in others. Frequently the dynamic behind this cannot be explained. For example, Austria, Belgium, France, and Spain have utilized presumed consent and have generated more donors. But Switzerland, Greece, and Italy have presumed consent and have lower transplant rates than countries using a voluntary, opting in system. As such, there seems to be no clear-cut relationship between presumed consent and high donation rates (Wolfslast, 1992).

Across Europe and perhaps the world, Spain has the highest cadaveric kidney donation rate in the world, about 30 per million population (Nasto, 1996). It has a decentralized network of specifically trained transplant coordinators (most are physicians in Intensive Care Units) at the national, regional, and local (hospital) levels. These coordinators are responsible for the whole process, from donor detection to organ and tissue retrieval. This approach helped significantly in overcoming obstacles such as untrained or inadequately trained staff, failure to identify potential donors, and reluctance to approach grieving families. With the execution of this program, donor rates increased by 75% and the number of available organs doubled (Matesanz, Miranda, Felipe, & Naya , 1996). Spain has also partnered with the Eurotransplant International Foundation and the Partnership for Organ Donation (U.S.) to create Donor Action programs. This approach was also designed to improve hospital donation processes. Donor Action provides a comprehensive package of tools, resources, guidelines, and training to help hospitals diagnose their own potential for organ donation and improve their donation related procedures. In conjunction with the training of individual health professionals, programs like Donor Action are deemed to be the most effective method to increase organ donations in individual hospitals (Cohen et al., 1997).

Some countries have tried to duplicate Spain s experience with less success. For example, Italy has charged its hospitals just to copy how the Spaniards do it , but have not supplemented with the necessary training and support (Simini, 1997). To address these problems the European Donor Hospital Education Programme (EDHEP) was designed to meet the widely perceived need to help health professionals deal effectively with bereaved relatives of potential organ donors. EDHEP holds interactive skills awareness workshops , sharpens communication skills, heightens sensitivity to bereaved families, and teaches professional coordinators how to make effective donation requests. As a result of the efforts of EDHEP, statistically significant learning effects have been demonstrated in the Netherlands and the UK. Also encouraging is that the program adapts well to all national, religious, cultural, and educational needs. Israel and Japan are two countries who have shown some success with the program (Cohen et al., 1997).

While Italy s copycat strategy has produced disappointing results, two other events have spurred willingness to donate organs in that country. One was the new, more favorable definition criteria for cerebral death. The other was the consent to multiorgan donation by the parents of an American child killed while vacationing in Italy. His organs saved the lives of several Italians and publicity was widespread. Also, Italy has recently organized a Health Regional Office to educate and inform people about donation and transplants (Mirone and Triolo, 1996).

Attitudes toward organ donation in Japan also received a significant boost from the tragic death of a five-year old American boy who was living in Japan with his family. His kidneys were given to two young Japanese boys whose lives were saved because of their transplants. Since Japan does not admit death until it is too late to use most organs, Japanese transplants have been possible only through the donation of organs by non-Japanese people. Four thousand Japanese doctors, fed up with the refusal of Japanese lawmakers to permit organ donations upon brain death, forged an agreement with US military hospitals in Japan to provide these needed organ donations (Jordan, 1996).

An organization named TRIO (Transplant Recipients International Organization) started in Pittsburgh to provide donor education and awareness raising with an international viewpoint. Ironically, Japan established TRIO s first international chapter. It serves two major roles. One is to provide a means of mutual support among transplant recipients, waiting patients, and their families. The other is to

provide education to enlighten Japanese society by highlighting how transplant recipients are now able to lead meaningful lives (Aoki et al.,. 1992).

Another effective strategy is to use well-known and respected opinion leaders in changing negative attitudes and behaviors regarding organ donation. This is consistent with the use of Muslim religious scholars to promote organ donation (Rashed, 1997) and the Sikhs use of respected health professionals to do the same (Exley et al. 1996). Also, community leaders and organizations have been used effectively to increase organ donation in African American communities (Exley et al., 1996). Formal religious organizations should be called upon to do the same.

Sadly, ineffective generation of donated organs causes many patients to leave their country or obtain organs donated from other countries for needed transplants. Germany s shortage of organs is quite severe, and most organs obtained for German transplant patients have been donated from other European countries (Simm, 1966). Many Italian patients have gone overseas for transplants (Simini, 1997), as have Japanese patients (Aoki et al., 1992). Many others die without receiving life-saving transplants.

CONCLUSIONS

Across the world there are many encouraging similarities between countries and cultures with respect to organ donation. Virtually no country or religion rejects or bans some form of organ donation and transplantation, and efforts to increase the availability of transplant organs are underway almost everywhere. However, some critical differences in laws, religion, and culture do exist which affect how marketing of organ donation may or may not be optimal.

Trends in legal systems can be seen to be both negative and positive. Concerning countries systems of legislating how the decision about being an organ donor is made, the trend is a move towards more voluntary, informed consent, opting in systems. At face value this would appear to be a threat to increased organ donation because people have to take conscious action to become donors, while in presumed consent systems people must take conscious action to defer from donation. However, some countries employing the opting in approach do have higher rates of donation than some countries which implement presumed consent. More research is needed to determine what the mediating variables might be. Trends appear favorable in terms of defining the point at which patients can be declared dead. With a few lagging exceptions, most countries use brain death as the criterion or are moving rapidly in that direction. This allows for maximum opportunities to harvest healthy and usable organs.

Trends in religious attitudes and support towards organ donation also appear to be favorable. Only rare instances of outright rejection of organ donation and transplantation can be identified, and this is usually among fringe groups. As well, religious organizations and leaders have in the past taken a typically passive stance regarding a person s decision to become a donor or to defer. Increasingly these groups and individuals who are persuasive opinion leaders to many people of faith are actively promoting and facilitating the choice to become an organ donor. Some religious restrictions on what organs may be given, by whom, and under what conditions remain though most are not critical or insurmountable obstacles.

Nonreligious cultural values, norms and behaviors present both a threat as well as numerous opportunities for the organ donation movement. Differences in important cultural dimensions across varying parts of the world pose their biggest threat when they are either not properly identified, or worse, when they are identified but ignored. On the other hand, understanding these cultural differences and tailoring marketing approaches to incorporate them respectfully offer great opportunities to meaningfully improve the organ donation situation globally. As outcomes suggest, approaches which are successful in some markets fail miserably in others so a strictly undifferentiated strategy is not appropriate.

Strategies and campaigns designed to increase organ donation have suffered somewhat through a trial and error period, but now it is becoming more apparent which basic types of approaches yield the most positive results. Among the most promising are appointing transplant coordinators who handle the donation and transplant process and who have been extensively trained in how to do their jobs, cross-country cooperation in creating cross-border computer data base registries of potential donors and recipients as well as in forming joint organizations and programs to promote organ donation, applying culture sensitive techniques, and using high profile, respected opinion leaders to destroy harmful misconceptions and to hasten progress in increasing the numbers of donors and organs donated.

Still, some events which affect attitudes and behaviors regarding organ donation cannot be directly controlled, such as sensationalistic or untrue publicity or the tragic deaths of youths whose compelling stories bring organ donation into the media spotlight. But responses to these occurrences *are* controllable and can turn negative situations and untimely deaths into a means to change attitudes and behaviors involving organ donation.

REFERENCES

Aoki et al., (1992), How to Increase Cadaver Organ Donation in Japan: A Transplant Recipients Approach , *Transplantation Proceedings*, Volume 24, number 5, October, 2064-2065.

Awuonda (1997), Swedish organ-donation drive set for success , *The Lancet*, Volume 347, May 18, 1401.

Cohen, D Amaro, De Meester, & Persjin (1997), Changing patterns in organ donation in Eurotransplant, 1990-1994", *Transplantation International*, Volume 10, 1-6.

Cosse & Weisenberger (1997), Perspectives on the Use of Financial Incentives for Human Organ Donation, in Jerry W. Wilson (edt.), *Marketing: Innovative Diversity Proceedings Atlantic Marketing Association 1997 Annual Conference*, Nashville, TN: Atlantic Marketing Association, 89-100.

Cosse & Weisenberger (1998), Words versus Actions about Organ Donation: A Four Year Tracking Study of Attitudes and Self Reported Behavior , *Proceedings of the Society for Marketing Advances 1998 Annual Conference*, New Orleans, LA: Society for Marketing Advances.

Dobrusin (1996), Organ Donation in Jewish Law , a rabbinical presentation and discussion given at Beth Israel, June 26.

Exley, Sim, Reid, Jackson & West (1996), Attitudes and Beliefs Within the Sikh Community Regarding Organ Donation: A Pilot Study , *Social Science in Medicine*, Volume 42, number 1, 23-28.

Hong Kong Medical Association, The Hong Kong Medical Association Donation Register , www.hkma.org/bregist.htm.

Jordan (1996), Organ donation from U.S. boy stirs Japan into action , *Washington Post, October 27, 1, 2.*

Krauthammer (1999), YES, Let s Pay for Organs , *Time*, May 17.

Matesanz, Miranda, Felipe, & Naya (1996), Continuous Improvement in Organ Donation: The Spanish Experience , *Transplantation*, Volume 61, number 7, April 15, 1119-1121.

Mirone & Triolo (1996), A Regional Program for Expanding the Donor Pool: Experience in Piedmont, Italy , *Transplantation Proceedings*, Volume 28, number 1, February, 236.

Nasto (1996), Changing World Views on Transplantation , *Mature Medicine*, Volume 10, October, 1062.

Pessemier *et al.*, (1977), Willingness to Supply Human Body Parts: Some Empirical Findings , *Journal of Consumer Research*, Volume Four, December, 131-140.

Rashed (1997), The false stigma of organ donation , www.arab.net/arabview/articles/, May 10, 1-3.

Shaheen et al., (1996), The Causes of Family Refusal to Consent for Organ Donation from a Brain-Death Relative in Saudi Arabia , *Transplantation Proceedings*, Volume 28, number 1, February, 387.

Simon (1995), Organ Transplants and Donation in Jewish Law , a rabbinical presentation given to the Oxford University Jewish Society.

Smith (date unspecified), in UNOS Donation and Transplantation Medical School Curriculum , at www.unos.org.

Wallich & Mukerjee (1996), Regulating the Body Business , *Scientific American*, Volume 254, March, 12-13.

Wolfslast (1992), Legal aspects of organ transplantation: an overview of European law , *Journal of Heart and Lung Transplantation*, Volume 11, number 4, part 2, S160-S163.

www.islamicity.org/science/organ.html, Organ Donation and Transplantation , 1-2.

DEVELOPING AND USING INTERACTIVE STUDY GUIDES IN THE CLASSROOM

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ABSTRACT

This paper describes the development and use of a universal interactive study guide for marketing and management courses. The instructor's goal in using such a study guide is to approach study and thinking as an active learning process. An interactive study guide provides numerous opportunities for students to interact with the class material. The guide is correlated with all parts of the textbook including cases, videos, chapter material, discussion questions, and test questions.

THE INTERACTIVE STUDY GUIDE

Educators have commonly noticed the problem students have in taking notes covering important class material. Students vary greatly in their ability and willingness to accurately transcribe all the information that flows from the instructor. Providing training in note taking skills might be one possible solution. Another solution may be for the instructor to provide important information either through printed handouts or through a web page. The difficulty with using handouts or material on the web is that there is no real involvement or participation. One possible solution to this problem is to use an interactive study guide to achieve a balance of providing information and requiring student participation. An interactive study guide is defined as an organized set of student notes which are used in conjunction with class lectures, class presentations, case problems, class videos and power point slides. Student involvement is achieved by providing a series of questions for the students to answer as the class progresses. The interactive study guide focuses the attention of the students on key concepts by requiring them to answer important questions about the material being presented.

BACKGROUND

Writers and researchers have identified that learning styles, goal setting skills, time management, information processing, note taking and test taking skills are important variables that contribute to effective and meaningful learning. (Ellis, 1994, McWhorter, 1996, Wong, 1994). In particular, interactive study guides have been found to be an effective method for moving students from passive reception to active learning (Forsyth and McMillan 1991). Moreover, it has been shown that an interactive study guide helps students manage the flow of information presented during lectures, cases, videos and class presentations. Interactive study guides also help students to know how to proceed with class assignments, how to make the most of each class session, how to prepare for tests and how to monitor personal progress throughout the course. Through an interactive study guide the instructor can provide distinct examples or ideas and concepts, point out topic transitions and identify key concepts.

METHODOLOGY

At the beginning of the semester the class was organized into student learning teams (SLT). Each SLT was required to complete several power point presentations that covered the chapters and the cases in the textbook. In addition, assignments covering videos, discussion questions, and testing were made. Each student was required to use an interactive study guide during the semester. At the end of the semester a survey was administered that asked for the following information.

1. What is your sex?
2. What is your age?
3. What is your major?
4. The study guide helped me organize the course material.
5. The study guide improved my test scores.
6. The study guide was boring?
7. The study guide gave me more useful feedback that I get in other courses.
8. The study guide increased my motivation to learn the material.
9. The study guide was busy work.
10. Each class session was more meaningful because I used the study guide.
11. The study guide improved my grasp of the course material.
12. How frequently did you use the study guide?
13. In the average week, how many minutes did you spend using the study guide?
14. Do you have any comments regarding the study guide and the value of using it?

RESULTS

The students agree that using an interactive study guide is helpful in improving class organization and clarity. Moreover, the study guide was found to be an effective teaching tool for giving feedback to students and in helping students to identify difficult themes or concepts. Finally, the study guide was helpful in creating learning experiences that encourage active rather than passive learning.

CONCLUSION

Those instructors who plan to design an interactive study guide must consider the variables that contribute to meaningful and motivated student learning. With today's increased emphasis on student learning teams and computer technology, an interactive study guide is an important teaching tool that helps move students from passive listeners to active learners. By designing and/or using an interactive study guide the classroom instructor will foster behavior that invite student teacher interaction, increase active learning and promote feedback that promotes learning. Ultimately, these behaviors will contribute positively to the student's feelings about their learning and to the work they devote to class activities and assignments.

REFERENCES

Cyrs,T.E, and Smith F. A, "Designing Interactive Study Guides with Word Pictures for Teleclass Teaching, "Tech Trends l991, 36 (1), 37-39.

Ellis, David B. Becoming A Master Student. Rapid City, South Dakota College Survival, Ins. 1993.

Forsyth, d. R., and McMillan, J.H. "Practical Proposals for Motivating Students," In R. Menges and M. Svinicki (eds), College Teaching: From Theory to Practice, New Directions for Teaching and Learning, no. 34 San Francisco: Jossey-Bass, l991.

McWhoter, Kathleen, Study and Thinking Skills in College, Little Brown, Boston Mass 1996.

Wong, Linda, Essential Study Skills, Houghton Mifflin Company, Boston Mass. L994

ELECTRONIC AUCTIONS: WHAT IS A PICTURE WORTH?

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ABSTRACT

One of the oldest forms of commerce, the auction, has gained amazing popularity online. The largest online auction, eBay, boasts 5.6 million registered users of its services. They further claim that users buy and sell items in more than 1,600 categories and that everyday, eBay hosts over 2.5 million auctions with over 250,000 new items being offered for sale (eBay Website, 1999). And eBay is only one of many websites providing electronic auctions on the Internet today. Amazon.com, MSN and other companies are beginning to join the online auction bandwagon started by eBay in September 1995. Even well known auctioneers such as Sothebys and Guernsey's Auction House are beginning e-auctions (Business Week, 1999b).

Yet, despite the popularity of online auctions, little academic research has been devoted to this relatively new phenomenon. Because buyers do not have face-to-face contact with either the items being sold or the sellers, challenges not present in tradition auctions arise. How do buyers choose which items to bid on? What consumer decisions rules apply to online auctions? This research study proposes that three variables are particularly important to online buyers: 1) whether or not a picture of the item is available for the buyer to view; 2) the experience of the buyer (measured by buyers' feedback ratings); and 3) the reputation of the seller (measured by sellers' feedback ratings).

INTRODUCTION

This study will examine consumer behavior in an online auction environment. A field experiment will be conducted to examine three hypotheses regarding online auction bidding behavior. The results of this study should provide insights to online sellers and buyers, as well as companies involved in online auction services. The three factors we propose to be particularly important to online buyer's bidding amounts are as follows: 1) whether or not a picture of the item is available for the buyer to view; 2) the experience of the buyer (measured by buyers' feedback ratings); and 3) the reputation of the seller (measured by sellers' feedback ratings). The data used for the study will be 120 proof sets of coins that can be considered a commodity product. Common sense dictates that none of the above factors should influence the purchasing price of a commodity, but marketing theory, as well as the authors' and others' intuition and informal observations indicate that these factors may indeed be important to the amount bid on items in electronic auctions.

PICTURE EFFECTS ON INFORMATION PROCESSING

One variable we propose to be significant for consumers' bidding in electronic auctions is whether or not a picture of the product exists. A picture may serve at several functions for the consumer bidding on an item: it provides additional information about the item being sold; and it can

assure the buyer that the seller has experience and expertise in online auctions. Both of these functions help reduce the high level of perceived risk that is inherent in buying situations where the buyer cannot personally inspect the item being sold or the person selling the item. The picture may also influence the bidder's attitude toward the seller and the item being auctioned.

While research has not been conducted on the effect of pictures on product choice or perceived risk, there is an extensive research stream on the presence of pictures in advertising. Pictures have long been used in advertising to convey information about the brand, to show its users and uses, and/or to create an image or personality for the brand (Edell & Staelin, 1983). Prior research on the subject has focused predominantly on the effect of pictures on consumers' attitudes (Mitchell & Olson, 1981; Mitchell, 1986) and/or memory (Childers & Houston, 1984; Houston, Childers & Heckler, 1987; and Heckler and Childers, 1992). As memory of an auction item does not seem to be an issue when the bidder has the whole array of items for sale immediately accessible on a Website, it is the attitude toward the brand that will be the focus of this discussion.

Mitchell (1986) suggests that visual elements of advertisements may affect brand attitudes in at least two ways. First, individuals may form inferences about the advertised brand based on the visual elements presented. These inferences may result in the formation or change of beliefs about the advertised brand. Second, if the visual component of the advertisement is positively or negatively evaluated, it may have an effect on brand attitudes that operates through attitudes toward the advertisement. In other words, if a picture is negatively evaluated, the viewer has a negative attitude toward the advertisement that is then transferred as a negative attitude toward the brand in the advertisement. Other research studies have demonstrated varying levels of support for these hypotheses. Mitchell and Olson (1981) found that a picture of an attribute created a stronger belief that the brand possessed that attribute than an explicit verbal claim. However, Edell and Staelin (1983) found that a "framed" picture (in which the verbal information is a restatement of the picture) and a verbal message alone elicited similar reactions from consumers. Therefore, the picture did not reinforce beliefs about the brand. Despite these mixed research findings, which may be due to individual differences in the ability and preference to process visual or verbal information (Childers, Houston and Heckler, 1995), some support does exist that pictures reinforce consumers' attitudes toward the brand in an advertisement.

Based on the above findings, intuition and informal observation by the authors and others (Bauerly, 1998) of eBay auctions, we propose that pictures will influence potential buyers' attitudes and thus the amounts they are willing to bid on auction items. We propose the following hypothesis:

H1: The presence of a photographic image in the item description will positively influence the amount bid on the item.

Two reasons for this positive relationship may exist. First, the presence of a picture elicits stronger beliefs about the attributes associated with the items placed in the auction. In turn, these stronger beliefs reduced the buyer's perceived risk associated with buying a product sight unseen.

SOURCE CREDIBILITY

Another factor that we propose to be important in consumers' assignment of bids to items in an online auction is the credibility of the seller. Seller credibility is measured in eBay by the comments that buyers provide about the sellers. Sellers that received a large number of positive comments from buyers are given a colored star to indicate their rating. Sellers with high credibility, or in other words, a high seller feedback rating, would be instrumental in reducing the amount of risk perceived by consumers in the online auction environment. In other words, buyers could see that the seller had been rated highly by other buyers and realize that they will be getting a fair deal.

The idea of seller credibility fits with marketing research on source credibility. According to Sternthal, Phillips and Dholaki (1978), source credibility consists of two components: expertise and trustworthiness. Both of these components could be important to the buyer who is deciding which seller to give his/her business. Also, highly credible sources often have resulted in more behavioral compliance

than have sources that have less credibility (Sternthal, Phillips & Dholaki, 1978). Thus, we propose the second hypothesis of this study:

H2: A high seller feedback rating will positively influence the amount bid on the item because a higher rating implies higher seller credibility.

CONSUMER EXPERTISE

The influence of the buyer expertise should also be considered. Similarly to the seller ratings, eBay allows for sellers to post positive or negative comments about the buyers they with whom they have dealt. These buyer feedback ratings provide information on previous transactions by that buyer.

Many studies have focused on the difference between experienced consumers and novices (Alba & Hutchinson, 1987; Bettman & Park, 1980; Brucks, 1985; Maheswaran, Sternthal & Gurhan, 1996; Mitchell & Dacin, 1996; Rao & Seiben, 1992). Alba and Hutchinson (1987) identify two dimensions of consumer expertise: expertise and familiarity. Familiarity is defined as the number of product-related experiences that have been accumulated by the consumer, while expertise is defined as the ability to perform product-related tasks successfully. While the eBay buyer feedback ratings do not measure the consumer's expertise in the product category, they do provide an indication of the consumer's familiarity with the online auction medium and possibly with the product category. In general, increased product familiarity results in increased consumer expertise (Alba & Hutchinson, 1987).

Studies have indicated that experts have greater ability to analyze information presented to them and isolate that which is most important and task relevant (Alba and Hutchinson, 1987). Thus experts should realize that the pictures of commodity products are irrelevant as no differences between brands exist. Thus knowledgeable consumers should be less willing to pay prices that are not commensurate with the quality of the product than consumers who are not knowledgeable (Rao and Sieben, 1992). However, facilitating the novices' message processing by providing a picture would enhance their learning of the appeal and thereby the favorableness of the message evaluations (Maheswaran, Sternthal and Gurhan, 1996). Therefore, we propose the following:

H3: A high buyer feedback rating will negatively influence the amount bid on the item; whereas a low buyer feedback rating will positively influence the amount bid on the item.

OVERVIEW OF ONLINE AUCTIONS AND EBAY

The online auction phenomenon is quickly becoming a force to be reckoned with in e-commerce. In 1998, online auctions accounted for $3.8 billion in sales and it is predicted that by 2002, online auctions will account for 29 percent of all e-commerce or $129 billion. In 1998, 35 percent of online buyers, or 3 million users, had purchased through online auctions. This number is estimated to increase to 14 million users by 2002 (Business Week, 1999a). There are three basic kinds of online auctions: business-to-business, business-to-consumer and person-to-person (Bauerly, 1998). Many e-retailers, such as Amazon.com and traditional retailers, such as Sharper image are opening e-auction sites. Sharper Image uses an online auction as a method of liquidating excess inventory. They can receive 40 percent of retail on excess goods via online auctions compared to 20 percent from liquidators (Business Week, 1999a). While business-to-business auctions currently have the largest dollar volume (Peterson, 1999), the focus of this study is on the person-to-person auction exemplified by eBay.

EBay started the online auction bandwagon in 1995 when founder Pierre Omidyar tried to find a market for his wife's Pez dispenser collection (Business Week, 1999a, eBay Website, 1999). EBay was the first and is currently the largest online person-to-person auction and boasts 5.6 million registered users of its services. They further claim that the users buy and sell items in more than 1,600 categories including collectibles, electronics, computers and household products. Every 24 hours, eBay hosts over 2.5 million auctions with over 250,000 new items being offered for sale (eBay Website, 1999). In December 1998, eBay was the second most visited Web shopping site according to Media Metrix, a

Website tracking company (Turner, 1999). Media Metrix reported in June of 1999 that EBay users average 111 minutes on the site making it the third most popular Website by user minutes (eBay Website, 1999). In a study conducted by Vanderbilt University's Owen Graduate School of Management of 10 major online auction sites, eBay was rated highest for the level of customer support it provides (PC Week, 1999).

Online auctions are creating new variables in a company's marketing mix including the concept of dynamic pricing. A wide range of goods is being priced at what the market will bear (Business Week, 1999a). However, online auctions are not without their drawbacks. Levels of perceived risk tend to be higher when consumers cannot examine either the merchandise or the sellers. A study by Advertising Age (Maddox, 1998) surveyed consumers who are unwilling to shop on the Internet. They found that the first reason for resisting Internet shopping was security and the second most important reason was the inability to examine the merchandise before purchasing it. Internet auctions have the additional hurdle of trust as anyone with a browser can place a bid or auction goods. Sellers remain wary of getting paid and buyers are concerned about the shipment of an item and its quality (Busch, 1999). To circumvent this obstacle, eBay has devised a reputation rating system to help traders judge each other. Buyers and sellers may leave public comments, known as "feedback" about transactions on the site. Each positive entry is assigned a point and tallied to give a numerical rating. Each negative comment lowers the score by a point (Mannix, 1999; eBay Website, 1999).

When placing an item up for auction on eBay, the seller must choose from several different auction formats. These formats include a standard auction based on the English open-outcry mechanism, reserve price auction, private auction, Dutch auction, and restricted access auction. The standard auction displays a current bid, bid increment, and minimum bid. The minimum bid is the current bid plus the bid increment. The amount of the bid increment varies according to predefined price ranges published on the eBay site. The reserve price auction is similar to the standard auction with the exception that the seller has established a minimum price at which he or she will sell the item. A private auction differs from the standard auction in that the identity of the bidders is not displayed. At the conclusion of the auction the buyer's identity is revealed only to the seller. A Dutch auction is used when the seller has more than one of an item available for auction. In the Dutch auction the seller specifies the quantity available and a minimum price. All winning bidders in the Dutch auction pay the same price for the item, the lowest successful bid. The restricted access auction is used to sell adult-oriented items. The restricted access auction requires that the buyer have a credit card on file with eBay thus providing some level of assurance that the buyer is an adult.

As stated above, when an item is placed up for auction using a standard auction format the current bid, bid increment, and minimum bid are displayed. A bidder may bid the minimum price or may choose to use what eBay describes as an automated proxy. When using the automated proxy, the bidder enters the maximum price he or she is willing to pay for an item. The automated proxy will bid the minimum bid on the item and, if outbid, will raise the bid. The automated proxy will continue this process until the auction closes or the maximum amount the bidder is willing to spend is reached. The amount bid by the automated proxy will be the new minimum bid or the maximum amount of a competing automated proxy plus the bid increment.

METHODOLOGY

The experimental design for this study is a 2 x 2 x 2 grid consisting of independent fixed variables of the picture/no picture conditions and the high seller feedback rating/low seller feedback rating conditions; and an independent random variable of the high buyer feedback rating/low buyer feedback rating conditions. The site for data collection will be eBay's online auction and the data will consist of 120 proof sets of coins from the years 1969 to the present. There will be four matched sets of proofs so that there will be 30 observations in each of the fixed variable conditions (picture/no picture; high seller feedback rating/low seller feedback rating). A proof set is a set of one of each denomination coin for a given year. They are struck using new polished dies and are manually transferred from the die into hard plastic cases. A proof set from any given year should have the same value and can be treated as a

commodity, thus a picture should make no difference in the amount an individual is willing to bid on the set. The book value of the coins will be considered a covariant in this study.

The 120 proof sets will be sold on eBay over a 6 week period with the order of presentation randomized. Care will be made to offer the coins during similar times of day and days of the week to avoid interference of heavy and low eBay usage. This data collection will occur in January and February, 2000.

REFERENCES

Alba & Hutchinson (1987), "Dimensions of Consumer Expertise." *Journal of Consumer Research*, Volume 12, March, 411-454.

Bauerly (1998), "Online Auction Services: Selling Made Easy." *Proceedings of the Annual Meeting of the American Society of Business and Behavioral Sciences.* Volume 1.

Bettman & Park (1980), "Effects of Prior Knowledge and Experience and phase of the Choice Process on Consumer Decision Processes: A Protocol Analysis." *Journal of Consumer Research*. Volume 7, December, 234-248.

Binmore (1992), *Fun and Games: A Text on Game Theory.* D.C. Heath and Company, Lexington, MA.

Brucks (1985), "The Effects of Product Class Knowledge on Information Search Behavior." *Journal of Consumer Research.* Volume 12, June, 1-16.

Busch (1999), "Wanted: Better Auctions." *Information Week.* March 22, 164.

Business Week (1999a), "Going, Going, Gone." *Business Week.* April 12, 30.

Business Week (1999b), "All the World's an Auction." *Business Week*, February 8, 120.

Childers & Houston (1984), "Conditions for a Picture-Superiority Effect on Consumer Memory." *Journal of Consumer Research.* Volume 11, September, 643-654.

EBay Website (1999), www.eBay.com. December 1.

Edell & Staelin (1983), "The Information Processing of Pictures in Print Advertisements." *Journal of Consumer Research.* Volume 10, June, 45-61.

Heckler & Childers (1992), "The Role of Expectancy and Relevancy in Memory for Verbal and Visual Information: What is Incongruency?" *Journal of Consumer Research.* Volume 18, March, 475-492.

Houston, Childers & Heckler (1987), "Picture-word Consistency and the Elaborative Processing of Advertisements." *Journal of Marketing Research.* Volume 24, November, 359-369.

Maddox (1998), "Survey Shows Increase in Online Usage, Shopping." *Advertising Age.* Oct 26, S6.

Maheswaran, Sternthal & Gurhan (1996), "Acquisition and Impact of Consumer Expertise." *Journal of Consumer Psychology*, Volume 5, Number 2, 115-134.

Mannix (1999), "Who's Been Naughty and Who's Been Nice." *U.S. News and World Report.* Volume 127, September 27, 60.

Mitchell (1986), "The Effect of Verbal and Visual Components of Advertising on Brand Attitudes and Attitude Toward the Advertisement." *Journal of Consumer Research.* Volume 13 (June) 12-24.

Mitchell & Dacin (1996), "The Assessment of Alternative Measures of Consumer Expertise." *Journal of Consumer Research.* Volume 23, December, 219-240.

Mitchell & Olson (1981), "Are Product Attribute Beliefs the Only Mediator of Advertising Effects on Brand Attitude?" *Journal of Marketing Research.* Volume 18, August, 318-332.

PC Magazine (1999), "eBay." *PC Magazine.* March 9, 198.

PC Week (1999), "Strategies Digest: Study Concerning Online Auction Sites." *PC Week*. November 15, 140.

Petersen (1999), "New Breed of Auctioneer Moving Into Mainstream." *PC Week.* November 8, 30.

Rao & Sieben (1992), "The Effect of Prior knowledge on Price Acceptability and the Type of Information Examined." *Journal of Consumer Research.* Volume 19, September, 256-270.

Seltzer (1999), "Bidding Frenzy." *PC Magazine.* March 9, 191.

Sternthal, Phillips & Dholakia (1978), "The Persuasive Effect of Source Credibility: A Situational Analysis." *Public Opinion Quarterly.* 287-314.

Turner (1999), "Winning Bid: The Hot Web Auction Site eBay is Addictive, For Sure. But is it Any Way to Shop." *Money.* Volume 28, March 1, 201-202.

Wu and Schaffer (1987), "Susceptibility to Persuasive Appeals as a Function of Source Credibility and Prior Experience with the Attitude Object." *Journal of Personality and Social Psychology.* April, 677-688.

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ELECTRONIC COMMUNICATION IN THE HEALTHCARE ENVIRONMENT

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ABSTRACT

Communication in the healthcare environment is very important. With the added usage of electronic messaging, it is important that healthcare workers do not miss use this important medium. This manuscript addresses the etiquette issues of when e-mail is appropriate. Guidelines are suggested to assist healthcare providers in determining when a face-to-face meeting is preferred over e-mail communication..

INTRODUCTION

Electronic communication has begun to revolutionize the workplace. Anyone who has every pushed "send" has experienced the feeling of power from moving tasks and responsibilities from his or her desk to someone else's in box. There is no question that this relatively new form of communication is an extremely productive method of communication. It requires little effort, leaves an organized record of data, has the ability to reach large numbers of people simultaneously and seems to be without problems. But anyone who has ever received a "rude e-mail" knows that electronic communication sometimes causes human relations problems, which ultimately take more time to resolve than a "face-to-face" meeting initially would have taken.

ELECTRONIC COMMUNICATION ETIQUETTE RULES

Edward Hallowell wrote eloquently about "The Human Moment At Work" in his recent article in the *Harvard Business Review* (1999). He says, "e-mail and voice mail are efficient, but face-to-face contact is still essential to true communication." This article, along with several others, combined with personal bad experiences of many people led us to develop a list of electronic communication etiquette rules:

- Make sure there is "value" in the message.
- Don't copy without a "need to know."
- Keep attachments to a minimum.
- Remember some people treat e-mail as a letter and don't respond immediately.
- Electronic communication tends to be curt and reactive, missing the human touch such as intent, expressions, and tone. Therefore, the meaning of the message is often misconstrued.
- Nothing is private. (Electronic communication can be forwarded and even retrieved after being deleted.)
- Don't be rude in e-mail. Have a private conversation to resolve issues.

- Never substitute e-mail when a face-to-face meeting is more appropriate. It's not human to reprimand via e-mail. Go see the person involved and keep it private.
- You must engage in "human moments" on a regular basis for them to have a meaningful impact on your life.
- Choose your method of communication carefully. Updates and notifications of meetings are two examples of an appropriate use of e-mail. Other moments where interaction can be productive require human contact.

THE HEALTHCARE ENVIRONMENT

How does this information relate to the healthcare environment? It is not specific to any industry; however, the healthcare environment requires a constant demeanor of sensitivity, both for hands-on patient care and between co-workers. While it is true that most electronic communication has been between co-workers, there is a growing usage of electronic communication between physicians and patients. In either instance, internal communication or communication between a professional healthcare worker and patient, the necessity of choosing the appropriate communication device and executing that communication with sensitivity and maturity take on an added importance because of the nature of this business to people's lives. When co-workers begin to be inconsiderate to one anther, soon the pattern and habits become natural. Soon the patients suffer the insensitivity of misconstrued messages.

CONCLUSION

All of us need to use technology to be more productive; but productivity should not be the only goal of the business world. Whether it's in the Healthcare industry or any other segment of our modern world. Our first question should be "What method of communication is appropriate for this message?"

REFERENCES

Barlow, Jim (1999) "E-mail Etiquette Has Its Own Rules" Houston Chronicle (March 11) p1.

Eadie, Alison (1999) "Business File: E-mail Gives the Wrong Message: Management Matters" The Daily Telegraph (September 2).

Eisenberg, Daniel (1999) "The Net Loves Old Print and TV Get A Windfall of Ads From Dot.coms Desperate for Attention" Time Magazine (November 1) p60+.

Hallowell, Edward (1999) "The Human Moment At Work" Harvard Business Review (January/February) p58-66.

Johannes, Laura (1999) "Medical Journal Faces Questions Over Web Deal" The Wall Street Journal (October 26) pB1.

McCarthy, Michael (1999) "Now the Boss Knows Where You're Clicking" The Wall Street Journal (October 21) pB1.

Rafter, Michelle (1999) "For the E-mail Challenged, Some Useful Tips" Reuters English News Service (October 27).

Reisner, Neil (1999) "E-Mail Replaces Workplace Water Cooler, Consultants Say" World Reporter (October 25).

Staff writer (1999) "The Dangers of E-Mail in the Work Place; Protecting Your Business from Unnecessary E-Mail Litigation" PR Newswire (September 7).

ELECTRONIC BANK MARKETING: THE FUTURE IS NOW

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ABSTRACT

This paper addresses the issue of electronic bank marketing in the Midwestern section of the United States. The reader is introduced to consumer banking via the internet. Problems are presented to the potential user. Demographic profiles are discussed that includes user research and feedback. The competitive environment is then evaluated. A recommendation for this bank is made with possible results for a future promotional campaign.

INTRODUCTION

The Internet is an important marketing communications tool. Transaction-based online systems allow organizations not only to communicate with the consumer but to sell online as well. If a firm wants to build brands and inform it will operate at cognitive and attitude levels of the hierarchy of effects, perhaps utilizing information publishing, web advertising and other promotional techniques (Strauss and Frost, 1999).

Along with the boom of personal computer use that began in the late 1980's, came the advent of personal finance programs. Programs such as Dollars & Sense, Quicken, and MicroSoft Money have been helping millions of Americans to track their expenditures, print checks, and even pay bills electronically for over a decade (Barrier, 1998). But until recently, the programs have had no connection to your bank, and the missing link has kept customers from accessing bank accounts and information.

These automated checkbooks led to consumer demand for additional electronic services. Larger banks responded by providing electronic bill paying services in conjunction with their checking accounts. Unfortunately, electronic bill paying is really a misnomer. Consumers transmit a list of bills to be paid to a third party such as CheckFree who then prints and mails paper checks. More than 95% of electronic bill payments are processed in this manner (Barrier, 1998).

Many banks have taken the first step toward an Internet presence by posting a web site. However, the bulk of current banking-related web sites serve up little more than glorified online brochures (Baig, 1997). These web sites may describe various product offerings and services, and they may even offer job postings and an e-mail link. But they typically offer little in the way of interactive tools, and usually no connection to the consumer's accounts.

As banking firms evolve from an online brochure web site into true electronic banking, the elite realize the need to load their web sites with interactive tools to help customers make financial decisions. Some have even developed Internet communications that allow customers to open accounts, apply for loans and services, and receive targeted e-mail communications.

Even without a connection to the bank's data service, web sites can contain some of these jewels which keep customers coming back. Calculators are a popular tool which consumers can use for financial

planning. For instance, a customer can enter his or her monthly income and monthly debts, and receive the size of a mortgage loan for which they could qualify. Or, by entering the desired monthly payment and current interest rate, the consumer can calculate the price of a new car that they can afford. There is a myriad of uses for calculators including retirement planning, college financial planning, and refinance decisions. Rate watch services are another popular tool for banking web sites. A consumer who is contemplating refinancing a mortgage, for example, can ask to receive an e-mail notification when the rate hits his stated threshold. Online account openings and loan applications turn the site into an additional sales force.

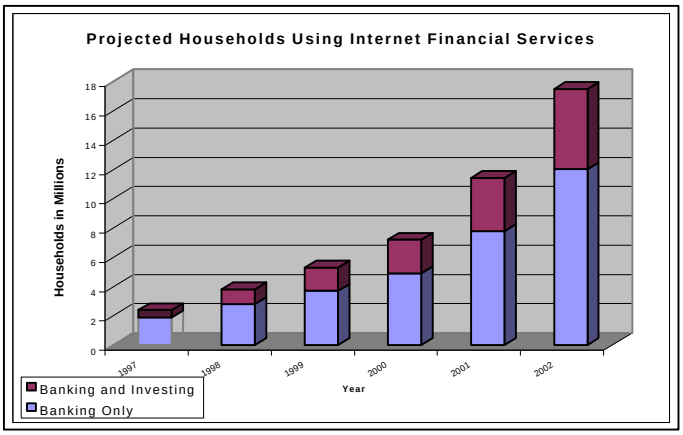
The limited web site can lead to true electronic banking when connectivity to the bank's mainframe is added. Customers can then log on and view balances, check for cleared items, transfer funds among accounts, and pay and receive bills online. According to Ernst & Young, LLP., less than 10 percent of all U.S. banks currently offer this level of Internet banking (Gerwig, 1998).

Banks must move with the times to maintain the value of their electronic offerings. As banks shift away from online brochures and towards a more interactive web presence, online brochures will lose any value they currently possess. "Since most banks and brokerages will offer online transactions over the next two to three years, the competitive value of an online brochure will disappear, and even the value of a transactional site will fade," says Octavio Marenzi, (1998) research director for Meridien Research. Meridien Research predicts that 90 percent of North American banks will offer Internet-based transactions by 2000. Firms are already working to help smart cards turn PCs into ATMs. A card reader fitting into the PCs 3½ inch disk drive would load value on a smart card and deduct the amount from the cardholder's bank account.

CONSUMER PROFILE

It is assumed that electronic banking usage will follow Internet usage trends. At the end of 1998, there were over 40 million people online in any given week according to Media Metrix (Kutler, 1998). This is up substantially from 25 million weekly users in 1997. The number of web sites these users can access is also growing at a rapid pace. There are over one million web sites in common usage and 3,000 new domain names are registered every day (Reed, 1997).

Of the 40-plus million weekly Internet users, 6.9 million check bank balances and 5.1 million perform banking transactions according to a Nielson Media Research study conducted in July 1998 (Kutler, 1998). The following table shows recently-released projections of Forrester Research of Cambridge, Massachusetts for the number of households using electronic banking or a combination of electronic banking and investing (Kutler, 1998).



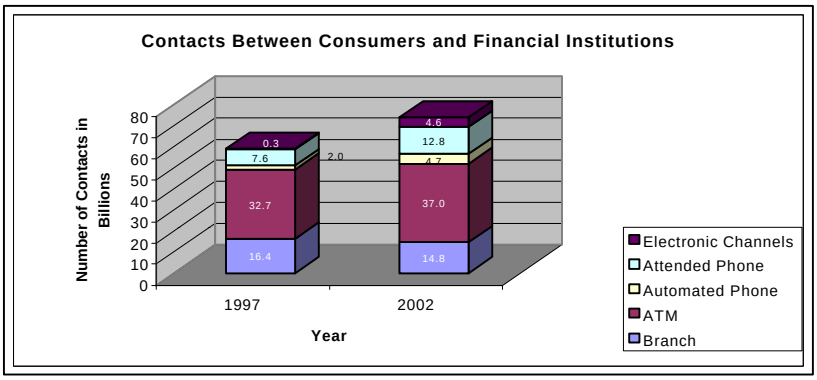
In addition to the numbers of users increasing, the frequency of use is also on the rise. Jupiter Research, a market research firm, reports that there were 155 million online transactions in 1997 and they

expect that number to climb to 286 million by the end of 1998. Their predictions call for 1.4 billion transactions in 2002 (Baig, 1998).

PROFITABILITY

Electronic banking offers the promise of reduced transaction costs to financial institutions. According to Booz, Allen & Hamilton, a transaction in a full-service branch costs $1.07; the average telephone transaction costs 54 cents. An ATM transaction costs only 27 cents at a proprietary machine and a web transaction costs only a penny. While Internet banking costs just a fraction of traditional, personal service, banks typically charge between $3 and $7 per month for online banking and electronic bill paying services (Baig, 1998).

Even though per transaction costs are lower for electronic banking, major savings have not yet been realized. Wayne Cutler, vice president of First Manhattan Consulting Group, believes this is due largely to "channel optimizers" - people who maximize transaction volumes because of easy accessibility (Kutler, 1998). This trend is confirmed by Meridien Research whose findings show that the major impact of electronic banking thus far has been to increase the number of contacts the consumer has with financial institutions (Stroper, 1998). Meridien Research estimates that consumers had 59 billion contacts with financial institutions in 1997 and they predict this it will grow to 75 billion in 2002. The following table shows the composition of these transactions.



PITFALLS OF ELECTRONIC BANKING

There are several problems and disadvantages that the young electronic banking industry needs to overcome. Perhaps the greatest objection to electronic banking is the fear of lack of privacy on the Internet. In focus groups conducted by MicroSoft and First Data Corporation in July 1998, 90 percent of the participants were unnerved by the idea of having their financial information on the Internet (Stone and Tanaka, 1998). Until banks can convince consumers that their encryption techniques are sufficient to protect the consumer's financial information, electronic transactions will remain a small portion of the total.

Another major roadblock to the success of electronic banking is the appeal of bank web sites. "Bank sites don't provide the content people are looking for," said Bernadette Tracy, president of Netsmart (Power, 1998). Netsmart recently performed a survey of 1,001 individuals who are online at least one hour per week excluding time spent on e-mail. The respondents reported being frustrated by dead ends (74%), confusing searches (68%), long periods of scrolling to find information (79%), and

delayed or no response to e-mails (70%) in conjunction with bank web sites (Power, 1998). Netsmart reports that 83% of users leave bank sites out of frustration.

Electronic bill paying is a major draw for consumers considering banking online. However, this system has two major pitfalls to be considered. First, since electronic bill paying is really not electronic 95 percent of the time, it can add several days to the process and cause late charges to be incurred. Second, payees occasionally aren't sure what to do with an electronic payment when they receive it (Barrier, 1998). Because they receive a check but no payment coupon or stub, payees must take the initiative to correctly post the payment. And since a third party is actually responsible for making the payment, following-up on late or missing payments is not always simple.

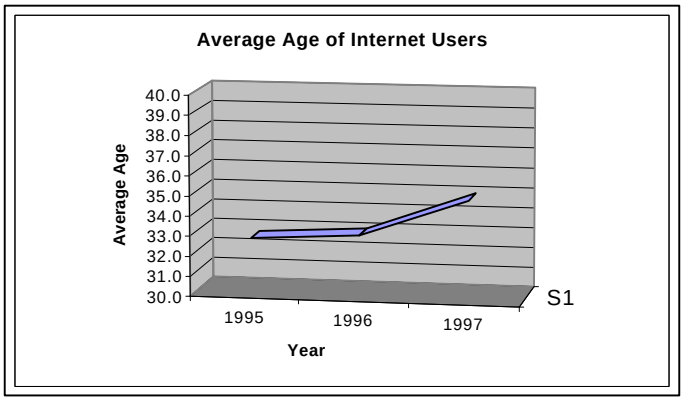
For consumers attempting to bypass trips to the bank altogether in favor of electronic banking, there are still more pitfalls. First, when deposits are mailed in, the consumer is at the mercy of the U.S. Postal Service. These consumers will have slower access to their funds than those who deposit them in person (Goldwasser, 1998). Some services, such as cashier's checks are unavailable through electronic means. Finally, if a consumer chooses a virtual, or branchless, bank they may find ATM transactions costly. While many virtual banks offer free ATM transactions worldwide, if they don't own machines in the consumer's vicinity, surcharges will likely be imposed (Goldwasser, 1998).

DEMOGRAPHIC PROFILE OF CONSUMERS

Understanding the demographic profile of potential consumers of Internet banking can help determine the probable target audience already within the customer base and the best way to communicate with them. Nearly every major research organization has studied the demographic composition of Internet consumers. While methodologies vary, the findings are consistent: Internet consumers as a group are young, well-educated and earn higher-than-average incomes ("MediaWeek", 1997).

Gender balance is an important demographic condition for financial services because some service selections such as checking accounts are most frequently female-driven and others such as investments are more male-driven. Women are a growing segment of Internet users, now representing over 42 percent of the online population, according to a March 1997 CommerceNet/Nielson survey ("MediaWeek").

Age is one of the most important demographics because it derives multiple decisions from product design to advertising medium choice. In banking, age is an important determinant in product usage and profitability. Ages 18 through 34 drive the institution's fee income while ages 35 through 54 typically form the bulk of borrowers and seniors over age 55 provide most of the deposits. The good news is that the average age of Internet users is steadily increasing. This shows a broadening target audience. The average age of web users in 1997 was 34.9 years old, according to the sixth annual WWW User Survey by the Georgia Institute of Technology's GVU Center. The following table shows the increasing age trend for the past three years.

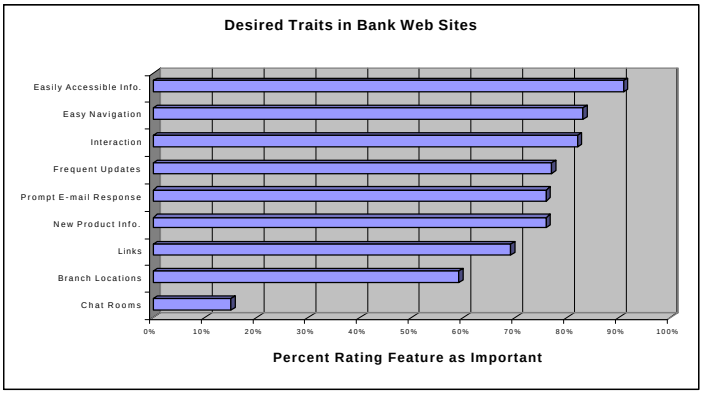


High incomes mean increased earnings potential for financial institutions. Customers with higher incomes typically have more relationships with an institution, are less adverse to fees, and hold

larger deposits than other customers. According to the Georgia Institute of Technology survey mentioned above, the average household income of Internet users is $60,800. In addition, a 1996 survey by SRI Consulting Group showed that in excess of 65 percent of Internet users have household incomes greater than $50,000, compared with 35 percent of the U.S. population as a whole ("MediaWeek", 1997). The level of education demographic can help marketers determine how to approach households. According to the previously mentioned SRI study, 75 percent of Internet users have attended college, as opposed to 46 percent of the total population ("MediaWeek" 1997).

CONSUMER RESEARCH AND FEEDBACK

Beyond raw usage statistics and demographic profiles, are a myriad of subtle issues being researched to help define what consumers want, how to maximize profitability, and how best to utilize this delivery channel in the future. A leading Internet research firm, Netsmart, recently performed a study to determine what attributes of a bank's web site are most important (Power, 1998). The quest for information was found to be the goal of 91 percent of the respondents, making easily accessible information the most desired attribute by an impressive margin. Wachovia Corporation has similar findings in an internal study. Jeanne Howard, vice president of Internet financial services, said, "Account information is the key for a lot of our customers. They want to see everything online, so we give them an online statement and an online register." (Power, 1998). Also of importance in the study were easy navigation and interaction. The following table shows other results.



Wayne Cutler, vice president of First Manhattan Consulting Group, says his firm has found that Internet banking customers are up to 50 percent more affluent than the industry's average customer (Kutler, 1998). Not only are they more affluent, they are also twice as profitable as others, according to Edgar Brown, senior vice president at First Union Corporation (Costanzo, 1998). This finding was substantiated by Michael DeVico, executive vice president of BankAmerica's Interactive Banking Division. BankAmerica's customer segmentation analysis shows that the segment that leverages the Internet banking channel is very profitable (Costanzo, 1998). Huntington Bancshares of Ohio has found that Internet customers as a rule have three times as many banking relationships with their firm as others. Contrary to typical customers who use an average of three financial institutions, they tend to aggregate all of their accounts so they can view and manipulate them online (Costanzo, 1998).

POTENTIAL CONSUMERS

The potential consumers of online banking can be delineated in a fairly straightforward manner by looking at households who possess the needed computer equipment. In December 1998, this potential market, those owning PCs and modems, stood at 36 percent of all U.S. households (Costanzo). This segment grew 23 percent between 1996 and 1997, but growth slowed to 13 percent between 1997 and

1998, according to PSI Global, a Tampa-based research firm (Stone and Tanaka, 1998). PSI Global also reports that only four percent of U.S. households currently use online banking services. This leaves 32 percent of all U.S. households able to use online banking, but not yet doing so. A more precise target audience would be frequent Internet users. According to Nielson Media Research, there are almost seven million current consumers of online banking and another 33 million weekly Internet consumers without online banking (Kutler, 1998).

Unlike face-to-face service, potential customers do not need to reside near their online bank. This broadens the potential market from a traditional ten-mile radius around a physical location to the entire country. Some of the larger online banking providers have found that as much as 30 percent of their online customers reside in states where there are no physical locations (Baig, 1998). Virtually any institution offering online banking tremendously broadens their potential market. Online banking thus poses two lines of potential; the potential to attract customers outside the normal service area, and the potential to consolidate the relationships of customers within the market area.

COMPETITIVE ANALYSIS

As financial institutions flock to the Internet with varying degrees of interactivity, banks feel the need to get online to keep up with competitors. But defining competition is becoming more difficult. There are direct competitors such as other banks, thrifts, and credit unions. There are also indirect competitors who offer financial services such as insurance, investments, or banking services without any physical locations, or personal service.

"At this point, banks are most likely paying attention to their direct competitors in their market areas," says Christopher Musto, senior analyst at Gomez Advisers Inc. (Costanzo, 1998). But as Internet banking grows in popularity, they will also have to contend with direct competitors who are not located right down the street, but possibly across the country. And, "If companies like E-Trade are successful in gaining a foothold on the Internet and establishing a branch they can use to cross-sell products, that is a threat," Mr. Musto said (Costanzo, 1998).

In evaluating Local Federal Bank's competition in online banking, one should first consider direct competitors serving the same markets. Local Federal operates 50 branches in 22 Oklahoma communities including the Oklahoma City and Tulsa metropolitan areas. Within the 22 communities, Local competes directly with commercial banks, thrifts, and credit unions. Virtually all peer institutions in Oklahoma currently have a web presence; most of them provide online banking services. In fact, the Oklahoma Banker's Association's web site offers links to 45 bank web sites. Of Local Federal's top five competitors; Bank of Oklahoma, BankOne, NationsBank, MidFirst Bank, and BancFirst; all offer Internet banking currently except MidFirst Bank. Their web sites allow customers to log on and check account balances, transfer balances and download account information into financial management software. The table below shows major competitor's pricing for Internet banking.

Comparative Bank Pricing

Institution	Online Banking Price	Bill Paying Price
Bank of Oklahoma	Free	$5.95
BankOne	Free	$4.95
NationsBank	Free	N/A
MidFirst Bank	N/A	N/A
BancFirst	$5.00	N/A

Being one of only two major institutions in Oklahoma not offering Internet banking places Local Federal at a disadvantage. The degree of this disadvantage grows with the popularity of the service. This

convenience-related weakness is compounded by the fact that Local Federal is also the only major institution without a strong ATM presence or a 24-hour call center. Therefore, convenience-oriented customers are at risk of migrating to more technologically-advanced institutions.

A new threat also looms from financial institutions outside Oklahoma. David Weisman, director of money and strategies at Forrester Research, says, "You no longer have to settle for whatever the local bank offers." (Baig, 1998). He backs up his statement with the fact that 30 percent of Bank of America's home banking checking customers reside outside the 11 states in which the bank has a retail presence. In the future, an attractive web site, low pricing and aggressive marketing may be the attributes that draw customers instead of convenient locations.

Virtual banks are beginning to spring up and grab market share from all over the country. Because these virtual banks draw customers from such a broad market and carry extremely low overhead costs, their pricing is often superior to community banks (Baig, 1998). Kiplinger's Personal Finance Magazine advocates virtual banks for checking accounts because their fees are usually much lower than traditional banks (Goldwasser, 1998).

RECOMMENDATION

After reviewing the functionality of Internet banking, usage trends, profitability impacts, user and potential user profiles, and the competitive environment, the recommendation is that Local Federal Bank add Internet banking to its product line. As a late adopter, offering Internet access defensively would allow Local Federal to maintain market share. By eliminating the convenience advantage currently held by other institutions due to Local's lack of ATMs, 24-hour call centers, or Internet access, the accounts of Local Federal Bank and other institutions can again compete based on features, service, and pricing. While Local Federal should not expect the market to bear a fee for Internet account access, the institution should implement a fee in the range of $5 per month for electronic bill paying services in conjunction with Internet banking. This new income stream will help offset the expenses associated with the initiation of Internet access.

CONCLUSION

According to the Internet Advertising Bureau during the first quarter of 1998 most ad spending was generated from the following product categories: computing (27%), consumer related (25%), telecom (14%), financial services (13%), and new media(10%).

An interactive web site serves to inform and empower users. Interactive featured provide a communication channel with the customer feedback and customer service. The site can provide information concerning product selection, product recommendation and retailer referrals and assist in site navigation (Strauss and Frost, 1999).

Once the decision has been made to offer electronic banking services, thought must be given to how best to promote the new product. Traditional bank marketing focuses on two areas, educating the consumer about a product and selling the benefits of a product. Because Local Federal currently has no web presence, the introduction of online banking will require a great deal of customer education. This product introduction is very similar to Local's late introduction of check cards. As one of the last large institutions to offer check cards, it was assumed that little effort would be necessary in the area of consumer education. This turned out to be an incorrect assumption. The check card program is now almost two years old and consumer education still plays an important part in marketing efforts. Benefit promotion plays an increasing role as consumers become more educated about the product and its use.

Internet banking must take into account the product adoption process. This process evolves from the article Diffusion of Innovations developed by Everett Rogers in 1962.

In Internet banking, Local is again a late adopter of a new technology. Therefore, Local is advised to enter with a competitively priced, branded product and take the lead position in promotion and consumer education. This will allow Local to leverage the exposure other programs have already had.

Relationship marketing plays an important role in analyzing Internet consumer behavior research and indicates that internet consumers are less loyal due to six major forces: (1) the abundance of choice,

(2) availability of information, (3) entitlement, (4) nothing stands out, (5) insecurity and, (6) time scarcity. Relationship programs that can retain customers are a vital part of a company's marketing program (Copulsky and Wolf, 1990).

A market roll out to current customers is a wise first step. This not only gives the institution an opportunity to iron out any problems during a period of controlled growth, it also gives current customers the privilege of adopting the product first. The obvious media choice for this product roll out is direct mail utilizing Local Federal's system for targeting the consumer.

After the initial introduction, a blitz to promote recognition and adoption should occur. Due to the young, upscale skew of Internet users, Local would be wise to depend on cable TV, radio and direct mail which can all be targeted to the proper demos. These types of media can be used for education about the product as well as branding. In-branch merchandising, statement stuffers and statement messages can help drive the message home to customers who have not yet adopted. Billboard advertising can help build brand awareness. Newspaper advertising should be used sparingly due to the age skew towards youth.

Once the public has been exposed to the brand and the campaign, Local could begin to do some supplementary education such as seminars. Seminars would give participants an opportunity to preview the product and learn of its advantages and benefits in a non-threatening environment with skilled support readily available. Another educational tactic employed by Wachovia Corporation in conjunction with their Internet banking program is to distribute CD-ROMs containing interactive video demonstrations, instructions and frequently asked questions (Power, 1998).

After the initial education blitz, education through internal marketing channels should continue, and a follow-up effort to support the brand identity should occur within six months. This will solidify the brand's awareness and position. Later efforts can be made in a maintenance mode.

REFERENCES

Baig, E. (1997). Your friendly banker, the Web. BusinessWeek Online, May 12, 1997 1-4, Retrieved December 28, 1998 from the World Wide Web: http://www.businessweek.com/1997/19/b3526129.htm.

Barrier, M. (1998). Online banking. Popular Science Online, Dec. 28, 1998 1-12, Retrieved December 28, 1998 from the World Wide Web: http://www.popsci.com/content/computers/features/onlinebanking.

Copulsky, Jonathan and Wolf, Michael J. (July-August, 1990). "Relationship Marketing: Positioning for the Future," Journal of Business Strategy:16-20.

Costanzo, C. (1998). Internet services add to costs bust can attract profitable customers. American Banker, 163, 2A-4A.

Friedman, M. (1997). Off-the-shelf banking apps bridge legacy data with Web. Internetweek, Issue 692, 19-21.

Gerwig, K. (1998). BellSouth packages E-banking. Internetweek, Issue 744, 18-20.

Goldwasser, J. (1998). Glitches in Internet banking. Kiplinger's Personal Finance Magazine, 52, 76-78.

Kutler, J. (1998). Promise of online banking grows with Internet boom. American Banker, 163, 8-11.

Power, C. (1998). Ads for online banking paid off big for Wachovia. American Banker, 163, 11-13.

Power, C. (1998). Survey of online shoppers finds them unimpressed with most banks' web sites. American Banker, 163, 16-18.

Reed, G. (1998). The Internet: Making consumer inroads advantage. Retrieved 12-28-98 from the World Wide Web: http://www.magicline.com/theinternet.html.

Rogers, Everett (1962). Diffusion of Innovations, 20-24.

Stone, B. & Tanaka, J. (1998). Point, click and pay. Newsweek, 132, 66-68.

Strauss, and Frost (1999). Marketing On the Internet, 10-11.

Stroper, A. (1997). Meridien findings: Financial institutions still in early stages of Internet sales of retail products and services. Retrieved 12-28-98 from the World Wide Web: http://www.meridien-research.com/pages/press/releases/stroper/Nov97/cons_ed_nov97.html.

Stroper, A. (1998). Meridien findings: Branches unlikely to disappear, but elec-tronic channels add to selling opportunities. Retrieved 12-28-98 from the World Wide Web: http://www.meridienresearch.com/pages/press/releases/stroper/May98/cons_ed_may98.html.

"Why" (1997). Why Internet advertising? MediaWeek, 7, 8-13

ESTIMATING INTERMARKET RETAIL SALES FLOWS ON A COMPARATIVE COUNTY, MSA AND STATEWIDE BENCHMARK BASIS

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ABSTRACT

Using current secondary data, estimates of the direction and intensity of intermarket retail patronage patterns were produced for an atypical military market on a Comparative County, MSA, and statewide benchmark basis. A modified location quotient and sales conversion index procedure was used for five common retail sectors (food, eat/drink, general merchandise, furniture/appliances, and automotive) to estimate retail category inshopping and outshopping on a retail sector basis. The importance of the benchmark economy and selection as a microcosm of the local economy was identified relative to "net" unique local market characteristics. As such, a local retail sector can readily compare their geographically restricted subject market with market areas that have similar economic and benchmark characteristics on a locational quotient and sales conversion index basis.

INTRODUCTION

A large portion of the economic health of many communities rests with the economic health of the retail sector. Although measured as secondary employment, retail sales historically represent at least 50% of communities' effective buying income and account for significant employment and local tax receipt activity. Although the economic health of a retail sector can be supported by population growth, employment growth, and effective buying income growth to name but a few, a strong retail sector is commonly characterized by "inshopping" in which local retail sales are supported to some extent by shoppers and retail dollars originating outside the defined local market or trade area. Conversely, "outshopping" occurs when the local population spends retail dollars outside of the defined local market or trade area. The identified inshopping and outshopping activity can be "net" on an aggregate retail sales basis or further identified or approximated on a standard retail sector or segment basis.

Wendell R. Smith's (1956) classic treatise on segmentation stated that segmentation is "…disaggregative in its effects and tends to bring about recognition of several demand schedules where

only one was recognized before…[It] consists of viewing a heterogeneous market (one characterized by divergent demand) as a number of smaller homogeneous markets in response to differing product preferences among important market segments." As such, retail sector strength and activity (inshopping/outshopping) should most logically be approached "as a number of smaller homogeneous markets reflecting different retail sector preferences most commonly classified as food, eating/drinking, general merchandise, furniture/appliances, automotive, and drugs by Sales and Marketing Management's Survey of Buying Power(1999). Obviously, retail sector strength and usage rate will vary by retail group classification as well as by community and benchmark base employed.

One of the most widely known usage rate segmentation studies was written by Dik Twedt(1964) which introduced the "heavy-half" concept in which a collection of shoppers representing 50% of the population accounted for significantly more than 50% of purchases. Heavy user segments with indexes or ratios greater then one were identified as potentially very attractive markets. *The purpose of the submitted paper is to explore and employ a number of different retail sector sales or usage indexes to identify the most productive or reasonable estimates of inshopping/outshopping activity and intermarket retail patronage patterns*. As identified by Anderson and Glascoff (1990), "It should be apparent…that there are multiple methods by which heavy-user indexes may be developed and also that the method selected has, in most cases, a profound effect on the resulting indexes and identified heavy user segments."

Various approaches have been used to assess the economic health of retail segments of a given market area. In particular, studies by Anderson and Kominsky (1985), LaForge, Reese, and Stanton (1984), Lillies and Hawkins (1974), and Papadopoulous (1980) utilize time consuming subject purchase recall methodologies to estimate retail sector intermarket behavior. Of more practical significance are two identified studies employing secondary data and similar but differently based "usage" indexes. The study by Young (1990) utilized a "location quotient" defined as "the percentage of *local* sector retail sales divided by the percentage of *benchmark* sector retail sales" to approximate intermarket retail sales flows for all Minnesota counties and MSA's. The study by Brockway and Mangold (1988) utilized a "sales conversion index" defined as "a *market* area's retail sales expressed as a percentage of total EBI (effective buying income) divided by the *benchmark* area's retail sales expressed as a percentage of total EBI." This paper compares and contrasts both of these indexes for a Tennessee "military" MSA using five (5) different benchmark assumptions.

INDEXES

A number of indexes have been developed and used to assist business managers in assessing retail market strength and opportunity. Sales and Marketing Management (1999) calculates the Buying Power Index (BPI), the Sales Activity Index and the Quality Index as follows:

1. *Buying Power Index*: The BPI is calculated as .5x(%EBI) + .3x(%U.S. Retail Sales) + .2x(%U.S. Population) and measures the overall retail demand in an area expressed as a percentage of total demand in the U.S.
2. *Sales Activity Index*: This index is calculated by dividing a retail area's percent of U.S. population into its percent of U.S. retail sales. A high Sales Activity Index may indicate a strong influx of nonresident purchasers or inshopping.
3. *Quality index*: This index is calculated by dividing a retail area's percent of U.S. population into its calculated BPI as above. A high Quality Index may indicate an above average buying power of residents, inshopping, or both.

LaForge, Reese, and Stanton (1984) produced the *Net Trade Flow Index* which expresses retail sales as a percentage of effective buying income(EBI) divided by an assumed 50% EBI retail conversion. Based on this assumption, a retail conversion rate in excess of 50% indicated a strong retail sector. This index is similar to the aforementioned Sales Conversion Index (SCI) but on an assumed and aggregate retail sales conversion basis.

Most retail textbooks include some discussion of the *Index of Retail Saturation* (IRS) and the *Market Expansion Potential* (MEP). In particular, these concepts are discussed by Ghosh (1994) as follows:

1. *Index of Retail Saturation*: This index is calculated by dividing area retail sales by retail square footage to produce, in effect, a calculation of sales per square foot. A high IRS indicates an attractive retail trade area or segment category(food) because of either high sales per normal square footage or normal sales associated with reduced retail square footage allocated. The IRS is only truly meaningful in comparison with some kind of norm or benchmark as a denominator such as industry sales per square foot or some management standard.
2. *Market Expansion Potential*: This index is calculated in dollar terms by subtracting from actual retail area sales benchmark estimated sales potential (the benchmark sales conversion index times local trade area EBI subtracted from actual retail area sales).

Of particular interest to the present study are the Location Quotient developed by Young (1990) and the Sales Conversion Index developed by Brockway and Mangold (1988) as follows:

1.*Location Quotient*: This index is expressed by the following formulae:

$$LQ = \frac{ns/Ns}{nb/Nb}$$

Where: LQ = Location Quotient

ns = Area retail sales in ith sector
Ns = Area total retail sales
nb = Benchmark retail sales in ith sector
Nb = Benchmark total retail sales

As such, the percentage of *local* retail sales in a particular sector is divided by the percentage of *benchmark* sales in the same particular sector. A location quotient in excess of one indicates that the sector is generating a sales surplus or inflow (inshopping). Quotients less than one are indicative of outshopping and supportive of Market Expansion Potential. Additional relationships can mathematically be established from the above basic formulae/relationship as follows:

a. $ES = \frac{nb}{Nb}(Ns)$ Where: ES = Expected Sales

To the extent that the local economy is a microcosm or "subset" of the benchmark economy, the ES relationship provides the expected retail sales in a sector for the local economy and a basis to approximate the dollar amount of Market Expansion Potential.

b. $SR = \frac{ns - \frac{nb}{Nb}(Ns)}{ns}$ Where: SR = Specialization Ratio

The above Specialization ratio expresses the dollar amount of retail sector inflows/outflows as a percentage of local retail sector base. As such, a specialization ratio of -.20 would indicate that the local retail sector sales were 20 percent lower than they would have been if local retail sector sales proportions had the same degree of specialization as the benchmark economy.

2.Sales Conversion Index: This index is expressed by the following relationship:

A Market area's Retail Sector Sales expressed as a percentage of its Total EBI

The Benchmark area's Retail Sector Sales expressed as a percentage of its Total EBI

As such, the local area's sales conversion factor (by sector) is divided by the benchmark area's conversion factor (by sector) as a relative measure of a local trade area's ability to convert buying income into retail sales (by sector) as compared to a benchmark trade area. *The Sales Conversion Index has the distinct advantage of taking into consideration variations in household income (EBI) and regional differences in non-retail expenditures such as housing, utilities, etc.* As such, a comparison of the Location Quotient (total retail sales based) and the Sales Conversion Index (total EBI based) is relevant. In addition and for both indexes, the appropriate selection of benchmark trade areas is of vital concern. The benchmark trade area should be similar to the local area of study to provide a useful and unbiased basis of comparison. The appropriate benchmarks are intuitively paired as rural/rural, MSA/MSA, and in this particular case, military/military to provide an unbiased estimating denominator and "real" or unbiased measures of trade area strength by sector.

METHODOLOGY

Data was collected from the most current Sales and Marketing Management Survey of Buying Power (1999) for five(5) retail sectors(food,eat/drink,general merchandise, furniture/appliances, and automotive) for Montgomery County, Tennessee to be compared with the following benchmark trade areas:

1. Contiguous Counties: (Stewart,Dickson,Houston,Cheatham,Robertson)
2. Non-metro Counties in Tennessee
3. MSA Counties in Tennessee
4. State Average in Tennessee
5. Military Counties: (Fayettville,NC and Killeen,TX)

Simple averages were calculated for each of the five(5) multiple benchmark trade areas. A comparison of Location Quotients, Sales Conversion Indexes, Specialization Ratios, Estimated Sales, and Inflows/Outflows was performed for all five (5) benchmarks in an attempt to identify the most reasonable, productive and unbiased trade area analysis and methodology. Montgomery County, Tennessee was selected as the researched local trade area due to its atypical nature and retail profile challenge. Prior unpublished work on retail sector profiles and trends for Montgomery County produced distinct and large SCI and LQ indexes when based on contiguous county benchmarks. As home to the 101st Air Assault "Screaming Eagles" (25,000 authorized troop strength), demographic profiles are skewed relative to age, family size, household income, education, etc. and the state and nation as a whole. Prior LQ and SCI calculation on 1994 data indicated significant outshopping for food and eat/drink establishments and significant inshopping for automobiles using surrounding county benchmarks and trade flows. As such, the present research function was to compare LQ and SCI indexes on a multiple benchmark trade area basis to block out benchmark bias and assess "net" local retail economic strength by retail sector/category.

RESULTS

Tables One through Five present calculated LQ, SCI, Specialization Ratio, and Inflows/Outflows for Montgomery County by contiguous county, non-MSA county, MSA county, state average, and military county benchmarks respectively. Table Six summarizes LQ and SCI indexes by benchmark category with grand average computed. A number of observations are possible as follows:

1. For all tables and benchmarks, Food outshopping is significant ranging from losses of approximately $240,000,000 (contiguous counties) to $76,000,000 (metro counties). Military commissary food sales(non taxable or reported) and border state Kentucky lower sales tax "outshopping" is blamed.
2. Calculated "net" retail sales are negative (outshopping) for all five tables and benchmarks but turn positive for all five benchmarks when the identified unreported commissary and Kentucky food sales are eliminated (net inshopping). Table Five aggregate and by sector SCI and LQ

indexes are most balanced (approximate one) for the military county benchmark comparison as would be expected.

3. Table Six summary of LQ and SCI indexes by trade area benchmark demonstrate large variance by index and benchmark community with the following observations:
    a. Food sector indexes are less than one for all benchmarks indicative of food outshopping by any measure.
    b. General Merchandise sector indexes are greater than one for all benchmarks indicative of General Merchandise inshopping by any measure.
    c. Automotive sector indexes are greater than one for all benchmarks (except LQ MSA) indicative of automotive inshopping by almost any measure.
    d. Eating/Drinking sector indexes are balanced for LQ measures and positive for SCI measures indicative of general Eating/Drinking inshopping.
    e. Furniture/Appliance sector indexes are largely mixed indicating inshopping by contiguous counties (SCI) and overall outshopping by remaining noncontiguous benchmarks and counties.

CONCLUSIONS

The results of study data analysis were basically as expected. The more comparable and unbiased the benchmark retail community, the less significant the inshopping/outshopping profile. As such, the magnitude of *local* military market inshopping/outshopping was drastically reduced with military market *benchmark* comparison. SCI and LQ indexes varied widely regardless of benchmark employed indicative of buying power and non-retail cost of living differences. The results of this study indicate the need to seriously consider benchmark community characteristics when computing SCI and LQ indexes and the further need to consider relative effective buying income influences in retail market strength/attractiveness determination.

REFERENCES

Anderson, Carol H. and Mary Kominsky (1985). "The Outshopper Problem: A Group Approach for Small Business Retailers." *American Journal of Small Business*, Spring 1985, 34-35.

Anderson, Steven J. and David W. Glascoff (1990). "Index Number Calculation Procedures Involving Product Usage And Volume Segmentation." *Progress in Marketing Thought : SMA Proceedings*, 4-9.

Brockway, Gary and W. Glynn Mangold (1988). "The Sales Conversion Index: A Method for Analyzing Small Business Market Opportunities." *Journal of Small Business Management*, April 1988, V26, n2, 38-48.

Ghosh, Avijit (1944) Retail Management, 2nd ed. Orlando: The Dryden Press. Pp 258-260.

LaForge, Raymond, Richard Reese, and Wilbur Stanton (1984). "Identifying and Attracting Consumer Outshoppers." Journal of Small Business Management, January 1984, 22-29.

Lillis, Charles M. and Delbert I. Hawkins (1974). "Retail Expenditure Flows in Contiguous trade Areas." Journal of Retailing, Summer 1974, 30-42.

Papadopolous, N.G. (1980). "Consumer Outshopping Research : Review and Extension." Journal of Retailing, Winter 1980, 41-58.

Smith, Wendell R. (1956). "Product Differentiation and Market Segmentation as Alternative Marketing Strategies." Journal of Marketing, 21 (July) 3-8.

"Survey of Buying Power" (1999). Sales and Marketing Management, August 1999.

Twedt, Dik Warren (1964). "How Important to Marketing Strategy is the Heavy User?" Journal of Marketing, 28 (January) 71-72.

Young, Mark R. (1990). "Measures of Intermarket Retail Sales Flows." Progress in Marketing Thought : SMA Proceedings, 363-366.

ESTIMATING THE NET REVENUE EFFECT OF PRICE CHANGES ACROSS THE PRODUCT LINE

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ABSTRACT

Profit-maximizing marketing decisions require estimates of both the short-run and long-run effects of changes in the marketing mix. This paper investigates the problem of the simultaneous estimation of demand functions over a broad product line or products mix with complementary and substitute product demand interrelationships using econometric models. The models & measures presented here may be easily adjusted to reflect the new products and competitive environment of the twenty-first century.

INTRODUCTION

In recent years, marketing researchers have increasingly used econometric modelling techniques (classical and new) to measure the effects of various components of the marketing mix. For example, the long-run effectiveness of advertising and the relationship between both brand sales and product category sales with advertising have been modelled by Baghestani (1991), Zanias (1994), and Dekimpe and Hanssens (1995). Chowdhury (1994) modelled the relationship between aggregate advertising expenditure and macro-economic fluctuations. Franses (1994) estimated the product life cycle of a brand as a function of macroeconomic variables. Kalyanam, et. al. (1998) formulated a Bayesian Spline Regression model to trace the time path of irregular price changes. Foekens, et. al. (1999) modelled the own and cross price effects of promotional price cuts. Similarly, Dekimpe, et. al. (1999) estimated the long-run effects of price promotions for four different food product categories employing unit-root econometric theory. In 1999, The Journal of Econometrics devoted a special volume (89) to seventeen articles applying econometric techniques to marketing.

This study extends the above econometric applications. It addresses the problem of the simultaneous estimation of demand functions over a broad product line or products mix with complementary and substitute product demand interrelationships. Elasticity measures are derived that will assist the product manager to assess the net revenue effect of one or more price changes over the relevant planning period. In addition, a net revenue matrix (or spreadsheet) is formulated to trace the effects of any pattern of price change across the product line. Specification, estimation, and validation issues are also considered.

The models and measures developed are applied to the actual product line of the New York Telephone Company (now Bell Atlantic) as of 1990. The data is from the official record of the New York Public Service Commission Case 28961 (1990). The models presented may be easily adjusted to reflect the new products and competitive environment of the twenty-first century.

The remainder of the study is organized as follows: (1) application of own and cross price elasticities; (2) demand model specification; (3) tests of model evaluation; (4) demand model results; (5) price effects algorithm; and (6) conclusion and recommendations. The Appendix shows how the price effects can be calculated over time.

IMPORTANCE OF OWN AND CROSS PRICE ELASTICITIES

Price elasticity (E) measures the relationship between quantity demanded (Q) and price (P). There are two forms of E: (a) own and (b) cross. **E own** focuses on the relationship between the quantity demanded of a particular product (or service) and its price. **E cross** measures the relationship between the quantity demanded of a particular product and the price of either a substitute or a complementary product. Elasticity is defined in percentage terms (that is, the percentage change in quantity resulting from a percentage change in price). Elasticity measurements (coefficients of elasticity which are negative for price demand relationships) are subdivided into three categories: ***inelastic demand*** (E less than 1), ***unitary elastic demand*** (E equals 1), and ***elastic demand*** (E greater than 1). Since Revenue equals Price × Quantity, it follows that an increase in price increases Revenue only if demand is inelastic. This is the case for most of the product line offered by a local telephone company. (Indeed, this is the rationale for regulation.)

In the regulated utility industry, price elasticity measures are critical to the determination of revenue requirements, rate of return, capital planning and recovery and resolving intergenerational equity issues. In unregulated industries, price elasticity measures are needed to achieve targeted sales, market share, profit levels, proactive and reactive responses to competitors price changes and the time path of capital recovery.

Own elasticity estimates make it possible to calculate the revenue effects of price changes within a service category. While cross elasticity provides a means of estimating inter-service price relationships and the "cannibalistic" revenue reductions resulting from product line extensions.

Table 1 below provides an illustrative (and actual) calculation of the revenue effects of $100 increase in the Private Line (dedicated access line between two or more points) service category. The own price elasticity effect results in only a $69.20 revenue increase in that category. On the other hand, the increase in the price of private line stimulates the demand for substitute services, namely, business access ($4.10), additional message units ($30.80) and intralata toll service ($4.50) resulting from the $100 price increase in Private Line. Calculating all own and cross service effects produces a bottom line net revenue effect of $87.90. The concept and application of elasticity is further addressed in Section 5.

Table 1

Business Segment

$100.00 Increase In Private Line

Category	Absolute Increase	Restriction/Stimulation	Net Increase
Business Access		$ -4.10	$4.10
Private Line	$ 100.00	30.80	62.20
AMU		-10.10	10.10
Toll		-4.50	4.50
WATS		0.00	0.00
Total		$12.10	$ 87.90

Code: Restriction represents a decrease in demand. Stimulation represents an increase in demand. A negative sign represents stimulation as an offset to restriction.

DEMAND MODEL SPECIFICATION

The proper construction of a demand model involves the appropriate selection of (1) explanatory variables, (2) type of equation, (3) lag specification, (4) data, and (5) tests of evaluation.

Demand models for specific services are specified with own price variables and cross (substitute and/or complement) price variables where appropriate and measurable. Table 2 presents a matrix showing most of the services that have been modelled and the demand-price interrelationships (that is, complementary or substitute) existing among the various company services.

Table 2

Identification of Product Relationships

From Demand Studies

Price components / Demand category	Residence Access	Business Access	Residence Inside Wire	Business Inside Wire	Supplemental Services	Non-Recurring Charges	Private Line Services	Residence Local Calling	Business Local Calling	Residence Intralata Toll	Business Intralata Toll	WATS	Semi-Public Coin Access	Directory Assistance	Local Coin	Other Services
Residence Access																
Business Access				C			S									
Residence Inside Wire																
Business Inside Wire																
Supplemental Services																
Non-Recurring Charges																
Private Line Services									S		S					
Residence Local Calling	C		C		C	C				C			C			C
Business Local Calling		C		C	C	C	S				C	S	C			C
Residence Intralata Toll			C		C	C		C					C			C
Business Intralata Toll																
WATS									S		S					
Semi-Public Coin Access																
Directory Assistance																
Local Coin																
Other Services																

Code: C represents complementary service**; S** represents substitute service

In addition to the service variables, the models are specified to reflect the systematic effects on demand of (1) prices of other goods and services (CPI or GDPD); (2) real personal income or business income; (3) market size or growth (number of households, population or a time trend); and (4) customer inertia or habit formation. The rationale underlying the inclusion of a habit variable (or a lag specification) is that customer demand (calling patterns) tends to respond gradually to a change in economic stimuli. This is due to the complexities of changes in rate structures and the time it takes for customers (and competitors) to receive, evaluate and act upon new information. As a result, this pattern of

delayed demand response tends to produce long-run price elasticities that exceed short-run price elasticities.

The exponential form of the demand equation is used because it provides the greatest fit, is easy to estimate, provides immediate interpretable results and minimizes potential heteroscedastic problems (that is, the statistical problem associated with an increasing stochastic error term over time).

As noted above, the relationship between demand and the explanatory variables of demand are not generally contemporaneous. The most common lag structures used in applied regression modelling are the Almon polynomial lag and the Koyck geometric lag. In this instance, both lag structures produce similar results for the telephone demand models. Only the Koyck results are reported in this study. Appendix B shows how the Koyck elasticities are derived for different time periods.

Price-deflated revenue is used as a proxy for the quantity variables of the various models. Laspeyres weighted price indexes were developed from historical rate schedules filed with the New York Public Service Commission (NYPSC) during the 1960-1990 period.

Most of the demand models use a time trend variable to reflect the effects of demographic factors. However, since such a variable plays so many roles in a regression model (e.g., compensating for an autocorrelated dependent variable), no interpretation has been placed on its regression estimate.

Quarterly seasonal dummies are used to account for seasonal influences and in some cases, other dummy variables are used to reflect short-lived effects on demand.

TESTS OF MODEL EVALUATION

In judging the validity of an econometric model, six salient common sense and statistical criteria should be considered. (1) Does the model (or models) contain the essential independent variables that logically explain the behavior of the dependent variable (e.g., demand) over time? (2) Is the form of the postulated relationship (polynomial or exponential) consistent with economic theory and experience? (3) Do the independent variables have the correct signs in their coefficients? (4) Are the independent variables significant at the acceptable level of confidence? (5) Are the results in accord with theoretical expectations and other independent studies (where such studies exist)? (6) Are the data used in the study reasonably accurate and reflective of the relationships being measured?

Each of the models were evaluated in terms of the above mentioned criteria and all of the models passed these tests. The two most critical statistical tests of coefficient (elasticity) validity are the tests for autocorrelation and estimator significance. All models pass the Durbin-Watson, Durbin h-test and chi-squire tests for non- autocorrelation of the error term. (The h-test is appropriate for models with lagged dependent variables, as in the case of the Koyck lag specification.) All elasticity estimates are significant at the ninety-five percent level of confidence or greater.

The estimates represent the average four-quarter demand response. The results follow a hierarchical order of logical expectations. The most necessary (and monopolistic) services are the least elastic, for example). On the other hand, services that are more discretionary or that have substitutes are more elastic, for example, residence and business AMU (-0.262 and –0.314, respectively), CENTREX (-0.385) and local coin (-0.515).

The interpretation of the estimates may be explained by considering the results of one model, for example, the Business AMU model. The elasticity estimates are: -0.314 (own), -2.31 (cross-complementary), and +0.148 (cross substitute). Thus, if the price of Business AMU service were increased by, say, 10% (ceteris paribus), the demand for that service would decrease by 3.14%, the demand for complementary services (e.g., access, inside wire, supplemental services, etc.) would decrease by 2.31% and the demand for substitute services (e.g., private line and WATS) would increase by 1.48%. The bottom line net revenue change would depend on the relative share of each service's category revenue contribution to total firm revenues.

THE DEMAND MODEL RESULTS

Table 3 presents a summary of the own and cross price elasticity for 22 service categories.

Table 3
Own and Cross Price Elasticities

	One-Year Price Elasticity		
Service Category	**OWN**	**Complementary**	**Substitute**
1 Residence Access	-0.054	-0.016	-
2 Business Access	-0.045	-0.066	+0.16
3 Business Measured Access	-0.101	-0.076	-
4 Business Flat Access	-0.112	-	+0.206
5 Total Access	-0.042	-	-
6 Residence Inside Wire	-0.168	-	-
7 Business Inside Wire	-0.206	-	-
8 Non-Recurring Charges	-0.304	-	-
9 Private Line	-0.292	-	+.356
10 Supplemental Service	-0.301	-	-
11 Residence AMU	-0.262	-0.203	-
12 Business AMU	-0.314	-0.231	+.148
13 Total AMU	-0.206	-0.159	+.063
14 Residence MTS	-0.265	-0.289	-
15 Business MTS	-0.209	-	+.243
16 WATS	-0.230	-	+.209
17 Directory Assistance	-0.288	-	-
18 Local Coin	-0.515	-	-
19 Semi-Public Coin Access	-0.165	-	-
20 CENTREX	-0.385	-	-
21 Other Exchange	-0.314	-	-
22 Aggrgate	-0.209	-	-

Tables 4 and 5 below present the complete statistical details for two of the twenty models, namely, residence and business usage (the additional message unit category on the telephone bill). The business usage model includes a price interaction term to account for the increasing competition in this market. As can be seen from Tables 4 and 5, the statistical properties of the models are very good. R^2 exceeds 0.99, Durbin-h tests for autocorrelation are well below 1.64 (95 percent level) and the model coefficients significantly exceed their standard errors. Comparable results were achieved for the other models.

Table 4
New York Telephone Company
Demand Model for Residence Usage
(Cochrance-Orcutt)

Time Span: Q2/76 – Q2/89

Function Form: **Log**

LnQ=	- 1.11939	+ 0.61895LnQ_{t-1}	- 0.15265LnP_t
	(0.81069)	(0.13046)	(0.05203)
	- 0.11826$LnPc_t$	+ 0.59950LnY_t	+ 0.06985 D1
	(0.06775)	(0.21292)	(0.02018)
	- 0.010882 S2	- 0.01908 S3	+ 0.0456 S4
	(0.00846)	(0.00730)	(0.00886)

LnQ	=	Quantity of Residence Usage service
LnP	=	Real Own Price of Residence Usage service
LnPc	=	Real Complementary Cross Price of Residence Usage service
LnY	=	New York State Real Personal Income
D1	=	1 in Q1/78, o elsewhere
S2, S3, S4	=	Quarterly Seasonal Dummies

Summary of Test Statistics:

$\overline{R}^2$	=	0.9919
F(9, 42)	=	694
Durbin-h	=	-1.0263
S.E.E.	=	0.018040

Note: Values in parentheses beneath the coefficients are the standard errors of the coefficients.

Table 5

New York Telephone Company
Demand Model for Business Usage
(Cochrance-Orcutt)

Time Span: Q2/76 – Q2/89

Function Form: Log

LnQ_t=	+ 3.06838	+ 0.53665LnQ_{t-1}	- 0.19288LnP_t
	(0.95822)	(0.12388)	(0.06849)
	- 0.14562$LnPc_t$	+ 0.09340$LnPs_t$	+ 0.30591 $LnBAI_t$
	(0.04995)	(0.03753)	(0.08903)
	+ 0.028 S2	- 0.1490 S3	+ 0.00122 S4
	(0.00533)	(0.00600)	(0.00536)
	- 0.00543 $DLnP_t$		
	(0.00248)		

LnQ_t	=	Quantity of Business AMU services and IntraLATA Toll
LnP_t	**=**	**Real Own Price of Business AMU services and IntraLATA Toll**
$LnPc_t$	=	Real Complementary Cross Price of Business AMU services and IntraLATA Toll
$LnPs_t$	=	Real substitute Cross Price of Business Usage (Private Line and WATS)

$LnBAI_t$	=	New York State Business Activity Index
D1	=	1 in Q1/78, o elsewhere
S2, S3, S4	=	Quarterly Seasonal Dummies
$DLnP_t$	=	$DLnP_t \times D$ (***D=1 for Q2/86 – Q2/89, 0 elsewhere***)

Summary of Test Statistics:

$\overline{R}^2$	=	0.9944
F(9, 43)	=	1020.13
Durbin-h	=	-0.8178
S.E.E.	=	0.0137

Note: Values in parentheses beneath the coefficients are the standard errors of the coefficients.

Dekimpe, et. al. (1999, p. 275) remarks that the Koyck specification precludes the detection of any persistent effects, such as, the over-time effectiveness of price promotions. As shown in the appendix, the Koyck model is capable of estimating immediate, intermediate and long run effects. The model can also be specified to reflect changes in market conditions including number and behavior of competitors. Dummy variables (intercept and/or slope specifications) can be used to assess the effectiveness of promotions to shift the demand function or to affect price elasticity measures.

CALCULATION OF PRICE EFFECTS

Methodology and Inputs

The effect of a single or a broad change in prices on a product line may be calculated with the general methodology presented in this section.

The required inputs are: (1) own and cross price elasticity coefficients (Table 3); and (2) the percentage change (including relevant taxes) in prices. For a regulated firm, the percentage change in prices is calculated from gross revenue requirements (i.e., the gross value of a rate reward) and the forecast of revenues in the planning period (i.e., test year) without a change in prices.

The exponential bivariate demand relationship may be expressed as:

$$Q_0 = AP_0^b \qquad (6.1)$$

where Q_0 and P_0 represent quantity and price, respectively, for a given test period. The coefficients A and b represent the values of the intercept and price elasticity relationship, respectively. As will be shown, the intercept term and the inclusion of additional explanatory variables in equation (6.1) are irrelevant to the final formulations. Reformulating equation (6.1) with a different price, P_n, yields

$$Qn = APnb \qquad (6.2)$$

Equations (6.1) and (6.2) may be converted into revenue equations (R_0 and R_n) by multiplying both sides of the equations by their respective prices. Thus,

$$R_0 = AP_0^{1+b} \qquad (6.3A)$$

and

$$R_n = AP_n^{1+b} \qquad (6.3B)$$

Dividing equation (6.3B) by (6.3A) yields:

$$R_n/ R_0 = (Pn/ P_0)^B \qquad (6.4)$$

where B=1+b. Since $R_n = R_0 + NVRC$, equation (6.4) can be expressed more operationally as:

$$NVRC= R_0 [(Pn/ P_0)^B -1] \qquad (6.5)$$

where NVRC represents the net value of the rate change and R_0 represents the forecast of unrestricted planning period revenue. (Equation (6.5) may be easily extended to include a cross price term when applicable; the cross price term would be raised to the power of its cross price elasticity coefficient and

would in effect, be a scalar multiplier of the own price term). One plus the percentage increase in price or (P_n/P_0) may be obtained as follows:

$$P_n/ P_0 = 1 + (GVRC/R_0) \quad (6.6)$$

where GVRC represents the gross value of the rate change from the following definitional relationship:

$$\text{Restriction} = GVRC\text{-}NVRC \quad (6.7)$$

The net revenue effect of the price change equals

$$\text{Net Revenue} = GVRC\text{-Restriction} \quad (6.8)$$

Illustration

The elasticity estimates can be used with the price calculation methodology presented in this section to trace through the effects of an across the board increase in the prices of various telephone services. In 1990, the New York Telephone Company (now Bell Atlantic) proposed an increase in tariffs to realize an increase in net revenue of $675.3M (NYSPSC Case 27896).

Table 6 presents a detailed matrix (or spreadsheet analysis) of the product line price changes and their effect on category and total revenues and net profits. Price changes were defined in terms of both tariff and related tax changes. The total gross price changes of $848.9 million (column F) produced a net revenue effect of $675.3 million (column H) and a net profit (after cost change adjustments) of $700.3 M (column J).

The demand restriction values (column G) represent the net revenue restriction effect (restriction less stimulation), including both the own and cross elastic effects of the proposed price changes. The cross elastic effects include both substitute and complementary demand relationships. Substitutes represent services which are alternatives for each other, such as, WATS and Toll. Complements represent a set of services that are used in combination, such as access and local calling.

Table 6: Price Effect Matrix

	Tariff	State Surcharge	Municipal Surcharge	Federal Transfer Surcharge	MTA Surcharge	Gross	Restriction	Net Revenue Effect	Cost Offsets	Net Effect
	A	**B**	**C**	**D**	**E**	**F**	**G***	**H=F-G**	**I**	**J=H+I**
Residence Access	618.4	21.0	8.3	23.6	3.5	674.9	55.3	619.6	8.0	627.6
Business Access	70.8	2.4	1.0	2.7	0.4	77.3	9.4	67.9	1.4	69.3
Supplemental Services	-40.2	-1.4	-0.5	-1.5	-0.2	-43.9	-13.9	-30.0	-2.0	-32.0
Nonrecurrent Charges	32.1	1.1	0.4	1.2	0.2	35.0	11.2	23.8	1.6	25.4
Private Line Services	0.0	0.0	0.0	0	0.0	0.0	2.0	-2.0	0.3	-1.7
Residence Usage	71.0	2.4	0.9	1.9	0.4	76.6	88.4	-11.8	12.7	0.9
Business Usage	-14.4	-0.5	-0.4	-1.2	-0.1	-16.5	6.5	-23.0	0.9	-22.1
WATS	0.0	0.0	0.0	0	0.0	0.0	0.2	-0.2	0.0	-0.2

Semi-Public Coin Access	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Directory Assistance	41.7	1.4	0.6	1.6	0.2	45.5	14.5	31.0	2.1	33.1
Other Exchange	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTREX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Local Coin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Misc Prem Eqpt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Late Payment Charge	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Carrier Access	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**779.4**	**26.4**	**10.3**	**28.3**	**4.4**	**848.9**	**173.6**	**675.3**	**25.0**	**700.3**

Defined more rigorously, service A is a substitute for service B if, as the price of A increases (decreases), the demand for B increases (decreases); service A is a complement for service B if, as the price of A increases (decreases), the demand for B decreases (increases).

CONCLUSION AND RECOMMENDATIONS

The models presented in this study provide a general framework for estimating price-demand effects for a specific product and across an interrelated product line. A practical algorithm has been developed to assist the product manager in calculating and tracing the net revenue effects of price changes across the product line. The practical application of this algorithm would be greatly enhanced by the addition of marginal cost or cost elasticity estimates. This would allow both net profit and net revenue calculations as shown in Table 6. In a subsequent paper, we will present a methodology for developing incremental cost estimates.

There are many econometric approaches, conventional and new (unit-root, cointegration, logit, etc.), that can be used to formulate, estimate and test demand relationships. The major hurdle in obtaining reliable estimates, and evaluating approaches, is adequate data. Recently, scanner data has been used in several studies (Chentaguna, 1993; Dekimpe, et. al., 1995, 1999; Mela, et. al., 1997; Papatta and Krishnaminthic, 1996) to measure multi-period demand effects. This may eventually prove to be a valuable and reliable data source. Current limitations of this data source include time span, comprehensiveness and representativeness. For example, two years of weekly scanner data produces a “large” sample size of 104 observations but this time span is not sufficient to estimate trends and cycles that reflect structural market changes caused by competition, technology or shifts in consumer preferences.

Clearly, more effort is needed in developing reliable and representative data sources.

APPENDIX

Elasticity Estimates of the

KOYCK DISTRUBUTED LAG SPECIFICATION

For simplicity, only the bivariate relationship between demand (Q) and price (P) is examined. The Koyck formulation may be expressed as:

$$Q(t) = \acute{a} + \hat{a}\sum_{i=0}^{\infty} w^{i} P(t-i) + \mathring{a}(t) \qquad (1)$$

or

$$Q(t) = \acute{a} + \hat{a}P(t) + \hat{a}wP(t-1) + \hat{a}w^{2}P(t-2) + \cdots + \mathring{a}(t) \quad (2)$$

where 0 < w <1. The w^i values are generally assumed to follow a geometric probability distribution with mean value of w / (1-w). For example, if w=1/2, the mean lag is 1 which means that half the impact of a price change is realized in the first period.

Multiplying Equation (2) by w and lagging all variables one period yields

$$wQ(t-1) = w\acute{a} + w\hat{a}P(t-1) + w^{2}\hat{a}P(t-2) + w^{3}\hat{a}P(t-3) + \cdots + w\mathring{a}(t-1) \qquad (3)$$

Subtracting Equation (3) from Equation (2) yields

$$Q(t) = \acute{a}(1-w) + wQ(t-1) + \hat{a}P(t) + u(t) \qquad \textbf{(4)}$$

Note that the error term in Equation (4) is u (t) = ε (t)– wε (t-1).

Equation (4) is easily estimated from observed data. If equilibrium is assumed, the time subscripts may be dropped, and equation (4) may be expressed as:

$$Q_e = \acute{a}(1-w) + wQ_e + \hat{a}P_e \qquad \textbf{(5)}$$

or,

$$Q_e = \acute{a} + \frac{\hat{a}}{1-w}P_e \qquad \textbf{(5A)}$$

Alternatively, from equation (1), in the limit

$$\sum_{i=0}^{\infty} w^{i} = \frac{1}{1-w} \qquad \textbf{for 0 < w < 1,}$$

and, hence, the long run demand response equals

$$\hat{a}\sum_{i=0}^{\infty} w^{i} = \frac{\hat{a}}{1-w} \qquad \textbf{(6)}$$

In general, the long run demand response of any explanatory variable of the Koyck model is

$$E_j(LR) = \frac{\hat{a}_j}{1-w} \qquad \textbf{(7)}$$

where the subscript j denotes a particular explanatory variable and w_j represents the coefficient of the lagged dependent variable. The intermediate run elasticity value, defined in terms of the cumulative demand response for any number of quarters may be calculated as follows:

$$\begin{aligned} E_j(\text{for n quaters}) &= \hat{a}_j \sum_{t=0}^{n} w^{t} \\ &= \hat{a}_j + w\hat{a}_j + w^{2}\hat{a}_j + \cdots + w^{n}\hat{a}_j, \qquad j > 1 \end{aligned} \qquad \textbf{(8)}$$

Thus, the cumulative elasticity effect over three quarters equals the sum of the first three terms in equation (8). For example, assume that w = 0.4, and $_j$ = 0.2. The cumulative elasticity for the first four quarters are:

Quarter	**Q_1**	**Q_2**	**Q_3**	**Q_4**
Cumulative Elasticity	**0.2**	**0.28**	**0.312**	**0.325**

The long-run elasticity value, from equation (7), is 0.33. Thus, in this example, almost 99 percent of the long run effect is realized by the first four quarters.

REFERENCES

Baghestani, H. (1991), "*Cointegration Analysis of the Advertising – Sales Relationship*," Journal of Industrial Economics, 34, 671 – 681.

Bemmaor, A. C. and Mouchoux, D. (1991), "*Measuring the Short-Term Effect of In-Store Promotions and Retail Advertising On Brand Sales : A Factorial Experiment*," Journal of Marketing Research, 28, 202 – 214.

Blattberg, R. C. and George, E. I. (1991), "*Shrinkage Estimation of Price and Promotional Elasticities: Seemingly Unrelated Equations*," Journal of the American Statistical Association, 86 (414), 304 – 315.

Blattberg, R. C. , Briesch, R. and Fox, E. J. (1995), "*How Promotions Work*," Marketing Science, 14, 122 - 132.

Chintagunta, P. K. (1993), "*Investigating Purchase Incidence, Brand Choice and Purchase Quantity Decisions of Households*," Marketing Science, 14, 184 – 208.

Chowdhury, A. R. (1994), "*Advertising Experiments and the Macro-Economy: Some New Evidenc*e," International Journal of Advertising, 13, 1-14.

Dekimpe, M. G. and Hanssens, D, M, (1995), "*The Persistence of Marketing Effects on Sales*," Marketing Science, 14, 1 – 21.

Dekimpe, M. G., Hanssens, D, M and Silva-Risso, J. M. (1999), "*Long Run Effects of Price Promotions in Scanner Markets*," Journal of Econometrics, 89, 269 – 291.

Doran, H. E. (1989), *Applied Regression Analysis in Econometrics*, N. Y. : Marcel Dekker, Inc.

Engle, R. F. and Mc Fadden, D. L. (Eds.) (1994), *The Handbook of Econometrics*, Amsterdam: Elsevier Science, v.4.

Foekens, E. W. et al. (1999), "*Varying Parameter Models to Accommodate Dynamic Promotion Effects*," Journal of Econometrics, 89, 249 – 268.

Franses, P. H. (1994). "*Modeling New Product Sales: An Application of Cointegration Analysis*," International Journal of Research in Marketing, 11, 491 – 502.

Kalyanam, K. and Shivly, T. S. (1998), "*Estimating Irregular Pricing Effects: A Stochastic Spline Regression Effect*," Journal of Marketing Research, 35, 16 – 29.

Mela, C., Gupta, S. and Lehman, D. R. (1997), "The Long Term Impact of Promotion and Advertising on Consumer Brand Choice," Journal of Marketing Research, 34, 248 – 261.

Papatla, P. and Krishnamurthi L. (1996), "*Measuring the Dynamic Effects of Promotions on Brand Choice*," Journal of Marketing Research, 33, 20 – 35.

White, H. (1994), *Estimation, Inference and Specification Analysis*, Cambridge: Cambridge University Press.

Zanias, C. P. (1994), "*The Long Run Causality, and Forecasting in the Advertising –Sales Relationship*," Journal of Forecasting, 13, 601 – 610.

ETHICS IN ADVERTISING

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INTRODUCTION

It is very important for every industry to improve its public image. This is especially important for the advertising profession, an industry that has great visibility. Unfortunately, there is a considerable amount of evidence that the public is quite annoyed with the advertising industry [Wells, Burnett, and Moriarty (1998), p. 43]. Surveys show that the public believes that advertisements talk down to them. Even advertising executives are concerned about the large number of bad advertisements. The industry continues to work on improving its image and curbing abuses. Towards this end, the advertising profession has established guidelines. For example, the American Association of Advertising Agencies (4A's) has developed a Standards of Practice which can be downloaded from the world wide web at: http://www.aaaa.org/inside/standards/index.html. The American Advertising Federation's booklet, "The Advertising Principles of American Business," also provides ethical guidelines for advertisers.

The more the advertising industry knows about how it is viewed by the public, the easier it will be for the industry to improve its image. Research by Storholm and Friedman (1989) demonstrates how an understanding of the myths and unethical practices of direct marketing professionals about their industry could be used to better the image of that industry. This paper examines advertising professionals' perceptions of the myths and unethical practices in their industry.

METHOD AND RESULTS

A sample of 100 individuals was taken from the *Standard Directory of Advertising Agencies*—January 1998 Edition. The sample consisted of advertising professionals with the title of president, vice-president, creative director, or marketing director. Respondents were contacted either by e-mail or telephone. The response rate was about 40%. Participants were asked to list the myths of advertising and to describe unethical practices used in advertising to the public.

As Table 1 indicates, some of the major myths of advertising are: that advertisers sell the public products they do not need, that advertising is untruthful, that advertising can sell any product, and that advertising is immoral. It seems that these four myths could all be part of the same problem. The public believes that advertisers are all-powerful and can sell anything with the tools of their trade, even products that are not needed by the public. This might cause the public to perceive the industry as immoral and exploitative.

The solution might be to run promotions reassuring the public that advertisers do not attempt to create wants and needs for unnecessary products. Rather, advertisers attempt to demonstrate how products satisfy existing needs. The public, especially young people, has to be made aware of the fact that

major industry associations -- the American Association of Advertising Agencies, the American Advertising Federation, and the Association of National Advertisers -- are involved in self-regulation through their work with the National Advertising Division (NAD) of the Council of Better Business Bureaus.

Table 2 indicates that advertising professionals believe that the major unethical advertising practices are: misrepresentation of a product's benefits, dishonest testimonials and claims, and offensive advertising. The advertising industry does work with the Better Business Bureau to monitor deceptive advertisements. However, NAD only has limited resources and often handles less than 100 cases per year. Many of the complaints handled by (NAD) involve false claims. Given the results of this study, perhaps the advertising industry should expand the operations of NAD.

In addition, advertisers should be encouraged to create advertisements that do not stereotype any minority groups. Advertisements that degrade women or members of minority groups hurt the entire industry. Advertisers that continue to run offensive advertisements should be criticized not only by consumer groups, but by concerned industry executives as well.

This paper highlights the fact that many advertising professionals believe that there exist various myths about the advertising business. These myths disparage the profession and are essentially untrue. It is thus important for the industry to do all in its power to dispel these myths. The industry should embark on a public campaign to clarify what advertising attempts to accomplish and what advertising does not endeavor to achieve.

In addition, there are beliefs regarding the use of unethical advertising practices by the industry that should be eradicated. Advertisers have to make sure that the performance of products are not hyped too much in advertising. Testimonials and endorsements should be honest product evaluations.

Future research should focus on the beliefs of the general public regarding the myths and unethical practices in the advertising industry. The perceptions of the public can then be compared to those of advertising professionals.

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REFERENCES

Storholm, Gordon and H. Friedman (1989). "Perceived Common Myths and Unethical Practices Among Direct Marketing Professionals," *Journal of Business Ethics, 8*: 975-979.

Wells, William, J. Burnett, and S. Moriarty (1998). *Advertising: Principles and Practices.* Upper Saddle River, NJ: Prentice-Hall, Inc.

Table 1
Myths of Advertising
(n=100)

Myth	Number of Mentions
Advertising sells people stuff they really don't want or need	35
Advertising is untruthful and cannot be trusted	22
Advertising can sell anything	12
Advertising is evil, bad, or immoral	11
Advertising is a fun business where you make a lot of money	10
Advertising exploits people	7
Advertising is packed with subliminal advertising	6
Research can't tell you anything that you don't already know	5
A celebrity automatically adds impact and selling power to a brand	4
Three-martini lunch	4
Advertising sets trends and determines culture	3
No great ad is going to make up for a lousy product	3
Advertising agencies are too expensive; it can be done cheaper in-house	3
Once they try our product they will keep coming back	3
Advertising is an expense rather than an investment	2
Don't waste money on advertising; just spend more on your salesforce	2
An advertising agency that's strong on creativity is weak on marketing	2
Advertising agencies love to spend their clients' money	2
There are no myths	2
Features, features, features—it's the only way to sell	1
Advertising agencies think their clients never have good ideas	1
Total	140*

***NOTE**: The total added up to 140 because of multiple responses

Table 2
Unethical Practices in Advertising to the public
(n=100)

Practice	Number of Mentions
No unethical behavior	48
Misrepresentation of a product's performance and/or benefits	15
Testimonials that do not reflect the true opinion of the endorsers	8
Claims that are not sufficiently supported or that distort the meaning of statements made by professional or scientific authorities	7
Statements, suggestions, or pictures offensive to public decency or minority segments of the population	6
Advertisers try to manipulate the public	6
Unethical practices are the result of advertisers doing their own promotion	3
Price claims that are misleading/bait and switch advertising	3

Clients often suspicious of agencies and their billing costs	2
Marketing of cigarettes and beer to minors	2
Total	100

EXAM QUESTION SEQUENCING EFFECTS ON MARKETING AND MANAGEMENT SCIENCES STUDENT PERFORMANCE: AN EXTENDED EMPIRICAL INVESTIGATION

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ABSTRACT

Marketing and Management Sciences instructors may utilize multiple versions of a single examination as a deterrent to student cheating, particularly for exams comprised of multiple-choice questions. Viewed from this perspective, understanding the impact that multiple exam versions has on student performance is important, because such an understanding may serve as an aid to instructors in designing equitable examinations. However, identifying and understanding situations where student performance is affected by the order in which questions are asked of them may have broader implications for Marketing and Management Sciences education, providing insights into the organization of student knowledge structures and the manner in which students access knowledge when confronted by Marketing and Management Sciences problems.

The results of previous research examining the effect of multiple-choice question sequencing have been inconsistent. This paper reports on a series of investigations into the impact of exam question sequencing on Marketing and Management Sciences student performance. The research involved manipulating the order of presentation of multiple-choice questions on the exams in six different courses taught by two instructors over one semester. Compared to much of the previous work in this area, the results of the extended investigation reported in this paper is different. Student performance was affected in all of the courses in which the experiment was conducted. The implications of the findings and directions for future research are described.

INTRODUCTION

Marketing and Management Sciences instructors may utilize multiple versions of a single examination as a deterrent to student cheating, particularly for multiple-choice or other objective questions. Understanding the impact of multiple exam versions on student performance is therefore important because such an understanding aids instructors in designing “equitable” or “unbiased” examinations (i.e., exams that do not unfairly advantage or disadvantage particular students simply because of the version of the exam that they are given). Additionally, identifying situations in which student performance is affected by the order in which questions are presented may have broader

implications for Marketing and Management Sciences education by providing insights into the organization of student knowledge structures and the manner in which students access their knowledge when confronted by Marketing and Management Sciences problems.

There is very little research that has examined evidence of exam question sequencing impacts on Marketing and Management Sciences student performance. The results of this limited body of research in this area is mixed. While some researchers have found relatively strong evidence of exam question sequencing impacts, others have failed to find any impact of exam question sequencing on student performance, and still others have found evidence of impact only in some courses, or for certain subsets of students within the studied courses.

The purpose of the research presented in this paper is to extend our knowledge of exam questioning sequencing impacts on Marketing and Management Sciences student performance. Specifically, this paper reports on a series of investigations that examined evidence of multiple-choice question sequencing impacts across six courses taught by two instructors. Additionally, the paper discusses the implications of the results of this stream of research for Marketing and Management Sciences educators and provides direction for future research.

The remainder of this paper is organized into four sections. The first provides a summary of previous studies that have examined test question sequencing impacts. The second section describes the design and execution of our research and the third section presents our results. Finally, the fourth section discusses the implications and limitations of this research.

REVIEW OF THE EXISTING LITERATURE

Early research in the area of test-item order examined the systematic alteration of items using question difficulty as the basis for ordering. Results of these studies reported higher performance on exams when items were arranged from easy to difficult. Differences in motivational level and/or anxiety were determined to be key determinants for the results obtained. (Sax and Cromack, 1966; Flaugher, 1968; Kleinke, 1980). Recent research has investigated the relationship between the order of topical presentations in class and the order those topics are presented in an examination. Some researchers have described the variations as forward-sequential and reverse-sequential. In the forward-sequential method, the test questions are arranged in a sequence coinciding with the topical presentations in the course. In the reverse-sequential approach, the test questions are arranged in reverse order. A third approach is to scramble the items using a randomized approach. (Pettit, 1986). Researchers have examined the effect of multiple-choice question sequencing reporting mixed results. For example, Balch (1989) found that students scored slightly higher when test items were grouped sequentially (relating to text and lectures) than on tests when test items were grouped by text chapter but ordered randomly, or when test items were ordered randomly. Araujo and Semb (1979) completed two experiments using a 2 x 3 x 2 (instructors x test forms x class time) designs to compare three aspects of student performance (mean final examination scores, homogeneity of variance, and retake frequencies) on three test forms. The test items on the three forms were arranged in three ways: (1) forward—items paralleled the presentation of material in class; (2) backward—items were in an opposite order; and (3) random order. The analysis indicated that item order did not significantly influence student performance in either experiment.

Chidomere (1989) examined students enrolled in principles of marketing. Four examinations were administered in a three-week interval. All of the questions used were obtained from a test-bank. Similar to other studies, he altered the format of questions using ordered, reverse-ordered and scrambled formats. His study found no significant differences between the various test scores in test forms analyzed in his study.

In summary, the empirical evidence concerning the impact of question sequencing is very limited and mixed. Chidomere states that "despite the popularity of item rearrangement in objective examinations among marketing and management science educators, little effort has been made to explore its effect on students' performance. Further research is necessary to explore the issue."

RESEARCH DESIGN AND EXECUTION

This study was conducted at a small private university in the northeast. Multiple-choice question sequencing was manipulated in all exams administered in two sections of Principles of Management, one section of Sales Management, one section of Social Roles of Organizations and two sections of Advertising. The Principles of Management class is a required course for all business majors. The Sales Management class is an elective for marketing majors. The Social Roles of Organizations is an elective for management sciences majors. Advertising is a required class for marketing majors. Two instructors, one from the marketing department and one from the management sciences department taught the classes. In each case, multiple-choice questions were positioned at the beginning of the exam, followed by other types of questions (primarily problems and short essays). The advertising classes used exclusively multiple-choice questions. Information concerning the number (and percentage value) of multiple-choice questions on each exam and the number of students in each condition is summarized in Table 1. The first instructor taught the two advertising classes while the second instructor taught the remaining four classes. The same research design was used across all courses. There were three versions of each exam, all of which contained the same multiple-choice questions. In the first condition ("ordered"), questions appeared in the same sequence as the related material was presented in class; in the second condition ("reverse ordered"), the sequence of questions was reversed; and in the final condition ("scrambled"), the questions were randomly ordered. Exams were randomly distributed to students in the first exam. On the next two exams, students were given the version of exam that they had not been exposed to in the first exam. Therefore, each student was exposed to each type (ordered, reverse ordered and scrambled) of exam throughout the semester. When exams were graded, the exam version was recorded to permit subsequent analysis.

TABLE 1

Summary of Experimental Conditions

Course	# of Exams	Format: # of MC questions/ (% of total exam)	Versions	# of Students
Advertising	3	100 (100%)	Ordered	51
(2 Sections)		85 (100%)	Reverse ordered	51
Fall, 1999		200 (100%)	Scrambled	51
Social Roles of	3	27 (54%)	Ordered	45
Organizations		21 (35%)	Reverse ordered	45
Fall, 1999		26 (33%)	Scrambled	48
Sales Management	3	26 (43%)	Ordered	14
Fall, 1999		32 (45%)	Reverse ordered	14
		30 (45%)	Scrambled	14
Principles of Management	3	57 (71%)	Ordered	64
(2 Sections)		61 (85%)	Reverse ordered	64
Fall, 1999		47 (62%)	Scrambled	64

This design was intended to allow for the examination of the impact of multiple-choice question sequencing. In an effort to provide more reliable evidence concerning sequencing effects, we replicated the design across several different courses and used it for each exam administered in each of the courses.

We also collected data related to student quality. However, we were primarily interested in determining whether there was a systematic difference in students' performance on the multiple-choice questions based on the version of the exam taken.

ANALYSIS OF RESULTS: ANOVA, using a randomized block design, was chosen to analyze the results of this experiment since the variation in student ability needed to be minimized. The results of three classes are presented below. All of the required exams had not been administered in each experimental class at the time this article was written. Results for the remaining classes will be made available during the conference.

TABLE 2

ANOVA: Two-Factor Without Replication

Principles of Management Sciences Classes

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Students	6134.9800	33	185.9085	2.038292	0.007053	1.612216
Examinations	591.6078	2	295.8039	3.243181	0.045341	3.135924
Error	6019.7250	66	91.20796			
Total	12746.3100	101				

As shown in Table 2, there is a significant difference (α = .05) for the type of examination used in the two sections of Principles of Management. When compared against Table 4, it appears that students perform least successfully with the scrambled format.

TABLE 3

ANOVA: Two-Factor Without Replication

Social Roles in the Organization Class

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Students	5104.5930	44	116.0135	2.003815	0.002891	1.514726
Examinations	508.4593	2	254.2296	4.391121	0.015213	3.10007
Error	5094.8740	88	57.8963			
Total	10707.9300	134				

As shown in Table 3, there is a significant difference (α = .05) for the type of examination used in the two sections of Principles of Management. Again, when compared against Table 4, it appears that students perform least successfully with the scrambled format.

TABLE 4

Mean Average of Examinations by Class and Format of Examination

	Social Roles in the Organization		
	Ordered	**Reverse Ordered**	**Scrambled**
Principles of Management (1)	73.56% (2)	74.26% (1)	71.66% (3)
Principles of Management (2)	78.11% (1)	73.29% (3)	72.76% (2)
Social Roles of the Organization	82.70% (1)	78.70% (3)	79.52% (2)

The average response for each examination by class and format is presented in Table 4. In addition, the ranking of each exam in each class is provided. Although no definitive conclusions can be established, the table suggests that the ordered format is the most successful format based on student scores.

SUMMARY, IMPLICATIONS, AND LIMITATIONS

The results of research examining the impact of exam test-item sequencing on student performance—both our research and the work of our predecessors—could be described as "mixed." Some researchers have found relatively strong sequencing impacts. Others, however, have found that test-item sequencing only affected student performance in certain courses. The most consistent finding has been the lack of impact on student performance of presenting questions in the order in which the material was covered in the course versus in "reverse" order. The findings in studies that have compared the impact of "scrambled" presentation versus the two ordered alternatives have been les consistent. Some studies have not found any impact of this treatment. However, other research, has found that student performance was significantly impaired when exam questions are presented in scrambled order.

The issue of test-item sequencing impacts has been discussed in the existing literature primarily as relating to testing "equity," as well as motivated by a desire to produce "unbiased" examinations. This reflects the belief that students' examination performance should not be affected by extraneous factors such as the version of the test that is administered to them. Viewed from this perspective, readers of this body of research my wish to use the results of these studies to help them design examinations such that the results are not affected by the version of the exam administered Several suggestions for accomplishing this result are to use ordered and reverse ordered (but not randomly ordered) exams, or to keep the ordering of the questions the same but vary the order of the response choices offered. However, it does not appear that the hypothesis that it will produce "equitable" results has been subjected to empirical testing in Marketing and Management Sciences contexts. Empirical testing in other contexts, however, suggests that response ordering does not influence exam performance (Aiken, 1990).

The results of the research into the impact of exam question sequencing on Marketing and Management Sciences student performance, taken as a whole, seem to indicate that students may organize their Marketing and Management Sciences knowledge in highly specific ways (e.g., in terms of sequential textbook chapters). Students' ability to access and utilize this knowledge may be significantly impaired when they are confronted with questions that do not conform to these sequential structures. However, if Marketing and Management Sciences student knowledge structures—perhaps being developed and enhanced through the Marketing and Management Sciences educational process—are as specialized and

constrained as the body of research on intertopical ordering effects suggests, perhaps students are not being well prepared for the professional world that they will be encountering after graduation.

Despite the growing body of research in the area of Marketing and Management Sciences education, we still clearly do not have a well-developed understanding of the factors affecting student exam performance.

Many studies that have examined the impact of exam question sequencing on student performance have not examined the effects of question sequencing on sub-groups of students within courses. Following the lead of earlier researchers, we intend to extend our analysis to explore the impacts of exam question sequencing on sub-groups of students partitioned based on their cumulative GPAs. Despite the mixed results of research that has examined the impacts of question sequencing on student sub-groups to date, we believe that this may still be a fruitful direction for future inquiries.

In conducting our research, we attempted to control for established factors, other than exam version (such as student SAT scores and cumulative GPA) that may be related to student exam performance. Additionally, we attempted to increase the generalizability of our findings by extending our investigation over four different courses, representing six sections snd taught by two instructors over the course of one semesters. However, all of these courses were taught at a single university.

The limitations of our work notwithstanding, we believe that the research presented here meaningfully extends our understanding in this important area of Marketing and Management Sciences education and provides useful direction for future inquiries.

REFERENCES

Aiken, Lewis R. (1990). Testing with Multiple-choice Items, in Research and Testing, edited by Donna L. Street, Ashton C. Bishop, and Ralph L. Benke, Jr. Harrisonburg, VA: Center for Research in Marketing and Management Sciences Education, School of Marketing and Management Sciences, James Madison University.

Araujo, J. and G. Semb (1979). "Effects of Item Order on Student Performance," paper presented at the 8th Annual Conference of the American Psychological Association, New York.

Balck, William R. (1989). "Item Order Affects Performance on Multiple-Choice Exams." *Teaching of Psychology*, Volume 16, Number 2, April, 1989, 75-77.

Chidomere, Roland C. (1989). "Test Item Arrangement and Student Performance in Principles of Marketing Examination: A Replication Study." *Journal of Marketing Education*, Fall, 1980, 36-40.

Flaugher, Melton and Meyers (1968). "Item Arrangement Under Typical Test Conditions." *Educational and Psychological Measurement*, Volume 28, 813-824.

Kleinke,D. J. (1980), "Item Order, Response Location, and Examinee Sex and Handedness on Performance on Multiple-Choice Tests." *Journal of Educational Research*, Volume 74, 225-228.

Pettit, Kathy L., Kenneth G. Baker, and Laura D. Davis (1986). Unconscious Biasing of Student Examination Scores: A Case of Sequential Versus Random Information Retrieval." *Journal of Marketing Education*, Fall, 20-24.

Sax, G. and T. R. Cromack (1966). "The Effects of Various Forms of Item Arrangement on Test Performance." *Journal of Educational Measurement*, Volume 3, 309-311.

HEALTHCARE MARKETING REPS NEED A PROFESSIONAL VOCABULARY

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ABSTRACT

This manuscript examines the need for healthcare marketing reps to possess a professional vocabulary. Suggestions are provided which will assist them in building a vocabulary that will enable them to read and understand business-related publications and improve their overall communication efforts.

INTRODUCTION

Many college graduates begin their professional careers in positions which involve marketing. Companies and organizations offering products and services to the health care industry may prefer and seek new employees who are recent college graduates as these prospective employees are viewed as educated, motivated, trainable, and literate. These employers may even assume and expect that recent college graduates can effectively communicate through reading, writing, listening, and speaking.

Communication skills are an important part of the job for a marketing representative involved with the health care industry. The representative can expect to communicate with customers, clients, and colleagues who may be less educated to very highly educated, versed and fluent in medical terminology, affluent, and business minded.

Marketing representatives will need a vocabulary appropriate for the specific audience. The ability to select the appropriate vocabulary for the current situation and receiver may be just as important as possessing a strong vocabulary. This vocabulary will include the highly specialized technical terms used by health care professionals involved in specialties or general practices. In addition, the marketing

representative will need a generalized vocabulary of words that are spoken, heard, read, and written in daily life.

THE EXPANDED GENERAL VOCABULARY

Marketing representatives need familiarity with generalized words to be able to communicate effectively with current and prospective customers and clients as well as others within the company. A familiarity with general words involves the ability to recognize the word, know the correct spelling and pronunciation, evaluate possible definitions, select and use the correct definition, determine that the word is appropriate for the situation and persons involved, and affirm that the word is used in a correct manner.

One dimension of a generalized vocabulary is familiarity with words written in articles and advertisements appearing in popular newsstand publications. The business community has accepted and recognized *Business Week* as one such popular publication which presents business articles and information to a general audience.

The articles in *Business Week* are non-technical and use generalized words considered to be appropriate for the readers. This publication often reports news about people, organizations, products, and issues related to the health care industry. Copies of the publication are often found in the waiting rooms of health care providers. *Business Week* is popular within the health care community.

A QUESTION OF FAMILIARITY

Prospective employers may expect and assume that college graduates and graduating seniors posses a generalized vocabulary which is adequate for the business environment. It may be expected and assumed that these prospective employees are familiar with the words used in general publications such as *Business Week*. These expectations and assumptions lead to a real question—Are college students familiar with the words used in publications such as *Business Week*?

This question was the basis for a study of college students' levels of familiarity with selected target words in *Business Week*. A measure of familiarity can be described as a person's ability to recognize and understand the words used in a specific situation or scenario. In this case the scenario was a single issue of *Business Week*.

THE STUDY

A test of familiarity was developed which focused on specific words in a single issue of *Business Week*. A jury of academicians read articles in the selected single issue of this publication and identified target words that might be challenging or unfamiliar to the readers. The jury selected thirty-three target words that would be used for the test of familiarity.

An instrument was designed which presented each target word in the same sentence as it appeared in the selected issue of *Business Week*. The only modification to the quoted sentence was to change the names of individuals to generic terms such as "the manager." The target word in each sentence was underlined and the instructions on the instrument referred to the target word as the underlined item.

Participants were instructed to read each sentence and describe familiarity with the underlined item. Participants could select the "A" response to indicate that the underlined item was a word and correctly used in the sentence, the "B" response if the underlined item was a word but not correctly used in the sentence, or the "C" response if the underlined item was not a word.

Participants in the study were 143 upper-level students enrolled in business courses at a public university. Sixty-one (42.7 percent) of the participants were female and 82 (57.3 percent) were male. Ages of the participants ranged from 20 to 52 with an average of 24.67 years. Grade point averages (GPA) ranged from a low of 1.87 to a high of 3.92, with a mean GPA of 3.05 on a 4.0 scale.

RESULTS OF THE STUDY

Table 1, which follows, summarizes the familiarity of business students with the thirty-three selected words. The words are listed in order of familiarity. The score indicates the number of students who correctly recognized the word. The percentage was calculated by taking the number of correct responses and dividing by the number of survey respondents.

Each of the thirty-three words was taken directly from the selected issue of *Business Week* and described as correctly used by the jury of academicians. Higher scores represent a higher level of familiarity with the word; lower scores represent a lower level of familiarity.

The highest levels of familiarity were with the words "daunting" (78%), "precariously" (75%), and "abyss" (72%). The lowest levels of familiarity were with the words "winnow" (19%) and "tony" (10%). None of the words was familiar to all business students, and only thirteen of the thirty-three words were recognized by at least half of the students.

Table 1

Frequency of Word Recognition

Rank	Target Word	**Frequency of Correct Responses**	**Percent of Correct Responses**
1	Daunting	111	78%
2	Precariously	107	75%
3	Abyss	103	72%
4	Fret	95	66%
5	Evocative	88	62%
6	Vaulting	86	60%
7	Purging	86	60%
8	Dire	85	59%
9	Porous	83	58%
10	Exacerbated	83	58%
11	Myriad	81	56%
12	Whiff	78	55%
13	Juggernaut	71	50%
14	Tenuous	70	49%
15	Eclectically	66	46%
16	Starkly	64	44%
17	Deluging	60	42%
18	Malaise	56	39%
19	Heft	56	39%
20	Edgy	49	34%
21	Fratricidal	47	33%
22	Maelstrom	44	31%
23	Hyperbole	41	29%
24	Hidebound	40	28%
25	Foundering	39	27%
26	Cannily	39	27%
27	Contagion	33	23%
28	Zipless	33	23%
29	Rout	31	22%

30	Plaudits	29	20%
31	Tranche	28	20%
32	Winnow	27	19%
33	Tony	14	10%

DISCUSSION OF FINDINGS

The findings from this study present several interesting points for consideration by those who have selected a career as a marketing sales rep in the health care industry. Effective communication is important in all aspects of life and crucial in some. There will, in all likelihood, be great differences in familiarity with general words used in popular publications such as *Business Week.* Unfamiliarity with general words can lead to communication breakdowns, misunderstandings, loss of credibility, and even embarrassment.

Health care marketing reps will be communicating on a number of different levels with health care providers and office managers/staff members who are current customers or prospective customers, competitors, and those within their own company. It is important to select and correctly use appropriate words for the various receivers of your message. Appropriate vocabulary in one situation may not necessarily be appropriate in another. For example, the vocabulary used when the receiver is the health care provider may be somewhat elevated over that which is used with the office staff.

CLOSING COMMENTS

It is hoped that the results of this study will be a "call for action" by both health care marketing reps as well as those responsible for training and managing these reps. Several suggestions and recommendations follow.

Marketing reps should read materials that their current and prospective customers are reading. Extra effort should be made to learn the meanings and uses of unfamiliar words. This is an important step in building a generalized vocabulary. This can be carried a step further in that the health care marketing rep can be building an industry-specific vocabulary at the same time.

Additionally, attention should be given to the vocabulary used by and with current and prospective customers. Word selection should be determined by the situation and the receiver. It is important to use appropriate words to make the sales presentation and to close the sale; however, it is equally important to avoid words that have the potential to confuse, intimidate, or embarrass the customer or client.

Although it is reasonable to assume that recent college graduates are educated, motivated, trainable, and literate, it is important to remember that each is an individual who has different strengths and weaknesses as well as a different level of familiarity with general words. It is also reasonable to assume that, because of these anticipated traits or characteristics, they will be successful in their attempts to improve their vocabulary if they are willing to expend a little effort.

HOW COLLEGES AND UNIVERSITIES CAN BENEFIT BY SUPPORTING NATIONAL SKILL STANDARDS IN MANAGEMENT AND MARKETING COURSES

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INTRODUCTION

National Skill Standards are an integral part of today's management process. There just are not any unskilled jobs in marketing. The managers and supervisors we are educating in our colleges and universities today should be aware of the need for skill standards, how to develop skill standards and how to recognize when new skills are needed. The basic case in point is the rapidly changing production methods both from the machinery standpoint and the highly sophisticated skills needed to program, operate and maintain the equipment. National Skill Standards Council is in the process of setting standards that can also be used to improve education and training in colleges and universities, schools as well as at companies.

Those who are really interested in setting marketing skill standards are destined to be the first to be criticized for pioneering national skill standards for marketing. It is long overdue and there are many hurdles that must be overcome.

The marketing industry, be it bending metal, molding plastics, sewing garments, making computer components, or assembling autos has changed so drastically in the past 10 years, even 5 years, that there just are not any unskilled job available. A recent survey showed that in about 4 years less than 15% of the 16 million jobs in manufacturing would be open for the unskilled. Without continuing education and new skills for professors, the current work force, the entry level positions and the displaced workers, there will not be employment for them.

Colleges and universities must take the leading edge of the skill standards. They must educate and train the managers of the next decade to manage and continue to develop the high quality workforce that is needed to compete in a global market.

It's a long way around, but we have been able to determine from interviews and assignments with manufacturers, what their education and training needs are. From our relationship with the Chicago Economic Development Council and other economic development groups, we found that the single most important factor that plant owners demand is a highly skilled work force. Our students must have the

ability to supervise and continually develop the skills of the workers. This highly skilled work force is a key issue for the retention and recruitment of manufacturing in Chicago. And there is no doubt that the same holds true for every part of the country. Stating it as simply as I can, without a highly skilled work force you cannot have an economic development program and there will be little if any retention of your present marketing base. The marketing base includes all phases of marketing.

More accurately stated, we have an excellent start on developing a highly skilled work force. We need skill standards and we need more industry input, and cooperation from the educational delivery system at all levels to insure increased productivity and workers retention.

SKILL STANDARDS ARE NECESSARY AND BEING DENANDED

The most rapid expansions of career tracks are in all phases of marketing. Marketing includes, but is not limited to, food processing, sewing, electronics, and metalworking. This applies to workers and well as managers and executives. We are returning to a marketing society, but in a far different atmosphere than in the 20's and 30's. Each and every job requires highly skilled technician and managers. Today's factory worker no long comes home with oil and grease on his clothes and shoes. Plants are well lit, have been 'greened' and can produce better products in less time than ever before. Plants seek to hire the best employees to operate a machine costing several hundred thousand dollars. At IIT we have the Instrumented Factory for Gears, better known as INFAC. We research, test and improve the machining of parts and have a new process in place called reverse engineering. This is when a worn out part is sent to us and we can measure it, on a $750,000 device, make a drawing on a $15,000 computer, re-measure the drawing against the part, compensate for wear and tear and then mill the part on a $300,000 CNC machine. This is just one example of the skills needed to operate and manage this procedure.

With this high degree of skill comes some type of standard for the position. Another example of needed skills: A particular gear takes about an hour or more for person to deburr. The deburring process is to remove a little burr on any part of the gear. To operate properly the gear must be able to mesh with the drive train or another gear. At INFAC (at IIT) there is a robot that will do the job faster (about 15 minutes), more accurately (to about 1/10,000 of an inch), and can work all day, will not have a fight with its spouse and doesn't smoke or take coffee breaks. The question I would like to ask you: "Is this robot going to replace a worker?" Many say yes.

Wrong, this will not replace any workers. In fact it will increase the working team. There will be three highly skilled people on the robot team. One computer programmer, one to maintain the robot and an operator, plus a manager who has the skills to manage this operation. Granted the robot team can service eight machines, but each person does a specific job and can help each other. Job training and skill training adds value to the employee in the form of job security and value to the company as a productive employee. Managing highly skilled workers requires a new type of educational module.

SKILL STANDARDS CAN BENEFIT THE COLLEGE AND UNIVERSITY

Skill standards can benefit both the community colleges and universities as both a recruitment tool and a retention tool. The best advertising for recruitment is a student body that is trained and skilled well enough to find and hold employment and enter a career track at their employment and at a college. Look at the private schools. Their claim to fame is that they train people and the people can get good jobs. It has been proven time and time again that better trained and educated students get better jobs and better job opportunities bring better students to a college.

Another point to consider in this age of high tuition for colleges is the potential of employers giving tuition reimbursement. Employers may offer tuition reimbursement only if there are well trained students who can become skilled workers. We are back to skill standards again and again.

The schools should consider that a well trained student becomes a giving member of the alumni. A company that received value from his local school is more apt to be a contributor and a resource as well. A

school that can demonstrate that it can produce a well trained student can consider offering corporate training both at the college and on site at a corporate location.

There is an important factor in dealing with the schools. Often a manufacturer will ask that the curriculum be changed. This is an unusual hardship on the school administration. The process involves the instructor, the department head, the dean of the school, the faculty review committee and up to the state level for final approval. It easy to understand if you work in a academic setting that to effect a curriculum change requires several layers of approval and a few years of paper work and processing.

In reality, changing a few modules in a course and bringing them 'up to date' may not require a change in the entire curriculum. The upgrading of a few classes of a specific course may not require layers of approvals.

As an example, a course in business administration did not have any modules on marketing. We submitted and wrote three modules to be inserted into the course. One module was the history of marketing with another module on the economic contributions of marketing to our society. A third module was on the future of marketing.

BRIDGING THE GAP BETWEEN ACADEMICS AND THE JOB MARKET

Each management course should support all phases of the marketing constituency and help set training goals, but we have to incorporate the skill standards so the students who become employees or managers are not limited to a specific job or industry or location.

A Business Advisory Council can benefit the school from several points of view: including increased job and internship opportunities. Other contributions can include obtaining needed resources, financial support and recruitment of students. There is the opportunity for special off site instruction. A closer relationship with businesses offers countless means of support.

SUMMARY

The need for skill standards is a major concern of industry and should be a key factor in every college and university.

Economic development is an essential element of our national growth. Retention and recruitment of businesses to remain in the area is dependent upon a highly skilled and well developed workforce.

Schools must understand that the key to a school's retention and expansion program is based on if students can use their learned skills to enter a career track and an academic track.

Working with industry schools need additional programs and revision of some modules in specific courses. New modules need to be developed to meet the demands of the rapid growth of advanced technology.

Setting skill standards is a key element to continued economic growth.

Working with economic development councils will support the manufacturers and the community.

Skill standards need to installed on all levels, from high schools to community colleges and approved and mandated by the state education department as soon as possible. Skills will always change and need to be updated. Getting accepted on all levels is necessary.

Students of management who enter an executive career track will be required to assess the skills of the workers and will need to continually evaluate new skill standards as new machinery, technology and new marketing processes are developed.

McKee, Keith and Field Jerry. Report to Advisory Council Manufacturing and Management IIT March 1999.

Field, Jerry Report to Manufacturing Skills Standard Council, March 1998.

Darnell, Dale Why Do I Have to Learn This, 1995. CORD, Waco, Texas

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Getting Along with Community Colleges

A few helpful hints

1. Look at established programs and courses
   Getting a new course or a completely revised course usually takes a great deal of time, and the course could be out dated before its approved. Our program has looked at existing courses to add a module or four to the course. This will not need complete approval, clearing with department heads and dean is usually a rapid process. The development of a Business Administration 111 course has four classes covering the history of skill standards, the use of skill standards, the application in business and marketing of skill standards and the future of having skill standards and professionalism.

2. Presentable workable program with industry input
   It is necessary to keep the program up to date to have industry input. This will train the students with the skills they need to be employable.

3. Consider a certificate program leading to a for credit degree
   Having short adult education courses serves a two fold purpose. Most employees can handle a short 7 week course one night a week. This course can be transferable to a credit program. This increases the potential student base that can enter and complete a degree program.

4. Establish an intern training program to prepare students
   Some firms will not be receptive to having interns, as the student do not come with the skills needed to be productive. By having an advisory board the member can tell you what skill the intern must have to obtain an internship.

5. Have industry establish internships - mentor and evaluate
   Associations and trade groups can be helpful in setting up internships and apprenticeships and other work study programs. I would also suggest that the unions not be overlooked. Most unions are in need of some type of training program and have in the past been reluctant to work with college as they did not produce skill trained individuals. Educated, but not skill trained. A skill training program might get their attention.

REFERENCES

Business Week. December 21, 1998.

Business Week. July 12, 1999, p116-118.

Newsweek, July 19, 1999, p43.

HOW MARKET-ORIENTED IS THE NEXT GENERATION OF MANAGERS? A BASELINE MEASUREMENT

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ABSTRACT

Increasingly, research has established a relationship between market orientation and organizational performance. This study develops a model to expand the scope of market orientation measurement to include business administration students as a stakeholder group, and provides a baseline measurement of student market orientation. A survey of 386 undergraduate principles of marketing students indicates overall student market orientation is weak. Results indicate the degree of student market orientation varies significantly between individual components of market orientation, with student market orientation being weakest in terms of market-based pricing.

Additionally, the moderating effects of eight variables on student market orientation were examined. Although the moderating effect of each variable varies according to individual components of market orientation, five variables including grade point average and domestic versus international student status demonstrate moderating effects.

INTRODUCTION

Market orientation occupies a central position in marketing and strategic management literature. During the last decade, market orientation has been the subject of an increasing number of empirical studies (Kohli & Jaworski, 1990; Narver & Slater, 1990; Jaworski & Kohli, 1993; Slater & Narver, 1994; Greenley, 1995; Siguaw, Brown, & Widing, 1994; Pelham, 1997; Kumar, Subramanian & Yauger, 1998; Siguaw, Simpson & Baker, 1998; Han, Kim & Srivastava, 1998). Market orientation research has primarily followed four general themes (Greenley & Foxall, 1998): instrument development, instrument testing, measuring market orientation's main effects on performance, and measuring the impact of external moderating variables on the relationship between market orientation and performance.

Market orientation studies typically collect behavioral data, from senior management and other key employees of organizational strategic business units where the focus is on customer and competitor stakeholder groups. Current research represents a void with respect to collecting individual market orientation data from stakeholder groups other than customers and competitors. The void is particularly acute with respect to undergraduate and undergraduate business students. This lack of research exists even though there is an implicit assumption stakeholder orientation is positively associated with firm performance (Greenley & Foxall, 1998). Consequently, the potential significant impact other stakeholder groups' market orientation has on firm performance has been relatively ignored.

The purpose of this exploratory study is two folds in nature. First, this study seeks to develop a conceptual framework for broadening the scope of market orientation measurement to include undergraduate business students as a stakeholder group. Second, this study strives to provide a baseline measure of market orientation principles of marketing students bring to their first formal marketing course. Data pertaining to students' initial levels of market orientation will enable faculty to develop and implement teaching strategies that will increase overall student market orientation. This study is one of the first to address the issue of student market orientation and as such, makes a significant contribution by developing a model that expands the scope of market orientation research, increases awareness of College of Businesses' responsibility to produce market-oriented graduates, and calls for student market orientation to be utilized as a measure of teaching effectiveness.

LITERATURE REVIEW

Although the precise definition of market orientation has been the subject of significant discussion (Shapiro, 1988; Day, 1998), most attempts to define the construct stem from conceptualizations of the marketing concept (Siguaw, Simpson & Baker, 1998). Further, most attempts to define market orientation tend to incorporate elements Kohli and Jaworski's (1990, p.6) definition which views market orientation as: *".....the organizationwide generation of market intelligence pertaining to current and future customer need, dissemination of the intelligence across departments, and organizationwide responsiveness to it."*

Presentation of market orientation research for literature review purposes is classified according to four main themes: instrument development, instrument testing, market orientation's effect of performance, and moderating variable effect.

Instruments designed to measure market orientation have been developed by several researchers. Kohli and Jaworski (1990), Narver and Slater (1990), and Kohli, Jaworski, and Kumar (1993) are among the earliest researchers to develop market orientation scales. Additional scales have been developed by Siguaw, Brown, and Widing (1994), Deshpande, Farley, and Webster (1993), as well as Deng and Dart (1994). Best (1997) has developed an instrument for measuring individual managers' market orientation.

Instrument refinement, and subsequent evidence of validity and reliability, has been reported by Jaworski and Kohli (1992) and Deng and Dart (1994). Deshpande and Farley (1996) examined the scales developed by Narver and Slater (1990), Kohli, Jaworski, and Kumar (1993), and Deshpande, Farley, and Webster (1993) and concluded each scale correlates with performance data. Best's (1997) instrument has undergone extensive empirical validity and reliability examination. Kumar, Subramanian, and Yauger (1998) refined and revalidated Narver and Slater's (1990) scale. Perhaps the most comprehensive examination of validity and reliability issues relating to market orientation instruments has been performed by Wrenn (1997). Wrenn's research provides guidelines for appropriate utilization of categorical, Likert, and Thurstone scales for measuring market orientation.

Several studies have examined whether environmental variables mediate the relationship between market orientation and firm performance. Demand-side and supply-side variables moderating business performance were identified by Kohli and Jaworski (1990). Hart and Diamantopoulos (1993) identified competitive hostility as a moderating variable on sales growth. Slater and Narver (1994) established limited support for a moderator role of competitive environment on the market orientation-performance relationship. The path from market orientation to profitability and share has been described an "indirect" by Pelham (1997). Market turbulence and technological change exhibit moderator effect on organizational performance (Greenley, 1995). The role of technical and administrative innovations as a

mediator of the market orientation-performance relationship was confirmed by Han, Kim, and Srivastava (1998). Moderator variables have also been identified by Pelham and Wilson (1996), Appiah-Adu (1997), and Greenley and Foxall (1998).

The relationship between market orientation and organizational performance has been extensively researched. Organizational performance, like market orientation, has been defined in a variety of ways. Top managers' assessment of a SBU's profitability in terms of return on assets relative to competitors was utilized by Narver and Slater (1990). Kohli and Jaworski (1990) identify return on investment, profits, sales volume, market share, and sales growth as indicators of favorable business performance. Sales growth and new product success, as related to return on assets were cited by Slater and Narver (1994) and indicators of organizational performance. Greenley (1995) identified return on investment, new product success rate, and sales growth as indicators of company performance. Profitability in terms of return of equity, gross margin, and return on investment, was employed by Pelham (1997) to indicate firm performance. Greenley and Foxall (1998) utilized market share, new product success, return on investment, and sales growth to define company performance. Business performance measures were assessed on income growth and return on assets by Han, Kim, and Srivastava (1998).

Initial attempts to measure the market orientation/performance relationship primarily concentrated on large domestic manufacturing based firms (Kohli & Jaworski, 1990; Narver & Slater, 1990; Jaworski & Kohli, 1993; Slater & Narver, 1994). However examination of the literature reveals the scope of research examining the market orientation/performance relationship has been expanded to include a wide variety of industries and countries. A summary of the most significant US studies is presented in Table 1. Table 2 presents a summary of the most significant international studies.

Table 1
Summary of the Market Orientation/Performance Relationship for US Studies

Study	Sample	Relationship
Narver & Slater (1990)	113 SBU's in 1 corporation	Positive
Ruekert (1992)	5 SBU's in 1 corporation	Positive
Jaworski & Kohli (1994)	Sample 1: 222 companies Sample 2: 230 companies	Positive
Slater & Narver (1994)	107 SBU's in 2 *Fortune* 500 firms	Positive
Raju *et. al.* (1995)	176 hospitals	Positive
Pelham & Wilson (1996)	68 firms in various industries	Positive
Pelham (1997)	160 small industrial firms	Positive
Van Egeren & O'Conner (1998)	70 service firms from the 5000,7000, & 8000 SIC categories	Positive
Han, Kim, & Srivastava (1998)	134 banks	Positive
Kumar, Subramanian, & Yauger (1998)	159 various sized hospitals	Positive

Examination of Table 1 reveals extensive support for the positive relationship between market orientation and organization performance. Support for the relationship is exhibited across a variety of large and small firms in various manufacturing and service industries. The positive relationship holds within and between firms and industries.

Table 2
Summary of the Market Orientation/Performance Relationship for International Studies

Study	**Country**	**Sample**	**Relationship**
Deshpande *et. al*. (1996)	Japan	87 companies	Positive
Diamantopoulos & Hart (1993)	UK	50 "quadrads" from various industries	Weak
Au & Tse (1995)	New Zealand Hong Kong	148 NZ & 41 HK hotels	Not identified
Greeley (1995)	UK	240 large companies (various industries)	Not direct
Atuahene-Gima (1996)	Australia	158 manufacturing & 117 service firms	Mixed
Pitt *et. al*. (1996)	Malta & UK	200 Maltese firms from various industries & 161 UK firms	Weak
Appiah-Adu (1997)	UK	59 manufacturing & 51 service firms	Positive
Bhuian (1997)	Saudi Arabia	30 branch banks	Unrelated
Ngai & Ellis (1998)	Hong Kong	73 textile firms	Positive
Greenley & Foxall	UK	Not identified	Positive
Bhuian (1998)	Saudi Arabia	115 manufacturing firms	Positive
Chan & Chau (1998)	Hong Kong	34 children & youth centers	Positive
Hurmerinta-Peltomaki & Nummela (1997)	Finland	400 public sector expert service firms	Positive

Studies presented in Table 2 reveal support for the positive relationship between market orientation and performance. Specifically a positive relationship was identified in seven of the 12 international studies. Although results of these studies are more mixed than for US studies, the positive relationship exits across and within firms, industries, and countries. Collectively, data presented in Tables 1 and 2 demonstrate the robustness of the market relationship between market orientation and firm performance.

In addition to empirical research, several conceptualizations concerning the performance impact of achieving and maintaining a strong market orientation have been offered. Jaworski and Kohli (1993), Slater and Narver (1994), and Greenley (1995) conclude market orientation is a means to achieving a sustainable competitive advantage. One of the most unequivocal assessments of market orientation's impact on business performance is made by Best (1997). Best (1997, p. 5) states: "There is a direct linkage between the strength of a business's market orientation and its profitability. Thus, businesses with a strong market orientation are able to deliver both high levels of customer satisfaction and profitability." Best's position closely mirrors that of Slater and Narver (1994). Slater and Narver conclude: "Becoming and remaining market-oriented are essential to the continuous creation of superior value. In sum, the rebuttable presumption is that businesses that are more market-oriented are best positioned for success under any environmental conditions. Accordingly, being market-oriented can never be negative (p. 53)." Existence of substantial empirical and conceptual demonstration of the market orientation/performance relationship clearly establishes the importance of firms being market-oriented.

CONCEPTUAL FRAMEWORK

A primary thesis of this paper concerns the importance of expanding the scope of market orientation measurement to include undergraduate business students as a stakeholder group. Existing market orientation literature provides support for measuring additional stakeholder groups' market orientation.

Slater and Narver (1992b), Jaworski and Kohli (1993), and Best (1997) address the issue of other stakeholder groups' market orientation. Slater and Narver (1992b) conclude there is much more to being market-oriented than being attuned to customers and being dependent upon the marketing department. Accordingly, importance of the marketing department becomes significantly reduced as all employees become market-oriented. Jaworski and Kohli (1993) indicate it would be useful to compare perceptions of managers and nonmanagers from different levels of an SBU. Best (1997) argues it would not be possible for a firm to have a strong market orientation, unless managers and key employees possess individual market orientations. Consequently, an organization's market orientation is the collective sum of market orientations possessed by individuals comprising the organization.

Jaworski and Kohli (1992), Siguaw, Brown, and Widing (1994), Greenley and Foxall (1996 and 1998), Menguc (1996), and Siguaw, Simpson, Baker (1998) provide empirical support for measuring the market orientation of additional stakeholder groups. Jaworski and Kohli (1992) indicate market orientation increases employees' organizational commitment and *esprit de corps*. Market orientation was found to significantly influence salespersons' job attitudes and customer orientation (Siguaw, Brown & Widing, 1994). Menguc (1996) replicated Siguaw, Brown, and Widing's study and concluded a firm's market orientation impacts salespersons' customer orientation, role conflict, role ambiguity, and organizational commitment. Supplier market orientation affects distributor market orientation, and commitment to the supplier/distributor relationship has a direct effect on distributor trust and perception of cooperative norms (Siguaw, Simpson & Baker, 1998).

Greenley and Foxall (1996) suggest the balance between competitor and customer orientation can be extended by adding employees to the model, and calls for broader investigation of stakeholders' role in strategic alliances. Such a broadening will result in understanding of advantages that can be obtained from strengthening associations between customer orientation and orientations to other stakeholder groups. Greenley and Foxall (1998) argue that in order to be successful, firms should address the interests of all stakeholder groups, and achieving effective consumer orientation is partly dependent on orientations to other stakeholder groups. Accordingly, market orientation will be more effective if all employees are educated to recognize marketing as part of their responsibility. As a result of determining different types of stakeholder orientations are associated with different measures of performance, Greenley and Foxall (1998) call for investigation of stakeholder orientation to be expanded to include distributors, suppliers, and other value-chain organizations.

The concept of "distributors, suppliers, and other value-chain organizations" combined with the role individual employees' market orientations play in determining a firm's overall market orientation, provide the linkage for considering business students as appropriate stakeholder groups for measuring

market orientation. The major "suppliers" to American corporations are university-based education programs. In order to continue their position of dominance in this market, business schools must continue to meet the needs of student-executives and their employers (AACSB, 1991). Dubas, Ghani, Davis, and Strong (1998) conclude a customer driven approach in curriculum design enables students to make an immediate contribution to employers.

Compelling support for business schools' role in developing students' market orientation is provided by Narver and Slater (1989, p. 1) when they state: *"The 'superiority' of a market orientation over and internal orientation commands a central place in the teaching and practice of marketing management*." Best (1997) maintains marketing education plays a key role in developing individual market orientations of all employees and managers. That is, individuals with higher levels of marketing education have higher levels of market orientation, and an individual manager's ability to build a stronger market orientation for a business is related to the manager's marketing education. A solid marketing education foundation facilitates building a market-driven business (Best, 1994).

The relationship between marketing education and student market orientation is presented in Figure 1. This relationship provides the basis for expanding the scope of market orientation measurement to include undergraduate and graduate business students.

Figure 1 considers student market orientation, as affected by moderating variables, to be a function of marketing education. Upon employment, student market orientation is modified further by a particular organizational culture. Organizational culture's impact upon student market orientation can be positive, negative, or neutral. The level of individual market orientation students bring to their employment, as modified by corporate culture, becomes the foundation for individual strategy decisions. Although the Figure 1 does not attempt to predict levels of student market orientation, four observations can be made. First, the stronger the level of market orientation students bring to an organization, the stronger the market orientation students retain as employees. Second, student market orientation in conjunction with marketing skills and knowledge become resources to be utilized for strategy formulation and implementation. Third, the stronger the level of individual employee market orientation, the stronger the level of overall organization market orientation. Fourth, the stronger the level of overall organization market orientation, the more successful an organization will be in formulating and implementing, marketing strategies which increase customer/employee satisfaction/retention, and organization performance. The relationship between student market orientation and organization performance presented in Figure 1 can be summarized as follows:

Marketing education, as influenced by moderating variables, is the foundation of student market orientation. Student market orientation, as influenced by organizational culture, is the foundation of individual employee market orientation. Individual employee market orientation drives overall organization market orientation, which drives organizational strategy formulation and implementation. Strategy formulation and implementation drives customer/employee satisfaction and retention, which drives organizational performance.

HYPOTHESES

Interestingly, a literature search reveals a virtual scarcity of research designed to measure students' market orientation. Best (1994) measured marketing attitudes of 600 first-year MBA students at the beginning and end of a marketing management course. Students' average marketing attitude score increased from 88 to 114. The market orientation of the Executive MBA Program at Saint Joseph's University (Philadelphia) was measured by Dubas, Ghani, Davis, and Strong (1998). Importance and satisfaction ratings for 12 skills and knowledge areas were obtained from current students and recent graduates. Respondents ranked customer and market focus sixth in importance, but tenth in satisfaction. The authors concluded customer and market focus needed more attention in order to provide the necessary skills and knowledge needed by middle and upper level managers.

A major thrust of this study is to demonstrate the importance of including student market orientation in measuring teaching effectiveness and to foster development of a market-based measure of teaching effectiveness. However, the lack of research designed to examine student market orientation

restricts the ability to utilize empirical research for hypothesis formulation purposes. Consequently, the authors' over 30 years experience teaching numerous undergraduate and graduate marketing and management courses at several accredited public and private Colleges of Business Administration provides the primary basis for hypothesis formulation.

Specifically, unsettlingly low levels of student understanding of fundamental marketing concepts and theories are being observed on a more frequent basis. Although low levels of understanding of marketing are certainly not new, today's increasingly market-driven competitive environment renders such misunderstanding significantly more perilous. This decrease in understanding appears to be applicable to undergraduate and graduate students alike, and is compounded by students' apparent inability to think strategically. This lack of knowledge and an inability to think within a marketing strategy framework tends to be revealed in students' statements concerning marketing mix variables. Most marketing faculty have probably heard such statements as: Marketing equals advertising/selling. Advertising equals promotion. Marketers employ marketing "schemes" to "lure" consumers into buying "things" consumers do not need. Advertising causes prices to increase. Price is determined by costs. A firm's market is defined in terms of the product/service it produces. Form utility is superior to time, place, and/or possession utility. Such statements tend to reflect students' true level of market orientation and provide the basis for the following primary research hypothesis:

H1: Principles of marketing students' initial overall market orientation is low.

In order to adequately evaluate the initial level of market orientation principles of marketing students' possess, hypotheses were developed for each component of market orientation. Analysis of these hypotheses provides data necessary for developing teaching strategies that strengthen student market orientation.

Students have typically completed three to six hours of course credit in accounting and economics prior to taking principles of marketing. In fact, principles of accounting and economics are usually prerequisites for principles of marketing. As a result of this exposure to accounting procedures dealing with cost (expense) concepts and microeconomic price theory, the following hypothesis is offered for student market orientation with respect to market-based pricing.

H2: Principles of marketing students' initial market orientation is low with respect to market-based pricing.

During the past decade markets have become increasingly competitive and as a result individual firms and industries have become more market-driven. This, combined with a shift in channel power from manufactures to retailers has resulted in consumers being exposed to increasing numbers of marketing strategies designed to implement relationship marketing. The changing market place has placed increasing emphasis on customer satisfaction. Consequently, the following hypothesis with respect to customer focus is offered:

H3: Principles of marketing students' initial market orientation is strong with respect to customer focus.

The concept of strategic planning has significantly influenced management and marketing texts and courses during the past two decades. The focus of strategic planning concerns a firm's ability to maintain a strategic fit between the firm's resources and an increasingly changing external environment. A primary component of the external environment concerns the actions of competitors. Business students are exposed to the role competition plays in affecting organizational marketing strategies numerous times during their academic careers. However, students often receive their first exposure to the strategic planning model in a principles of marketing course. Therefore, student appreciation for competition and other uncontrollable variable tends to be developed after enrollment in principles of marketing. This situation results in the following hypothesis being offered with respect to competitor orientation:

H4: Principles of marketing students' initial market orientation is low with respect to competitor orientation.

At the time of enrollment in principles of marketing, students have typically completed multiple courses in economics and accounting. These courses provide students with significant exposure to profit's role in ensuring organizational survival. Factors of production, matching of expenses and revenue, profit maximization, and short-run versus long run equilibrium are a few of the profit-related concepts students

encounter prior to enrolling in principles of marketing. Consequently, the following hypothesis is offered with respect to profit orientation:

H5: Principles of marketing students' initial market orientation is strong with respect to profit orientation.

The importance of team based management techniques have received increased attention in academia and industry. Team-based projects have replaced individual case analyses and other individual projects. Platform teams, team selling, and matrix management are team-based methods organizations employ to facilitate strategy formulation and implementation. However, student exposure to, and experience with, team approaches tends to be somewhat limited prior to enrollment in principles of marketing and other junior level courses. This limited exposure results in the following hypothesis with respect to team approach:

H6: Principles of marketing students' initial market orientation is low with respect to team approach.

Figure 1 indicates moderating variables affect the level of student market orientation. In order to test for the impact of moderating variables, several corollary hypotheses are presented. Although empirical research is somewhat limited, support for such hypotheses development is provided in the literature. Best (1997) measured the individual market orientation of over 2,500 managers in 30 *Fortune 500* firms. Variation in market orientation was, in part, explained by differences in marketing education, marketing knowledge, job function, marketing experience, need for marketing training, and familiarity with marketing tools and concept. Specifically, Best's research indicates individual market orientation was highest for managers with higher levels of marketing knowledge, education, and experience. Conversely, managers with lower levels of market orientation were more likely to be in nonmarketing jobs, be less familiar with marketing concepts, and need marketing training. These results provide the basis for development of eight hypotheses with respect to moderating variable influence on student market orientation.

Although not an indicator of marketing knowledge, student grade point average is assumed to be related to student market orientation. Specifically, the relationship between GPA and market orientation is summarized as follows:

H7: Principles of marketing students' initial overall market orientation is positively related to overall grade point average.

Higher levels of marketing experience are assumed to be associated with higher individual market orientation. Thus, the following hypothesis is presented:

H8: Principles of marketing students' initial level of overall market orientation is positively related to employment "marketing relatedness."

Formal marketing education is considered to have a moderating effect on individual marketing education. That is, individual market orientation tends to increase as formal education increases. Therefore, the relationship between student market orientation and student classification (junior versus senior) is expressed as follows:

H9: Principles of marketing students' initial overall market orientation is positively related to student classification.

Individual market orientation is deemed to be related to academic discipline. Thus, students majoring in marketing should demonstrate higher levels of market orientation than students majoring in other disciplines. The relationship between academic discipline and student market orientation is hypothesized as follows:

H10: Principles of marketing students' majoring in marketing possess higher initial levels of overall market orientation than nonmarketing majors.

In order to fully develop the exploratory nature of this study, the presence of additional moderating variables is examined. Additional hypothesized moderating variables pertain to gender, part-time versus full-time student status, day versus evening student status, and domestic versus international student status. Accordingly, the following hypotheses are presented:

H11: Principles of marketing students' initial overall market orientation is independent of gender.

H12: Principles of marketing students' initial overall market orientation is independent of full- versus part-time student status.

H13: Principles of marketing students' initial overall market orientation is independent of day- versus evening-student status.

H14: Principles of marketing students' initial overall market orientation is independent of domestic versus international student status.

METHODOLOGY

In order to accomplish the objective of this study, market orientation data were collected from 420 undergraduate principles of marketing students enrolled marketing and management courses during a Fall semester at a North Texas, AACSB accredited, College of Business Administration. Thirty-four questionnaires with missing responses were eliminated from consideration, resulting in a usable sample of 386 respondents.

In order to reduce the effect of initial student adds and drops on course enrollment, questionnaires were administered during the class period corresponding to either the university official census date, or the first class period immediately after the census date. Census date enrollment is often referred to as 12th or 14th day enrollment.

Although several market orientation instruments have been developed, the instrument developed by Best (1994) was adopted for this study. The instrument consists of 15 Likert-type, seven-point, marketing attitude statements. Collectively, the statements are designed to measure five components (dimensions) of individual market orientation (Best 1997). These dimensions of individual market orientation are (1) customer focus, (2) competitor orientation, (3) profit orientation, (4) market-based pricing, and (5) team approach. Narver and Slater (1990), as well as, Kumar, Subramanian, and Yauger (1998) identified five dimensions (components) of market orientation.

Utilization of attitude statements to measure market orientation is supported in the literature. Ames (1970) discusses the importance of achieving attitude change to ensure market needs are given principal importance. Masiello (1988) indicates market orientation is often not achieved because the necessary attitudes are not established. Greenley (1995a) concludes market orientation is about a set of attitudes designed to create and enhance customer value. Wrenn (1997, pp. 35-38) examined 32 published market orientation/concept studies. Of the studies reviewed, attitude was the focus of measurement for five studies. Attitude and behavior was the focus of measurement for eight additional studies. Ngai and Ellis (1998, p. 124) state "…scholars *concerned with market orientation generally measure those attitudinal behavioral variables which are presumed to reflect this underlying culture*."

For the purposes of this study, the most significant reason for adopting Best's market orientation instrument concerns the instrument's objective of measuring individual, not organizational, market orientation. Market orientation studies typically measure organization market orientation by collecting behavioral data from CEO's, managers, and other key employees of a particular firm. With respect to measuring student market orientation, collection of firm specific behavioral data, is considered to be inappropriate. Therefore, a market orientation instrument designed to secure "firm-neutral" data is a more appropriate choice for measuring student market orientation.

Instrument reliability was evaluated by using Cronbach's coefficient alpha (Churchill, 1979). Results of this analysis are presented in Table 3. The overall coefficient alpha of 0.6028, for the individual market orientation variable, exceeds the threshold of 0.50 to 0.60 recommended by Nunnally (1967). Alpha values for deletion of individual scale items are also presented in Table 3. Alpha values associated with 11 items are lower than the overall coefficient alpha and alpha values for the remaining four items are very close to the overall coefficient alpha value. These results indicate scale reliability would be not improved by eliminating scale items, and are consistent with Churchill's recommendation (1979, p. 68). Additional support for instrument reliability is provided by an extensive two-year study designed to text and validates the instruments' ability to measure marketing attitudes (Best, 1994).

Table 3
Instrument Reliability Analysis

Scale Item	Item to Total Correlation	Alpha if Item Deleted
If you pay attention to today's details in delivering good customer solutions, the future will take care of itself.	0.1940	0.5936
Since business knows technology better than customers, it is business' job to tell customers what they want.	0.3735	0.5577
Customer value is a nice corporate slogan, but what customers really want is low price.	0.4428	0.5425
Changes in customer satisfaction precede changes in revenue.	0.0849	0.6079
Knowing a competitor's positioning is more important in setting price than costs and margins.	0.3335	0.5686
When costs go up 10 percent, customers have to expect that prices must go up.	0.1860	0.5937
A marketing strategy that meets customer requirements and is cost effective will succeed regardless of a competitor's strategy.	0.2553	0.5820
Cross-functional teams play an important role in developing a market-based strategy	0.0146	0.6140
Keeping customers satisfied pays off in the long run, even if that means less profits in the short run.	-0.0383	0.6191
Engineers, manufacturing managers, and people in finance can play a key role in developing and implementing marketing strategies.	0.0491	0.6150
Marketing plans are nice exercises, but do not carry much relevance to what goes on in the market where firms compete for customers' purchases	0.3320	0.5681
It's fine to talk about the long term, but what's really important is quarterly profits.	0.4470	0.5457
Team-generated strategies are generally poorer than individually generated marketing strategies.	0.1600	0.5980
Benchmarking competitors is a nice exercise, but is of little use in developing a marketing strategy.	0.3037	0.5770
Price is set in the marketplace independent of margins and costs.	0.2263	0.5876
Coefficient alpha for instrument: 0.6028		

Reliability analysis was also conducted on the hypothesized moderating variables using Cronbach's coefficient alpha and is presented in Table 4. The overall coefficient alpha for moderating variables of 0.5463 is within the range of acceptable values suggested for early stages of basic research Churchill (1979, p.68). Alpha values for deletion of individual hypothesized moderating variables are also presented in Table 4. Alpha values associated with seven moderating variables are lower than the overall coefficient alpha and the remaining six alpha values are very close to the overall coefficient alpha, thereby providing additional support for hypothesized moderating variable reliability.

Table 4
Hypothesized Moderating Variable Reliability Analysis

Moderating Variable	Corrected Item Total Corr.	Alpha If Item Deleted
Course Enrollment	0.3466	0.5063
Classification	0.2971	0.5170
Undergraduate major	0.4600	0.4378
Graduate major	0.4470	0.4443
Gender	0.0700	0.5476
Full-time or part-time student	0.0645	0.5480
Day or night student	0.3425	0.5190
Employment Status	-0.2012	0.5678
Marketing related employment	0.1100	0.5589
Number of previous undergraduate marketing courses	0.3379	0.4988
Number of previous graduate marketing courses	0.3872	1.4903
Overall GPA	0.0628	0.5751
International student	-0.2813	0.5648
Coefficient alpha value for moderating variables	**0.5463**	

ANALYSIS AND RESULTS

The individual components of market orientation provide the framework for analyzing the extent of student market orientation. For each market orientation component, the mean value of all scale items comprising the component was computed and utilized as the component's "score." Market orientation scores were measured on a scale of zero to 100. A mean value of zero corresponds to strongly not market-oriented, and a mean value of 100 corresponds to strongly market-oriented. A mean value of 50 corresponds to the scale neutral point. Moderately not market-oriented and slightly not market-oriented correspond to mean values of 16.7 and 33.3 respectively. Mean values of 66.7 and 83.3 correspond to slightly market-oriented and moderately market-oriented respectively. Data pertaining to the mean values for individual components of market orientation for principles of marketing students are presented in Table 5.

Table 5

Mean Values* for Individual Components of Market Orientation

Component	Mean Score
Market-Based Pricing	35.7
Customer Focus	60.3
Competitor Orientation	62.5
Profit Orientation	64.9
Team Approach	74.9
Overall Mean	59.7

*Mean values have a potential range of zero to 100. Higher mean values represent stronger levels of market orientation. n=386

STUDENT MARKET ORIENTATION

Responses to the 15 attitude statements from undergraduate students enrolled in principles of marketing were analyzed for hypotheses testing purposes.

The mean value for overall market orientation for principles students is 59.7 and lies in the neutral to slightly market-oriented interval. Principles of marketing students' overall market orientation is considered to be low**.** These results provide support for H1. Additional support for H1 is provided by examining the mean scores for each component of market orientation. Mean scores for customer focus, competitor orientation, and profit orientation are in the neutral to slightly market-oriented interval. The mean score for market-based pricing is in the neutral to slightly not market-oriented interval. The mean values associated with these individual components of market orientation provide support for H1.

Principles of marketing students' mean value for market-based pricing is 35.7 and is in the neutral to slightly not market-oriented interval. Consequently, principles students' initial market orientation with respect to market-based pricing is considered to be very low. These results support H2.

The mean value associated with principles students' customer focus is 60.3 and lies in the neutral to slightly market-oriented interval. These results indicate principles students' initial market orientation with respect to customer focus is low. H3 is not supported.

Principles students' mean value for competitor orientation is 62.5. This mean value is in the neutral to slightly market-oriented interval. Principles of marketing students' initial market orientation with respect to competitor orientation is considered to be low. These results do not support H4.

The mean value for principles students' profit-orientation is 64.9 and is in the neutral to slightly market-oriented interval. These results indicate principles students' initial overall market orientation is considered to be low with respect to profit orientation. These results do not support H5.

Principles students' mean value for team approach is 74.9. This mean value is in the slightly to moderately market-oriented interval and indicated principles students' initial overall market orientation is moderate with respect to team approach. H6 is not supported.

MODERATING VARIABLES

Hypotheses 7 through 14 predict student market orientation is influenced by several moderating variables. Data pertaining to moderating variable influence are presented in Table 6.

Table 6
Moderating Variable Impact on Student Market Orientation

Variable	Dimension	F Value	Prob.
Grade Point Average	Market-Based Pricing	3.03	.00
	Customer Focus	0.70	.69
	Competitor Orientation	1.75	.08
	Profit Orientation	4.39	.00
	Team Approach	2.75	.00
Employment Marketing Relatedness	Market-Based Pricing	0.82	.55
	Customer Focus	0.87	.52
	Competitor Orientation	3.14	.00
	Profit Orientation	1.76	.11
	Team Approach	2.90	.00
Classification	Market-Based Pricing	6.45	.00
	Customer Focus	1.95	.10
	Competitor Orientation	5.48	.00
	Profit Orientation	9.24	.00
	Team Approach	6.17	.00
Major	Market-Based Pricing	0.92	.50
	Customer Focus	1.10	.36
	Competitor Orientation	2.15	.03
	Profit Orientation	3.70	.00
	Team Approach	1.02	.42
Gender	Market-Based Pricing	8.30	.00
	Customer Focus	1.59	.21
	Competitor Orientation	0.50	.48
	Profit Orientation	2.35	.13
	Team Approach	1.08	.30
Full-time/Part-time student	Market-Based Pricing	5.56	.02
	Customer Focus	0.27	.61
	Competitor Orientation	4.14	.04
	Profit Orientation	4.47	.03
	Team Approach	0.00	.96
Day/Night student	Market-Based Pricing	5.54	.00
	Customer Focus	0.05	.95
	Competitor Orientation	7.46	.00
	Profit Orientation	5.94	.00
	Team Approach	3.87	.02
Domestic/International Student	Market-Based Pricing	0.49	.49
	Customer Focus	13.04	.00
	Competitor Orientation	9.30	.00
	Profit Orientation	7.41	.00
	Team Approach	0.02	.88

Hypothesis seven assumes a positive relationship between overall GPA and initial student market orientation. This positive relationship is supported for the market-based pricing (p=.00), profit orientation (p=.00), and team approach (p=.00) components of student market orientation. The relationship is not supported for customer focus (p=.69) and competitor orientation (p=.08) These results support H7.

A positive relationship between employment marketing relatedness and initial student market orientation is assumed by H8. Customer focus (p=.52), market-based pricing (p=.55), and profit orientation (p=.11) do not support this relationship. Competitor orientation (p=.00) and team approach (p=.00) support this relationship. These results do not support H8.

H9 assumes a positive relationship between student classification (junior versus senior) and initial student market orientation. A positive relationship is supported for competitor orientation (p=.00), market-based pricing (p=.00), profit orientation (p=.00), and team approach (p=.00). Customer focus (p=.10) does not support the relationship. H9 is supported by these results.

H10 suggests marketing majors will posses higher levels of initial market orientation than nonmarketing majors. This relationship is supported by the competitor orientation (p=.03) and profit orientation components (p=.00). Customer focus (p=.36), market-based pricing (p=.50), and team approach (p=.42) do not support the relationship. H10 is not supported.

Initial student market orientation is assumed to be independent of gender (H11). This relationship is supported by the customer focus (p=.21), competitor orientation (p=.48), profit orientation (p=.13), and team approach (p=.30) components. Market-based pricing does not support the relationship (p=.00). H11 is supported by these results.

H12 assumes initial student market orientation is independent of full-time/part-time student status. Customer focus (p=.61) and team approach (p=.96) support this relationship; competitor orientation (p=.04), profit orientation (p=.03), and market-based pricing (p=.02) do not. H12 is not supported.

Day/evening student status and initial student market orientation are assumed to be independent (H13). Customer focus (p=.95) supports this relationship; competitor orientation (p=.00), market-based pricing (p=.00), profit orientation (p=.00), and team approach (p=.02) do not. These results do not support H13.

H14 suggests international/domestic student status and initial student market orientation are independent. Market-based pricing (p=.49) and team approach (p=.88) support this relationship. The relationship is not supported by customer focus (p=.00), competitor orientation (p=.00), and profit orientation (p=.00). H14 is not supported.

DISCUSSION

The purpose of this exploratory study is to develop a conceptual framework for expanding the scope of market orientation measurement to include undergraduate business administration students, and to provide a baseline measurement of market orientation students bring to their first formal marketing course. Evidence is provided for accomplishment of this purpose.

Results of this study indicate undergraduate students bring low levels of initial overall market orientation to principles of marketing. Although a measurement of initial overall market orientation is useful, more meaningful insight is provided by examining students' market orientation with respect to each individual component of market orientation. Principles students' market orientation is low with respect to the market-based pricing, customer focus, competitor oriented, and profit orientation components.

Results concerning principles students' initial overall market orientation tend to be consistent with expectations. Principles of marketing is the first, and for many students, the only, exposure they receive to the marketing concept. Consequently, intuition suggests initial student overall market orientation would be low. These results demonstrate the critical role principles of marketing plays in undergraduate students' curricula.

Results concerning initial student market orientation in terms of individual components of market orientation are consistent for market-based pricing and inconsistent for the remaining four components of market orientation. Heavy student exposure to accountings' and economics' emphasis on the role of cost in determining price was expected to influence market-based pricing. Relatively low levels of initial market orientation with respect to customer focus and profit orientation are not consistent with expectations. Perhaps the effects of generation X's attitudes toward "big business" are being revealed in these data.

Results concerning competitor orientation and team approach were not expected. Although students probably are not readily aware of the speed at which competition impacts a firm's growth and marketing strategies, students apparently recognize that firms operate in markets characterized by varying degrees of competitive intensity. That is, competition is a fact of life, and principles students recognize it. Team approach is the individual component of market orientation with perhaps the most unexpected results. Certainly senior level students receive considerable opportunity to participate in team-based projects and assignments. However, experience with teamwork should be fairly limited for principles students. The robustness of the team approach component, though unexpected, is very interesting.

Moderating variable influence on student market orientation with respect to overall grade point average and student classification are consistent with expectations and the framework provided by Best (1994 and 1997) and Narver and Slater (1989). However, the apparent lack of moderating influence in terms of employment marketing relatedness is inconsistent with Best (1994 and 1997). Clearly, results concerning academic major's lack of moderating influence on student market orientation are inconsistent with expectations.

Gender's independent relationship with student market orientation is consistent with expectations. The lack of independence between student market orientation and full- and part-time status, as well as, day/night student status is consistent with expectations. Similarly, the lack of independence between domestic/international student status and market orientation is consistent with expectations concerning cultural differences between countries.

IMPLICATIONS

This study provides significant implications for marketing education and educators. Results indicate that in terms of initial market orientation, not all components are created equal. Consequently, if market-oriented graduates are to be produced, classroom-teaching strategies should be adjusted to devote appropriate attention to each individual component of market orientation. Also, given the role of market orientation in impacting organizational performance, measurement of student market orientation should be included in measurements of teaching effectiveness for principles of marketing courses.

The relatively low levels of initial overall student market orientation indicate the need for marketing educators to closely examine what is being taught in the classroom, as well as how it is being taught. Although improvement in each individual component of market orientation is needed, this need is particularly important in terms of customer focus and market-based pricing. From a marketing education's viewpoint, producing graduates who are less than slightly market-oriented in terms of customer focus is very disturbing. Clearly, a strong customer focus should be one of the most important concepts undergraduate students learn in a principles of marketing course. The low ranking of customer focus indicates market faculty should devote additional resources to improving students' understanding of a strong customer focus' role in developing and implementing successful marketing strategies.

From a revenue and profit perspective, market-based pricing's poor ranking is cause for concern, given price is the only marketing mix variable directly producing revenue. Market-based pricing is the weakest individual component of student initial market orientation and is primarily responsible for initial overall student market orientation being low. Clearly, attention must be devoted to examining how pricing concepts and theory is being taught in principles of marketing courses. Accounting and economics have been successful in instilling cost's role in determining price. Marketing must devise teaching methodologies that provide principles students with a thorough understanding and appreciation of market-based pricings' role in firm profitability.

Moderating variable results provide insight into development of more effective teaching strategies, course development, and curriculum design. Utilizing differences in variables such as GPA, full/part-time status, day/night status, domestic/international status will enable marketing educators to develop and implement teaching strategies that will produce greater uniformity between individual components of market orientation and higher levels of overall student market orientation.

Results indicating marketing majors do not have higher levels of initial market orientation are of particular interest. Unequivocally, marketing majors should have higher levels of market orientation than nonmarketing majors. Absence of such a relationship for principles demonstrates the critical role principles of marketing plays in marketing majors' formal marketing education.

LIMITATIONS AND ADDITIONAL RESEARCH

There are several limitations associated with this study. First, the findings presented here tend to be institution specific and cannot be generalized beyond this study. Second, the measurement of initial overall student market orientation was taken on the official census date. This date may have been too late because students had been exposed to approximately two weeks of course material and this may have overstated initial overall student market orientation. This potential overstatement would be greatest for the customer focus and profit orientation components. The first class period is probably a more appropriate measurement date. Third, the instrument employed for market orientation measurement purposes appears to be "weak" in terms of reliability. Therefore, low student market orientation may be instrument and not respondent related. Additional empirical testing of the instrument is needed. Fourth, an after measurement of overall student market orientation should have been taken to determine the extent to which students' market orientation changed during their principles of marketing course

Due to the exploratory nature of this study, additional research in several areas is needed. Studies examining the importance of expanding the scope of measuring student market orientation need to be conducted in a variety of academic institutions. Studies need to be conducted in public, private, accredited, and non-accredited colleges of business administration. Studies utilizing before and after measurement on the same respondents are needed to improve measurement of changes in student market orientation. Similarly, studies employing more appropriately timed before and after measurements of student market orientation need to be conducted. Such studies will allow changes in overall market orientation and individual components of market orientation to be utilized for measuring teaching effectiveness.

Additional studies examining moderating variable influence on student market orientation are needed. This is especially true with respect to the relationship between academic major and student market orientation. Studies designed to measure changes in student market orientation within principles of marketing courses are needed and would be a valuable means of measuring the effectiveness of particular teaching methodologies in increasing student market orientation. Additional research is needed to empirically test the reliability of the instrument employed in this study. Research is needed to develop an instrument specifically designed to measure student market orientation. Studies concentrating on individual market orientation components, especially market-based pricing, are need to develop more effective ways of teaching marketing concepts and theories.

REFERENCES

AACSB (1991), "Executive Education Current Enough?" *Newsline*, Volume Twenty-One, Number Four, 1991, 10-13.

Ames, B. Charles (1970), "Trappings Versus Substance in Industrial Marketing," *Harvard Business Review*, Volume Forty-Eight, July/August 1970, 93-102.

Appiah-Adu, Kwaku (1997), "Market Orientation and Performance: Do the Findings Established in Large Firms Hold in the Small Business Sector?" *Journal of Euromarketing*, Volume Six, Number Three, 1970, 1-26.

Atuahene-Gima, Kwaku (1996), "Market Orientation and Innovation," *Journal of Business Research*, Volume Thirty-Five, 1996, 93-103.

Au, Alan.K.M. and Alan.C.B.Tse (1995), "The Effect of Marketing Orientation on Company Performance in the Service Sector: A Comparative Study of the Hotel Industry in Hong Kong and New Zealand," *Journal of International Consumer Marketing*, Volume Eight, Number Two, 1995, 77-87.

Best, Roger J. (1994), "Determining the Marketing IQ of Your Management Team," *Drive Marketing Excellence*, November 1994, Institute for International Research, New York, NY.

Best, Roger J. (1997), Market-Based Management: Strategies for Growing Customer Value and Profitability, Upper Saddle River, NJ: Prentice Hall, 1997.

Bhuian, Shahid, N. (1998), "An Empirical Examination of Market Orientation in Saudi Arabian Manufacturing Companies," *Journal of Business Research*, Volume Forty-Three, 1998, 13-25. (1997),

"Exploring Market Orientation in Banks: An Empirical Examination in Saudi Arabia," *The Journal of Services Marketing*, Volume Eleven, Number Five, 1997, 317-328. Chan, Ricky Yee-Kwong, and Alice Chau (1998),

"Do Marketing-Oriented Children and Youth Centres (CYS's) Perform Better: An Exploratory Study in Hong Kong," *Journal of Professional Services Marketing*, Volume Seventeen, Number One, 1998, 15-28.

Churchill, Gilbert A. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, Volume Sixteen, February 1979, 64-73.

Day, George S. (1998), "What Does it Mean to be Market-Driven," *Business Strategy Review*, Volume Nine, Spring 1998, 1-14.

Deshpande, Rohit and John U. Farley (1996), "Understanding Market Orientation: A Prospectively Designed Meta-Analysis of Three Market Orientation Scales," Marketing Science Institute Working Paper No. 96-125. Cambridge, MA: Marketing Science Institute, 1996. and Frederick E. Webster, Jr. (1993),

"Corporate Culture, Customer Orientation, and Innovation in Japanese Firms: A Quadrad Analysis," *Journal of Marketing*, Volume Fifty-Seven, Number One, 1993, 23-37.

Dubas, Khalid M., Waqar I. Ghani, Stanley Davis, and James T. Strong (1998), "Evaluating Market Orientation of an Executive MBA Program," *Journal of Marketing for Higher Education*, Volume Eight, Number Four, 1998, 49-59. Greenley, Gordon E. (1995),

"Forms of Market Orientation In UK Companies," *Journal of Management Studies*, Volume Thirty-Two, Number One, 1995, 47-66. (1995),

"Market Orientation and Company Performance: Empirical Evidence From UK Companies," *British Journal of Management*, Volume Six, 1995, 1-13. and Gordon R. Foxall (1998),

"External Moderation of Associations Among Stakeholder Orientation and Company Performance," *International Journal of Research in Marketing*, Volume Fifteen, 1998, 51-69. and (1996),

"Consumer and Nonconsumer Stakeholder Orientation in U.K.Companies," *Journal of Business Research*, Volume Thirty-Five, 1996, 105-116.

Han, Jin K., Namwoon Kim, and Rajendra K. Srivastava (1998), "Market Orientation and Organizational Performance: Is Innovation a Missing Link?" *Journal of Marketing*, Volume Sixty-Two, October 1998, 30-45.

Hart, Susan and Diamantopoulos, Adamantious (1993), "Linking Market Orientation and Company Performance: Preliminary Work on Kohli and Jaworski's Framework," *Journal of Strategic Marketing*, Volume One, Number Two, 1993, 93-122.

Hurmerinta-Peltomaki, Leila and Niina Nummela (1997), "Market Orientation for the Public Sector Providing Expert Services for SMEs," *International Small Business Journal*, Volume Sixteen, Number Two, 1997, 69-83.

Jaworski, Bernard J. and Ajay K. Kohli (1993), "Market Orientation: Antecedents and Consequences," *Journal of Marketing*, Volume Fifty-Seven, July 1993, 53-70.
and (1992),

"Market Orientation: Antecedents and Consequences," Marketing Science Institute Working Paper No. 92-104. Cambridge, MA: Marketing Science Institute, 1992.

Kohli, Ajay K. and Bernard J. Jaworski (1990), "Market Orientation: The Construct, Research propositions, and Managerial Implications," *Journal of Marketing*, Volume Fifty-Four, April 1990, 1-18., and Ajith Kumar (1993),

"MARKOR: A Measure of Market Orientation," *Journal of Marketing Research*, Volume Thirty, Number Four, 1993, 467-477

Kumar, Kamalesh, Ram Subramanian, and Charles Yauger (1998), "Examining the Market Orientation-Performance Relationship: A Context-Specific Study," *Journal of Management*, Volume Twenty-Four, Number Two, 1998, 201-33.

Masiello, Thomas (1998), "Developing Responsiveness Throughout Your Company," *Industrial Marketing Management*, Volume Seventeen, 1998, 85-93.

Menguc, Bulent (1996), " The Influence of the Market Orientation of the Firm on Sales Force Behavior and Attitudes: Further Empirical Results," *International Journal of Research in Marketing*, Volume Thirteen, 1996, 277-291.

Narver, John C. and Stanley F. Slater (1990), "The Effect of a Market Orientation on Business Profitability," *Journal of Marketing*, Volume Fifty-Four, October 1990, 20-35. and (1989),

"The Effect of Market Orientation on Business Profitability," Marketing Science Institute Working Paper No. 89-120. Cambridge, MA: Marketing Science Institute, 1989.

Ngai, Jimmy, Chan Hung, and Paul Ellis (1998), "Market orientation and business performance: some evidence from Hong Kong," *International Marketing Review*, Volume Fifteen, Number Two, 1998, 119-39.

Nunnally, Jum C. (1967), Psychometric Theory, 2nd ed. New York: McGraw-Hill, 1967.

Pelham, Alfred M. (1997), "Mediating Influences On The Relationship Between Market Orientation and profitability In Small Industrial Firms," *Journal of Marketing Theory and Practice*, Summer 1997, 55-76.and David T. Wilson (1996),

"A Longitudinal Study of the Impact of Market Structure, Strategy, and Market Orientation Culture on Dimensions of Small-Firm Performance," *Journal of the Academy of Marketing Science*, Volume Twenty-Four, Number One, 1996, 27-43.

Pitt, Leyland, Albert Caruana, and Pierre R. Berthon (1996), "Market Orientation and Business Performance: Some European Evidence," *International Marketing Review* Volume Thirteen, Number One, 1996, 5-18.

Raju, P.S., Subhash C. Lonial, and Yash P. Gupta (1995), "Market Orientation and Performance in the Hospital Industry," *Journal of Health Care Marketing*, Volume Fifteen, Number Four, 1995, 34-41.

Ruekert, Robert W. (1992), "Developing a Market Orientation: An Organizational Strategy Perspective," *International Journal of Marketing*, Volume Nine, 1992, 225-245.

Shapiro, Benson P. (1988), "What the Hell Is 'Market Oriented'?" *Harvard Business Review*, Volume Sixty-Six, Number Six, 1988, 119-23.

Siguaw, Judy A., Gene Brown, and Robert E. Widing, II (1994), "The Influence of the Market Orientation on Sales Force Behavior and Attitudes," *Journal of Marketing Research*, Volume Thirty-One February 1994, 106-116. , Penny M Simpson, and Thomas L. Baker (1998),

"Effects of Supplier Market Orientation on Distributor Market Orientation and the Channel Relationship: The Distributor Perspective," *Journal of Marketing*, Volume Sixty-Two, July 1998, 99-111.

Slater, Stanley F. and John C. Narver (1994), "Does Competitive Environment Moderate the Market Orientation-Performance Relationship?" *Journal of Marketing*, Volume Fifty-Eight, January 1994, 46-55.and _ (1992a),

"Market Orientation, Performance, and the Moderating Influence of Competitive Environment," Marketing Science Institute Working Paper No. 92-118. Cambridge, MA: Marketing Science Institute, 1992. and (1992b),

"Superior Customer Value and Business Performance: The Strong Evidence for a Market-Driven Culture," Marketing Science Institute Working Paper No. 92-125. Cambridge, MA: Marketing Science Institute, 1992.

Van Egeren, Marsha and Stephen O'Connor (1998), "Drivers of Market Orientation and Performance in Service Firms," *Journal of Services Marketing*, Volume Twelve, Number One, 1998, 39-58.

Wrenn, Bruce (1997), "The Market Orientation Construct: Measurement And Scaling Issues," *Journal of Marketing Theory and Practice*, Summer 1997, 31-54.

INITITAL FOREIGN MARKET ENTRY STRATEGIES AND REVERSION TO HOME MARKET CENTERED STRATGIES OVER TIME

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ABSTRACT

Given the continued globalization of markets, it is important to understand the nature of new market entry strategies and determine how strategies change over time. Based on this perspective, the authors present a descriptive overview of marketing strategies used by 196 companies, as reported by managers, located in Hong Kong, who reported on international marketing activities for entering foreign markets. The companies can be characterized as mostly small to medium sized firms with more than half having less than fifty employees. The majority of the firms engaged in re-exporting for fifty percent or more of their business activities. Three-quarters of the companies were independently owned Hong Kong companies and ten percent were foreign owned. The companies covered six export product categories: clothing and textiles, electronics, watches and clocks, jewelry, plastic products and printed materials,

The initial foreign market entry strategies varied from the Hong Kong home market strategies and were designed to gain a competitive advantage in the selected foreign markets. Using a split ballot approach, managers were asked to report on their experiences in entering a pre-assigned foreign market. The foreign markets were United States and Canada, China, other Asian Countries and Western European Countries. Data was collected on eleven strategic elements covering the extent of changes from the home market marketing activities when first entering a foreign market, the extent of the differences for each element of the marketing activities at the time of data collections and the importance of each marketing element for success – each measured on a five point scale. The market entry strategies varied across product categories and foreign markets.

The data provides a profile of the different initial strategies used to enter foreign markets compared to home strategies and current foreign market strategies compared to home strategies and that over time, foreign market strategies become indistinguishable from current home market strategies. This change was reflected across the six product categories and markets.

INTRODUCTION

During the past 10 to 15 years two topics that have been of fundamental interest to researchers are global marketing standardization or adaptation (Levitt, 1983; Samiee and Roth, 1992; Szymanski, Bharadwij, and Varadarajan, 1993) and export marketing. In order to be able to assess export marketing behavior, attention has been directed to export performance (Brooks and Rosson, 1982; Cavusgil and Nevin, 1981; Cavusgil, 1984; Madsen, 1987; Samiee and Roth, 1992).

Levitt (1983) argued that world markets were becoming homogeneous and, thus, global. This meant that in order for a company to reap the benefits of such a marketplace, standardized marketing activities and strategies would be needed. If such markets did indeed exist, it was believed that companies

using standardized strategies would outperform companies using adapted strategies by either economies of scale or managerial experience. Reporting on an empirical test of this relationship in the early 1990s, Samiee and Roth (1992, p. 1) summarize their findings as follows: "…in the critical area of performance, no difference is observed between firms stressing global standardization and others." More recently, Cavusgil and Zou (1994) found a positive relationship between export performance and product adaptation but an unanticipated--by them--moderate and inverse relationship between performance and promotion adaptation. Szymanski, Bharadwij and Varadarajan (1993) examined the extent to which it would be desirable for companies to standardize their strategic resource mix across marketing mix variables when serving multiple Western markets. Their findings show that the strength and form of the relationships between the various marketing mix, other competitive strategy, market structure, and business performance factors are relatively similar across the U.S., U.K., Canadian, and Western European markets. In short, a standardized approach of resource allocation evoked similar performance responses from these markets. Transference, on the other hand, is viewed as being on a continuum ranging from total-transfer to no-transfer-at-all. More formally, we define transference, for operational as well as conceptual purposes, *as the extent to which a marketing activity or strategy is performed the same in a foreign market compared with the market where it comes from, usually the home market.*

There are some basic advantages in extending (i.e., transferring) marketing activities and strategies in such a way. First, it may be very hard to generate successful tactics and strategies routinely. If a company can successfully transfer something to as many foreign markets as possible, there will be a saving in the time and effort that otherwise would have to be devoted to searching for "new" ways to do things. Second, direct transfer can lead to lower cost of developing and implementing marketing activities. Finally, some managers may be more comfortable in handling their duties if they are less complex and varied. But, there also is the risk that transfer may not work out as intended. First, the nature of foreign environments differ and may be harder to understand than the home market environment. Also, if management does not fully understand why its domestic strategy has been successful, i.e., there is no model or theory explaining its success--it will be risky to extend to less familiar foreign markets.

Transfer and standardization are different in that transfer is concerned with how marketing activities arrive in a foreign market while standardization is an end result where activities are performed the same in a set of foreign markets. A company may transfer marketing activities and strategies and yet not have a fully standardized marketing approach unless it does this in all markets. In contrast, it is possible for a company to have standardized operations in foreign markets, yet not have these developed on the basis of transfer from the home market, or from any other market. The major purpose of this paper is to illustrate that companies, overtime, tend to modify their initial foreign market entry strategies to match home market strategies.

PRIOR RESEARCH ON TRANSFERENCE

Prior research on the transfer phenomena has been concerned primarily with advertising and marketing communications. Dunn (1966) used case studies to examine the transfer of successful domestic advertising campaigns to foreign markets. This was followed by a laboratory experiment testing potential factors that affect the success of advertising campaigns' transference (Schleifer and Dunn, 1968). Later, Dunn (1976) conducted a study on the transfer of marketing strategy, which in reality was concerned with promotional strategy. Killough (1978) studied advertising transference by conducting depth interviews with more than 60 senior managers.

Two articles made important conceptual contributions to the transference issue. Sheth (1978) discussed eight advertising transference strategies based on three dimensions: (1) the expectations (i.e., benefits expected) people use to evaluate a product class; (2) the mechanics of encoding and decoding of communications as reflected in the media; (3) the "silent language," as used in the background for advertising messages. In contrast, Keegan (1969) proposed five strategic alternatives for expansion into foreign markets on the basis of the extension or adaptation of the product and communications variables.

The most recent study is one that examined transfer behavior of Danish exporting companies (Shoham and Albaum, 1994). The study looked at the extent of transfer of marketing methods and

activities and the relationship of such transfer with alternative measures of export performance. Seven marketing variables were examined, and export performance was defined as "the composite outcomes of the export sales of the exporting companies" (Shoham and Albaum, 1994, p. 226). The performance composite was based on three dimensions: (1) sales, (2) growth, and (3) profitability. Each dimension was operationally measured by multiple indicators. For example, profitability was measured by perceptual measures such as satisfaction with meeting expectations about profit. One overall finding is that companies that transfer marketing strategies and activities from one market to another do not perform as well as companies that adapt for each market separately. This relationship holds regardless of the type of product and the cultural distance between the countries.

The present study differs from that of Shoham and Albaum (1994) in that the number of marketing activities to be examined is expanded, a different sample of companies is studied, and the market areas covered are broadened.

METHODOLOGY

A survey of managers responsible for international marketing activities was conducted in Hong Kong, which during the 1990s has been consistently ranked among the world's top fifteen trading economies. Firms there actively export a wide spectrum of products to all the world's major regional markets.

The original sample of companies was selected randomly by the Hong Kong Trade Development Council, the agency of the Hong Kong Special Administrative Region Government that facilitates Hong Kong's external activities, from their database of all exporters (about 1,500) actively involved in Hong Kong's six major export product categories--clothing and textiles, electronics, watches and clocks, jewelry, plastic products, and printed materials. Only companies with at least 5 people in the firm were included in the original sample of 400 companies.

A "modified" mail survey technique was used to study adaptation of marketing strategies in foreign markets. A four-contact process was used for data collection: 1. A letter was sent as a preliminary notification of the survey, 2. A few days later a telephone call was made to solicit participation and to ensure that the proper person was being contacted as a potential respondent, 3. Questionnaires were then mailed to all those who indicated a willingness to participate and return were to be by mail and 4. After a period of two weeks, a follow-up contact was made with respondents, including another questionnaire.
This process resulted in responses from 196 companies yielding a response rate of 49%. This response rate exceeds what has been reported in the literature for similar populations (Fraser and Hite, 1990; Samiee and Roth, 1992; Shoham and Albaum, 1994).

MEASUREMENT

Eleven items were used to measure transfer of marketing activities presented in Table1.

TABLE 1
Marketing Variables Used to Measure Transference

Product Strategy	Distribution Strategy
Product Design	Product Quality
Pricing Strategy	Service Strategy
Advertising/Promotion Strategy	Marketing Research
Personal Selling Practices and Strategy	Product Function
	Product Function

Within a context of a specific foreign market, respondents were asked to indicate the extent to which they changed each marketing variable from that used in the domestic market when *first entering* the market, using a five-point scale (1=very significant change, 5=no change). Similarly, respondents reported the extent to which each variable was being performed *today* differently than that for the domestic market, using the same five-point scale. Finally, perceived importance of each of the 11

activities in the success of company operations in the specific market was reported using a five-point scale (1=very significant, 5=none).

A split ballot approach was used to obtain the responses. Each respondent was assigned randomly to respond for one of the following market areas: China, USA/Canada, Western Europe Countries, Asia (other than China). If a company did not have any operations in the assigned market area, it was free to choose any market; the company was asked to indicate for which foreign market it was responding.

RESPONDING COMPANY CHARACTERISTICS

The companies can be characterized as small and medium-sized. More than one-half of the companies had less than 50 employees. Responding companies range in age from less than five years to more than 100 years, with the mean age being 12.7 years. More than three-fourths of the respondent firms were independent-owned Hong Kong companies and less than 10% were subsidiaries of foreign-owned companies. The vast majority (65%) reported that at least one-half of their exports represented re-exports, with most coming originally from China.

Slightly more than three-fourths of the respondents were male with 60% having completed at least a university or polytechnic educational program. More than 80% of respondents were Hong Kong Chinese and 70% were at a senior managerial level. There is no evidence from the companies or elsewhere to suggest that individual respondents would not be knowledgeable about initial market entry conditions, particularly since such a high percentage were senior managers.

Since a split ballot approach was used to obtain the desired information about transfer of marketing activities, a question can be raised about differences in characteristics of responding companies and individuals. The distribution of each characteristic was cross-tabulated with market area and contingency tests were conducted. There were significant differences at $p < .05$ only for ownership of company and for decision orientation. Regarding ownership the major difference seems to be that a greater proportion of companies responding for China as their market area were subsidiaries, particularly subsidiaries of foreign companies, than was the case for companies responding for other market areas (see Table 2). As far as decision-making orientation is concerned a greater proportion of companies responding for China and for Western Europe reported being *ethnocentric* in their decision making by being concerned with impact on Hong Kong; *polycentrism* was more prevalent for the market described as Asia Other than China; and companies responding for USA/Canada were most dominantly *geocentric*

TABLE 2
Ownership and Orientation by Market Area

	Percent Distribution			
	China	Other Asia	USA/ Canada	Western Europe
Ownership:				
Independent Hong Kong Company	61.1	78.9	89.7	86.0
Subsidiary of Hong Kong Company	13.0	7.9	2.6	7.0
Subsidiary of Foreign Company	18.5	2.6	2.6	5.3
Joint Venture of HK and Foreign Companies	5.6	5.3	5.1	0.0
Other	1.9	5.3	0.0	1.8
	100.0	100.0	100.0	100.0
Orientation:				
Hong Kong (Ethnocentrism)	40.0	26.5	20.0	42.6
Specific Foreign Market (Polycentrism)	28.0	44.1	17.1	18.5
Group of Foreign Markets (Regiocentrism)	8.0	0.0	11.4	11.1
All Markets (Geocentrism)	24.0	29.4	51.4	27.8
All Companies	100.0	100.0	100.0	100.0

The difference in ownership may not be that surprising since a major reason for foreign companies being in Hong Kong is that it served as a gateway to China, particularly Southern China. Subsidiary companies who were first "assigned" another market area in the sampling process probably did not do business in the assigned area so they responded for China. This might also help explain the distribution of responses by market area since the obtained sample distribution differed from the original sample distribution. Although Hong Kong is under Chinese Sovereignty, it is a Special Administrative Region and many of the "old" relationships with China and elsewhere remains in force.

FINDINGS AND DISCUSSION

Each respondent was asked to indicate for the foreign market area assigned to his/her company (or selected) how the company changed its Hong Kong marketing approach for marketing strategies when first entering that market area (measured on a five point scale with 1=very significant change to 5=no change from home market), the extent to which marketing in that area differs "today" from the domestic market (measured on a five point scale with 1=very significant difference today to 5=no difference from current home market strategies), and how important each activity/strategy is for success (measured on a five point scale with 1=very significant for success to 5=not important to success). These data are shown in Table 3.

TABLE 3
Mean Values of Extent of Transfer and Perceived
Importance to Success*

Marketing Variables	Initial Entry**	Difference Today***		Importance Difference to Success +
Brand Name	2.98	3.00	0.02	2.99
Marketing Research	2.98	2.99	0.01	2.83
Advertising/Promotion Strategy	2.99	2.88	-0.11	2.80
Distribution Strategy	2.83	2.88	0.05	2.74
Personal Selling Practices and Strategy	2.96	2.98	0.02	2.71
Product Function	2.92	3.01	0.09	2.71
Service Strategy	2.68	2.84	0.18	2.34
Product Design	2.45	2.61	0.18	2.30
Product Strategy	2.43	2.58	0.15	2.24
Pricing Strategy	2.13	2.32	0.19	2.01
Product Quality	2.34	2.60	0.26	2.01

*Number of respondents varied from 165 to 181.
**Measured on a scale of 1 - 5 where 1 = very significant change and 5 = no change.
***Measured on a scale of 1 - 5 where 1 = very significant difference and 5 = no difference.
+Measured on a scale of 1 - 5 where 1 = very significant importance and 5 = no importance.

For initial entry into foreign markets, the data in Table 3 show that the greatest change was made in pricing strategy and then in the product (quality, design, and strategy). The least change was in advertising/promotion strategy and then in brand name, marketing research and personal selling practices strategies. Using the data in Table 3, initial entry change and difference today were compared using the t-test for Related Samples. Significant differences were observed for product strategy ($t = 2.22$, $p < .03$), product design ($t = 2.32$, $p < .03$), pricing strategy ($t = 2.43$, $p < .02$), product quality ($t = 3.97$, p .001), and service strategy ($t = 2.89$, $p < .01$). In all cases mean values were greater for extent of difference today, and the greater the mean value the less there is a difference from the domestic Hong Kong market.

There is an interesting pattern in the data in terms of the marketing strategy and its importance to success. The marketing variables that were deemed to be most important to success, had the greatest difference from home market strategies. The two most important strategies were pricing and product quality with product strategy, product design and service strategy following. The least important strategies of brand name and marketing research varied little from home market strategies, followed by advertising/promotion, distribution, personal selling practices and product function strategies. As one might expect, the strategies that were most like the home market strategies changed little over time but what change did take place, reflected a move to being even more similar to the home market strategies except for advertising/promotion strategy. The most important "importance to success" strategies also changed to become more like the home market strategies but with more pronounced changes.

The explanation for pronounced difference between the home market and initial foreign market entry strategies might be that those marketing variables deemed to be important were modified because of the importance of them to potential success whereas the less important variables, if not modified, would have little impact on success. Another possible explanation is, reflecting Levitt's contention, global markets are homogeneous or the global market is becoming more homogeneous over time. Thus the need for unique or modified strategies is not required.

In Table 4, the data shows the difference of initial foreign market entry strategies by market. There are several significant differences between countries. The market entry strategies are significantly different between China and USA/Canada and China and Western Europe for product design. There is a significant difference between China and USA/Canada for personal selling practices strategy as well as a significant difference between China and other Asia countries for brand name strategy.

An interesting pattern emerges from the data. The smallest changes in foreign market entry strategies compared to the home market is China. This would be expected since Hong Kong was strongly tied to China. The largest changes in foreign market entry strategies compared to home market is split between the USA/Canada and Western Europe markets.

TABLE 4
Mean Values of Extent of Change for Initial Market Entry
By Market Area Entered

Marketing Variables	China	Other Asia	USA/ Canada	Western Europe	p(F)	Significant Contrasts
Product Strategy	2.74	2.38	2.44	2.29	.27	
Product Design	2.97	2.61	2.18	2.14	.003	b,c
Pricing Strategy	2.39	2.02	1.91	2.19	.22	
Advertising/Promotion Strategy	3.31	2.89	2.71	3.06	.14	
Personal Selling Practices and Strategy	3.44	2.87	2.58	2.98	.02	b
Distribution Strategy	3.12	2.60	2.85	2.84	.24	
Product Quality	2.64	2.53	2.18	2.06	.054	
Service Strategy	2.83	2.81	2.59	2.52	.43	
Marketing Research	3.17	3.04	2.59	3.04	.11	
Product Function	3.34	2.96	2.71	2.75	.054	
Brand Name	3.37	2.45	3.00	3.17	.01	a

a China – Other Asia contrast
b China – USA/Canada contrast
c China – Western Europe contrast
d Other Asia – USA/Canada contrast
e Other Asia – Western Europe contrast
f USA/Canada – Western Europe contrast

In Table 5, the data shows the difference of initial market entry strategies and home market strategies today by market. There are several significant differences between countries. The market entry strategies are significantly different between China and Western Europe for product strategy. There is a significant difference between China and USA/Canada as well as a significant difference between China

and Western Europe for product design strategy. In addition there are significant differences between China and USA/Canada as well as between China and Western Europe for advertising/promotion strategy.

TABLE 5
Mean Values of Extent of Change for Difference Today
By Market Area Entered

Marketing Variables	China	Other Asia	USA/ Canada	Western Europe	Significant p(F)	Contrasts
Product Strategy	2.97	2.59	2.58	2.32	.04	c
Product Design	3.14	2.67	2.36	2.33	.007	b,c
Pricing Strategy	2.57	2.33	2.18	2.22	.38	
Advertising/Promotion Strategy	3.40	2.81	2.63	2.74	.01	b,c
Personal Selling Practices and Strategy	3.29	2.82	2.70	3.08	.08	
Distribution Strategy	3.29	2.67	2.79	2.84	.07	
Product Quality	2.94	2.73	2.42	2.36	.09	
Service Strategy	3.23	2.91	2.55	2.70	.06	
Marketing Research	3.26	3.02	2.70	2.96	.13	
Product Function	3.22	3.11	2.76	2.92	.28	
Brand Name	3.34	2.66	3.09	3.00	.17	

a China – Other Asia contrast
b China – USA/Canada contrast
c China – Western Europe contrast
d Other Asia – USA/Canada contrast
e Other Asia – Western Europe contrast
f USA/Canada – Western Europe contrast

The same pattern holds for this set of data in that the China market strategy today is most similar to home market strategies. This would be expected since Hong Kong was tied to China. The largest differences compared to today's home market strategies are split between the USA/Canada and Western Europe markets.

In Table 6, the data shows the importance of each strategy across the four markets. There are several significant differences between countries. The importance of the product design strategy is significantly different between other Asia countries for distribution importance and China and Western Europe markets for importance of brand name.

TABLE 6
Mean Values of Importance of Marketing Variable to Success
By Market Area Entered

Marketing Variables	China	Other Asia	USA/ Canada	Western Europe	Significant p(F)	Contrasts
Product Strategy	2.47	2.21	2.22	2.13	.51	
Product Design	2.62	2.59	2.06	2.00	.007	e
Pricing Strategy	2.14	1.98	1.83	2.06	.58	
Advertising/Promotion Strategy	2.97	2.70	3.06	2.59	.18	
Personal Selling Practices and Strategy	3.00	2.69	2.50	2.69	.32	
Distribution Strategy	2.97	2.28	2.89	2.89	.01	a
Product Quality	2.17	2.22	1.83	1.81	.09	
Service Strategy	2.43	2.45	2.15	2.30	.56	
Marketing Research	2.89	2.83	2.78	2.81	.98	
Product Function	2.94	2.70	2.36	2.80	.12	
Brand Name	3.11	2.54	3.36	3.07	.02	c

a China – Other Asia contrast
d Other Asia – USA/Canada contrast

b China – USA/Canada contrast
c China – Western Europe contrast
e Other Asia – Western Europe contrast
f USA/Canada – Western Europe contrast

The pattern for this data is different from the two preceding tables in that the importance of the strategies is more important in the USA/Canada and Western Europe markets compared to China and other Asia markets. This is likely the result of the perceived homogeneity of the China and other Asia countries to the Hong Kong home market.

CONCLUSIONS

Based on the data in table 3, overall, it appears that there is a tendency for the responding companies to "return" to what they "know" best over time. That is, over time many companies appear to be reverting their foreign market marketing program back to that being used in Hong Kong. This conclusion is consistent with past research, especially supporting Levitt's (1983) argument on global homogeneity. In addition, although this research did not investigate the issue of strategies being a macro marketing activity, the authors speculate that what might be different are the more micro marketing activities, namely the tactics used by organizations to execute marketing strategies.

FUTURE RESEARCH

The key issues needing further exploration are the reasons for the differences in initial market entry strategies and why these strategies tend to become more like the home market strategies over time. Another likely important element is the differences in tactics used to execute the marketing strategies. Other related issues, such as, the type of organization structure and foreign market relationships impact on initial and long-term market entry strategies could also be investigated.

REFERENCES

Aaby, N. E. and Slater, S. F. 1989. "Management Influences on Export Performance: A Review of the Empirical Literature 1978-88." *International Marketing Review*, Vol. 6, No. 4, pp. 7-26.

Bonoma, T. V. and Clark, B. H. 1988. *Marketing Performance Assessment*. Boston, MA: Harvard Business School Press.

Brooks, M. R. and Rosson, P. J. 1982. "A Study of Export Behavior of Small- and Medium-sized Manufacturing Firms in Three Canadian Provinces," in Czinkota, M. R. and Tesar, G. (Eds.), *Export Management*. Praeger, New York.

Cavusgil, S. T. 1984. "Differences among Exporting Firms based on their Degree of Internationalization." *Journal of Business Research*, Vol. 12, pp. 195-208.

Cavusgil, S. T. and Nevin, J. R. 1981. "Internal Determinants of Export Marketing Behavior: An Empirical Investigation." *Journal of Marketing Research*, Vol. 18, January, pp. 114-119.

Cavusgil, S. T. and Zou, S. 1994. "Marketing Strategy-Performance Relationship: An Investigation of the Empirical Link in Export Market Ventures." *Journal of Marketing*, Vol. 58, No. 1 (January), pp. 1-21.

Dunn, S. W. 1966. "The Case Study approach in Cross-cultural Research." *Journal of Marketing Research*, Vol. 3, February, pp. 26-31.

Dunn, S. W. 1976. "Effect of National Identity of Multinational Promotional Strategy in Europe." *Journal of Marketing*, Vol. 40, October, pp. 50-57.

Ekeledo, I. and Sivakumar, K. 1998. "Foreign Market Entry Mode Choice of Service Firms: A Contingency Perspective." *Journal of the Academy of Marketing Science*, Vol. 26, No. 4 (Fall), pp. 274-292.

Evangelista, F. U. 1994. "Export Performance and Its Determinants: Some Empirical Evidence from Australian Manufacturing Firms." *Advances in International Marketing*, Vol. 6, pp. 207-229.

Fiegenbaum, A. and Karnani, A. 1991. "Output Flexibility -- a Competitive Advantage for Small Firms." *Strategic Management Journal*, Vol. 12, pp. 101-114.

Fraser, C. and Hite, R. E. 1990. "Impact of International Marketing Strategies on Performance in Diverse Global Markets." *Journal of Business Research*, Vol. 22, No. 3, pp. 249-262.

Ginsberg, A. and Venkatraman, N. 1985. "Contingency Perspective of Organizational Strategy: A Critical Review of the Empirical Research." *Academy of Marketing Review*, Vol. 10, No. 3, pp. 421-434.

Harvey, D. F. 1982. *Strategic Management*. Columbus, OH: Merrill.

Jain, S. C. 1989. "Standardization of International Marketing Strategy: Some Research Hypotheses." *Journal of Marketing*, Vol. 53, January, pp. 70-79.

Kashani, K. 1989. "Beware of Pitfalls of Global Marketing." *Harvard Business Review*, Vol. 67, September/October, pp. 91-98.

Keegan, W. J. 1969. "Multinational Product Planning: Strategic Alternatives." *Journal of Marketing*, Vol. 33, January, pp. 58-62.

Killough, J. 1978. "Improved Payoffs from Transnational Advertising." *Harvard Business Review*, Vol. 56, July/August, pp. 102-110.

Levitt, T. 1983. "The Globalization of Markets." *Harvard Business Review*, Vol. 61, May/June, pp. 92-102.

Madsen, T. K. 1987. "Empirical Export Performance Studies: A Review of Conceptualizations and Findings, in Cavusgil, S. T. (Ed.), *Advances in International Marketing*, Vol. 2, pp. 177-198. JAI Press, Greenwich, Connecticut.

Ohmae, K. 1989. "Planting for a Global Harvest." *Harvard Business Review*, Vol. 67, July/August, pp. 136-145.

Perlmutter, H. V. 1969. "The Tortuous Evolution of the Multinational Corporation." *Columbia Journal of World Business*, Vol. 4, January/February, pp. 9-18.

Samiee, S. and Roth, K. 1992. "The Influence of Global Marketing Standardization on Performance." *Journal of Marketing*, Vol. 56, April, pp. 1-12.

Schleifer, S. and Dunn, S. W. 1968. "Relative Effectiveness of Advertisements of Foreign and Domestic Origin." *Journal of Marketing Research*, Vol. 5, August, pp. 296-299.

Sheth, J. N. 1978. "Strategies of Advertising Transferability in Multinational Marketing," in Leigh, J., Martin, C. R. Jr. and Arbor, A. (Eds.), *Current Issues and Research in Advertising*, pp. 131-141. University of Michigan, Ann Arbor, Michigan.

Shoham, A. 1991. "Performance in Exporting: a State-of-the-Art Literature Review and Synthesis and Directions for Future Research." National Conference of the Academy of International Business, Miami, Florida.

Shoham, A. and Albaum, G. 1994. "The Effects of Transfer of Marketing Methods on Export Performance: an Empirical Investigation." *International Business Review*, Vol. 3, No. 3, pp. 219-241.

Shoham, A., Rose, G. M. and Albaum, G. S. 1995. "Export Motives, Psychological Distance and the EPRG Framework." *Journal of Global Marketing*, Vol. 8, No. 3/4, pp. 9-37.

Stewart, T. A. 1992. "Brace for Japan's Hot New Strategy." *Fortune*, Vol. 126, No. 6, pp. 62-74.

Szymanski, D. M., Bharadwaj, S. G., and Varadarajan, P. R. 1993), "Standardization versus Adaptation of International Marketing Strategy: An Empirical Investigation." *Journal of Marketing*, Vol. 57, October, pp. 1-17.

Wiechmann, U. E. and Pringle, L. G. 1979. "Problems that Plague Multinational Marketers." *Harvard Business Review*, Vol. 57, July/August, pp. 118-124.

Wind, Y., Douglas, S. P. and Perlmutter, H. V. 1972. "Guidelines for Developing International Marketing Strategies." *Journal of Marketing*, Vol. 37, April, pp. 14-23.

Woo, C. Y. Y. and Cooper, A. C. 1981. "Strategies of Effective Low Share Business." *Strategic Management Journal*, Vol. 2, pp. 106-113.

INTERNAL MARKETING APPLICATIONS IN ROMANIA: A CASE STUDY OF A LEADING MANUFACTURER

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ABSTRACT

Internal marketing is a relatively new phenomenon. It was unheard of in the 1970's. Its influence grew after an article in the early 1980's. Internal marketing is basically applying the marketing concept approach to employees. One of the tenets of the marketing concept is a research orientation to determine customer needs and wants and also satisfaction. The employee-attitudinal survey is one of the consequences of this approach. This paper identifies the findings from such study in Romania.

INTRODUCTION

During a professional trip to Romania during July 1998, an opportunity occurred that would entail the need to study the attitudes of employees of Futego, a "large" manufacturer in a Romanian community. This company employed over 1900 persons and was interested in their views about the company. The company was implementing a new program concerning employees and wanted an assessment of the employees' current thinking about the company.

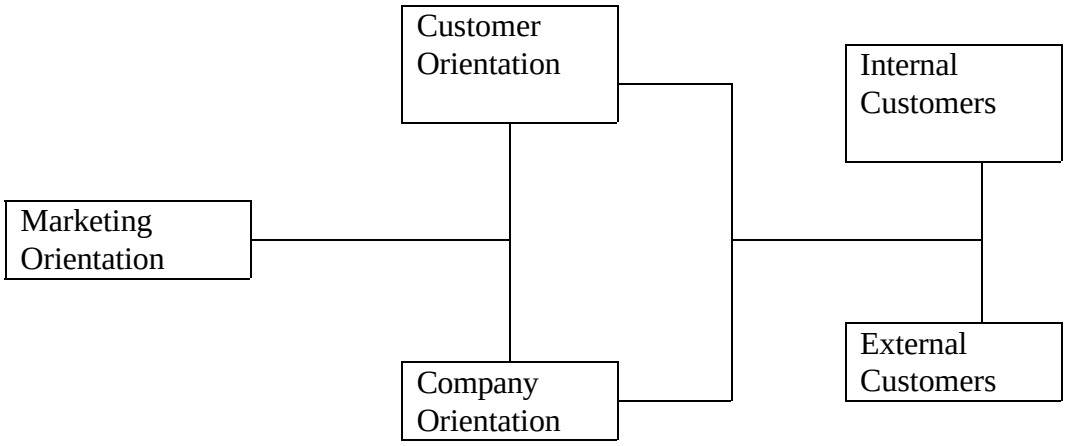
A marketer can take a number of approaches in performing the different marketing functions, whatever they may be. As Figure 1 indicates, one can use a customer orientation or a company focus. A customer orientation indicates that the needs and wants of the customer should be upper most in the marketer's mind when developing products, broad marketing strategies or specific marketing tactics. A company focus indicates that the marketer is more concerned with the needs of company first and the customer becomes an afterthought. This can occur whether or not you are marketing to external customers or your internal customers (employees). Futego wanted to use a customer focus in redesigning its human relation's area.

BACKGROUND

Internal marketing is not a unique phenomenon. It is an application of the marketing concept approach to the internal side of the organization. The person credited with identifying the concepts concerning internal marketing was Leonard Berry in the early 1980's. He studied the employees of a bank and generalized this approach so that others could study the methods and concepts.

People in management have probably studied employee attitudes for decades. People in marketing like to apply their concepts to other areas. The two areas are probably not far apart in their thinking or application. Some companies have adopted an employee attitude perspective. The Shell corporation had over 1100 employees (of different organizations) interviewed concerning their jobs. Different categories of employees were developed: Fulfillment Seekers, High Achievers, Clock Punchers, Risk Takers, Ladder Climbers and Paycheck Cashers. (Who We Are at Work, 1998). But performing these kinds of surveys is not limited to a particular discipline or country. Conducting employee studies is very popular. A review of all of the sources is not the purpose of this article. But they have been listed in the References section.

Figure 1. ALTERNATIVE MARKETING APPROACHES



METHODOLOGY

Two of the authors met with the Human Relations manager for the company, Futego (an assumed name). They identified 10 different areas concerning the problem definition. They determined that the manager was interested in learning about 6 different concepts and about 50 different variables. After reorganizing these concepts and variables, the researchers examined a book containing a number of different studies. This Handbook of Marketing Scales by Bearden and Netemeyer (1994) provided one study that seemed to capture the essence of the concepts and variables that were developed with the manager. This article, "Job Satisfaction of Industrial Salespersons: INDSALES," gave 95 different statements evaluated on a traditional Likert Scale method. Approximately 50 statements from this article were added to 35 other questions to form the first draft of the questionnaire. After much discussion with management, the final questionnaire was administered to the employees during the fall of 1998. Out of 1997 questionnaires that were distributed, 1931 were returned. This excellent return formed the basis of a thorough investigation of the employees' attitudes.

EMPLOYEE ATTITUDES

This sample of respondents is probably fairly representative of a manufacturing situation. In Table 1, we notice that 45% of the employees are between 35 and 45 years old. Also there is an almost equal proportion of those who are 25 to 34 years old and those who are 45 to 54 years old, accounting for 24% and 25% of the total number of employees respectively. Most of the respondents were workers (75%) while managers represented only 3% of the respondents. Clerks accounted for 20% of the surveyed employees while 2% were foremen. The majority of the respondents were men (68%). The employees

are fairly well educated since only 38% have a high school degree or less. Only 14% have a college degree.

TABLE 1. DEMOGRAPHIC CHARACTERISTICS (n=1931)

Age of the Employee

< 25	3%
25 to 34	24
35 to 44	45
45 to 54	25
55 and over	3
Total	100% (n=1882)

Occupation

Worker	75%
Foreman	2
Clerk	20
Manager	3
Total	100% (n=1862)

Gender

Female	32%
Male	68
Total	100% (n=1880)

Education

Middle school	5%
Vocational school	38
igh school	33
Technical school	10
College degree	13
Graduate degree	2
Total	101%

(n=1893)

Employees were asked their extent of agreement concerning statements about their job. Table 2 highlights that more than half of the employees (58%) agree that their work gives them a sense of accomplishment. However, 43% of them consider their job to be routine. Also 58% of the respondents find their work environment satisfactory while about a third of the employees think that their work is stable. However, the majority of the respondents think that more instructions would increase the stability of their job. Only 29% of employees agreed with the statement that their wage is reflecting the importance of their job. About 4 in 10 agreed that they could get training in the field they are interested in. One important area is job appraisal. Almost three-fourths of the employees considered their current job appraisal method to be unfair. Many also feel that their opportunities are very limited.

TABLE 2. EMPLOYEES' ATTITUDES ABOUT THEIR JOBS (n=1901)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My work gives me a sense of accomplishment	9%	14%	19%	48%	10%
My job is a routine	13	21	23	36	7
My work environment is satisfactory.	8	14	21	48	10
My work is stable	14	22	30	28	6
My wage is reflecting the importance of	24	32	16	23	6

my job.					
I can get training in the field I am interested in.	15	26	21	31	7
More instruction increases the stability of my job.	6	12	15	50	17
The current job appraisal method is fair.	17	25	32	22	4
My opportunities for advancement are	11	14	21	40	16

In addition to evaluating their particular job, the employees evaluated the management of Futego. Instead of evaluating their particular boss, the employees were asked about Futego's management in general. A fairly high degree of "neutrality" was present for these questions with a range of 21% to 36%. Only one of the statements was positive by more than 50%of the employees. This focused on the "progressiveness" of management but only 51% felt that management is progressive. The two lowest areas concerned wages. Less than one-fourth of the employees agreed that the wages were higher compared to other companies or that the wage was fair compared to other Futego's employees' wages. It seems that "everyone else" is making more.

TABLE 3. ATTITUDES ABOUT FUTEGO'S MANAGEMENT… (n=1896)

FUTEGO'S MANAGEMENT .	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Really tries to get their employees' ideas.	13%	17%	32%	34%	5%
Is progressive.	10	13	25	42	9
Operates efficiently and smoothly.	11	18	34	31	5
Lives up to their promises	11	15	36	33	6
Does a good job helping employees develop their own potential	15	20	36	24	5
Instills confidence in the fairness and honesty of management.	13	14	30	34	9
Pays wages here are higher compared to other companies around	21	23	32	18	5
Makes my wage fair compared to other Futego's employees' wages	27	28	21	19	5

The employees felt more positive about their supervisors than management in general. At least 53% of the employees felt that their supervisors were helping them live up to their professional potential. This may seem low but is positive given the vast number of employees who felt that advancement opportunities were limited. The next lowest percentage was 68% for management living up to their promises.

TABLE 5. ATTITUDES ABOUT SUPERVISORS. (n=1905)

MY SUPERVISOR . . .	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
has always been fair in dealing with me	6%	8%	15%	54%	18%
did a good job helping ME to develop MY own Professional potential	8	13	26	41	12
Lives up to his promises.	7	8	17	51	17

gets his people to work together as a team	4	7	13	55	20
has a lot of knowledge about his/her departments goals and objectives	4	5	16	48	26

Lastly, the employees were asked about their fellow employees. The majority of the employees said the other employees are sincere, 53%. All other comments about employees were very positive. At least 65% of them said that their peers were responsible, fair, moral, and humorous or friendly. They feel positive about this part of the work environment.

TABLE 6. EMPLOYEE ATTITUDES ABOUT THEIR FELLOW EMPLOYEES (n=1903)

FELLOW WORKERS . . .	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
are friendly	2%	4%	12%	62%	20%
are sincere	3	10	34	40	13
are fair	2	9	30	45	14
Are responsible	2	8	26	51	14
Are moral	2	7	21	56	15
Have humor	2	5	16	55	22

CONCLUSIONS AND RECOMMENDATIONS

In a country that has only recently (since 1989) adopted more of a capitalistic perspective than before, much progress has been made. This organization can be proud of its employee orientation. Yet, much work needs to be performed concerning job appraisal. Standard methods need to be adopted. The Human Relations Department needs to be very employee oriented as it develops new standards and procedures. The employees need to feel that their job is important. Opportunities for advancement must be researched and identified for the employees.

The feeling about management is not very positive right now. The economy of Romania is not very healthy and perhaps the employees are placing the blame for the hard times in Romania on its management. The overall caring attitude of management needs to be reinforced. Newsletters and informational meetings might help. Given the positive feeling about the supervisors, the company might want to communicate information from management about new policies or routine actions through the supervisors. The employees might be more likely to listen to their supervisors.

One aspect of marketing is to allow word of mouth advertising to help "sell your product." The same concept can be applied here. Management should encourage the employees to talk to each about the work conditions. They should be encouraged to "join bowling teams". The management could identify key persons who are opinion leaders and provide more training in human relations. These persons could then share their ideas with others.

In a developing economy such as Romania, views about capitalism and marketing are still somewhat naïve but many companies trying to accept and practice modern business practices. One of these practices focuses on the needs and wants of the customers. When the employees are identified as a set of customers, then marketing can be applied from an internal-customer orientation. This article has

documented the very internal-customer approach used by a manufacturer in Romania. Companies in more developed economies might take note of this manufacturer's approach to employees.

REFERENCES

Adler, P.S. and Borys, B. 1996. Two Types of Bureaucracy: Enabling and Coercive. *Administrative Science Quarterly*, 41: 61-90.

Akaah, I.P. (1992). Social Inclusion as a Marketing Ethics Correlate. *Journal of Business Ethics*, 11 (8): 599-608.

Bearden, W.O. & Netemeyer, R.G. (1994). *The Handbook of Marketing Scales*. Thousand Oaks: Sage Publications, 260-268.

Brayfield, A. H. and Rothe, H. F. (1951). An Index of Job Satisfaction. *Journal of Applied Psychology*, 5: 543-565.

Churchill, G., Ford, N. and Walker, O. (1974). Job Satisfaction of Industrial Salespersons: INDSALES. *Journal of Marketing Research*, 11, 254-260.

Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman/Ballinger.

Grayson, M.A. (1992). Benchmark TQM Survey Tracks a New Management Era in Administration. *Hospitals*, 66(11), 26-27.

House, R. J. (1995). Leadership in the Twenty-First Century: A Speculative Inquiry. In Howard, A. (Ed.), The Changing Nature of Work. San Francisco: Jossey-Bass.

Jauch, L. R.; Glueck, W. F.; and Osborn, R. N. 1978. Organizational Loyalty, Professional Commitment, and Academic Research Productivity. *Academy of Management Journal*, 21: 84-92.

Locke, E. A. (1976). The Nature and Causes of Job Satisfaction. *Handbook of Industrial and Organizational Psychology*, 1297-1349.

Mowday, R. T.; Steers, R. M. and Porter, L. W. (1979). The Measurement of Organizational Commitment. *Journal of Vocational Behavior*, 14:224-247.

Mueller, C. W.; Boyer, E. M., Price, J. L. and Iverson, R. D. (1994). Employee Attachment and Noncoercive Conditions of Work: The Case of Dental Hygienists. *Work and Occupations*, 21(2): 179-212.

Rousseau, D. M. and Parks, J. M. (1993). The Contracts of Individuals and Organizations. In L. L. Cummings and B. M. Staw (Eds.), *Research in Organizational Behavior*, 15: 1-43. Greenwich, Conn.: JAI Press.

Schuler, R. S. and Harris D. L. (1992). *Managing Quality: The Primer for Middle Managers*. Reading, MA: Addison-Wesley.

Slocum , J.W. (1971). A Comparative Study of the Satisfaction of American and Mexican Operatives. *Academy of Management Journal*, 14, 89-97.

Slocum, JW Jr, Topichak, PM. (1972). Do Cultural Differences Affect Job Satisfaction? *Journal of Applied Psychology*, 56, 177-178.

"Who We Are at Work: Six Types of Employee Attitudes," (November 1998). *Workforce*: Workforce Extra Supplement. ACC Communications.

INTERNET AWARENESS, USAGE AND ATTITUDES OF UNIVERSITY FACULTY: A CASE STUDY

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ABSTRACT

The use of the computer and the Internet has grown tremendously during recent years. This is occurring in the more developed countries and in developing countries like Romania. A study of a university's faculty was conducted to determine their usage and attitudes about a variety of computer-related issues. This article highlights those findings.

INTRODUCTION

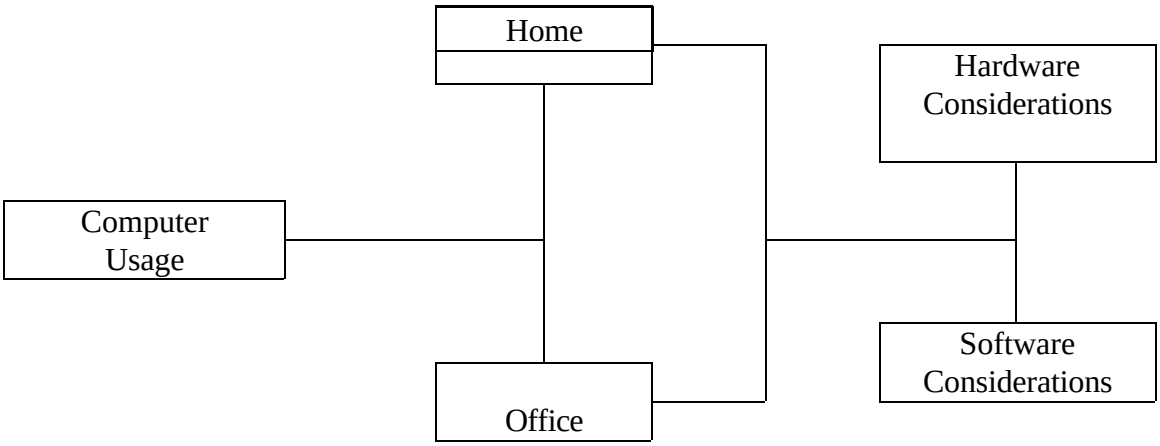
This paper presents results of a study about attitudes and behaviors of 106 faculty members of College of Engineering from "Lucian Blaga" University of Sibiu, Romania during the month of October 1999. The study aimed to determine the computer usage at home and at the office, the degree of Internet awareness, and attitudes about the "in construction" Intranet network, developed by a group of faculty and students, called the Intranet Team. The study had been initiated as a result of the poor response of the faculty toward the necessity of establishing an Intranet network in the College of Engineering and degree of usage of such internal Internet-like networks. Also, the Intranet Team wanted to determine the computer ownership and literacy of the faculty as a means to successfully create and facilitate the use of this network.

BACKGROUND AND METHODOLOGY

No references could be located to identify the software usage and hardware usage of persons in different countries. One set of articles presented at a national Decision Science Conference did address some issues concerning faculty's computer capabilities. See the articles by Bean and Cummings (1997), Bennett (1999), Chou, Yen, and Chang (1997), and Dunning, and Vijayaraman (1997). The relationship investigated in this article is represented by Figure 1 concerning the usage of programs at home and at the office.

The data were collected from the faculty from the College of Engineering, the Lucian Blaga University of Sibiu during the fall, 1999. An attempt at determining faculty attitudes concerning computer usage and attitudes during the spring of 1999 was not successful. Consequently, the questionnaire was restructured and the approach to collecting to gathering the data was revised. At a chair's meeting, the purpose of the study was explained and cooperation was secured from the chairs to distribute the questionnaire. The questionnaires were taken to the departments' secretaries for distribution.

Figure 1. COMPUTER USAGE CONSIDERATIONS



CHARACTERISTICS OF THE SAMPLE

The response rate is given in Table 1. Of the 106 persons who received the questionnaire, 68% of them responded. The total response was 72 answered questionnaires and 10 blank ones. The high response rates of MBT and MT departments was due to the direct involvement of the department heads toward the distribution and gathering of the questionnaires. On the other hand, an unexpected poor response rate was recorded from the CS department. Rivalries among departments may have accounted for this response. It is interesting to notice that a faculty leads the Intranet Project from the Economical-Engineering Department.

TABLE 1. DISTRIBUTION OF RESPONSES.

Department	Dept. Code	# People	Questionnaires Delivered	Questionnaires Received	%
Computer Science	**CS**	20	20	7	**35.0%**
Electrical and Electronical Eng	**EEE**	13	13	8	**61.5%**
Machine Building Technology	MBT	22	21	20	**95.2%**
Machine Designing	**MD**	17	17	11	**64.7%**
Machine Tools	**MT**	15	14	13	**92.9%**
Materials Study and Technology	**MST**	9	9	5	**55.6%**
Economical Engineering	**EE**	12	12	8	**66.7%**
TOTAL			**106**	**72**	**67.9%**

Out of 14 managerial positions in the College and University held by the faculty, only 5 answered the questionnaire (36%). This is interesting since the college's management had initiated the project. The faculty is an experienced faculty since 48% were over 40 years of age. Most of the respondents were men.

TABLE 2. DEMOGRAPHIC CHARACTERISTICS (n=72)	
Age of the Employee 21-30 17% 31-40 35 41-50 29 Over 50 19 Total 100%	**Gender** Female 18% Male 82 Total 100%
Job Classification Managerial 5% NonManagerial 95	

AVAILABILITY OF COMPUTER RELATED EQUIPMENT

From the 72 faculty at the University of Sibiu, we learn that they have access to a computer at home and at the office. All of the monitors were color while 60% of the faculty had an ink jet printer at their homes. Many more faculty members were connected to the Internet at the office than at home, 90% to 44%, respectively. Most of the connections were through Netscape rather than Explorer at both home and at the office.

Three-fourths of the faculty have access to a computer at home and almost four in five have access at the office. But only 14% of the faculty have their own personal computer at the office. The faculty have fairly large hard drives available to them since one-third had a 4 Gigabyte or larger machine. Almost half of them had at least a one Gig machine (up to 4 Gigabytes). About four of every five computers was at least a Pentium machine. Almost all of machines are IBM compatible.

TABLE 3. NATURE OF THE COMPUTER USED AT HOME AND THE OFFICE.		
	Home	**Office**
Ownership of a computer at (n=72)	75%	79%
	(n=48)	
Size of the hard drive. <lG	20%	
1G <4G	46	
4G or >	33	
Brand of the computer IBM	94%	
Macintosh	6	
If IBM compatible, the type of computer < Pentium	19%	
Pentium	59	
Pentium II >	22	
Type of monitor Color	100%	

Ownership of a Printer	65%	
Type of Printer Dot Matrix	23%	
Ink Jet	60	
Laser	18	
Connected to the internet?	44%	90%
Netscape	61	73
MS Internet Explorer	39	28

SOFTWARE USAGE

As indicated in Table 4, the faculty is using Word instead of Word Perfect, both at home and at the office. They prefer Excel to Quattro Pro but Fox Pro was used more than Access. Less than five percent of the faculty did not indicate the usage of any of the programs. Interestingly, about half of the faculty indicated the use of only one program while about 46% used more than one program. It appears that the faculty is computer literate and active.

TABLE 4. KINDS OF PROGRAMS USED AT HOME AND AT THE OFFICE		
	Home	**Office**
MS Word	82%	93%
WordPerfect	19	18
MS Excel	30	33
Quattro Pro	4	2
MS Access	13	12
Fox Pro	32	18
None	2	4
Netscape	61	73
MS Internet Explorer	39	28

ATTITUDES ABOUT THE INTERNET

The faculty was asked about their overall attitudes about the Internet. More than 8 in 10 felt the interest to be useful (85%) with 75% indicating the internet was somewhat or very useful. A similar percentage, 79%, felt that the internet was entertaining with 74% saying somewhat or very entertaining. A slightly lower percentage, 74%, indicated that the internet was easy to use with 70% saying somewhat or very easy. The waiting time in Romania when using the internet is somewhat long. This was supported by the faculty's answers. Only 32% of them indicated that the response time was short with only 16% saying somewhat or very short (quick) response time.

USAGE OF THE INTERNET

The faculty was asked about their use of the internet for a variety of activities. As indicated in Table 5, of the 12 uses, the faculty had used 9 at some time. Only searching for jobs, searching for vacation information and searching for different services had never been accomplished by more than half of the faculty. Searching for a job is very unusual for faculty in Romania. Many tend to teach in a

university in their hometown. Changing universities is not common. Concerning vacations, many people either go to the mountains or to the Black Sea and therefore do not need other information. Only 2 of the 12 activities were searched for on a daily or weekly basis. Another three activities were done by at least 40%.

The faculty is not using the internet in their jobs yet. Over 50% had never used the internet for seven of the nine job related activities. Only "teaching courses" and "obtaining information to prepare for the courses" had been used by more than 50% of the faculty.

When the faculty had used the internet for searching the web, only 2 of the 11 sources had been used by more than 50% of the faculty, "single search engine" and Yahoo. Even though 43% of the faculty had never used Yahoo, it was the most used 'search engine" since 47% had used it daily or weekly.

TABLE 5. USAGE OF THE INTERNET. (n=72).

In general, frequency of use of the Internet for	**Daily/ Weekly**	**Monthly**	**Less than Monthly**	**Never**
Searching for jobs	1%	4%	21%	74%
Searching for vacation information	0	3	32	65
Searching for different services	4	22	22	51
Searching for statistical information	11	17	24	49
E-mailing in Sibiu	35	14	10	42
Entertainment	17	14	29	40
Searching for general purpose information	38	21	14	28
E-mailing in Romania	49	13	13	26
Searching for general teaching interests	43	21	15	21
E-mailing with the rest of the world	46	18	15	21
Searching for general research interests	50	18	13	19
Searching for work related information	57	24	7	13
Frequency of use of the Internet in their job for	**Daily/ Weekly**	**Monthly**	**Less than Monthly**	**Never**
Providing grades	3%	3%	11%	83%
Giving grading criteria	0	6	11	83
roviding course notes	7	1	14	78
Listing assignments	3	7	15	75
Providing course descriptions	8	6	14	72
E-mailing to your students	6	13	18	64
Providing additional readings	11	14	18	57
Teaching courses	22	11	19	47
Obtaining information to prepare for courses.	31	17	22	31
When doing a search, frequency of using	**Daily/ Weekly**	**Monthly**	**Less than Monthly**	**Never**
Magellan	3%	6%	4%	88%

Hotbot	6	4	3	88
Web crawler	6	7	6	82
Infoseek	11	14	8	78
Excite	10	6	8	76
Lycos	13	4	13	71
Specialized searching software	21	8	6	65
Multiple engines	44	7	6	63
Alta Vista	35	10	4	51
A single search engine at the time	33	13	8	46
Yahoo	47	6	4	43

CONCLUSIONS

A faculty at a university in a developing country has access to computers and software that persons in more developed countries have. It would seem that the experience curve is probably about 4 years behind at this university concerning the nature of the computer equipment and type of software used. The faculty does have access to computers and to relatively good computers. They also have access to the internet. But one of the problems in Romania, especially at universities, is the slow response time. One should expect the faculty in a developing country to have access to the world wide web information just like their counterparts in more developed countries.

REFERENCES

Bean,L. and Cummings, M. (1997). An Investigation into the Issues Corporations Are Facing With Intranet Technology. In Proceedings of Decision Sciences Institute, San Diego, California, 627

Bennett, G. (1999). Introducing Intranets. QUE Publishing, Indianapolis, IN.

Chou, D.C., Yen, D.C. and Chang, C. (1997). Developing an Intranet: Tool Selection and Management Issues. In: 1997 Proceedings of Decision Sciences Institute, San Diego, California, 558..

Dunning, K.S., and Vijayaraman, B.S. (1997). Barriers to Entry In The Use Of The World Wide Web For Educational Purposes". In: 1997 Proceedings of Decision Sciences Institute, San Diego, California, 559-561.

INTERNET BANKING – PRESENT AND PLANNED

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ABSTRACT

Five hundred financial institutions in the United States were randomly sampled during this study. The CEOs of those institutions were asked their present involvement with on-line banking and their anticipated level of involvement with on-line banking over the next two years. A 40.6 percent usable response rate was achieved in the study. This paper examines the responses of CEOs of financial institutions regarding present and planned Internet activities.

REVIEW OF THE LITERATURE

In a comparison of banks and discount brokers, Gandy (1998) states that banks are considering how Internet services can be used to increase revenue. Gandy believes the problem with revenue enhancement is that electronic banking services are often either simple electronic bulletin boards or are limited to requesting account balances or transferring funds between accounts. Some early Internet banks acknowledge the revenue enhancement issue and indicate that the Internet is better at building customer relationships than making money (McTague, 1996). Nevertheless, the demographics of the on-line customer cannot be ignored. The average on-line financial service user is 39 years old and makes nearly $60,000 annually. Seventy-seven percent are college-educated, 63 percent have children, and 35 percent are self-employed (Orenstein, 1998). If increasing on-line services can enhance banking revenue, it is the current Internet user who should be the primary target customer. These users are the type of customers financial institutions need to attract to build profitability. Odyssey L.P. (1998), a research firm located in San Francisco, conducted a recent survey of households. In January 1998, American households with personal computers reached 42 percent, up from 31 percent in 1995, an increase of 36 percent. In the same time span households with Internet connections went from 7 percent to 23 percent, an increase of 328.6 percent. McConochie (1998) projected that “PC penetration could achieve 80% by the year 2000.”

Digital Insight's (1997) white paper entitled "Internet Home Banking: Market Penetration and Marketing Methods Study" cites a Booz, Allen, & Hamilton study that found that the Internet is the least expensive means of providing financial services, estimating cost-per-transaction at about a penny, compared to $1.07 for in-branch transactions. This white paper suggests that financial institutions will continue to be driven to reduce costs, and that the Internet now represents the lowest available cost for a

distribution channel. Income enhancement may be achieved by reducing costs or enhancing revenues. Both would increase profitability.

The literature in general indicates that the rush toward PC banking has begun, but no one seems to have directly consulted with banks. The consulting firm of Booz, Allen & Hamilton Inc. of New York surveyed financial institutions with an address on the World Wide Web, but excluded from the study all financial institutions that were not on the web. Thus, the intentions of large and small commercial banks, savings institutions and other institutions that are not on the web are not known. Do these financial institutions plan an Internet presence, and if so, how far toward full service on-line financial capabilities do they intend to go?

PURPOSE OF STUDY

The purpose of this study is to determine the present status and plans of financial institutions regarding an Internet presence. In addition, percieved obstacles to movement onto the Internet are explored.

METHODOLOGY

A questionnaire was mailed to 500 randomly selected CEOs of financial institutions in the United States. This group was targeted because it was felt that CEO's were most likely to know the short-term goals and objectives of their institutions. The survey instrument was numbered and sent to the sample in three different mailings, or until a response was received. Address labels were purchased from an outside research company that randomly generated the names of CEOs of financial institutions in the United States and its possessions. A single page, two-sided questionnaire was developed and tested by a control group for ease of use and understanding. Modifications were made to the questionnaire in response to recommendations from the control group. The questionnaire was first mailed out in August 1998. Mailings were repeated in September and November 1998.

RESULTS AND DISCUSSION

The respondents manage financial institutions of varying size and charters. Responses were examined in an effort to determine an institution's current or intended presence on the Internet within the next two years as well as the type of activity that presence would provide. If the respondents expressed no intention of going onto the Internet, the questionnaire attempted to ascertain why. If the respondent expressed intentions of going onto the Internet, but did not intend to offer full service banking capabilities, again the questionnaire attempted to ascertain why.

Financial institutions were divided into three classifications of involvement, as shown in Table 1. The first classification includes only those institutions that currently have an Internet presence. The second classification represents those institutions that are not presently on the Internet, but are planning to have an Internet presence within two years. The third classification includes only those financial institutions that have no plans to have an Internet presence within two years. Of the 202 responses, 35.1 percent of the respondents are presently on the Internet. Financial institutions that are planning to have an appearance on the Internet within two years represent 31.2 percent of the respondents. The remaining 33.7 percent of the respondents have no intention at this time to go on the Internet. Thus, approximately two-thirds of all financial institutions plan to be on the Internet before the end of the year 2000.

Table 1. Internet participation or perceived participation by financial institutions (n=202)
Table and data to be presented at ASBBS 2000 conference.

Four increasing levels of Internet involvement for financial institutions are shown in Table 2. Each succeeding level identifies the incremental number of institutions at that level. A Level 1 Internet presence provides information about the financial institution with no interaction between the institution and the customer other than a possible e-mail link. Similar to a digital bulletin board, the web site usually shows the name, address and other information about the institution. Level 2 allows the customer to submit information, such as loan or credit card applications, to the institution via the Internet. This type of site will usually have a fill in application form (more than a return e-mail link). Level 3 allows sharing of information, such as account balance information, with the customer. The web site will allow the consumer to access the institution's data. For instance, one can determine whether a check has cleared or check the balance on a loan. Level 4 allows the customer to process information that belongs to the institution, such as fund transfers or loan payments. Level 0 was used when a financial institution expressed no intention of going onto the Internet.

Presently 64.9 percent of all respondents are not on the Internet. Of those reporting a presence on the Internet, 57.7 percent only provide information (Level 1). Another 21.1 percent of those presently on the Internet can receive information from the customer (Level 2). Two point nine percent of responding institutions on the Internet share information (Level 3). Full service banking is provided by 6.4 percent of all respondents with an Internet presence (Level 4).

Table 2. Present level of Internet involvement by financial institutions
Table and data to be presented at ASBBS 2000 conference.

When responding financial institutions were compared according to type of institution (bank or credit union), no significant differences were found as shown in Table 3. Banks had a higher percentage (60.4 percent) of respondents offering information (Level 1) than credit unions (50.0 percent). Credit unions had a higher percentage of institutions (33.3 percent) that received information (Level 2) than banks (17.0 percent). No bank reported their Internet presence as being one of information sharing (Level 3), but 11.1 percent of credit union respondents report this level. Eighteen point three percent of the responding financial institutions report that their current presence offers information-processing capabilities. This capability was reported by 22.6 percent of banks and 5.6 percent of credit unions. Though the percentage differences look large, no significant differences could be established because of the relatively small number of credit union represented (n=18). It is interesting to note that credit unions use all levels of Internet presence, and provide more presence at Levels 2 and 3 (44.4 percent) than do banks (17 percent).

Table 3. Present level of Internet involvement by type of financial institution
Table and data to be presented at ASBBS 2000 conference.

Table 4 shows the institutions classified by asset size. As might be expected, larger institutions have a higher likelihood of present or future involvement in on-line banking. Only 23.1 percent of those under $1,000,000 are presently on or planning to be on the Internet. It is interesting to note the pattern that emerges when institutions are grouped above and below $10,000,000 in assets. Over 71 percent of the smaller institutions have no plans to develop an Internet presence, whereas only 23 percent (35) of the larger institutions reported having no plans for an Internet presence. Of the 35 institutions with no Internet plans, 63 percent have an asset size of less than $50,000,000. In the sample collected, those financial institutions that have asset size in excess of $50,000,000 have a significantly higher probability of going on the Internet. Within two years, almost all institutions in excess of $50,000,000 in asset size expect to be on the Internet. Conjecturally, it would be reasonable to expect that banks, with their typically larger asset size, are more likely to be on or moving onto the Internet than credit unions. As asset size increases, the number of credit unions in the equivalent population decreases. Growth in Internet presence will be taking place among the larger financial institutions, because smaller institutions do not see the demand for Internet usage at this time.

Table 4. Internet activity by asset size
Table and data to be presented at ASBBS 2000 conference.

CEO's were asked to delineate their institution's plans for the Internet within the next two years. Two-thirds' of the responding institutions report plans for an Internet presence in the next two years as shown in Table 5. The anticipated increase in levels of sophistication in Internet banking varies dependent on whether the financial institution is presently on the Internet or not. Of those financial institutions presently on the Internet, 70.4 percent anticipate offering information-processing capabilities within two years. Of those not now on but planning to be, 41.3 percent intend to be at the information processing level within two years. Higher percentages of those presently on the Internet will be moving toward "full service" sophistication than those financial institutions now planning an Internet presence. Moreover, this table indicates that within two years, 37.6 percent of all financial institutions will offer information-processing capabilities. Twenty-seven percent of all the new Internet involvement by financial institutions will be basic information provision with very low levels of sophistication. It is likely, however, that once a financial institution gets onto the Internet, more rapid progress toward full service banking will occur than presently anticipated because of increased competitive pressures. Presently, of those financial institutions on the Internet only 19.7 percent plan to be limited to providing and receiving information. Financial institutions now on the Internet

Table 5. Future level of Internet involvement by financial institutions
Table and data to be presented at ASBBS 2000 conference.

differ from institutions planning to enter the Internet in terms of planned capabilities. Financial institutions, typically enter the Internet at lower levels of sophistication and once on, move up to more sophisticated levels. In the future it is likely that financial institutions will skip the lower levels of Internet involvement as technology, costs, and competition allow more institutions to provide full service with their first Internet exposure. A presence limited to sharing information does not seem popular among financial institutions. Of the institutions presently on the Internet, only 9.9 percent anticipate merely sharing information in two years and only 11.1 percent of those moving onto the Internet plan to operate at this level.

Banks differ significantly from credit unions in their responses regarding current or intended Internet presence, as shown in Table 6. Banks are currently twice as likely as credit unions to be on the Internet (42.7

Table 6. Future Internet involvement by type of financial institution
Table and data to be presented at ASBBS 2000 conference.

percent to 24.3 percent). In looking at plans to move on to the Internet, approximately the same percentage of banks as credit unions have plans for an Internet presence. Current dominance of the Internet by banks indicates that banks will maintain their dominant position on the Internet, since the growth rate for both types of institutions appears to be approximately the same. Over the next two years the magnitude of the present dominance of banks on the Internet will decrease. To an approximate ratio of less than three to two (74.2 percent to 55.4 percent). It is therefore anticipated that approximately 75 percent of banks and over 50 percent of credit unions will be on the Internet within two years.

Institutions with no Internet plans were asked to indicate their reasons for not pursuing an Internet presence. The overwhelming obstacle perceived, as indicated in Table 7, was insufficient demand (75.0 percent). Cost (47.1 percent) and financial security (32.4 percent) are also identified by over 30 percent of the respondents as obstacles to Internet participation. It seems reasonable, however, to expect that as Internet services grow, more customers will become accustomed to its use, thereby resulting in a significant growth in demand. A growth in Internet banking services is predicted by most professionals (Editor, 1996). Interestingly, the CEOs were not overly concerned with loss of personal contact or difficulty of programming.

Table 7. Obstacles identified by financial institutions not going on the Internet
Table and data to be presented at ASBBS 2000 conference.

Financial institutions currently on or planning to be on the Internet identify financial security as the major obstacle (59.3 percent) as shown in Table 8. Insufficient demand was cited by 52.5 percent of the respondents as an obstacle. Cost was identified by over 28.8 percent of the respondents in this group as a potential problem. It is interesting to note that in the ranking of obstacles (1-5) financial institutions that are presently on the Internet identify financial security as the major obstacle whereas institutions not going on the Internet identify insufficient demand as the primary concern. Thus, there is a large disparity in perceived demand between Internet-bound institutions and those with no Internet plans.

Table 8. Obstacles identified by financial institutions on the Internet or going on the Internet for not seeking total interactive banking.
Table and data to be presented at ASBBS 2000 conference.

Interestingly, among institutions on the Internet or planning to be on, the primary reason for not progressing to fully interactive banking is seen as financial security. It is reasonable to speculate that demand for this type of service may grow significantly beyond today's anticipation, requiring that the banks solve the security issue so that demand can be met. This is especially true because of the growth of Internet access in households.

When financial institutions without Internet plans are classified by type of institution as shown in Table 9, two notable differences emerge. The perception of loss of personal contact as a deterrent is different. Banks perceive loss of personal contact to be of more concern than credit unions, in contrast to the popular perception that credit unions focus more on their members. Banks and credit unions both perceive that programming difficulties to be of little importance. Among institutions not going on the Internet, there is general agreement as to why. All believe that there is not sufficient demand to warrant that move. Another variable that concerns these institutions is the cost of Internet operations. The ranking of the last three perceived obstacles (financial security, other variables and programming difficulties) is similar for banks and credit unions.

Table 9. Obstacles for not going on the Internet when broken down by Banks and Credit Unions
Table and data will be presented at ASBBS conference.

Table 10 shows that among institutions classified by asset size, a greater concern for cost than loss of personal contact exists among smaller institutions whereas larger institutions are more concerned over loss of personal contact. The other four obstacles identified in the study show no significant differences when compared by asset size. An interesting side note is that financial institutions exceeding $1,000,000,000 in assets view financial security as a greater obstacle than inadequate demand. To the extent that smaller institutions are more likely to be located in smaller towns with greater ease of access, there may be some validity to these concerns.

Table 10. Obstacles for not going on the Internet when broken down by Asset Size
Table and data will be presented at ASBBS 2000 conference.

CONCLUSIONS

Financial institutions are moving on to the Internet rapidly. Two-thirds of all financial institutions are either currently on or plan to be on the Internet within the next two years. As might be expected, more of the larger institutions will be on the Internet than those smaller. Financial institutions that established a presence on to the Internet prior to 1998 are almost twice as likely to offer "full service" banking now or in the future than institutions establishing subsequent presences. Banks are currently

twice as likely as credit unions to be represented on the Internet, but that ratio is declining as more and more credit unions move to participate. Lack of demand and financial security are widely perceived as the primary obstacles to offering full service banking on the Internet. Demographics of the typical on-line user, together with the rapid expansion of households with Internet connections, show that American households are rapidly moving to the Internet. It is interesting to note that the perception of lack of demand decreases as the asset size of the responding institutions increases. It can be predicted that the rate of Internet expansion of financial services will accelerate beyond that currently planned given a heated competitive environment, technological advances, and the drastically reduced cost per transaction experienced on the Internet.

REFERENCE

Digital Insight (October 1997). 'Internet Home Banking: Market Penetration and Market Methods Study,' White Paper, pgs. 2-16.

Editor, (June 1996). 'An Internet Banking Boom is Coming…Really,' United States Banker, 106(6). P. 20.

Gandy, Anthony (Apr 1998). 'Brokers take to the Net,' *The Banker*, 148(866), p. 84.

McConochie, Roberta M. (April 1997). 'Summary of Arbitron NewMedia's Pathfinder Study,' Available: http://www.commercepark.com/AAAA/casie/arbitron/execsum.html, cited 1998 December 15.

Odyssey L.P. (Spring 1998). 'Homefront: tracking study released twice a year, in the spring and fall,' Available: http://www.commercepark.com/AAAA/casie/comp/odyssey.html, cited 1998 June 8.

Orenstein, Alison (Feb 1998). 'Internet Banking,' *Bank Systems & Technology*, 35(2), pgs,24-30.

SUPPLY-CHAIN MANAGEMENT ANDNEW PRODUCT DEVELOPMENT

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ABSTRACT

This paper will look at the growth and development of Supply-Chain Management (SCM) and New Product Development (NPD), areas that are continuing to grow in importance. Suggestions will be made about how good management of supply chains can lead to improvements in the development of new products. The first way improvement can occur is through pull factors, i.e., an efficiently managed supply chain sets up an uncluttered route whereby concepts for new products flow back toward the manufacturer and their suppliers. The second area for improvement takes place when SCM factors are considered as the new product process unfolds. Finally, some comments will be made about the future of both disciplines.

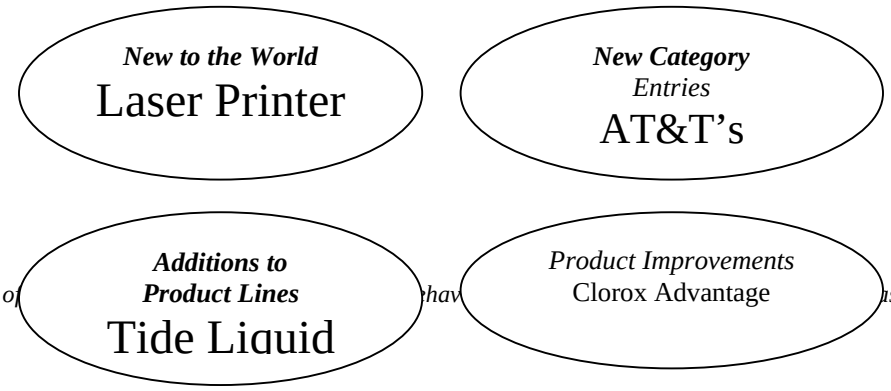
INTRODUCTION

The millennium is here and with it comes a new business environment. It is a global business world, one where new, ever-changing internet technology and the explosion of e-commerce present opportunities and challenges of monumental proportions. There are many critical aspects of business but certainly two crucial areas are the pressing need to develop new products, and the ability to move these products through marketing channels to target customers, i.e., create greater consumer value.

This paper will look at the current status of New Product Development (NPD) and Supply-Chain Management (SCM). This will be followed by some observations regarding the areas of SCM that should be taken into consideration at various points in the new product development process. Some observations will then be made about some new products, e.g., the Fire Storm line of tools by Black and Decker, and the role of SCM. Lastly, the authors would hope that this paper would lead them to develop an empirical study of the relationships between NPD and SCM.

In terms of this paper a new product is one that falls into one of five categories. These categories would be: new-to-the world products; new category entries; additions to product lines; product improvements (Crawford & DiBenedetto, 2000). (See Figure 1)

FIGURE 1
ACCEPTED CATEGORIES OF NEW PRODUCTS



SUPPLY-CHAIN MANAGEMENT

Simchi-Levi, Kaminsky, and Simchi-Levi define SCM as "a set of approaches utilized to efficiently integrate suppliers, manufacturers, warehouses, and stores, so that merchandise is produced and distributed at the right quantities, to the right locations, and at the right time, in order to minimize system wide costs while satisfying service level requirements." (Samchi-Levi, Kaminsky, & Samchi-Levi, 2000). Lambert, Stock and Ellram look at SCM as *the integration of business processes from end user through original suppliers that provides products, services, and information that add value for consumers* (Lambert, Douglas, Stock, & Ellram, 1998). In good supply chains partnering-orientated business relationships are established between and among members to facilitate activities. Members of the chain must work together as one entity in order to maximize productivity. Donald Bowersox of Michigan State University's School of Marketing & Supply Chain Management feels that in SCM alliances where retailers, manufacturers, and logistics Service Companies team up, everyone wins (Bowersox, 1990). In order for everyone to win it is imperative that all partners pool their assets and create a synergistic effect.

It is important to form alliances to share information vital to efficient SCM. There is a long list of such activities, and variations will occur depending on the specific chain, but there are prime areas of interest. Lambert, et al view SCM as consisting of Logistics Management and Key Business Processes. The business processes are: customer relations management, customer service management, demand management, order fulfillment, manufacturing flow management, procurement, returns channel and product development and commercialization (Lambert & Stock, 1998). This paper will focus on seven major areas of logistics that will improve the product development and commercialization process (See Figure 2).

Technology makes the job of cooperation easier, but problems remain in getting all partners to work together to maximize the operation of the total chain. Several studies are now available that indicate that the rewards are there for those who do practice good SCM practices. A study of several hundred firms including Xerox, Hewlett-Packard, and Merck says that members can get back as much as 7 per cent of their annual revenue. A study by Pittiglio, Rabin, Todd & McGrath found that the top companies involved in SCM function with significantly less inventory days than competitors; have a 40-60 percent advantage in cash-to-cash cycle time; get more productivity per employee; and provide higher levels of customer service (*Traffic World*, April 28, 1997). A study by A.T Kearney for chemical companies indicates that up to $30 billion can be derived in SCM savings (Saccomeno, 1997).

FIGURE 2

SUPPLY CHAIN MANAGEMENT

BUSINESS FUNCTIONS	**LOGISTICS FUNCTIONS**
Customer Relations	Customer Service
Customer Service	Inventory Management
Demand Management	Materials Handling
Order Fulfillment	Order Processing
Manufacturing Flows	Packaging
Procurement	Transportation
Product Development & Commercialization	Warehousing
Returns Channel	

Supply-Chain Management is a crucial factor in today's global, high-tech business environment, and many firms are seeking solutions to the myriad enigmas the management of this concept creates. William B. Cassidy in an article in *Traffic World* titled "Back on the Chain Gang" finds that shippers want to know how to manage it, carriers wonder how they fit in, and suppliers are trying to offer the best software, hardware and solutions to automate it (Cassidy, 1997). The vision of the Supply Chain Management Program at Michigan State University is to embrace all aspects of creating consumer value in a global competitive economy. At the heart of this vision is the integration of marketing guidance systems with the process of new product and service development, materials transformation, assortment and geographical dispersion (http://www.bus.msu.edu/msc/scm). This paper stresses the importance of starting good SCM practices in their nascent stage. It is important for those responsible for developing the new products that will be entering the supply-chain to factor into the development process all activities that will occur as this new product moves to its ultimate target customer.

NEW PRODUCT DEVELOPMENT

One does not have to be very observant in order to see the plethora of new products that appear everywhere. Whether it is computer technology, groceries or fashion items, new products roll on to the market every day. Crawford and DiBenedetto say over a hundred billion dollars are spent yearly on the technical phase alone. In addition, untold thousands of new products are marketed every year, perhaps millions if we call each web site a new product (Crawford, 2000). The Product Development & Management Association continues to grow with over 2500 members in 32 countries (http://www.pdma.com). These new products are costly to market Philip Kotler estimates that it costs $20 to $50 million to launch a new product (Kotler, 2000). In spite of the money and planning the goes into bringing forth new products, many, if not most, fail. Kotler cites Tom Vierhile, general manager of Marketing Service Ltd., who estimates that 80% of recently marketed new products have failed (Kotler, 2000).

Consumer and business markets demand new products, and these products, many doomed to failure, are costly to develop. Hence the management of new products has grown in importance. New product development is best managed if the process can be broken down into discernible stages. This sequence can be broken down in many ways; but the one used in this paper is presented in Crawford and DiBenedetto's book, New Product Development. This process includes five phases: Opportunity Identification and Selection, Concept Generation, Concept/Project Evaluation, Development (Technical & Marketing) and Launch (Crawford, 2000). (See Figure 3)

RELATIONSHIPS

As the new product process develops, it is important to think about the relationship between the marketing of the new product and supply-chain activities. Initially there should be action taken to see that the SCM relationships established provide for the opportunity to have ideas flow smoothly from the end of the chain back to the beginning. This can be labeled PULL factors. The identification and selection of new product ideas can come from all members of the chain. For example, careful analysis of inventory shifts can give direction to the development of ideas. Myriad pull factors can trigger the development of new product concepts. Shifts in inventory can provide direction for new product ideas. For example, shifts in cereal away from sweet and sugary types to low fat, fiber rich ones might be a tip off to start thinking new healthy cereals. A perusal of orders processed might show that consumers are buying products in smaller sizes and this could lead to new types of packaging. A review of complaints from warehouse operators and or transportation carriers might very well provide direction for new product ideas.

Push factors; on the other hand, come from the new product developers and set forth the possible potholes that might take place along the road toward commercialization. Many possible SCM problems might occur as the new product process evolves from opportunity to launch. A toy manufacturer might, perhaps, think about the supply chain as they search for opportunities. If there appears to be an

opportunity for new toy "X," what are the supply chain implications? How will this effect inventory management, order processing, transportation, etc? An opportunity might be more feasible if it is congruent with the existing supply chain. On the other hand, the opportunity might be less appealing if it is more divergent, e.g., a larger, less dense toy that would be harder to package, palletize, store, transport, etc. Each step in the new product process calls for a serious consideration of supply chain implications. It might even be important to have the SCM factors included as part of the Product Innovation Charter (PIC), the summary statement of strategy that will guide a department or project team in their effort to generate new product volume (Crawford & Merle, 1997).

FIGURE 3
BASIC NEW PRODUCT PROCESS

Phase 1: Opportunity Identification and Selection

Generate new product opportunities as spinouts of the ongoing business operation, new product suggestions, changes in marketing plan, resource changes, and new needs/wants in the marketplace. Research, evaluate, validate, and rank them (as opportunities, now specific product concepts). Give major ones a preliminary strategic statement to guide further work on them.

↓

Phase 2: Concept Generation

Select a high potential/urgency opportunity, and begin customer involvement. Collect available new product concepts that fit the opportunity and generate new ones as well.

↓

Phase 3: Concept/Project Evaluation

Evaluate new product concepts (as they begin to come in) on technical, marketing, and financial criteria. Rank them and select the best two or three. Request project proposal authorization when have product definition, team, budget, skeleton of development plan, and final PIC.

↓

Phase 4: Development

A. Technical Tasks
Specify the full development process and its deliverables. Undertake to design prototypes; test and validate prototypes against protocol; design and validate production process for the best prototype; slowly scale up production as necessary for product and market testing.

B. Marketing Tasks
Prepare strategy, tactics, and launch details for marketing plan; prepare proposed business plan and get approval for it, stipulate product augmentation (service, packaging, branding, etc.) and prepare for it.

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Phase 5: Launch

Commercialize the plans and prototypes from development phase; begin distribution and sale of the new product (maybe a on a limited basis); and manage the launch program to achieve the goals and objectives set in the PIC (as modified in the final business plan).

MACRO SCM CONSIDERATIONS

There are larger issues to look at in terms of the SCM implications of NPD, i.e., pull factors that are impacting NPC, and push factors that could possibly mean the development of new supply chains. Pull factors would be things occurring at the end of the supply chain that might alter the entire supply chain. The internet and the growth of e-commerce not only have given rise to new products that were unthinkable just a few years ago, but have and will continue to have an impact on the new product process. Online shopping is projected to increase from $14.3 billion in 1999 to $64.6 billion in 2003 (*USA Today*, November 15, 1999). In some cases the products will be the same, e.g., a book purchased via Amazon.Com might be the same as one purchased at a mall bookstore. However, e-commerce might favor products that lend themselves to computer graphics. In addition, the SCM requirements might dictate myriad types of new products. If more consumers do their grocery shopping on line, will they require new and different products? Global marketing adds more intrigue to the search for new products. Allyson L. Stewart-Allen, Director of International Marketing Partners Consultants, says that the number of American and European e-tailers now exploiting the commercial potential in the European Union-fueled by the seemingly endless tap of venture capital monies now available-is growing by 20 sites per day (Stewart-Allen, 1999). Sure, many traditional products will be sold online, but this is an area that will provide fertile ground for fresh products to satisfy the needs of e-shoppers.

Push considerations take into account the need for new supply chains to accommodate the desires of producers of new products. In the late nineties the O'Sullivan Specialty Snack Division of O'Tec, Inc., located in Hyattsville, MD, developed a packaging technique that allowed them to extend the shelf life of cotton candy from 30 days to six months (http://www.foodexplorer.com/business/products/newproducts/ pf02795b.htm). For several reasons, including high slotting fees, traditional supply chains in the U.S.A. were not attractive. Here was a new product in search of a supply chain and they were able to work through food brokers and develop supply chains to reach global markets. Once established, new products could be developed for these specific chains. For example, O'Tec has developed a chocolate flavored cotton candy that will be introduced in early 2000. Here is an example of how cooperation between supply chain members can lead to new products, as Nestle chocolate will be the supplier of the major ingredient for the new product (Gay, 1999).

CASE HISTORY

A review of two very different type products recently introduced to the market will help illustrate the role of SCM in the New Product Development Process. FIRE STORM (Ivey, 1999) — Black &Decker is a firm with a solid brand image and has instituted practices that have led to the introduction of many new products, e.g., the SnakeLight, Quantum Tools, ToolLight, Bullet high performance drill bits, Pilot Point tip design, Pivot Driver two-position screwdriver, and Sand Storm 3-in-1 sander. Black & Decker is also a leader in SCM and is linked with major retailers such as Home Depot, Lowe's, Wal-Mart, K-Mart, etc. Information flowing back to Black & Decker from these retailers indicated a drop in orders for traditional power tools and a significant increase in consumer complaints.

A team was formed, including several young, consumer oriented Product Managers, to analyze the problem and make recommendations about potential new products. This team began to realize that the consumers were interested in better cordless power tools. Black & Decker had two lines of cordless power tools. One was the VersaPak powered line targeted to meet the needs of the traditional B&D consumer- the "do-it-yourselfer." The other was the DeWalt line targeted for the professional power tool user, and designed to be sturdy and to hold up under daily rigorous use. The VersaPak had a maximum power of 7.2 volts while the DeWalt line ran from 9.6 to 18 volts. Consumer value could be enhanced with a line of tools positioned somewhere between the traditional do-it-yourself and the professional lines.

Hence the Fire Storm line was developed to fill this void. The color red was selected to go along with the new brand name, and to make it stand out in the retail environment.

The next decision was to select the cordless tool that would kick off the line. Information that flowed back from consumers indicated that the drills were a major problem. The decision was to develop a cordless drill in 9.6, 12, 14.4, and 18 volt models. These drills were similar to the DeWalt line in that they had a high output cooled motor, 24 position clutch, variable speed, an electronic break that stops the chuck in less than 1 second, and a balanced mid-handle design. The differentiating factors were that the Fire Storm, unlike the DeWalt, did not have an industrial grade keyless chuck, had an inferior motor and gears, and did not come with a one hour rapid charger or an extended run time battery. The second product in the Fire Storm line was a cordless, 14.4 volt circular saw. The saw is sold by itself, by itself in a kit-box and in a combo kit with a 14.4volt drill and a kit box.

The Fire Storm is a new product that would fall into the additions to product lines category, i.e., a product that is a line extension in B&D's current markets. Many of the SCM problems that the Fire Storm would encounter would not vary greatly from those met with the VersaPak line or the DeWalt line. Those responsible for NPD considered at each stage of the development process such things as the impact of adding additional items to order processing and the burden this new line would have on inventory management, e.g., would stock outs increase? Would the cost of carrying inventory increase? Would EOQ's be effected? A lot of effort went into the development of the new package from a marketing point of view, e.g., designing it so that it will sell itself, but the package must also withstand the rigors of warehousing, transportation, materials handling etc. The Fire Storm must conform to palletizaion requirements, and should be in conformity with the shelf space needs of retailers. Would the Fire Storm create transportation problems, e.g., loading configuration, increased rates, contract considerations, loss and damage, etc.? SCM implications may not have been extremely critical with the Fire Storm because of the structure of the company and recent experiences with such new products as the Quantum line of tools (21). However, a new product launch of this magnitude requires teamwork, and those involved in SCM are a vital part of that team.

O'TEC (Gay, 1999) - The aforementioned Fluff Stuff cotton candy developed by O'Tec would create many more and varied SCM problems. The newly developed package would keep the cotton candy fresh, but would it withstand the punishment it would take as it moved through the chain. As it turns out, the product is extremely hardy, and holds up well in all temperatures and under almost all conditions. As one can envision with little trouble, shipping a product like this creates a plethora of transportation problems. For example, a trailer would cube out with no weight at all. This might require that a heavy, dense product, one that would weight out before cubing out, be loaded in the bottom of a container with the pallets of cotton candy loaded on top. Similar problems would arise with respect to warehousing. In certain cases order processing would be affected. For example, transportation carriers may restrict the number of pallets they will accept due to the size and the lack of weight. This in turn might limit the number of orders that can be processed. The number of orders would then have an impact on inventory management.

The two new products discussed above are very different with many different SCM twists and turns. They are presented here as examples of the importance of SCM in the New Product Process. They illustrate how good supply chain systems can be an excellent source of new opportunities and new concepts. In addition, they present a clear picture of the kinds of things that must be considered as those opportunities turn into concepts that eventually result in the launching of a new product.

CONCLUSIONS AND RECOMMENDATIONS

New product development is a crucial part of consumer and business marketing. As McCarthy and Perreault point out, *Identifying and developing new-product ideas — and effective strategies to go*

with them – is often the key to a firm's success and survival (Perreault & McCarthy, 1999). The demand for new products is great, but the cost of developing a loser is costly too. For example, Mennen spent $14 million advertising "Real Ultra Dry Roll-On," only to have it fail (Berkowitz, et al, 2000). In today's global, high-tech environment, NPD should be a continuous learning process, one that has as its loci the increase in consumer value (Chafin, 1996). There are myriad ways that this process can be improved, but one is to stress the importance of SCM in the two critical ways.

First, a well-organized and efficiently managed supply chain can be an excellent source of new product ideas. Fresh and creative concepts can smoothly and timely filter back to the first link in the chain. Likewise, a good supply chain provides an excellent *conduit for getting good ideas from one channel member to other channel members* (Gordon, 1995). Second, Once the new product process begins, those responsible for managing it must take into consideration supply chain functions in order to insure that the new product is successfully launched and is a hit rather than another Edsel.

The environment is conducive to the blending together of SCM and NPD. Educational institutions like Michigan State University provide students in the Board School of Business the opportunity to study both of these fields. These students will be the future managers. The growth and development of organizations like the Council of Logistics Management and the New Product Development Association indicate that both are growing, thriving organizations. This bodes well for the improvement of the process of developing new products that increase consumer value.

It is A Brave New World we live in. In this era of e-commerce and sophisticated internet and intranet systems, there are new products arriving every day and more just on the horizon. New systems are themselves new products, but they also force the development of new products. Thus a never-ending circle is created. However, it is risky to focus on today. Generation "M" (Those born around the millennium) will be demanding new and unfathomably different products as well as new versions of Crest, Coke, etc. Hopefully, SCM and NPD will be working together to successfully help create these new products that will provide real value to Generation M as well as to those in Generations X and Y who will be getting older and demanding unique new products too.

REFERENCES

(1997). "New Study on Supply Chain Rewards." *Traffic* World, April 28, 1997, 35.

(1999). *USA Today*, Bonus Section E, November 15, 1999, 15.

Berkowitz, et al (2000). Marketing, 6th ed., Irwin/McGraw-Hill, 296.

Bowersox (1990). "The Strategic Benefits of Logistics Alliances." *Harvard Business Review*, July-August 1990, 36.

Cassidy (1997). "Back to the Chain Gang." Traffic World, May 12, 1997, 22.

Chafin (1996). "Turning New Product Development into a Continuous Learning." *Journal of Product Innovation Management*, March 1996, 89.

Crawford (1997). *New Products Management*, 5th ed., Richard D. Irwin, 487.

Crawford, ibid, 5.

Crawford, ibid, 25.

Crawford & DiBenedetto (2000). *New Products Management*, 6th ed., Irwin/McGraw-Hill, 11.

Gordon (1995). "Ten Ways." *Journal of Product Innovation Management*, June 3, 1995, 214.

http://www.bus.msu.edu/msc/scm

http://www.foodexplorer.com/business/products/newproducts/pf02795b.htm

http://www.pdma.com

Ivey (1999). Independent study, University of Baltimore, Baltimore, MD, July 1999.

Kotler (2000). *Marketing Management*, 10th ed., 329.

Kotler, ibid, 329.

Kotler & Anderson (1999). *Principles of Marketing*, 8th ed., Prentice Hall, 287.

Lambert, Stock & Ellram (1998). *Fundamentals of Logistics Management*, Irwin/McGraw-Hill, 504.

Lambert & Stock, ibid, 505.

Perreault & McCarthy (1999). *Basic Marketing: A Global-Managerial Approach*, 13th ed., Irwin/McGraw-Hill, 282.

Saccomano (1997). "A Shorter Chemical Chain." *Traffic World*, July 21, 1997, 27.

Samchi-Levi, Kaminsky & Samchi-Levi (2000). Designing and Managing the Supply Chain: Concepts, Strategies & Case Studies, Irwin/McGraw-Hill, 1.

Speech given by Robert Gay, Vice President of Sales, O'Tec, Inc., American Marketing Association Chapter, Baltimore, MD, October 21, 1999.

Stewart-Allen (1999). "Coordinate Logistics when E-tailing to Europe." *Marketing News*, November 22, 1999, 18.

MARKETING FINANCIAL SERVICES TO AFRICAN-AMERICAN CONSUMERS: A COMPARATIVE ANALYSIS OF SHOPPING AND PATRONAGE PATTERNS

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ABSTRACT

Research into the shopping behavior of African-American consumers has identified differences in information gathering and patronage patterns in comparison to their white counterparts. However, there has been little empirical study of these issues with regard to the purchase of financial services. This study utilizes the Federal Reserve System's Survey of consumer finances to analyze differences in shopping and patronage patterns of black and white households. The purpose of the study is to provide information useful to marketers of financial services seeking to understand how best to render more effective service to this attractive and growing segment. Findings indicate that there are several differences in the ways that blacks and whites access and patronize the offerings of the financial services industry.

INTRODUCTION

The importance of segmentation in the development of an effective marketing strategy is well established in business literature. There are many bases used for market segmentation including geographic, psychographic, and usage factors, but demographic characteristics such as age, occupation, income level, educational attainment, and race are frequently used to identify key markets. Race is important as a segmentation variable because it has been shown that race can influence consumption patterns and because racial minorities have come to represent a larger and larger proportion of the U.S. population. The sheer numbers of the largest minority group, African-Americans, and the improving economic status of many of its members, make this racial minority especially attractive, and it has been shown that purchase and consumption behavior of African-American differs from that of whites. However, there has been little empirical study of these differences in the financial services sector. It is the purpose of this study to determine if African-American shopping and purchase patterns are different from those of whites in the case of financial service purchases. Moreover, if differences are identified, a further

purpose is to determine how these differences are manifested, so that marketers of financial services can best approach the African-American niche.

BACKGROUND

The number of African-Americans in the U.S. has grown rapidly. In the ten-year period from 1985 to 1995 for example, there was an increase of more than 4.5 million blacks in the U.S., a nearly 16 percent increase. (The terms "African-American" and "black" are used synonymously in this paper because there is no clear preference for either term among members of this racial group.) (Morris, 1993). The corresponding percentage increase for whites in the same period was just under 8 percent. During the same ten-year period, the number of black households grew by 23 percent; white households grew by only 11 percent. Moreover, the total U.S. population of blacks is predicted to increase by as many as 17 million by the year 2020. This represents a projected 53 percent increase over the 25 years from 1995; the white population is forecast to grow only 28 percent during the corresponding period (U. S. Department of Commerce, 1998).

Nevertheless, a mere increase in numbers of people does not mean that a particular group is an attractive segment. Other factors must be present. In the case of the black minority, at the same time that it is increasing in numbers, its household income is also increasing. From 1985 to 1995, median money income of African-American households increased 51 percent while white household median money income increased less than 44 percent. The increase in black household income is reflected in declining poverty levels in the group. From 1985 to 1995 there was more than a six-percent drop in the number of black persons below the poverty level; the comparable drop in the percentage of whites below the poverty level was two percent. Nevertheless, even though the percentage of blacks dropped to less than 30 percent (lower than it had been for more than 35 years), the large number of African-Americans below the poverty level means that not all members of the group have participated equally in the upward economic movement (U. S. Department of Commerce, 1998).

Yet for those who have experienced income growth, some of the growth can be explained by changes in occupational status. For example, the number of blacks employed in managerial and professional specialties increased by more than 32 percent, an increase of more than 1,375,000 workers, from 1983 to 1996. During this period increases in some specific occupations were as follows: financial managers, 86 percent; engineers, 69 percent; college and university teachers, 48 percent; dentists, 41 percent; physicians, 37 percent; and lawyers, 35 percent. These career advancements were supported by increases in the college enrollment of many African-Americans, and generated a significant increase in degrees awarded. From 1985 to 1995 the increase in degrees awarded to African-Americans was as follows: bachelors' degrees, 32 percent; masters' degrees, 73 percent; doctors' degrees, 44 percent; and first professional degrees, 57 percent (U. S. Department of Commerce, 1998).

Beyond attainments in income, professional employment and education, many blacks have also advanced entrepreneurially. From 1987 to 1992 there was a 42 percent increase in black-owned businesses. This growth of nearly 200,000 businesses, in the five-year period, helped to generate an increase of 63 percent in sales receipts to black-owned businesses. Thus, by 1992 sales receipts of black-owned businesses totaled $32,197,000,000 (U. S. Department of Commerce, 1998). These statistics mean that there are members of the black minority that comprise an attractive market segment for the products and services offered by the finance industry. Indeed, one study noted that the phrase the "emerging black middle class" is passe; the group has arrived (Lach, 1999).

Similar to any other racial or ethnic segment of the population, the African-American segment is really a number of segments. One major study of African-American markets in the U.S. combined demographic and behavioral data to identify four unique black consumer groups (The 1993 Minority Market Report). One of the groups, identified as "Upwardly Mobile," was characterized as financially

secure, professional, status-oriented, and materialistic. Representing 24 percent of blacks, 62 percent of this group were married, 50 percent had attended college, and 80 percent were employed. A second group labeled as "Contented," represented 37 percent of U.S. blacks. This group was described as mature (mean age was 44) people who tended to save but were not optimistic about their financial futures. These two groups together represent more than sixty percent of U.S. blacks, a market of approximately 20 million individuals who could be expected to have an interest in and need for the services of the financial industry. The route to reaching members of these groups, however, is not necessarily clear. It has been argued by some that the differences between blacks and whites can be attributed mainly to social class, income, and location of residence (O'Hare, 1987). This view is supported by studies into the value orientation of the middle class that found many similarities between blacks and whites (Schiffman & Kanuk, 1997). Such similarities would be expected to lead to a convergence of values among the races in situations where socioeconomic levels are comparable.

Other studies, on the contrary, have shown that there are significant differences between the races and that it would be a mistake to think otherwise. One such study, for example, that controlled for education levels, age, occupation and family structure, found that, "compared to whites of equivalent backgrounds, African-Americans watch more television, spend more time at church, do less housework, and do more child care" (Robinson, Landry & Rooks, 1998). That study also found that in comparison to similar whites, blacks spend more time in phone and family conversation. Another study (Schlossberg, 1993) asserted that African-Americans do not seek to converge into the mainstream culture as incomes rise. Instead, the importance and value of ethnic heritage and identity rises as incomes and educational levels increase (Berry, 1991), and the tastes of African-Americans do not resemble those of whites (Williams & Qualls, 1989). These findings lend support to the statement of one black advertising executive who said, "Black people are not dark skinned white people – there are cultural values that cause us to be vastly different from the majority of the population" (Spadoni, 1984).

These differences manifest themselves in numerous ways, some of which can be seen in household consumption behavior, especially as incomes rise. One study of purchase intentions found blacks more likely than whites to intend to purchase high-ticket items like home appliances, jewelry, cars, and computers ("Motorola. . .," 1996). Among blacks involved with the Internet, socioeconomic levels are high. A survey of subscribers to an African-American newsletter delivered via e-mail showed that more than 75 percent have college degrees and that 45 percent of subscriber household incomes exceed $50,000 (Wynter, 1996). Further, Internet spending by blacks increased by 600 percent between 1996 and 1997, from ten to $60 billion ("Black American. . .," 1999).

In usage of other media blacks also have different media habits and attitudes than whites. For example, blacks represent only ten to 12 percent of mass-market magazine readership ("Black Consumers," 1993), but they regularly read black community newspapers and find them credible (Legette, 1994). Blacks watch different television programs than do whites (Jensen, 1993) and listen to radio more frequently than do similar whites (Robinson, Landry & Rooks, 1998). Moreover, many resent the way they have been portrayed in advertisements in print and electronic media; 60 percent of blacks in one survey felt that ads were, "designed for whites" (Reynolds, 1993). Another survey showed that the majority of consumers felt that there are not enough African-Americans in ads, and more than 90 percent of the respondents were white (Ward, 1992). There is ample literature that has analyzed the media and called for improvements in the frequency and role portrayal of African-Americans in both electronic and print media (e.g., Bristor, Lee & Hunt, 1996; Stevenson, 1993; Taylor, Lee & Stern, 1997).

The result of differences in buyer behavior, values and attitudes that lead to differences in racial consumption patterns also manifest themselves in purchase decisions regarding financial services, and it is apparent that many African-Americans are not being reached by the industry. To illustrate, Boyce (1998) noted that there is less involvement in the stock market by affluent blacks than by affluent whites. Zhong and Xiao (1995) found race to be a factor in stock ownership and determined that white households

were more likely to invest in stock than were black households of similar age and educational levels. Perhaps a reason for this is suggested by a 1997 study finding that 77 percent of black respondents feel they know "just 'some' or 'very few' of the things needed to make good investment decisions, compared to only 46 percent of whites" (Lach, 1999, p. 59.) A survey of families with household incomes of at least $50,000 found that 63 percent of African-American investors were conservative; the comparable figure for whites was 53 percent (Scott, 1998).

Another study found that in households with incomes in excess of $50,000 annually, black women are the least likely group to be invested in stocks (Mincer, 1999). The reluctance of African-American women to invest in stocks, attributed to cultural and demographic factors, is especially important because women are the primary financial decision makers in 21 percent of African-American households; in white households only ten percent of wives take this role (Smith, 1997). This conclusion, based on a 1997 nationwide survey of 974 adults, supports previous analysis of the role of the wife in black household consumption (Scanzoni, 1971). The 1997 survey further asserted that because blacks have not had parent and grandparent investors to emulate, they are more reluctant than whites to take the risks necessary to achieve higher returns. Nevertheless, they seek annual investment returns more than three percentage points higher than whites and are more likely than whites to rely on financial advisors rather that family or friends (Smith, 1997).

These fragmented findings provide a glimpse into where the African-American market is being under-served by financial services marketers. However, in order to reach this underserved sector, it is necessary to determine how blacks gather information about the products of the financial services industry. In addition to understanding communication channels, it is also important to know what distribution channels (in person, mail, computer, for example) are preferred. This information would give a clearer picture of which communication and distribution channels show the most promise for reaching this high-potential sector.

METHODOLOGY

Data for this study were gathered from the 1995 Survey of Consumer Finances (SCF) prepared by the Board of Governors of the Federal Reserve System in cooperation with the Statistics and Income Division of the Internal Revenue Service. Conducted triannually since 1983, the SCF provides detailed information on the financial characteristics of U.S. households, including financial asset and liability holding patterns, real estate ownership, and household net worth. Also included are demographic and attitudinal characteristics covering age, sex, race, educational attainment, income, and other classificatory variables useful for characterizing household balance sheet characteristics across different subgroups within the American population. A more complete description of the SCF dataset is given by Kennickell, Starr-McCluer, and Sunden (1997).

The SCF dataset uses a dual-frame-sampling plan that incorporates both an area-probability sample and a special list sample derived from IRS tax records. The area-probability sample provides information on financial variables that are widely distributed in the general U.S. population, such as automobile ownership and home mortgages, while the list sample represents a special oversample of relatively wealthy families designed to capture financial data items that are highly concentrated within a relatively small proportion of the population, such as commercial real estate holdings and household trust fund ownership. This dual-frame sample provides reliable information on data items that are relatively easy to generalize from a standard, geographically-based random sample of the population, as well as items that are narrowly observed within a cross section of the population that is subject to a heightened rate of survey nonresponse (Board of Governors of the Federal Reserve System, 1997).

Given its unique sampling methodology, however, the SCF sample is not an equal probability design. The oversampling of households more likely to be wealthy means that the data must be weighted

to generate valid sampling estimates that are projectable to the entire U.S. population. Thus, the weighting scheme used to combine the area probability sample with the list sample adjusts the main dataset for the oversampling of relatively wealthy families in the full, unweighted sample. The results reported below focus on the moderate to higher income households in the racial subgroups, rather than a general description of the U.S. population across all income strata. As such, these results are derived from the full, *unweighted* version of the SCF sample, including both area-probability and list sample results, to gain maximum benefit from the reporting of financial information by relatively wealthy families concerning information channels and financial services shopping patterns.

The SCF handles missing data attributable to item nonresponse using a multiple imputation procedure. Multiple imputation uses stochastic multivariate methods to replace each missing value with two or more values generated to approximate the sampling distribution of missing values. In the SCF dataset, multiple imputation replaces each missing value with five surrogate values, so that the reported proxies can be averaged to produce a more accurate estimate of what the missing value would have been in the absence of item nonresponse. In addition, multiple imputation allows for the estimation of corrected variance estimates, modified from the original item variance statistics to reflect the additional variability introduced within the dataset due to the uncertainty surrounding item nonresponse and the use of five imputed responses to proxy the original missing response (Montalto & Sung, 1996).

Multiple imputation offers the advantage of increased response estimation efficiency and the ability to incorporate additional respondent information to reduce unit nonresponse. In addition, this technique can be used to estimate the increased variability introduced within the dataset due to the estimation of missing values. The multiply imputed dataset provides for more valid statistical inference and significance testing, provided that researchers take advantage of each of the five imputed responses associated with every item nonresponse.This is achieved by combining results across the five complete datasets, known as implicates, within the full SCF dataset. Using observations from multiple complete datasets is known as repeated imputation inference (RII), and this procedure forms the basis for all of the descriptive statistics reported below. Accordingly, while the full 1995 SCF dataset surveys 4,299 households, including 2,780 families from the area-probability sample and 1,519 from the list sample, the descriptive information reported below derives from a total of 21,495 potential observations, reflecting the use of RII to capture results from all five SCF implicates (Board of Governors of the Federal Reserve System, 1995). The sample sizes for various subgroups reported below are normally less than the 21,495 potential observations, because the study uses information covering only two racial subgroups in the population and eliminates some item responses considered irrelevant or invalid in the context of household financial statement information.

The household responses to specific survey questions contained in the SCF dataset are organized according to primary economic units (PEUs). Each PEU represents an economically dominant single individual or couple in a given household, and includes information for all other individuals in the household who are financially dependent on the dominant individual or couple. Thus, the balance sheet data and shopping preferences reported below profile the entire PEU rather than the behavior of a single individual, such as the head of household, within the primary economic unit.

Finally, the data presented below follow the reporting convention used in Kennickell, Starr-McCluer, and Sunden (1997), providing descriptive financial statistics and sample proportions without including item standard errors or identifying statistically significant differences between paired financial characteristics. This is intended to highlight differences between the portfolio financial holdings of different racial subgroups, rather than focusing on individual differences in specific financial asset categories across the two racial subgroups included below. The intent is to highlight composite, portfolio differences in financial asset holding patterns and shopping preferences across the sample of black and white PEUs, rather than emphasizing any single individual difference in financial holdings across a particular asset category.

FINDINGS AND DISCUSSION

The shopping patterns and methods used to carry out financial transactions vary somewhat between black and white households as shown in Tables 1 and 2. Table 1, specifically, provides descriptive statistical information concerning the amount of time that SCF survey households devote to shopping for savings and investment products as well as credit and borrowing products, and identifies various sources of information that household members consult when making a decision to purchase savings and borrowing products. These statistics control for various household income levels to illustrate how shopping preferences change with increasing purchasing power.

The amount of time that survey respondents report shopping for savings and investment products is remarkably similar across black and white households. The only substantial difference is that a higher proportion of black households within the high-income category report spending a great deal of time shopping for investment-type products. This may occur because as income increases, and the technical complexity and material significance of investment decisions rises accordingly, more black families feel unprepared to make these decisions without extensive research and evaluation. Recent research by Ariel Mutual Funds and Charles Schwab found that 77 percent of black respondents believed they knew just "some" or "very few" of the things necessary to make good investment decisions, while only 46 percent of white investors reported a similar lack of comfort with investment decision-making (Lach, 1999). Thus, because rising family income leads to increasingly complicated investment scenarios, these circumstances require that black households make an extra effort to gain information and knowledge necessary to support financial decision-making.

A similar pattern characterizes borrowing decisions, although for credit products black households at all income levels report spending more time evaluating credit terms and products. This may occur because black households perceive that potential discrimination in the credit market will impede their ability to negotiate credit at favorable terms, so these families feel it especially important to research and evaluate various credit alternatives before making a borrowing decision. Gutter, Fox, and Montalto (1999) support this contention by noting that credit discrimination can take many forms, from reduced access to credit to limited access to credit information. Perhaps the limited information access argument makes it more difficult for African-American households to obtain information about alternative retail credit instruments, and the added difficulty these households face in seeking out credit information accounts for the higher number of black families who report spending a great deal of time shopping for credit products.

Reviewing the various information sources consulted by consumers in selecting financial products and services also supports the notion that black households engage in greater fact-finding and information-gathering
than white families, perhaps because they feel the need to acquire greater preparation in making significant financial decisions. This is supported by the fact that significantly more white families report self-consultation than black families, indicating that African-American households are less confident in trusting personal judgment and making financial decisions without outside assistance. In seeking information, higher-income black households frequently turn to friends and family members more readily than white families, reflecting the greater relative importance of extended family members and the immediate social community surrounding the African-American family (Collins, 1987; Nobles, 1978). Interestingly, however, black families do not simply turn inward to friends and family when seeking financial advice and assistance. At higher-income levels, African-American households often report a

higher rate of consultation with finance professionals – including accountants, lawyers, financial planners, and brokers – than white families in similar circumstances.

While Legett (1994) reported a higher rate of radio listenership and television viewership within black households, these families do not turn to television and radio in large numbers for financial advice. Rather, print media outlets – including magazines and newspapers – represent a popular source of financial information for both black and white families and black households in the higher-income categories utilize this source more often than whites. Surprisingly, neither group sees traditional commercial bankers as a popular source of financial advice, but white households are somewhat more likely to seek counsel from banks. This may reflect the greater rate of commercial bank patronage reported by white households.

Finally, it is surprising that "colleagues and business associates" information sources register such low usage rates across both racial groups within the SCF survey. This might reflect the notion that personal financial matters tend to be private affairs not frequently discussed in the workplace. While both racial groups show a willingness to seek outside information from financial vendors, friends and family, and a host of finance professionals when buying financial products, these discussions do not extend into the workplace for most respondents, regardless of race.

In terms of distribution channels and patronage patterns, the SCF data also show some surprising trends. Perhaps the most striking finding is the apparent desire to deal in person at a branch of a financial institution rather than through any other means. As can be seen in Table 2, as many as 90 percent of high-income (over $100,000) African-American households preferred the "in person" channel, and in no instance did this percentage drop below 63 percent. This finding would seem to call into question the movement to discourage such interactions by some larger providers of financial services.

Also noteworthy is the fact that the use of the computer as a financial channel never exceeded 6 percent in either racial category. However, these findings were obtained from 1995 SCF data; if similar data were available for 1999, undoubtedly the reported percentages would be higher. Perhaps the usage of automatic teller machines (ATM) would also be higher with more current data, but there is a wide divergence between those who indicate that they prefer ATMs and those who actually use them. The higher usage rate may be a reaction to availability; if "in person" services were available the data suggest that they would alter patronage patterns. Nevertheless, the preferences for ATMs and actual usage of ATMs is universally higher for blacks than whites in all but one income category. This may indicate that because blacks prefer to do business in their own communities (Jamison, 1993), the ATM may be the avenue most available to them.

Looking at other patronage patterns, debit card usage and direct deposit usage are quite similar across all racial and income categories, although black usage is always marginally higher than whites'. On other hand, in each income category, whites' usage of direct bill payment always exceeds that of blacks. Marketers of financial services should seek to determine why this is so, especially if offering such services results in cost savings to either the user or provider.

IMPLICATIONS AND CONCLUSION

Several implications can be drawn from the findings of this study. First, although previous research has shown that blacks listen to radio and television at higher rates than whites, they do not use these media to acquire financial information. Instead, magazines and newspapers are preferred and should be a part of the promotional mix when targeting the African-American household.

Second, blacks at higher income levels frequently turn to family members and friends for financial advice. Depicting such activities in print media copy would be consistent with the buying patterns of this segment. Further, because of blacks' willingness to consult professionals (lawyers, accountants) in seeking information regarding financial services, such scenes should also play a role in media depictions.

Third, it is apparent that African-Americans are less likely than whites to use self-consultation in making financial decisions. Thus, informational seminars should be offered by financial planners and directed to the black community to meet an apparent need, while at the same time building source credibility. It would appear that banks especially could profit from employing such an approach because they are not frequently seen as a
reliable source for financial information. This lack of recognition does not bode well as the distinction fades between bank offerings and those of other financial service providers.

Last, being able to deal personally with a provider of financial services was frequently cited as a key information and distribution vehicle for African-Americans. Thus, marketers of financial services would be wise to include a large commitment to personal selling in their marketing. Doing so at the expense of electronic means would seem to be inconsistent with current market trends, yet the data from this study would suggest otherwise.

In conclusion, it is clear from the descriptive statistical information presented here and a review of relevant literature that discusses purchase and consumption behavior across different racial groups that "black people are not dark-skinned white people," as one astute advertising executive noted (Spadoni, 1984). Indeed, there are differences as well as similarities in financial service shopping behaviors and purchasing channel preferences between black and white households. Marketers of financial services must recognize and understand these differences to address effectively the needs of the rapidly growing African-American sector.

Table 1
Financial Asset Shopping Patterns by Income and Race Characteristics

	Household Income in 1995 Dollars					
	$25,000 to $49,999		$50,000 to $100,000		Over $100,000	
	Race		Race		Race	
Shopping Pattern Characteristic	Black N = 471 Prop.	White N = 4385 Prop.	Black N = 182 Prop.	White 3693 Prop.	Black N = 50 Prop.	White N = 5060 Prop.
Savings and investment products:						
Time spend shopping:						
Very little	28.9%	32.5%	27.0%	27.0%	2.0%	27.2%
Moderate	40.6%	36.2%	37.5%	37.5%	26.0%	31.8%
Great deal	30.6%	31.3%	35.5%	35.5%	72.0%	41.0%
Information sources consulted:						
Call various vendors	31.6%	32.6%	44.5%	32.6%	30.0%	27.9%
Friends and relatives	31.6%	32.0%	33.0%	28.0%	28.0%	20.9%
Accountant	6.6%	8.7%	19.2%	13.8%	28.0%	20.9%
Lawyer	4.7%	3.1%	8.8%	4.6%	10.0%	11.7%
Financial planner or broker	4.2%	23.6%	24.7%	33.0%	60.0%	50.7%
Magazines or newspapers	28.2%	26.2%	48.9%	32.2%	50.0%	36.8%
Material received in the mail	18.7%	10.2%	11.5%	13.4%	40.0%	14.6%
Do not save or invest	9.1%	9.3%	5.5%	5.0%	0.0%	2.5%
Banker	3.2%	2.7%	0.0%	1.4%	0.0%	2.5%
Television or radio	0.0%	0.4%	2.7%	0.8%	0.0%	0.4%
Don't shop around; use same inst.	1.1%	2.1%	0.0%	1.8%	0.0%	0.3%
Colleagues and business associates	4.2%	2.1%	2.7%	2.7%	0.0%	1.3%
Self	9.8%	11.9%	5.5%	14.8%	0.0%	19.0%
Credit and borrowing products:						
Time spend shopping:						
Very little	18.7%	24.4%	7.7%	20.0%	2.0%	33.1%
Moderate	43.1%	40.2%	42.9%	37.1%	38.0%	30.2%
Great deal	38.2%	35.4%	49.5%	42.9%	60.0%	36.6%
Information sources consulted:						
Call various vendors	41.6%	49.8%	65.4%	55.5%	32.0%	40.2%
Material received in the mail	28.0%	23.5%	28.6%	25.0%	30.0%	17.9%
Other advertisements	15.3%	10.8%	21.4%	13.2%	10.0%	11.2%
Accountant	5.9%	9.0%	14.3%	11.9%	20.0%	18.5%
Magazines or newspapers	29.5%	25.5%	47.8%	32.7%	42.0%	26.3%
Friends and relatives	42.7%	33.0%	29.1%	30.2%	10.0%	18.3%
Lawyer	5.9%	3.9%	6.0%	5.8%	50.0%	11.4%
Financial planner	12.5%	10.5%	8.8%	16.2%	50.0%	21.8%
Never borrow	5.7%	12.8%	0.5%	11.0%	0.0%	24.0%
Banker	1.5%	3.2%	0.0%	2.3%	0.0%	2.8%
Television or radio	0.0%	0.2%	2.7%	0.6%	0.0%	0.4%
Don't shop around	4.2%	2.9%	3.8%	2.9%	6.0%	2.1%
Colleagues and business associates	2.1%	0.5%	0.0%	1.3%	10.0%	2.2%
Self	2.1%	2.1%	1.6%	2.1%	2.0%	2.9%

REFERENCES

Berry (1991). "Six Myths About Black Consumers." *Adweek's Marketing Week*, May 6, 6-19.

"Black American Spending Power Rises Seven Percent, Study Says." (1997). *Jet*, Volume 95, March 15, 19.

"Black Consumers." (1993). *American Demographics*, Volume 15, Winter, 4.

Board of Governors of the Federal Reserve System (1997). "Family Finances in the U.S.: Recent Evidence from the Survey of Consumer Finances." *Federal Reserve Bulletin*, January, 1-24.

Board of Governors of the Federal Reserve System (1995). *Codebook for 1995 Survey of Consumer Finances*, Washington, D.C.: Federal Reserve System.

Boyce (1998). "Blacks are Bearish on Wall Street Says New Survey." *The Wall Street Journal*, April 9, C-21.

Bristor, Lee, & Hunt (1996). "African-American Images in Television Advertising: Progress or Prejudice?" *Journal of Public Policy and Marketing*, Volume 14, Spring, 48-62.

Collins (1987). "The Meaning of Motherhood in Black Culture." *Scholarly Journal of Black Women*, SAGE Women's Educational Press.

Gutter, Fox, & Montalto (1999). "Modeling Racial Differences in Investor Decision Making Using an Afrocentric Influenced Model." Unpublished manuscript.

Jamison (1993). "Marketing to the African American Segment." *Bank Marketing*, Volume 25, Issue 12, 21-23.

Jensen (1993). "Blacks Favor Fox, NBC." *Advertising Age*, April 12, 28.

Kennickell, Starr-McCluer, & Sunden (1997). "Family Finances in the U.S.: Recent Evidence from the Survey of Consumer Finances." *Federal Reserve Bulletin*, Volume 20, January, 1-24.

Lach (1999). "The Color of Money." *American Demographics*, February, 59-60.

Legette (1994). "How to Reach Lucrative Minority Market." *Orlando Business Journal*, Volume 10, 18.

Mincer (1999). "Cultural Factors Hamper Blacks in Stock Market." *The Charlotte Observer*, June 15, 6D.

The 1993 Minority Report (1993). Coral Gables, FL: Market Segment Research, Inc.

Montalto & Sung (1996). "Multiple Imputation in the 1992 Survey of Consumer Finances." *Financial Counseling and Planning*, Volume 7, 133-146.

Morris (1993). "The Difference in Black and White." *American Demographics*, Volume 15, January, 44-49.

"Motorola Gets Signal on Blacks' Pager Use." (1996). *The Wall Street Journal*, June 24, 6B.

Nobles (1978). "Toward an Empirical and Theoretical Framework for Defining Black Families." *Journal of Marriage and the Family*, Volume 40, November, 679-688.

O'Hare (1987). "Blacks and Whites: One Market or Two?" *American Demographics*, Volume 9, March, 44-48.

Reynolds (1993). "Courting Black Consumers." *Black Enterprise*, September, 43.

Robinson, Landry, & Rooks (1998). "Time and the Melting Pot." *American Demographics*, Volume 19, June, 18-24.

Scanzoni (1971). "*The Black Family in Modern Society."* Boston: Allyn and Bacon, Inc.

Schiffman & Kanuk (1997). *Consumer Behavior*, Upper Saddle River, N. J.: Prentice-Hall, Inc.

Schlossberg (1993). "Many Marketers Still Consider Blacks 'Dark Skinned Whites'." *Marketing News*, Volume 1, January 18, 13.

Scott (1998). "Don't Let the Bull Market Pass You By." *Black Enterprise*, Volume 28, June, 243.

Smith (1997). "Blacks and Whites Differ as Investors--Sharply." *Money*, Volume 26, March, 22.

Spadoni (1984). "Marketing to Blacks-How to Media Segment the Target Audience." *Advertising Age*, November 19, 43.

Stevenson (1993). "The Portrayal of Blacks in Business Publication Advertising." *Journal of Marketing Management*, Volume 2, 26-33.

Taylor, Lee, & Stern (1995). "Portrayals of African, Hispanic, and Asian-Americans in Magazine Advertising." *American Behavioral Scientist*, Volume 38, February, 608-621.

U.S. Department of Commerce, Bureau of the Census. (1998). *Statistical Abstract of the United States*. Washington, D.C.: U.S. Government Printing Office.

Ward (1992). "What Roles Do Ads Play in Racial Tension?" *Advertising Age*, Volume 1, August 10, 35.

Williams & Qualls (1989). "Middle-Class Black Consumers and Intensity of Ethnic Identification." *Psychology and Marketing*, Volume 6, Winter, 263-86.

Wynter (1996). "Group Finds Right Recipe for Milk Ads in Spanish." *The Wall Street Journal*, March 6, B1.

Zhong & Xiao (1995). "Determinants of Family Bond and Stock Holdings." *Financial Counseling and Planning*, Volume 6, 10

MARKETING ON THE INTERNET: LESSONS FROM INTERMARKET SEGMENTATION

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ABSTRACT

Web-based marketing currently uses a "one size fits all" approach that is inconsistent with the concept of market segmentation, a key component of the consumer orientation era. This is analogous to the situation in international marketing in which a standardized approach is used. By borrowing the concept of intermarket segmentation from the field of international marketing, Web marketers can conceptualize how individuals in cyberspace can be "clustered" to form target segments based on psychographic or lifestyle factors. These segments could then be reached with targeted messages.

INTRODUCTION

The field of marketing has gone through several stages. The first stage was product orientation, next was sales orientation and then consumer orientation. Present day Web sites are back in the first stage of marketing, i.e., product orientation. A good example of product orientation is Henry Ford's classic statement "You can have any color you want--as long as it's black." Most Web sites are essentially like that--a "one size fits all" approach.

A product orientation on Web sites is understandable. A Web designer has little control over who accesses the site so an undifferentiated site simplifies design. However if a Web-based marketing program is to help build or maintain a competitive edge, it must shift from a product orientation to a targeted consumer orientation.

INTERMARKET SEGMENTATION

Intermarket segmentation, which has its origins in the field of international marketing (Jain, 1996), provides a useful model for introducing target marketing to Web sites. International marketers typically use either a single standardized approach to marketing, or the opposite, which is a customized marketing approach targeted to a country or region. Intermarket segmentation, on the other hand, groups potential customers *across* country boundaries. For example, an intermarket segment for an agricultural marketer might consist of all rural agricultural areas in the world regardless of country boundaries.

The Web marketer faces a situation similar to that of an international marketer who uses a standardized approach to marketing. In both cases the marketer is usually aware that there may be target segments "out there" someplace, but how to define such groups and market to them is not clear. International marketers who might wish to adopt an intermarket segmentation approach can do so easier than a Web marketer because they have a degree of control over who receives their message (via media selection) and control over what message each segment receives. The Web marketer, on the other hand, has little control over who visits the site. Therefore if the concept of intermarket segmentation is to be utilized in Web marketing, it must be done *after* the visitor arrives at the site. In effect, the customer must be led to a Web page specifically tailored to their psychographic characteristics.

Three possible alternatives for tailoring Web pages to specific psychographic targets include:

1. VALS

2. Customer groupings as identified by Global Scan
3. The psychographic cluster approach developed by Dr. Clare Graves.

The criteria for evaluating these three approaches is conceptual soundness and actionability, e.g., can it be easily used in Web page design.

VALS

VALS is the acronym for the Values and Lifestyles approach to market segmentation. It was originally developed by the Stanford Research Institute (SRI). It is now a commercial product offered by SRI Consulting (Bearden, Ingram, and LaForge, 1998). The currently available product is the second version of VALS.

VALS is a questionnaire-based approach whereby respondents are asked questions about their demographics, lifestyle, and personal preferences (Winters, 1992). Demographic factors such as age, education, sex and income are combined with the sociographic and psychographic variables to form the following eight segments:

1. Struggles
2. Makers
3. Fulfilled
4. Achievers
5. Experiencers
6. Believers
7. Strivers
8. Actualizers

The VALS survey is now conveniently available on the Web at http://future.sri.com and can be taken by anyone. In addition to the demographic questions, there are multiple choice questions that use a 4-point scale from "Mostly disagree" to "Mostly agree."

SRI also has a Japanese version of VALS (Winters, 1992). The Japanese version is designed to clarify the distinct differences between Western and Japanese values and behavior. The research of Tsunoda (1985) suggests that there are indeed differences in thought processes between the Japanese and non-Japanese.

GLOBAL SCAN

Global Scan was designed to be a proprietary resource available to the clients of the advertising agency Backer Spielvogel & Bates Worldwide (Winters, 1992). Global Scan began in 1985. Each year consumers from eighteen countries were interviewed and the results added to a database. Responses were clustered into the following groups:

1. Strivers
2. Achievers
3. Pressured
4. Traditionals
5. Adapters

As expected, the size of each of the five groups varied from country to country.

GRAVES' THEORIES

The late psychologist Clare Graves of Union College developed a theory of the emergence in human history of successive clusters of individuals, each with its own predominant way of thinking and behaving. Graves' research on the integration of biological, psychological and sociological factors was presented in his 1970 article in the *Journal of Humanistic Psychology* (Graves, 1970).

Graves theorized that the psychology of the mature human is an emergent process marked by the progressive subordination of older ways of thinking and behavior to newer higher-ordered ways of thinking and behaving. The process is potentially open-ended for the whole of mankind. Although humanity is evolving upward psychologically the individual settles into one cluster and takes on the needs, values, aspirations, behaviors and predisposition for that particular cluster. These clusters are:

Type 1: Primitive
Type 2: Tribalistic
Type 3: Egocentric
Type 4: Absolutistic
Type 5: Materialistic
Type 6: Relativistic
Type 7: Systemic

It is difficult to determine precisely the number of individuals of each type. Dr. Graves' research (Graves, 1970) suggests the proportion of each type in the total United States is as shown below. These percentages vary from country to country.

- Type 1 is not significantly represented in the population
- Type 2 about 5% of the population
- Type 3 about 15% of the population
- Type 4 about 30% of the population
- Type 5 about 25% of the population
- Type 6 about 20%.of the population
- Type 7 about 5% of the population

ASSESSMENT

VALS and Global Scan are essentially descriptive categorizations that lack a theoretical basis (Winters, 1992). Although they represent sophisticated lifestyle and/or purchase behavior systems, they are of limited use for proactive marketing of any type, especially Web-based marketing. Knowing what category a consumer is in, if it can be determined, provides only superficial clues regarding the psychological characteristics of the individuals in that group.

For example, knowing that the Global Scan "Achievers" expect high levels of service gives some insight into *what* could be said on a Web site designed for achievers, but gives no directions regarding *how* it should be said. Without insight into the psychological characteristics of individuals, it is difficult to know *how* to present product features and benefits.

Only Graves' theories provide both theoretical and practical guidance for the design of targeted Web pages. The disadvantage of using Graves' theories is that categorization of individuals is difficult. Dr. Graves used an open ended "write a story" approach in most of his research. He did not believe that the typologies could be identified with simple multiple-choice questions. New instruments need to be developed before Graves' theories can be effectively used in Web-based psychographic segmentation.

SUMMARY

In summary, Web-based marketing currently uses a "one size fits all" approach that is inconsistent with the concept of market segmentation, a key component of the consumer orientation era. This is analogous to the situation in international marketing in which a standardized approach is used. By borrowing the concept of intermarket segmentation from the field of international marketing, Web marketers can conceptualize how individuals in cyberspace can be "clustered" to form target segments based on psychographic or lifestyle factors. These segments could then be addressed with targeted messages. Of the three approaches discussed in this paper, the theories of Clare Graves offer the most potential for market segmentation on the Web because his theories have a strong conceptual basis. Additional work needs to be done to determine how to best capitalize on Graves' theories.

REFERENCES

Bearden, W. O., Ingram, T. N., & LaForge, R. W. (1998). *Marketing Principles & Perspectives* (2nd ed.). Boston: Irwin McGraw-Hill.

Graves, C. (1970). "Levels of Existence." *Journal of Humanistic Psychology*, Volume 10, Number 2, Fall 1970 131-155.

Jain, S. C. (1996). *International Marketing Management* (5th ed.). Cincinnati, Ohio: South-Western Publishing.

Tsunoda, T. (1985). *The Japanese Brain: Uniqueness and Universality*. Tokyo: Taishukan Publishing Company.

Winters, L. (1992). "International Psychographics." *Marketing Research*, Volume 4, Number 3, September 1992, 48-49.

MARKETING ON-LINE: BENEFITS, PRINCIPLES, AND TRENDS

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INTRODUCTION

The purpose of this exploratory report is to discuss the marketing opportunities derived from the Internet, the marketing principles implemented by on-line marketing pioneers, and the trends in on-line marketing.

This study includes an overall discussion of Internet benefits to businesses, electronic commerce, (e-commerce) and marketing methods used on the "Net." New technology and new means of marketing and selling goods and services–especially on the Internet–are adding fuel to competition around the world. Much of the importance of studying the marketing of goods and services on-line comes from the expansion of telecommunication systems that put the seller and the buyer on-line without the need of intermediaries. The Internet definition and the benefits it brings to contemporary businesses through electronic commerce are selected for discussion first.

Second, marketing principles stressed by on-line marketing pioneers are discussed. The importance of meeting customer expectations, and analyzing data collected about customers on-line is discussed. The electronic commerce trends of the 1998 holiday season are discussed in this section.

Last, the report concludes with the summary. In the following section of the report, Internet is defined and the benefits it brings to contemporary businesses through the use of electronic commerce are explored.

THE INTERNET

An increasingly important way that both public and private organizations are networking internally and with other organizations is through the Internet. The Internet is perhaps the most well-known—and the largest—implementation of networking—linking millions of individual networks all over the world. The Internet has a range of capabilities that organizations are using to exchange information internally or to communicate externally with other organizations. This giant network of networks has become a major catalyst for electronic commerce (e-commerce).

The Internet is based on client/server technology which is a model for computing that splits the processing between clients, the user point of entry for the required function; and servers, the networks that satisfy some or all the users' requests for data and/or functionality. Users of the Net control what they do through client applications, using graphical user interface or character-based products that control all

functions. All the data, including e-mail messages, databases, and Web sites, are stored on servers. Servers dedicated to the Internet or even to specific Internet functions are the heart of the information on the Net (Kenneth & Jane, 1998).

Major Internet capabilities include e-mail, Usenet newsgroups, LISTSERVs, chatting, Telnet, FTP, gophers, Archie, Veronica, WAIS, and the World Wide Web. The World Wide Web is at the heart of the explosion in the business use of the Net.

Organizations are deriving many benefits from the Internet, some include:

1. Reducing communication costs
2. Enhancing communication and coordination
3. Accelerating the distribution of knowledge

The Internet is rapidly becoming the technology of choice for electronic commerce because it offers businesses an even easier way to link with other companies or individuals at very low cost. The Internet's global connectivity and ease of use can provide companies with access to businesses and individuals that would normally be outside their reach. Web sites are available to consumers 24 hours a day. Marketers can use the interactive features of the World Wide Web (the Web) to hold consumer's attention and can tailor communications precisely to individual customers. The Web shifts more marketing and selling activities to the customer, as customers fill out their own on-line order forms (Hoffman, Novak, and Chatterjee, 1995). New marketing and sales channels can be created. Businesses can find new outlets for their products and services abroad because the Internet facilities cross-border transactions and information flows (Quelch & Klein, 1996). Handling transactions electronically can reduce transaction costs and delivery time for some goods, especially those that are purely digital (such as software, text products, images, or videos).

Companies large and small are using the Internet to make product information, ordering, and customer support immediately available and to help buyers and sellers make contact. According to CNN (1999), TravelWeb, is a Web site that offers prospective vacationers pictures and electronic information on more than 16,000 hotels in 138 countries. Travelers can book reservations with a credit card number if they are using a secure Internet browser.

Using the Internet and the Web offers businesses new flexibility because they can update their Web page offerings as often as needed. AMP, Inc., a $5 billion electronic components manufacturer, publishes 400 catalogues a year at an annual cost of $8 to $10 million. By placing its catalogues on the Web, the company hopes to reduce and eventually eliminate these costs while offering catalogues that are always up-to-date. AMP Connect, AMP's Web-based product catalogue, has 30,000 registered users and 33,000 hits per day. AMP is capitalizing on its success by creating AMP eMerce Internet Solutions, a division that will help manufacturers and other companies develop Internet-based product catalogues and selling mechanisms (Wilder & Stahl, 1996).

Companies find that through e-mail they can answer customer questions rapidly and usually at lower cost than by staffing a telephone system. Dell Computer has established a Dell newsgroup on the Net and other on-line services to receive and handle customers' complaints and questions. They answer about 90 percent of the questions within 24 hours. Dell also does free market research through these newsgroups rather than paying a professional organization for the same information (Kenneth & Jane, 1998).

The Internet is also performing electronic marketplace functions, directly connecting buyers and sellers. By skirting intermediaries, such as distributors or retail outlets, purchase transaction costs can be reduced.

The Internet is automating purchase and sales transactions from business to business as well as transactions between businesses and individuals. Cisco systems, a leading manufacturer of networking equipment, sells more than $1 billion per year through its Web site. Order taking, credit checking, production scheduling, technical support, and routine customer support activities are handled on-line (Caisse, 1999).

DIRECT MARKETING PRINCIPLES "ON-LINE"

In December, 1998, investment banking firm Gruppo, Levey and Co. (GLC) released the results of a survey of e-commerce efforts among direct marketers. The study, which found that 73% of direct marketers conduct transactions on the Internet and 43% of those Web businesses are profitable, echoed Target Marketing's own results of 61.5% and 41.4%, respectively, (State of the Industry, January 1999, p. 36).

The GLC study found that businesses are "ramping up" their use of direct marketing techniques on the Web, including introducing customized and seasonal on-line catalogues, collecting customer data for database marketing and conducting targeted campaigns through e-mail marketing. Among the marketers surveyed by GLC, 69% offer their complete print catalogues on-line. More than 25% of survey respondents predicts triple-digit increases in e-commerce sales in 1999, indicating that direct marketers will aggressively expand Web efforts (State of the Industry, January 1999, p.36).

The Web is just beginning to fulfill its promise of becoming the marketers' wonderland. On-line marketing pioneers like Amazon.com, ABC News and EDGAR Online are applying classic marketing principles to the evolving web environment. They add technological twists to reproduce the off-line experience for customers, while they gain for themselves the information they need to keep customers coming back for more.

These successful pioneers offer many lessons to other marketers about how to use the Web to accomplish the same success for their companies. First, and foremost, among these lessons is "Don't forget solid marketing principles." The Internet is a new, high-tech medium, and there is a tendency to focus too much on the technology, but human nature has not changed. The marketing strategies that worked for successful brands in newspaper, radio, and television marketing will work on the Internet with some fine-tuning. Pharmaceutical marketers are now beginning to embrace better on-line strategic marketing approaches.

Here are some lessons that can be learned from successful web pioneers (Robinson & Peroff, 1999):

BUILD STRATEGIES AROUND A CLEAR GOAL

Good on-line marketing starts with having a clear goal and then building strategies that will achieve it. Whether the goal is branding, commerce, customer service, or marketing, successful on-line marketers are building their strategies around what they have learned about their user's needs and expectations. They are gaining their insights on-line, much as traditional marketers learn through such tools as focus groups and telephone surveys.

LEARN WHAT USERS WANT, AND HOW THEY WANT TO GET IT

Interactive marketers survey on-line users while they are on-line to learn what they want and how they want to get it. For example, ABC News conducts "flash polls" by asking visitors to its web site for opinions on specific topics. They also ask what users think the previous week's top story was. This information tells ABC News what type of stories their users want to read more about.

TRACK ON-LINE BEHAVIOR TO BUILD RELATIONSHIPS

It is also important to track the behavior of the web site visitors, not just "hits," number of visitors, and page views, but which pages they view, how long they linger, how often they return. Tracking tells marketers where the visitors cluster. More than anything else, these behavioral patterns demonstrate what attracts and engages visitors. Using this information, marketers can build more

intelligent and interactive environments that continue to attract more visitors, keep them engaged longer, and create the opportunity to building lasting, sustainable relationships.

BUILD USER PROFILES TO CREATE MARKETING TOOL

In addition to behavior tracking, the development of user profiles creates another valuable asset in on-line marketing. Profiles can be developed by encouraging visitors to register in exchange for newsletters, updates, or notification of special on-line events. EDGAR Online asks visitors to register for free trial subscription to their offerings of companies' SEC filings such as 10-K's and 10-Q's. The registration process identifies users by demographics, profession, job function, and areas of interest. The information can be used to develop ongoing traditional marketing programs, such as advertising and telemarketing, and for one line direct marketing. Using Microsoft Site Server or similar software makes gathering and managing data for a marketing program automatic and easy.

MINE DATA TO PERSONALIZE SERVICE

Forward-looking marketing strategies will rely on mining data collected from web site visitors to allow segmenting consumers by user types. From there, marketers can create personalized marketing programs, allowing them to more efficiently and directly meet the needs of their consumers. In addition, this interaction will provide a guide for promotional and advertising development that is targeted to specific audience segments.

STRATEGIC PLANNING IS KEY TO SUCCESS

The integration of marketing strategy with technology is a frontier for marketing and communications. Until this point, most Internet marketing has relied on technical or design expertise to attract and hold an audience. Recognizing and developing the best marketing opportunities require both experience and expertise in Internet and traditional consumers brand marketing. The increased sophistication of on-line users requires marketers to look beyond technology and to incorporate direct-to-consumer brandmarketing skills for higher marketing return on investment.

STATISTICAL DATA ABOUT ON-LINE SALES

As it is said, "you have to spend money to make money." And it seems that on-line catalogers have gotten that message loud and clear. Even though on-line orders still constitute a small percentage of many marketer's overall sales, catalogers are spending more money in hopes of reaping the fiscal rewards later, according to CATALOG AGE's third annual exclusive survey on electronic marketing.

According to a study by Oberndorf (1999), nearly 25% of the business respondents with an on-line catalog saw a 100% increase in the percentage of sales generated from the Internet over last year. However, the percentage of revenue that Web catalogs contribute is still small relative to total sales. Half of the survey respondents say their Web sites account for less than 1% of coverall sales, that is 73% of business-to-business survey participants, 46% of consumer catalog respondents, and 37% of participating hybrids (catalogers that sell to both consumers and businesses). Slightly more than a third (39%) of survey respondents say their Web Sites account for 1 to 10% of overall sales. Only 11% of respondents, 16% of hybrids, 12% of consumers, and 4% of business-to-business–say their Web catalogs account for more than 10% of total revenue.

Yet 30% of participants spend more than $50,000 annually to maintain their Web sites, and 66% spent a higher proportion of marketing budgets on their sites this last year. On 28% of this year's respondents spend less than $5,000 annually to maintain their Web sites, including 72% of those with

annual sales of less than $1 million. As expected, the larger the company, the larger the Web site investment. Of those with annual sales of more than $50 million, 80% of hybrids, 54% of consumer catalogers, and 44% of business-to-business catalogers spend more than $100,000 on maintaining their electronic catalogues. The survey median annual cost to maintain a Web site is $19,700.

More catalogers have come to believe that designing a Web site ought to be left in the hands of experts. Of this year's survey respondents, 44% used an agency to design their electronic catalog, compared to 20% last year.

About one-fifth (21%) of survey respondents view their web sites as a prospecting tool–an economical and convenient method of finding new customers, as well as of obtaining more information about existing competitors. But 55% of survey respondents do not bother using any sort of user registration to track existing customers, down 15 percentage points from last year's 70%. Of the 455 participants whose sites include user registration, only 16% require visitors to register before shopping, the remainder says that registration is optional. As expected, 97% of respondents that have registration collect e-mail addresses from visitors. Only 18% ask users about their products, interests, and preferences, and just 17% ask for demographic information such as age, gender, and income.

While many Web catalogers collect data from on-line visitors, some still do not know what to do with the information. But the numbers this year do indicate they are learning. Only 20% of respondents this year admit they do nothing with this information, compared to a much higher 41% last year. Of those participants that use the collected data, nearly 38% send e-mail messages about special offers to on-line visitors, 11% customize the site for individual customers according to past purchases, and only 3% sell the data to or trade it with other electronic marketers. (Oberndorf, 1999)

Internet retail sales in the U.S. over the 1998 holiday shopping season topped $8.2 billion, nearly seven times more than the $1.2 billion sold a year earlier, according to a new report by the Marketing Corporation of America (MCA), a unit of Interpublic Group of Cos. Inc., which studied holiday on-line shopping.

According to MCA report, books were the most popular on-line purchase, followed by computer hardware and accessories, music and video products and computer software, MCA said.

The MCA study also found that the average on-line buyer spent $365, with women spending an average of $495 and men spending an average of $260. Based on reports from retailers and anecdotal evidence, Internet shopping is exploding and will continue to grow as consumers opt to browse the Web for holiday gifts and purchases other times of the year (Direct Marketing, 1999).

Internet service provider America On Line (AOL) reports the holiday on-line shopping is up 35% among its 14 million subscribers. That's a total of 750,000 people who are buying over the Net (Traffic World, 1999).

SUMMARY

An increasingly important way that both public and private organizations are networking internally and with other organizations is through the Internet. The Internet is rapidly becoming the technology of choice for electronic commerce because it offers businesses an easier way to link with other companies or individuals at very low cost. Organizations are deriving many benefits from the Internet, which include: reducing communication costs; enhancing communication and coordination; and accelerating the distribution of knowledge.

Among the lessons that can be learned from on-line marketing pioneers is "Don't forget solid marketing principles." Other principles for success are: build strategies around a clear goal; learn what users want, and how they want to get it; track on-line behavior to build relationships; build user profiles to create marketing tools; mine data to personalize service; and, strategic planning is the key to success.

Even though on-line orders still constitute a small percentage of many marketer's overall sales, catalogers are spending more money in hopes of reaping the fiscal rewards later. More catalogers have come to believe that designing a Web site ought to be left in the hands of experts.

Internet retail sales in the U.S. over the 1998 holiday shopping season topped $8.2 billion, nearly seven times more than the $1.2 billion sold a year earlier. Books were the most popular on-line purchase, followed by computer hardware and accessories, music and video products and computer software. Women spend more money shopping on-line than men and many on-line retailers target women.

REFERENCES

Andrews, K.J. (1999). Special Report Internet: Briefing. *Zip/Target Marketing*, February, 1999, 93-95.

Anonymous (1999). Online U.S. Holiday Sales Surged in '98. *Direct Marketing*, February, 1999, 6-7.

Anonymous (1999). E-commerce Comes of Age. *Traffic World*, February, 1999, 17.

Caisse, K. (1999). Cisco to Use Web to Reach Resellers. *Computer Reseller News*, February, 1999, 32.

Hoffman, Novak, and Chatterjee (1995). Commercial Scenarios for the Web: Opportunities and Challenges. *JCMC*, December, 1995, 39.

Kenneth and Jane (1998). *Management Information Systems*. New Jersey: Prentice Hall.Robinson.
Oberndorf, S. (1999). Reaping Web Rewards. *Catalog Age*, March, 1999, 43-51.

Wilder, C. (1996). Commerce Gets Webbed. *Information Week*, September, 1996, 39-44.

Quelch, and Klein (1996). The Internet and International Marketing. *Sloan Management Review*, Spring, 1996, 24-26.

R. (1999). Learning from the Internet Pioneers. *Medical Marketing & Media*, February, 1999, 60-64.

MARKETING SIMULATIONS, INTRODUCTORY-LEVEL COURSES, AND HISPANIC STUDENTS: AN INTEGRATIVE INVESTIGATION OF AN EDUCATIONAL TRICHOTOMY

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ABSTRACT

The paper describes experiences made in the process of globalizing the introductory-level business curriculum of predominantly Hispanic students. A computer simulation was utilized to reengineer traditional approaches to teaching introductory-level courses, and to enhance active and interactive learning by placing the course in the context of a global environment. The paper outlines the necessary measures to: first, ensure that students from a different than the Anglo-American cultural background benefit from simulations and, second, to accommodate the introductory-level student status which affects the utilization of the simulation in general, and the performance of the Hispanic students in particular.

INTRODUCTION

The globalization of the business classroom can be understood in two different ways. It can describe the process of internationalizing the curriculum in order to expose students to the worldwide economic, political, and social changes that have occurred over the past decade and have dramatically changed the world. Several events and developments, such as the break-up of Eastern Europe, the emerging markets in Latin America, the progress of European Union and NAFTA, the rise and fall of Asia's economy, and the globalization of consumer and business markets have provided opportunities and threats that business students need to comprehend.

On the other hand, the globalization of the business classroom can also address the origin-related diversity of the student body itself. Besides an ever growing number of international students pursuing an education in the United States (Lambert, 1995), ethnic groups in the United States, such as Hispanics, are growing and are increasingly entering business classrooms (Perez, 1997; Ryan & Kanellos, 1995). This leads to situations where inherently global business classrooms are being further internationalized through globalized curricula. When such a process is attempted on introductory levels, the situation appears to be even more complicated.

The present paper describes experiences made in the process of globalizing the introductory-level business curriculum of predominantly Hispanic students by the means of distance learning. More specifically, a computer simulation was utilized in order to reengineer traditional approaches to teaching introductory-level courses, and to enhance active and interactive learning by placing the course in the context of a global environment. Active knowledge gathering and knowledge application were emphasized. Universities from several countries were participating.

Before summarizing the experiences, the terms "Hispanic" and "Simulation" may need some theoretical consideration. First of all, drawing upon definitions from previous literature (e.g., Aleman, 1994; Gimenez, 1996; Padilla, 1997; Tan, 1994), the term Hispanics refers to people of Latin American descent who were born, live, work, or study in the United States or elsewhere. The term Hispanic appears

to be most appropriate to describe the ethnic group under consideration and, for practical purposes only, this term will be exclusively used. The author recognizes, however, that the term Hispanic may potentially be biased, stereotyping, and over-generalized, as contended by Gimenez (1996) and other authors. Second, a computerized business simulation can be described as a dynamic environment that integrates a computer-coded simulator, students competing through interaction and decision-making, and an instructor who directs, supports, and observes the behavior of the participants (Carvalho, 1991). A vast number of authors has described why simulations became so attractive from the pedagogical point of view (e.g., Curry & Moutinho, 1992; Engeholm & Bigel, 1996; Kang 1995; Keys et al., 1994; Lyles et al., 1992; Montgomery et al., 1997; Towne, 1995; Walters et al., 1997; Weiner & Boyer, 1993; Windschitl, 1998). However, despite of the extensive research on simulations, two potentially problematic issues emerge. First of all, none of the previous articles and studies has addressed the issue of whether the advantages and limitations of computer simulations differ when Hispanic students are participating. Second of all, how does the introductory level affect the utilization of the simulation in general, and the performance of the Hispanic students in particular. As will be outlined, these two issues may require several adjustments.

TAKING INTO CONSIDERATION THE HISPANIC FACTOR

Research has revealed that values, learning styles, and communication patterns of Hispanic students differ from those of Non-Hispanics (e.g., Dunn 1993; Gonzalez, 1998; Grossman 1995; Padilla, 1997; Scarpaci & Fradd 1985; Schuhmann 1992; Tan, 1996). In particular, Hispanic students: 1. are more dependent on approval; 2. relate better to a person-centered than a thing- or idea-centered curriculum; 3. prefer short-term assignments over term projects; 4. avoid competition with peers; 5. have a need for anonymity; 6. are rather motivated by interpersonal than impersonal drives; 7. avoid verbal acknowledgment of responsibility for mistakes and errors; and, 8. tend to react spontaneously and impulsively. Based on these findings, the simulation utilization needs several adjustments.

INSTRUCTOR'S ROLE

Although students participating in simulations need to spend a significant amount of their time by themselves, the instructor should always be present in the classroom or computer lab. It is very tempting to just let students do their simulation work without any interference. This situation may actually work out for many students, but for Hispanic students it is the wrong approach. The experience of the author has shown that Hispanic students hesitate to take initiative and make decisions until they were able to discuss their solutions with the instructor. Although simulations introduce uncertainty about the correctness of decisions, Hispanic students need instructor presence and instructor approval to perform well.

Similarly, feedback and rewards should be given regularly and often. Hispanic students need more personal feedback than other students, and also need rewards even if their performance in the simulation is not meeting the instructor's expectations. Since rewards provided by the simulation are expressed in non-personal information such as increased market shares or better financial ratios, the rewards by the instructor should be of personal nature. Simple individual attention may often be sufficient.

METHOD'S ROLE

The participation in simulations is primarily a thing- or idea-centered activity. This aspect does not compare well with the Hispanic culture of relationship focus. However, several adjustments can be made to de-emphasize the technology. Most importantly, the instructor should focus on individual characters involved, such as the "Chief Executive Officer", "Financial Manager", or "Marketing Manager." By assigning those roles, Hispanic students see more personal characteristics introduced into

the simulation. Additionally, comprehensive and semester-long simulations should be divided into smaller, if possible, daily tasks. By doing so, the Hispanic student's preference for short-term over long-term assignments does not inhibit his or her overall performance.

Another important solution to increase Hispanic student's performance in global simulations may be reached by de-emphasizing the competitive character of the simulation. Hispanic students tend to avoid peer competition. Since competition is part of simulation games, the instructor should focus on cooperation between company teams, rather than using the competitive character to motivate the student's participation.

TEAM MEMBER'S ROLE

For Hispanic student teams to perform better in global simulations, the discussion of alternate solutions should be constantly and actively encouraged by the instructor. Since Hispanic students tend to react spontaneously and impulsively, and attempt to avoid confrontation with peers, decisions are often ad hoc. The team members, however, have to understand that better decisions can be made if they are being discussed among the team members. Since Hispanic students tend to react negatively to open criticism, instructors should avoid enforcing open arguments. Rather, interpersonal relationships among the team members should be encouraged by the instructor to improve intra-group discussion. At the same time, the instructor should employ supporting teaching methods and techniques that de-emphasize impulsiveness.

TAKING INTO CONSIDERATION THE INTRODUCTORY-LEVEL FACTOR

In addition to the well-established characteristics and requirements of simulations and simulation instructors, the following recommendations can be made when utilizing global simulations in the instruction of introductory-level students.

INSTRUCTOR'S ROLE

An enthusiastic instructor is the most important variable in determining the success of business simulations in introductory courses. Freshmen and sophomores, more than upper-level students, will only be enthusiastic about the simulation if their instructor is enthusiastic, too. The uncertainty and, at times, frustration during the initial stages of a simulation can be overcome if the instructors stay motivated and repeatedly emphasize how excited they are about having the students participating in a simulation. This is of additional importance for Hispanic students.

However, despite all enthusiasm, an over-involvement is not recommended. As outlined before, simulations should lead to learning-by-doing situations. Particularly Hispanic introductory students often expect the instructor to make the decisions. Nevertheless, besides all consideration of the Hispanic factors, it is of utmost importance that introductory students make their decisions themselves, and experience possible negative outcomes. In the past, teams that went out of business came back with the best results.

METHOD'S ROLE

In the beginning, introductory level students will be overwhelmed with the information and knowledge that seems to be required by the simulation. A sense of frustration will spread rapidly, inhibiting all globalization efforts. At this point it is important to let the students know that this is a normal, expected situation. In most simulations, the first few decisions consist of trial-and-error approaches. Once introductory students understand and accept this, they feel more comfortable and take failure less personal.

In this respect, another important aspect is that most textbooks for introductory business courses are identical in that the areas of accounting and finance are covered somewhere in the back of the book.

For a successful participation in a simulation, however, knowledge about financial statements is needed before most of the other chapters. Instructors should, therefore, switch as soon as possible to accounting and finance, before covering other areas.

TEAM MEMBER'S ROLE

Introductory students seem to be very reluctant to use online help. This is particularly true for Hispanic students. Whereas upper-level students soon communicate frequently with online assistants, it is very hard to have introductory students doing the same. Again, they prefer to rely on the (personally known) instructor of the course. Instructors, however, should refer students also to the online assistants.

In many cases, introductory students have not yet developed the responsibility to attend team meetings and to participate in decisions. Whereas upper-level students can be expected to organize themselves well, introductory students often exhibit difficulties in "getting the team together". Additionally, they often feel that too much outside-class work is required of them. The latter may actually be true. To reduce the outside work that introductory students have to do for the course, the instructor could schedule one (of three) weekly classes in the computer lab. This is also of advantage because it makes it easier for the team to actually meet with *all* members. Quizzes, weekly lab attendance checks, and peer evaluations are good means to motivate and generate participation, although some Hispanics resist peer evaluations.

CONCLUSION

Computer simulations are increasingly used in the process of globalizing the business classroom (Connor et al., 1997; Keys et al., 1994, Schlais et al., 1998). However, culturally influenced learning and communication patterns may inhibit the success of Hispanic students, when global simulation approaches are not adjusted to specific Hispanic cultural traits. It is a challenge for globalizing educators to implement necessary changes. This paper has suggested some initial adjustments based on experiences made by the author. It is important that all students feel comfortable when participating in a classroom globalization process, not just those students whose cultural characteristics appear to match with the process requirements. The accommodation of an origin-related diversity of students in the internationalization process would represent the ultimate globalization approach.

REFERENCES

Aleman, N. L. (1996). *The Quality of Education and the Level of Academic Satisfaction Among Mexica/Chicano and Latino Students at The University of Minnesota – Twin Cities*. Ann Arbor, MI: UMI Dissertation Services.

Carvalho, G. F. (1991). "Evaluating Computerized Business Simulators for Objective Learning Validity." *Simulation & Gaming*, 22, 174-195.

Curry, B., & Moutinho, L. (1992). "Using Computer Simulations in Management Education." *Management Education and Development*, 23(2), 155-167.

Dunn, W. (1993). "Education Diversity." *American Demographics*, 15(4), 38-43.

Engeholm, G. M., & Bigel, K. S. (1996). "The Evaluation of a Management Simulation as a Method of Learning." *Business Education Forum*, 50(4), 21-24.

Gimenez, M. E. (1996). "Latino/Hispanic – Who Needs a Name?: The Case Against a Standardized Terminology." In: Darder, A., Torres, R. D., & Gutierrez, H. (eds.) *Latinos And Education*. New York: Routledge, 225-238.

Gonzalez, M. L. (1998). "Successfully Educating Latinos." In: Gonzalez, M. L., Huerta-Macias, A., & Villamil-Tinajero, J. (eds.). *Educating Latino Students*. Lancaster, PA: Technomic Publishing, 3-28.

Grossman, H. (1995). *Educating Hispanic Students – Implications for Instruction, Classroom Management, Counseling and Assessment*. Springfield, IL: Charles C. Thomas.

Kang, S. (1995). "Computer Simulations as a Framework for Critical Thinking Instruction." *Journal of Educational Technology Systems*, 23(3), 233-239.

Keys, J. B., Wells, R. A., & Edge, A. G. (1994). "The Multinational Management Game: A Simuworld." *Journal of Management Development*, 13(8), 26-37.

Lambert, R. D. (1995). "Foreign Student Flows and the Internationalization of Higher Education." In: Hanson, K. H., & Meyerson, J. W. (eds.) *International Challenges to American Colleges and Universities*. Phoenix, AZ: The Oryx Press, 18-41.

Lyles, M. A., Near, J. P., & Enz, C. A. (1992). "A Simulation for Teaching Skills Relating to Organizational Self-Renewal." *Organizational Self-Renewal*, 11(7), 39-47.

Montgomery, K. K., Brown, S. C., & Deery, C. (1997). "Simulations: Using Experimental Learning to Add Relevancy and Meaning to Introductory Courses." *Innovative Higher Education*, 21(Spring), 217-229.

Padilla, F. M. (1997). *The Struggle of Latino/a University Students: In Search of a Liberating Education*. New York: Routledge.

Perez, J. (1997). "Where are Students Now." *Hispanic Business*, 19(12), 14.

Ryan, B., & Kanellos, N. (eds.) (1995). *Hispanic American Almanac*. New York: UXL.

Scarpaci, J. L., & Fradd, S. H. (1985). "Latin-Americans at the University Level: Implications for Instruction." *Journal of Multicultural Counseling and Development*, 13(10), 183-189.

Schlais, D., Davis, R., & LeMaster, J. (1998). "Distance Learning Through the Global View Network." *Working paper presented at the Academy of International Business, Vienna, Austria, October 8, 1998*.

Schuhmann, A. M. (1992). "Learning to Teach Hispanic Students." In: Dilworth, M. E. (ed.). *Diversity in Teacher Education*. San Francisco, CA: Jossey-Bass Publishers, 93-111.

Tan, G. G. (1996). *Dropping Out Among Mexican-American Students*: A Multicultural Perspective. Ann Arbor, MI: UMI Dissertation Services.

Towne, D. M. (1995). "Learning and Instruction in Simulation Environments." *Instructional Science*, 23(11), 455-459.

Walters, B. A., Coalter, T. M., & Rasheed, A. M. A. (1997). "Simulation Games in Business Policy Courses: Is There a Value for Students?" *Journal of Education for Business*, 72(1), 170-174.

Weiner, J., & Boyer, G. (1993). "Simulation, Video, and High-Tech Applications." In: Vance, C. M. (ed.). *Mastering Management Education*. Newbury Park, CA: Sage Publications, 79-86.

Windschitl, M. (1998). "A Practical Guide for Incorporating Computer-Based Simulations Into Science Instruction." *The American Biology Teacher*, 60(2), 92-97.

MARKETING SIMULATIONS: LET'S TAKE THE MYSTERY OUT

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ABSTRACT

Before getting involved in graduate studies, the fourteen years of experience in the fields of accounting and marketing taught me about the business world and how the different disciplines (i.e., Marketing, Accounting, Finance) are interwoven to produce well orchestrated strategies that make a business successful. During my graduate experience the opportunity was there to work on a simulated business environment and discover its potential as a learning tool. As a professional educator I wanted to share with future business professionals the intricacies of marketing in the business world by using simulations at different levels to gradually transform business students into decision-makers.

It was a difficult road at the beginning because there were no specific guidelines or models to follow. Many of the simulations I reviewed—even those in the market today—present you with a complex array of issues pertaining to the specifics of the simulation that scares off many faculty members. In addition, most of the time, simulation guidelines fall short when dealing with the administrative details needed to efficiently prepare materials and those related to the operative part of their programs. Even after overcoming some of the previously noted hurdles, the emphasis is usually placed on the number crunching ability of the program.

This article is intended to throw some light into the mysterious world of business simulations from a marketing perspective (marketing simulations), and increase the interest in business simulated environments by providing general guidelines to facilitate the process of adoption and implementation. The paper will address the question of Why? (Professional as well as personal reasons), the selection process (the choice), planning and implementation issues, and ideas on how to be innovative.

INTRODUCTION

The use of simulations to study and evaluate changes in different elements/variables that affect potential outcomes is not new by any means. Industry and business have harvested the benefits of simulations by being able to analyze and evaluate complex situations in a very cost effective way. From engineering applications to business solutions, simulations have demonstrated their ability, agility, flexibility, and adaptability by providing greater insights into complex dynamic environments. Simulations are able to replicate, by means of sophisticated mathematical models, business or otherwise environmental conditions with a high level of realism. General Electric for instance, has successfully used simulations in management training to teach their managers the trade-off of short-term versus long-term planning (Thorne, 1992). Several years of experience in pricing strategy can be achieved in a relatively short time by experimenting with a computer simulation. Participants from an information service firm were able to evaluate in a simulated environment the impact of their pricing decisions on company results (Matanovich and Cressman, 1996). At Price Waterhouse, consultants learn what it takes to manage a knowledge-intensive company through the use of a business simulation. The simulated environment, identified as "Tango," requires the consultants to work on projects for fictitious customers and to compete with others for potential growth (Stewart, 1997). Corporate managers and field sales managers team up and make use of a simulation to develop a new sales compensation plan. After

conducting a number of simulations to see how their plans impacted sales personnel, the group selected a plan that emphasized both growth and profitability (Blessington, 1992). In the service industry simulations have assisted managers in decision-making and helped them achieve business objectives. They have been used as a planning tool to assure good use of resources and the quality of service (Smith, 1994).

In a similar way and with no less impact the use of simulations in the educational field has provided educators with the wonderful opportunity of challenging the new generation of decision-makers with replications of the business environments and its complexities. In addition to the direct benefits of manipulating variables and experiencing outcomes, simulations have been instrumental in exposing students to an even more crucial issue—team work—allowing students to acquire team management skills so important in today's total quality orientation. There are simulations specifically designed to address this important issue. For example, a simulation called "Self-managed Work Teams" provides the participants a deliberately charged environment where they have a chance to increase their self-awareness and monitor their own behavior (Solomon, 1993). In industrial engineering, which also includes aspects of management, simulations are being used to place students in an environment that emulates the industrial setting. Here students make a series of decisions on purchasing, production, marketing and other aspects (Bringelson, Lyth, Reck, and Landeros 1995). Marketing simulations like the Sales Management Simulation (SMS) that offer orientation and training for employees, screening for managers or would-be managers, and management training, are essential in the development of the skills students will need to succeed as professionals (Faria and Dickinson, 1994). It is a fact that management education needs to change because of the evolving nature of business. There are useful market-based simulations that require decisions on target segments, positioning, and the allocation of resources that could become a sort of strategic thinking laboratory and where team dynamics can be observed (Matanovich 1993).

Many times, however, due to time restrictions, limited resources, heavy teaching and/or administrative commitments, faculty members—especially those in smaller institutions—avoid getting involved. The reason is simple enough, simulations require time, resources, and dedication. The lack of detail information available (from the author(s) and/or publishers) in some respects, and the excessive amounts of information in others, complicate the situation. The following is intended to throw some light into the mystery behind simulated environments.

THE QUESTION WHY?

Among the professional reasons for utilizing simulated environments it is possible to mention the following: first, to provide students with the opportunity to (a) apply and practice concepts and strategies presented in class in a simulated environment; for example, the application of marketing strategies to the four elements of the marketing mix (i.e., differentiated strategy/positioning—where the price element of the marketing mix could be one of premium pricing strategy and the promotional element could emphasize advertising, personal selling, or both); (b) learn and develop team management skills and cooperative efforts towards a common goal; (c) learn and develop decision making skills in a competitive environment; and (d) learn and develop the skills required to resolve conflicts found when working as part of a team. A second reason would be to improve the educational development by using technology in the classroom to mimic the complex competitive marketing environment.

The personal reasons for using simulations are very unique and depend on each individual's perception of what is important from a personal perspective. I can think of two main reasons to do it. First and foremost to offer the students a practical view of marketing and an important reality check—to make sure students understand the difference between theory and practice. Secondly, and no less important, for love—love of what you can do for your students as an educator. Let's be realistic, simulations require a lot of dedication and attention to detail—work, work, work—especially if you have no assistance (i.e., student assistant or staff personnel).

THE SELECTION PROCESS: THE CHOICE

The selection process leading to a final choice involves a number of aspects: first, the course objectives. This includes (a) the specific course/topic and (b) the course level. Second, the level of complexity. This could be classified as (a) simple/basic, (b) specialized/concentrated, or (c) advanced/complex. Third, the following general requirements: (a) system (hardware) requirements, and (b) time requirements/constraints. Fourth, support offered by the publisher and by the author(s). Fifth, and a crucial task, is testing. The last phase of the process involves adoption or rejection.

With respect to the first aspect of the process, it is important to have a clear perspective of the objectives of the course and the intended level of materials and coverage/topics assigned to that course. For instance, for a Principles class (i.e., Principles of Marketing) the objectives involve presenting a broad perspective of marketing, where basic concepts, elements, strategies, and ideas are interwoven to create an overview of marketing. This reflects a lower or introductory level. A simulation that involves basic manipulations of different elements of the marketing mix with a limited number of products, market segments, or customer options should be sufficient to provide students an adequate level of involvement and challenge—at this level one product, and one segment is most frequently used. When more depth of coverage is pursued, courses specifically oriented towards a particular area within marketing are offered (i.e., Sales & Sales Management, Marketing Research). In this case the objectives are focused on a more in depth understanding of the intricacies of managerial processes, procedures, and tactics, and how they are connected. This is more in line with a course at a medium level of specialization and will suggest a simulation that is more specialized (i.e., Sales Management Simulation). Here not only some of the basic elements (product, price, promotion, and distribution) have to be manipulated, but the decisions could involve details of production forecast (at least for two products), managing a sales force—including hiring, training, compensating, and assigning territories—and usually serving/controlling different geographic locations/segments. Finally, for upper level courses (i.e., Marketing Management), where in addition to the previously mentioned issues (related to different elements of the marketing mix), the possible combination of more than one product and market segment, and a more in depth orientation on strategic decision making is required, then a simulation that provides flexibility of market conditions and involves strategic planning as well as more strict evaluation and controls methods will be the most appropriate. In addition, at this upper level other additional parameters of uncertainty can be easily added to provide environmental threats or conditions to which companies could be subjected.

Levels of complexity refer to issues such as the number of variables to manipulate, single versus multiple operative scenarios, number of products or product categories, basic versus complex options—for example, basic purchase of product units versus production schedules, loss of sales versus overtime capability to cover those sales. It is important, however, to be able to adjust a simulated environment to offer different grades of difficulty. For instance, in a simple/basic level it is important to limit the manipulation of certain variables (i.e., ordering costs, administrative costs) to provide a simplified model where students can observe clearly the impact of certain variables of the marketing mix elements without being affected by additional variability. In a more specialized/concentrated level of complexity, not only additional decision elements will be included (i.e., sales commission, production schedule to avoid overtime) but other elements—like demand factors—can be adjusted to add more variability to the decision process and increase the complexity of the marketing simulation. In the more advanced/complex level, in addition to manipulating more factors, including additional requirements of planning, evaluation, and control could increase the level of complexity, which require students to perform under more strict conditions and fully support their decisions.

When considering the general requirements one has to look at two main aspects. First, the system (hardware) requirements which could vary from: (a) Microcomputers with dos/windows environment and the basic needs for processor speed, hard drive capacity and speed, and the availability of 3.5 disk drive, CD-ROM drive, or both. (b) Sophisticated in-house main frame systems that require multiple stations—to receive input simultaneously if necessary—based on registered users. Or the more recent addition, (c) decentralized operative systems that receive the input from students, process the

results and provide feedback to both the students and the faculty coordinator/administrator (usually under a contractual agreement with the provider). Secondly, and most importantly, time requirements or constraints. Time requirements have to be evaluated from three different perspectives: Input, processing, and output conditions. In reference to the input, what level of sophistication does the program offer? Is it manual input? Is it automatic from a student's diskette? Is it on-line? How much time does the coordinator/administrator (faculty) has to spend during this stage? When looking at the processing part, how many stages does the processing take? Does the system process one case at a time and then combine them to get the results? Is the process transparent to the coordinator/administrator—one keystroke? Does it require more that one step to assure proper backup of the system and/or students' disks? As part of the output, consideration should be given to the requirements for printing the student's results and summary for the coordinator/administrator, as well as the printing time. Does the system offer an alternative to printing—like printing to a file (student's diskette or control file in the main frame).

Another very important aspect is support. Support refers to the resources provided by the author(s) and the publisher to facilitate the process of running, maintaining, and controlling the necessary operational elements of the simulation. Careful attention should be paid at the materials and other services available. These include, among others, the software, instructor manual, student manuals or book, and on-line support systems. In addition, if problems occur the coordinator/administrator should be clear on who will provide support (technical or otherwise). Is it the author(s)? Is the publisher assuming that responsibility? Is there a direct access to the previously mentioned sources? What kind of access? 1-800 number... e-mail... other? All of these questions become very important should something unexpected occur when one is in the middle of running a simulation and need answers immediately.

The next crucial step is testing the simulation. The simulation should be run on a trial bases using ones own data and parameters. The coordinator/administrator must evaluate different scenarios that can occur—for example, a student's group did not input the decisions, or student's disk got infected, broken, or lost. Does one have flexibility in those instances or in any other circumstances? What does the system offer in terms of flexibility, processing, and accuracy? What if it is a coordinator's/administrator's mistake—for example, he/she inputs a number in error. Can the error be repaired? The acid test of any simulation is based on the total outcome. The total outcome should include answers to the following questions: Does the simulation serve the coordinator/administrator's needs? Does it run as expected? What kinds of problems were encountered and were they relatively simple to solve? The test should serve as a confirmation of what the author(s) and publisher(s) are offering. If the simulation does not pass the test then it does not meet the coordinator's/administrator's objectives. It all comes down to the final test because in paper something can be easily overlooked.

Finally, after careful evaluation of all the precedent phases and the consideration of the limitations or issues that are acceptable and those that are not, a coordinator/administrator has to make a decision for adoption or rejection. If he/she is not completely sure about the decision, it is a good idea to take some extra time and reconsider some of the aspects that are unclear. If in doubt, the coordinator/administrator should ask the author(s) and/or the publisher all the necessary questions—in most instances they will be happy to clarify any concerns.

PLANNING AND IMPLEMENTATION

The planning phase involves three distinctive time-framed defined areas that require consideration. First, at the beginning of the simulation the following aspects require attention: (a) the simulation's framework and (b) materials to prepare ahead of time. Second, during the simulation the coordinator/administrator should be clear about (a) available form(s) or method(s) for feedback, (b) communication strategies between the students and the coordinator/administrator and (c) the presentation or display of the results. The third and final phase is the closing phase of the simulation. Here the coordinator/administrator needs to consider the following: (a) Are standard measures available? (b) Do more specific measures need to be created? and (c) The summary evaluation.

The implementation phase consists of two main areas. First, the evaluation of time factors, and then the control factors.

In the planning phase, at the beginning of the simulation, the coordinator administrator needs to create or define the simulation's framework. This requires the definition of how many industries one needs to create. In cases where there is more than one class (same level), where the same simulation will be used, different parameters need to be created to assure a unique version per class. The coordinator/administrator must also consider the number of periods the simulation will run, how many products to use (if more than one is offered and there is flexibility to select), how many segments to use (if alternative segments are offered and there is flexibility to decide). In addition, questions such as: how many teams per class (some simulations have limits as to how many companies are allowed in an industry)? and how many students per team (this will vary greatly with the level of complexity of the simulation—usually from two to five members)?

In this initial phase the coordinator/administrator has to consider the materials needed to prepare ahead of time. This part will also vary greatly with the level and complexity of the simulation and the intended objectives. For instance, planing an introduction to the simulation for a lower level class (Principles of Marketing – 300-level class) can be as easy as preparing enough information for two sessions. This should cover all the essentials. It may take four or five sessions to be able to relate the details of a more complex simulation and expectations to an upper level class (Marketing Management – 400-level class). When dealing with more complex simulations, handouts that include procedures, guidelines, expectations may need to be provided. The coordinator/administrator should also consider if any other forms require preparation (i.e., decision forms), or if those forms are provided and ready to use. If students' disks for each team need to be prepared and if certain files need to be cleared every time a new simulation starts (most of the time decision files and some cumulative files have to be cleared). In addition, the coordinator/administrator needs to be clear about the procedures required to initialize the simulation every time a new one is started.

During the simulation coordinator/administrator needs to consider what forms are available to provide feedback to the students. In most instances the forms are provided by the system and vary in complexity and quantity depending on the simulation. Some simulations offer a short format that summarizes income statement details, combined with other selective information (i.e., inventory control, marketing research). Others offer multiple forms that include more detailed analysis of sales by salesperson and sales regions, production costs and transportation charges, as well as more detailed research analysis (i.e., analysis of demand by regions). Depending on what is available the coordinator/administrator could require the students to prepare different kinds of analysis that will enhance their learning experience. The more complex the level of the simulation, the more detailed analysis is usually required.

The closing phase of the simulation involves making decisions about the units of measure the coordinator/administrator wants to select to determine the final position of the participating groups/companies. Some relevant issues are: Does the system provide some standard units of measure (i.e., profits, market share) or is there a need to create other measures by combining some of the ones available (i.e., an index measure)? Whatever the decision, the coordinator/administrator needs to make sure to use more than one standard measure to include different elements when evaluating final results and distributing the points assigned to the simulation. In addition, it is highly recommended that the coordinator/administrator prepare a summary evaluation of the results of the simulation so students can understand the way the final results and subsequent distribution of points occurred.

The implementation phase will revolve around precise definitions of the time factors and control mechanisms/forms. In reference to the time factors the coordinator/administrator has to determine the following time constraints: (a) A time frame for the simulation—how many iterations/periods will it run (i.e., four quarters, eight quarters). This will depend on the number of days/weeks of available scheduled classes. On a semester system you will be able to run up to three full years of operations (12 quarters), while on a quarter system the time frame is much more restrictive. (b) A time scheduled for decisions—when will students turn in their decisions (specific day of the week). (c) A time scheduled for

processing—when to run the simulation. (d) A time scheduled for feedback (results)—when will students get the results (specific day of the week). And finally, (e) a time scheduled for additional assignments (if additional work or analysis prepared in a team environment is expected). All of these time factors have to be well synchronized to avoid bottleneck situations or other delays in the process. One must make sure there is flexibility of action—especially when it comes to processing time. Here is where the unexpected usually occurs (i.e., a glitch in the system, a bad diskette). With respect to the control mechanisms/forms the coordinator/administrator has to be very clear about the reports that are available, not only for his/her use but also for the students and the industry in general. The information available will depend on the type of simulation program being used—certain simulations offer more detailed control reports than others. Some of the typical reports available for the coordinator/administrator include: decision summary, results summary, cumulative statistics, or other measurement factors (i.e., profits, sales lost to date), and research information available (i.e., demand factors, industry sales). The students usually receive a balance sheet, an income statement, selective information on inventory control, and in some specialized simulations (i.e., Sales Management Simulation) more detail reports on sales by salesperson and districts or regional areas. In addition, the students could receive a variety of research reports that could be as simple as the demand factor for next period or as complex as a full analysis of the demand factor breakdown by regions, products, etc. This last option is subject to the amount of money students are willing to spend on research information. Finally, industry reports usually will include, company rankings, market share (i.e., overall, by product, by territory), and sometimes control indexes. A clear perspective in all of these areas of control is essential for the success of managing a simulated environment.

IDEAS ON HOW TO INNOVATE

The possibilities are almost unlimited when it comes to innovation. Exercise creativity and find ways to expand the learning experience of the students. A couple of ways to accomplish this is by requiring students to do additional assignments/work, and to include some element(s) of uncertainty. First, in terms of additional assignments one has to exert caution and provide good balance between the complexity level of the simulation and the required assignment—the higher the level of the simulation, the more comprehensive/complex the assignment. A well-balanced assignment provides an additional learning experience and a way to evaluate not just decision-making, but time management and group effort. In a principles class for example, the coordinator/administrator could assign students the task of graphically reporting changes in their company's position, or sales, using M.S. Excell. In an upper level class (Marketing Management) one could require that students prepare control and evaluation forms for their companies (based on the simulation guidelines). Another option, is for students to prepare a comprehensive project dealing with company controls, operations and procedures (keeping full records of planning, decision-making activities, and evaluation of results). The coordinator/administrator can use any options or ideas separately or combine them to create an assignment that challenges the students, enhances their creativity, and complements the learning experience.

If the simulation provides the flexibility to manipulate certain elements such as other expenses or adding elements of uncertainty (i.e., environmental or natural disasters), not only does it provide the opportunity to add a bit of realism to a simulated environment, but also could serve as an element of control. This can be easily included by preparing a set of potential disasters (equal in number to the number of companies in an industry), randomly selecting a company number and a disaster, then applying it to selected periods/quarters during the simulation. It is important to keep the costs associated with disasters within limits that do not affect significantly any company in particular. In this way, since all the companies will be affected, the result of the simulation is not altered. The control element "other expenses" in the previous example is the one that students need to watch carefully and report to the instructor. If students are not checking the results properly they could overlook the charges and the coordinator/administrator can establish some penalties (i.e., 5% additional chargers for every quarter not reporte(d) to motivate participants to pay more attention to detail.

CONCLUSION

Computer simulations have extended their benefits to a vast array of sciences (i.e., physical, behavioral, social) proving their usefulness in the practical and applied environments of industry and business and also in the pedagogically oriented environment of education. In both instances, simulations have proven effective by providing opportunities to manipulate, evaluate, and study the impact of changes, or variations of an almost unlimited spectrum of elements/variables. There is no doubt that the involvement in simulations not only requires detailed evaluation of what is being offered (by different authors and publishers), but also detailed planning and timely implementation to ensure the achievement of the intended objectives.

I hope the preceding details offer a sort of road-map that complements the materials provided by the authors and publishers of simulation books, and helps to clarify the intricate details of what is involved behind the scenes of the mysterious world of simulations. Also, by taking the mystery out, I hope to motivate some colleagues, business people, or interested parties, to engage and embrace the almost unlimited possibilities offered by simulated environments in the business and educational arenas.

REFERENCES

Thorne (1992). "New Stimulus for Those Simulations." *Management Today*, Dec. 1992, 66-67.

Metanovich & Cressman (1996). "Pricing Information Services." *Marketing Management*, Volume Five, Number Two, Summer 1996, 46.

Stewart (1997). "The Dance Steps Get Trickier All the Time." *Fortune*, Volume One Hundred Thirty Five, Number Ten, May 26, 1997, 157-160.

Blessington (1992). "Revising the Pay Plan: How One Company Did It." *Sales & Marketing Management*, Volume One-Hundred and Forty-Four, Number Four, April 1992, 122, 124.

Smith (1994). "Computer Simulation Applications in Service Operations: A Case Study for the Leisure Industry." *Service Industries Journal*, Volume Fourteen, Number Three, July 1994, 395-408.

Solomon (1993). "Simulation Training Builds Teams Through Experience." *Personnel Journal*, Volume Seventy-Two, Number Six, June 1993, 10-14.

Bringelson, Lyth, Reck, & Landeros (1995). "Training Industrial Engineers with an Interfunctional Computer Simulation Game." *Computers & Industrial Engineering*, Volume Twenty-Nine, Number One-Four, September 1995, 89-92.

Faria & Dickinson (1994). "Simulation Gaming for Sales Management Training." *Journal of Management Development*, Volume Thirteen, Number One, 1994, 47-59.

Matanovich (1993). "Getting Dino-Sized Results from Marketing Education." *Marketing News*, Volume Twenty-Seven, Number Twenty-Three, November 8, 1993, 4-5.

MARKETING: WHERE WE'VE BEEN

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ABSTRACT

This paper traces the field of Marketing from its philosophical and economic background in bartering activity to modern Marketing in the US. Concepts of economics permeate the field today such as the four utilities, economic and rational man, needs, wants and demands, exchange and transactions. Now with the Internet we have an easily accessible international market place.

INTRODUCTION

Tracing the evolution of Marketing in the US in an article is a daunting task from several perspectives. One must ask and answer the questions of what to put in and what to leave out. If we restrict ourselves solely to the word "marketing" we begin with the turn of the 20th century. But, we know that marketing had its embryonic history and evolution in the field of economics, which was initially heavily influenced by philosophy. "It might be said that in the natural course of the economic development society progresses through predatory, hunting, pastoral, agricultural, craft, manufacturing, and marketing stages (Smith in Bartels, 1988)." Adam Smith conceived of man as the 'economic man' bent upon constant effort to better his condition. An opposite view was held by Ricardo, who foresaw the uncertainties of an expanding economy. David Ricardo was less idealistic and more pessimistic than Smith, as he viewed the growing disparity of interests in the rising factory system (Smith in Bartels, 1988). Certainly buying and selling activity of people, whether with money or barter has gone on at least from the beginnings of recorded history. During the period of pre-recorded history until the development of agriculture, all property was held in common for the social good. "…everything belonged to one, and everything to all. And there was nothing of which everybody could not use and take advantage (Mercado in Sheth and Fullerton, 1994)."

BARTER AND MONEY

With the development of agriculture surplus was created which facilitated the exchange of this surplus for other goods and services and trade exploded. As trade exploded specialization and the division of human labor grew exponentially. Eventually money supplanted barter as a common means of facilitating the purchase and sale of goods and services. "The contract of purchase and sale was being introduced for the common utility of seller and buyer, since each one needs the thing of the other (Vitoria in Sheth and Fullerton, 1994)." With the introduction of money in the form of gold and silver came the middlemen who bought from the producer and sold to the buyer. "…Each one would purchase with this metal, specially after being coined, whatever was convenient for the provision of his family. And realizing that many times it was lacking in the ground, many took upon themselves to bring it from outside at their own cost, and once bought, it was sold to the neighbors with some profit above the cost and expenses incurred. [These men] were initially called merchants by the common people because of their continuous use of buying and selling (Vitoria in Sheth and Fullerton, 1994). Early economists considered agriculture the only truly productive enterprise.

THE PHYSIOCRATS AND ECONOMISTS

The Physiocrats, among the earliest economic schools of thought founded in eighteenth-century France, held that only farming with nature's help could truly produce a surplus. Therefore, only the labor of farmers provided utility or value. "It was not until almost a century later that economists realized it was not a surplus that gave labor value making it productive, but rather any labor that produced utility provided value and was therefore productive. But this was such a subtle and difficult chain of reasoning, it even misled two of the greatest thinkers of the time—Benjamin Franklin and Adam Smith (Shaw in Sheth and Fullerton, 1994). The idea that some labor was more productive than others became a cornerstone of economics. "…the Father of Classical Economics, Adam Smith (1776, p. 639) noted that 'the labour of farmers…is certainly more productive than that of merchants, artificers and manufacturers.' Moreover, manufacturers were regarded as more productive than merchants, but even lowly merchants should not be considered 'in the same light' as those whose 'work consists in services (Smith, 1776).'"

FOUR UTILITIES

Eventually economists began to delineate the various kinds of utilities (capacity to satisfy customer wants) going beyond the early idea that only agriculture provided value. Form utility is created in the production process of transforming raw materials such as steel into a table or chair. However earlier economists only considered the extractive industries such as mining, agricultural milling, and manufacturing as producing form utility. Time utility is created in making goods and services available to customers when they desire them, such as after working hours or on Saturday. Place utility provides the goods and services in locations where customers can easily access them such as in their local neighborhoods. Possession utility allows for the transfer of ownership to whom it is desired such as in the purchase of a car or house. Three of these four utilities, time, place, and possession became the basis for a new field called "distribution," and this field later emerged into "marketing."

DISTRIBUTION

When distribution was separately identified as a field in the late 1800's, it was the task of the distributor to deliver goods to customers when they wanted them, where they wanted them, and to provide for the legal transfer of ownership. The three utilities soon incorporated all four as it was quickly realized that without the product none of the other three utilities could be provided. The four utilities provided the foundation for the human productive activities of "distribution." It was argued that "labor employed in carrying commodities from where they are produced to where they are to be consumed, and in dividing them into minute portions, so as to suit the wants of consumers, are really as productive as if they were employed in agriculture or manufacture (McCullock, 1844)." These ideas were expanded to include order processing, bulk breaking, branding, packaging, transporting, warehousing, inventorying, promoting, guaranteeing, and eventually providing credit.

MARKETING

Marketing has always existed in history, but the use of the term applied to a unique field and it's use as a noun instead of a verb occurred between 1906 and 1911 (Bartels, 1988). Ralph Starr Butler, then a professor at the University of Wisconsin tells how he conceived "marketing." "In brief, the subject matter that I intended to treat was to include a study of everything that the promoter of a product has to do prior to his actual use of salesmen and of advertising. A name was needed for this field of business

activity. I remember the difficulties I had in finding a suitable name, but I finally decided on the phrase 'Marketing Methods (Bartels, 1988).'" Originally, the market was the central place in the town where people went to purchase goods for their families. Bartels (1988) argued that marketing is not simply a business practice, but a social institution which meets and satisfies certain needs of people. Sociologists would agree that marketing certainly is a social institution which incorporates many sociological concepts of the group including the concepts of social class, status, and reciprocity or gift-giving. Holidays provide a major source of revenue for businesses of all type whether the holiday is a day such as Christmas with extensive exchange of gifts or a vacation period where travel agencies, hotels, restaurants, and tour organizers benefit. But there was probably no product class that was affected more by marketing or affected marketing more than the automobile.

THE CASE OF THE AUTOMOBILE IN AMERICAN MARKETING

"The Model T was a black, square vehicle so simple to drive and so easy to repair that Ford called it the 'universal car.' Ford had already discovered that if workers used the same gauging system throughout the whole manufacturing cycle, the parts would not have to be custom-crafted car by car but would fit any car of a given model. With the Model T, Ford achieved what he had been looking for. Parts were now uniform and interchangeable. Each assembler now performed just one task, and as a result the task cycle for the average Ford assembler fell from 514 to 2.3 minutes. With the introduction of the moving assembly line at Ford's new Highland Park plant in 1913, the cycle time was cut another forty-four seconds.

"More fascinated by factories than cars, Henry Ford built his company on these innovations in mass production. By drastically reducing the time needed to make an automobile, Ford found that he could cut the cost to the consumer by more than one-half, from $780 in 1910 to $360 in 1913. In the second decade of the century well over half the cars sold in the world were Model Ts. By 1923 Ford was producing 2.1 million perfectly identical cars and still had 50 percent of the world market. 'Every time I reduce the price of the car by one dollar, I get one thousand new buyers,' Henry Ford exulted."

Marketing became well developed during this period in American history. General Motors used marketing research to find that customers wanted different color cars and provided them any color car they wanted instead of the basic black provided by Ford. "It turns out that rather than its supposed organizational shortcomings, it was Ford's stubborn refusal to match General Motor's development of a diversified product line that accounted for Ford's declining fortunes during those [early] decades (O'Brien in Hausman, 1989). GM overtook Ford during the 1920s and 1930s not because its production and inventory systems were superior, but because its products were better than Ford's. "In the interwar automobile industry, as one suspects in the automobile industry of the 1980s, companies made and lost money more on the basis of the products they were producing than on the way these products were being produced O'Brien in Hausman, 1989)." GM was better than Ford at developing the "marketing concept:" produce what the customer wants, when the customer wants it, where the customer wants it, at a price the customer can afford., and realize a handsome profit in the process.

ACADEMIC MARKETING

The American Marketing Association and the Journal of Marketing dominated the first half-century of efforts to organize the discipline of marketing and disseminate the results of scholarly activity. The Journal of Marketing was first published in July, 1936. It was a consolidation of the American Marketing Journal and the National Marketing Review. The American Marketing Association grew out of the merger between the American Marketing Society and the National Association of Marketing Teachers in January, 1937 (Lewis and Owen, 1993).

The table below represents the subject matter included in the Journal of Marketing from its inception to 1967.

SHIFTS IN FOCUS

Early marketers focused on the product, then on production methods, and then on selling techniques. Each of these was labeled an "era" and was included in all early marketing texts. Later marketers were interested in the marketing concept and the societal marketing concept. "Keehn (1985) examines how a century of external changes prompted marketing responses by the manufacturers of Jockey underwear. Holden and Holden (1995) document how U.S. sheet music publishers responded to an overnight change in the 1917 environment with a flood of new products. A case study of the 1939 New York World's Fair by Holden (1994) shows that nonprofits also could be quite adept at marketing in the interwar period (Holden, 1998)." The core concepts of needs, wants, demands, products, exchanges, transactions, and markets penetrate all aspects of the field of marketing. Marketing acumen grew. Adding to the previously delineated functions of marketing were concepts such as Market Strategic Planning, Designing, Marketing Research, Segmentation, Targeting, Positioning, Pricing, Social Marketing, and Relationship Marketing. Marketing has been adopted in the business sector both nationally and internationally and in the non-profit sector. But, the biggest changes of all in the field occurred after the war.

AFTER WORLD WAR II

Thousands of families were reunited after the war, babies were born, and America's factories could be transformed from producing war materials to producing consumer goods. Anything and everything was in demand. New technologies developed during the war could be transferred to producing new consumer goods. Television became available to the masses as prices were reduced and the social fabric of the country began a slow transformation that is still in process. Instead of gathering around the radio families began to gather around the TV set. There were few channels and a captive audience of millions of people to watch the few shows produced. Advertisers could reach the millions both effectively and efficiently. What was advertised on TV instantly achieved high status. The pent-up demand during the war could now be met and the country entered an era of incredible prosperity. Consumers were the key to the growth of the economy.

CONSUMER BEHAVIOR

During the late 1960s the influences of the behavioral sciences--social psychology, psychology, and sociology culminated in the development of the further specialization of marketing with the emergence of consumer behavior studies. "The scholars who helped initiate this stream of research felt that the traditional economic concepts of 'economic/rational man' were simply irrelevant. They helped incorporate sociological and psychological theories of human behavior to help explain consumer's actions and the reasons behind them (Ottum, 1993)." *The Journal of Marketing Research* emerged to provide an outlet for research in consumer behavior. Harold H. Kassarjian of UCLA is considered one of the founding fathers of this school of thought. James Engel, David Kollat and Roger Blackwell worked together to produce the first book called *Consumer Behavior* in 1968. The field grew, but American consumers faced new challenges when oil prices skyrocketed in the early 70s.

INTERNATIONAL MARKETING

The oil shock of the early 70s caused Americans to realize they no longer lived in an isolated world with an ocean on the east and west, an empty country on the north and a poor country on the south. There was no gasoline to be had because the middle eastern countries had decided to retaliate against the

US for its involvement in the Arab-Israeli conflict. Suddenly the world outside the US took preeminence in the minds of Americans. While International Marketing can be traced back for centuries, its emergence in the minds of the masses can be traced to this period of time. America was no longer self sufficient. The US had to begin to build allies across the globe. Richard Nixon's trip to China in the early 70s and the opening of that country to US interests was part of the process of internationalizing the US. The consolidation of the European countries into the European Union resulted in the US creating the North American Free Trade Agreement (NAFTA). This allowed for relatively free trade between Canada, Mexico, and the US. Various additional free trade agreements are on the horizon for both world blocs—the US and the EU. The consolidation of currency for most of the European countries beginning in 1999 is putting tremendous pressure on the US dollar, which may lose it preeminence. Concepts from the elder statesmen, Adam Smith and David Ricardo reemerge into discussion on competitive and comparative advantage of nations in terms of which nations should produce which products. "The success and acceptance of the field [International Marketing] as a science will likely depend upon the ability of its tools and techniques to explain, predict and control the volatile and complex environment which hosts the international business phenomena (Eroglu and Eroglu, 1993)."

GLOBALIZATION OF THE MARKET PLACE

The knowledge industry and information technology is making us individually and collectively more productive than we have ever been. Our era has been dubbed the "Age of Productivity." The sense of urgency is evident all around. Managements are reengineering operations and building an information infrastructure of computers, software, and telecom equipment. Giant AT&T splits itself into three separate companies to become a nimbler, more flexible competitor. Ford Motor Co., nearly pushed into the scrap heap by the Japanese juggernaut in the early 1980s, now runs some of the car industry's most productive plants. The US semiconductor industry, in a bold bid for global market share, is constructing $9 billion worth of new plant capacity in the US. Says Paul A. Allaire, chief executive of Xerox Corp.: 'I think inside corporations, everybody is more focused on being competitive and efficient than they ever have been (Farrell, Mandel, and Weber, 1995).'" The comeback of America borders on reincarnation. "For much of the past two decades, US companies appeared to be no longer competitive with foreign rivals. Many feared that America would follow other imperial powers such as Austria-Hungary and Britain into economic decline (Farrell, Mandel, and Weber, 1995)." All of this has changed with Corporate profits as a percentage of national income higher than they were in the 1980s. "Unit labor costs have been flat over the past year, compared with an average annual increas of 4.1% in the 1980s, a clear sign of improved efficiency. The US has also regained its primacy as the world's leading stock market, rising by 75% since 1990, while the Japanese market has plummeted by 50%. Underlying these gains is a powerful surge in productivity. In the 1990s, nonfarm productivity has been rising at a 2.2% rate, more than twice the anemic pace of the previous two decades....Adds William Lewis, director of the McKinsey Global Institute: 'The US has the highest productivity and the best job creation performance among the industrial countries (Farrell, Mandel, and Weber, 1995).'" In 1991 telecommunications output in dollar terms equalled $205.2 billion and is projected for 1997 to equal $263.9 billion with 1.15 million workers, producing $228,800 per worker (Arnst, 1997). There appears to be no end in sight.

Shopping has changed too. Few people foresaw the impact the Internet would have on world commerce. And while many consumers are still worried about giving credit card information over the Internet, they can shop there and fax the credit card information to the firm avoiding potential problems of lack of security of data on the Internet. Customers are shopping for and buying all kinds of goods, even books and cars. Electronic banking is here to stay and saves time and money in fund transfers and the bill paying process. The globe is your marketplace now. The author recently wanted to purchase a portable electric vehicle and found suitable models in India and England using the Internet! With electronic banking, credit card and money wire services handy, and with package delivery firms readily available in nearly every country, it no longer poses a problem to buy globally. Geodemographic data collection on consumers and potential consumers is a high art. Credit card companies are selling customer profiles to

anyone interested in buying. "Since there are no laws that outright ban the sale of personal information on the Internet, a significant number of World Wide Web sites sell Social Security numbers to anyone with a few dollars, a computer, and a telephone (Mierzwinski, 1998)." Internet providers can track who visited their sites and pass this information on to marketers interested in reaching these consumers, who tend to be in their target market in terms of income, education, and occupation. The market place is no longer the local village retail store. The future of marketing is extraordinarily fluid.

SUMMARY

This article traces the evolution of marketing in the US through its mother science—Economics. Concepts of economics permeate the field today such as the four utilities, economic and rational man, needs, wants and demands, exchange and transactions. Some academics call marketing micro economics. Whatever its name it affects all aspects of life for the modern human being. Advertising and promotion make us aware of new goods and services and innovations such as the personal computer and the Internet make our lives easier and in some cases much more productive. The Internet now allows us to search the globe for goods not available at home. Marketing is both transformed and transforming as time marches forward.

REFERENCES

Arnst, Catherine, "Telecommunications," ***Business Week***, January 13, 1997, p. 108.

Bartels, Robert, ***The History of Marketing Thought,*** 3rd Ed., Columbus: Ohio, Publishing Horizons, Inc., 1988, p. 7 and p. 13, p. 3, p. 24.

Eroglu, Dogan and Sevgin , "International Marketing: The History and Impact of a Field," ***Contemporary Marketing History: Proceedings of the Sixth Conference on Historical Research in Marketing and Marketing Thought,*** Atlanta, GA sponsored by Michigan State University, 1993.

Farrell, Christopher, Mandel, Michael J., & Weber , Joseph, "Riding High: Corporate America now has an edge over its global rivals," ***Business Week***, October 9, 1995, pp. 134-5.

Holden, Alfred C. and Laurie, "Marketing History: Illuminating Marketing's Clandestine Subdiscipline," ***Psychology and Marketing***, Volume 15/No. 2, March, 1998, p. 119.

Lewis, Phillip A. & Owen, Robert S. "Early History of the American Marketing Association and the Journal of Marketing,", Atlanta, GA sponsored by Michigan State ***Contemporary Marketing History: Proceedings of the Sixth Conference on Historical Research in Marketing and Marketing Thought*** University, 1993.

McCullock, J. R., ***The Principles of Political Economy***, Edinburgh: Adam and Charles Black, 1844, in Eric H. Shaw, The Utility of the Four Utilities Concept in ***Research in Marketing: Exploration in the History of Marketing***, Jagdish N. Sheth and Ronald A. Fullerton, London, England: JAI Press, Inc., 1994, p. 49-50.

Mercado, T. (1571), *Suma de Tratos Y Contratos*, Seville, Spain: Hernando Diaz, p. 18 in "Scholastic Marketing Thought in Spain, The School of Salamanca, Sigfredo A***. Hernandez in Research in Marketing: Exploration in the History of Marketing,*** Jagdish N. Sheth and Ronald A. Fullerton, London, England: JAI Press, Inc., 1994, p. 38.

Mierzwinski, Catherine, "Data Dealers Seizing Control of Our Lives," ***At Home With Consumers***, Vol. 19, No. 1, May, 1998, Direct Selling Education Foundation, Washington, D.C.

O'Brien, Anthony Patrick, "How to Succeed in business: Lessons from the Struggle Between Ford and General Motors during the 1920s and 1930s" in **Business and Economic History**, William J. Hausman, ed., Papers presented at the thirty-fifth annual meeting of the Business History Conference, 1989, Boston, MA., p. 79, p. 87.

Ottum, Brian D. "Differences Between Two Streams of Early Marketing Philosophy and Their Relationship to Contemporary Theory," ***Contemporary Marketing History: Proceedings of the Sixth Conference on Historical Research in Marketing and Marketing Thought***, Atlanta, GA sponsored by Michigan State University, 1993.

Shaw, Eric H., The Utility of the Four Utilities Concept in ***Research in Marketing: Exploration in the History of Marketing***, Jagdish N. Sheth and Ronald A. Fullerton, London, England: JAI Press, Inc., 1994, p. 49.

Smith, Adam, ***The Wealth of Nations***, New York: The Modern Library, 1776, p. 639 in Eric H. Shaw, "The Utility of the Four Utilities Concept" in ***Research in Marketing: Exploration in the History of Marketing***, Jagdish N. Sheth and Ronald A. Fullerton, London, England: JAI Press, Inc., 1994, p. 49.

Vitoria, F. (1957), 'Comentarios a la Secunda Secundae de Santo Tomas," pp. 72-101 in Francisco de Vitoria: Una Teoria Social del Valor Economico, edited by D. Iparrigue, Bilbao, Spain: Editorial del Mensajero Corazon de Jesus., p. 75 in 18 in "Scholastic Marketing Thought in Spain, The School of Salamanca, Sigfredo A. Hernandez in ***_Research in Marketing: Exploration in the History of Marketing,*** Jagdish N. Sheth and Ronald A. Fullerton, London, England: JAI Press, Inc., 1994, p. 38 and p. 20.

MINORITY PARTICIPATION IN THE LIFE INSURANCE INDUSTRY: SOME EMPIRICAL FINDINGS IN THE SOUTHERN UNITED STATES

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ABSTRACT

Insurance literature over last several years has stressed recruitment of women and minority insurance agents and brokers as a method to increase the diversity of the clients and increase sales. This study involves a random sample of 375 active brokers and agents in 8 southern states to examine participation of women and minorities in the insurance industry. Findings reveal that minorities and women play a very small role in sales and management in the life insurance industry represented in this study. Life insurance companies in the southern United States should place more emphasis on recruiting women and especially minorities so they can serve their own ethnic groups and enhance company profits.

INTRODUCTION

As we begin a new millennium, the life insurance industry can learn from the past and adjust to the demands of the future. A major issue that will continue for years to come is equal employment opportunities for minorities with life insurance companies and other financial institutions. Life insurance companies continually strive for increased sales and higher profits. With the rising numbers of minority groups and their upward mobility, highly qualified minority employees may be a partial solution to the life insurance companies' drive for greater success and profits.

Life insurance companies can profit from the changing demographic trends by utilizing sales approaches that appeal to diverse and nontraditional markets. Women, African-Americans, Hispanics, and Asians are a growing market and demonstrate upward mobility. Insurers who are successful in working with minority groups warn against treating everyone alike. James H. Major, Jr., of Metropolitan Life says that focusing on ethnic markets and hiring people within those markets has improved agent retention rates (Novak, 1992).

The Life Insurance Marketing and Research Association predicts that the insurance industry's traditional agent recruiting and marketing patterns will be revised by the changing demographics. Delvin Benjamin, human resource development consultant for LIMRA says that people like to purchase insurance from people like themselves who are sensitive to their traditions and values. Benjamin recommends recruiting successful minorities to work as agents in their own communities (National Underwriter, 1992).

The insurance industry's history of recruiting women and minorities has generally lagged behind efforts of other service industry sectors. Jo Anne Roslansky and Richard Weylman recommend that life insurance companies expand participation of minorities in their sales forces and provide them with the training and support necessary to develop the minority market (Schwartz, 1994 and Weylman, 1993). As

the minority groups increase in size and spending power, insurers are beginning to realize the potential of marketing to the long-ignored ethnic groups.

Although some insurance companies make a sincere effort to attract minority representatives and underwrite minority policies, many companies still practice redlining of these groups. The life insurance industry can not afford to neglect this huge market and companies that have focused marketing plans directed at minority segments will grow profitably (Flowers, 1995). Allan Baker, senior vice president of Lincoln Financial Group, notes that two-thirds of the world's migration is to America and that Americans of African, Asian, and Hispanic descent command over $650 billion in purchasing power annually (Panko, 1997). Life insurance companies potentially can capture billions of dollars in untapped sales to minority consumers by employing minority agents (Pasher, 1996).

THE PROBLEM

The problem involves the determination of the extent of participation of women, African-Americans, Asians, Hispanics, and Native Americans as active brokers and agents in the life insurance industry in the southern United States. In addition, this study examines the minorities' level of education, professional designations attained, job position, and job satisfaction. Because of the tremendous increase in the African-American and Hispanic population in this region, life insurance companies could reap substantial gains by implementing strategies that focus-in on minority agents developing their own minority clients. Life insurance companies that embrace minority involvement may not only enhance their success, but also economically benefit the minority licensees and their clients. Although there has been considerable discussion concerning the targeting of the growing minority groups, this study examines whether this is actually occurring in the market place.

METHODOLOGY

Data are derived from a random sample of 375 active life insurance agents and brokers in an eight state area. Respondents were from Texas, Louisiana, Arkansas, Mississippi, North Carolina, Kentucky, Utah, and Arizona. Included in the sample were only active and practicing life insurance agents and brokers. Respondents are comprised of sales agents or representatives, sales managers, district managers, and independent agents and brokers. Retired licensees and others holding licenses who did not work full-time in the life insurance business were excluded.

A questionnaire was developed and tested to provide data concerning the respondent's age, gender, race, job position, job satisfaction, and education. To collect the data, each agent and broker was surveyed by either personal interview, telephone, or mail. Of the 375 questionnaires, 200 provided usable data giving a 53 percent response rate.

To identify key relationships, the data were statistically analyzed by using percentages, and arithmetic means.

The findings will be helpful to discover the extent progress is being made concerning minority participation and may lead to important implications for the life insurance industry's hiring practices.

FINDINGS

Respondents had a mean age of 41 years and have been in the life insurance industry for an average of 10.87 years. By job classification, the sample included: 61 percent life insurance agents or representatives; 9 percent sales managers; 6 percent district managers; and 24 percent independent life insurance brokers. By ethnic background, the respondents were 89.5 percent Caucasian, 9.5 percent Afro-American, and 1 percent Hispanic. No Native Americans or Asians were represented in the sample. Of the 200 respondents, 62.5 percent were male and 37.5 percent female Data tends to indicate that women

and especially the minority ethnic groups are poorly represented in the life insurance industry in the selected southern states included in this study.

Compared to minority ethnic groups, participation of women in the life insurance industry is relatively stronger. Women represented 39 percent of the sales agents and representatives, 36.84 percent of the sales managers, 16.67 percent of district managers, and 36.73 percent of the independent agents and brokers. By job classification, Table 1 shows that the predominately minority ethnic groups play an extremely small part in the life insurance companies represented in this sample.

TABLE 1
PERCENTAGE OF MINORITY RACE PARTICIPATION BY JOB CLASSIFICATION

Job Title	Afro-American	Hispanic	Native American	Asian
Sales Agents	11.38%	0.0%	0.0%	0.0%
Sales Managers	15.79%	5.26%	0.0%	0.0%
District Managers	0.0%	8.33%	0.0%	0.0%
Independent Agents	2.04%	0.0%	0.0%	0.0%

Data indicates that women tend to have lower levels of education than men and the minority races tend to be fairly close to the same level of education as Caucasions. Seventy-two percent of the men have bachelors or masters degrees whereas only 32 percent of the women have the same level of education. Furthermore, 57.15 percent of the minority races have bachelors and masters degrees relative to 56.98 percent of the Caucasion group. Table 2 shows the specific breakdown. A closer look at the minority races indicated that 52.63 percent of the Afro-Americans and 100 percent of the Hispanics have bachelors or masters degrees. The percentage of each group that held degrees with majors in Business Administration are: 16% of the women, 20% of the men, 17.32% of the Caucasions, 21.05% of the Afro-Americans, and 100% of the Hispanics.

TABLE 2
EDUCATION LEVELS OF WOMEN, MEN, MINORITY RACES AND CAUCASIONS BY PERCENTAGE

Education Level	Women	Men	Minority Races	Caucasions
High School Diploma	29.33%	12.0%	19.05%	18.44%
2 Years of College	22.67%	11.20%	9.52%	16.20%
Associate Degree	17.33	5.60%	14.29%	9.50%
Bachelors Degree	26.67%	60.80%	38.10%	49.16%

Masters Degree	5.33%	11.20%	19.05%	7.82%

Because professional designations are an integral part of continuing education and the success of the agent, the percentage of each group holding a CLU, CHFC and other designations is examined. Thirty-one percent of the respondents had a CLU designation. The data indicated a similar percentage holding designations in each group. It is interesting to note that the percentage of Afro-Americans and Hispanics holding CLUs was slightly higher than caucasions and all other groups. Specific percentages for each race and gender are shown in Table 3.

TABLE 3
PERCENTAGE OF WOMEN, MEN, MINORITY RACES, AND CAUCASIONS HOLDING A CLU, CHFC OR OTHER PROFESSIONAL DESIGNATION

Gender or Race	CLU	CHFC	Other Designation
Women	29.33%	6.67%	6.67%
Men	32.0%	6.40%	18.40%
Afro-American and Hispanic	38.10%	4.76%	9.52%
Caucasion	30.17%	6.70%	14.53%

The final objective of this study is to determine the relative degree of job satisfaction for women and the minority races. As illustrated in Table 4, on a scale from 1 to 10 respondents rated their job satisfaction with 1 as least satisfaction and 10 as their most job satisfaction. Data indicated that women are relatively less satisfied with their jobs than men. Eighty-eight percent of the men rated job satisfaction between 7 and 10, whereas only 78.66 percent of the women rated their job satisfaction between 7 and 10. The highest level of job satisfaction among races is from the Hispanics with 100 percent, and Afro-Americans with 89.47 percent rating their job satisfaction between 7 and 10. Overall, Hispanics and Afro-Americans perceived their jobs as more satisfying than all other groups.

TABLE 4
RATING OF JOB SATISFACTION ON A SCALE FROM 1 TO 10 WITH 10 BEING MOST SATISFACTION BY GENDER AND RACE BY PERCENTAGE

Gender and Race	**1-4**	**5-6**	**7-8**	**9-10**
Women	6.67%	14.67%	45.33%	33.33%
Men	2.40%	9.60%	44.80%	43.20%
Caucasion	4.47%	11.73%	43.58%	40.22%
Afro-American	0.0%	10.53%	57.89%	31.58%
Hispanic	0.0%	0.0%	50.0%	50.0%

CONCLUSIONS AND IMPLICATIONS

Although numerous articles have stressed the benefits of insurance companies and agencies employing members of ethnic groups and minority races, the findings from this study show that this has

not taken place in practice. Women represented slightly more than one-third of the respondents. However, there were no Asian or Native American licensees represented. Only 9.5 percent of the respondents were Afro-American and 1 percent were Hispanic. Sales agents included zero Asians, zero Native Americans, zero Hispanics and only 11.38 percent Afro-Americans. In a region that is highly populated by these groups, the implications are that insurance companies could increase sales and profits by recruiting more minorities who sell to their own groups.

Education does not seem to be a major difference among the groups. Generally, the percent of Afro-Americans and Hispanics with four-year degrees and graduate degrees is basically equal to that of Caucasions. Interestingly, a larger percent of Afro-Americans hold masters degrees than the Caucasions. Furthermore, a larger percent of Afro-Americans and Hispanics hold CLU designations than the Caucasions.

Although women perceived their jobs as less satisfying than men, the Hispanics and Afro-Americans were more satisfied with their jobs than their Caucasion counterparts.

If the findings of this study are representative of the life insurance industry, implications are that insurance companies and agencies could strive to broaden their employee base by employing more minorities. Recruiting a greater proportion of minorities could not only expand the demographic markets but also increase sales and profitability. Data tends to indicate that the life insurance industry could more aggressively target the minority markets by developing a highly qualified minority sales force.

REFERENCES

Flowers, Stephen (1995). "Insurers Need To Recognize Growing Minority Markets." *National Underwriter*, Volume Ninety-Nine, January 9, 1995, 13-14.

National Underwriter (1992). "Minority Recruitment Advice: Use Centers of Influence." *National Underwriter*, Volume Ninety-Six, October 19, 1992, 7.

Novak, Catherine (1992). "Profiting From Diversity." *Best's Review*, Volume Ninety-two, March 1992, 18-22.

Panko, Ron (1997). "Selling To America's Rainbow." *Best's Review*, Volume Ninety-Seven, February 1997, 46-48.

Pasher, Victoria (1996). "Insurers Urged to Target Untapped Minority Market." *National Underwriter*, Volume One-Hundred, June 10, 1996, 7.

Schwartz, Matthew (1994). "Targeting Women and Minorities." *National Underwriter*, Volume Ninety-Eight, March 28, 1994, 4.

Weylman, Richard (1993). "Finding Your Niche In New Demographic Markets." *National Underwriter*, Volume Ninety-Seven, August 2, 1993, 20.

MUSIC PUBLISHING CATALOGUE ACQUISITION

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INDUSTRY OVERVIEW

Music Publishing is one of the most rapidly expanding industries in the U.S. in terms of revenue growth. With the growing awareness of the potential profit in copyright exploitation, Wall Street is realizing that copyrights are lucrative assets. For all practical value, there is value in perpetuity for any new copyright (Whitsett) because a song is an intellectual property, much the same as a computer program.

To explore this business from a profitability standpoint, this expository paper serves four major functions. First, it offers a brief synopsis of how the music publishing business actually works and what some of its current trends are. Second, it explains a popular method used by music publishers to derive what they feel is a fair market value (possible acquisition cost) for an established song catalogue. Third, it attempts to disclose many of the primary sources of royalty income that are created by the ownership of the copyrights in a catalogue. Forth, it outlines how the music publishing industry has typically discounted future cash flows (royalty income).

CURRENT TRENDS

A number of recent, positive trends are making music copyrights even more valuable. As the popularity of American culture is spreading around the world, there has been an incredible proliferation in the growing number of uses of intellectual copyrights – creating demand for content. Separately, an increase in royalty collections throughout the world can be traced directly to the enactment and enforcement of copyright laws protecting intellectual property, the growing professionalism of the collection societies and the continued privatization and expansion of commercial broadcasting. (Trigon)

Additionally, the introduction of digital technology and the increase in sales of music via the internet, telecommunications and other media will continue to expand the publishing industry in the future. With the growth on the Internet, rapid advances in technology are allowing flawless copies of music to be sent digitally around the world and downloaded by users. While the vastly different countries of the world are increasingly interconnected, the concept of a global community is drawing closer to reality. New artist development and marketing opportunities will be created employing this direct link, as barriers to reaching consumers are greatly reduced. Therefore, the publisher must position itself now to

exploit these new possibilities, and further evolve the technologies necessary to manage, license and account for catalogue usage.

It is also interesting to note a recent phenomenon in the music publishing business: the securitization of projected future royalty income from copyrights. As enforcement of copyright use in emerging technologies is developed and is available, the potential for future earnings will also grow. CD-ROMS, DVD's, and the use of the WEB broadens possibilities for profit potential, although it also will pose collection difficulties. As a result of these expanding markets and the potential to exploit the usage of copyrights, some catalogues that contain seemingly timeless classics are being securitized. Given their consistent and predictable future royalty streams, the investment banking community is able to collateralize these cash flows in a fashion similar to the way federal agency debt is collateraized by principal and interest payments from commercial and residential mortgages.

For example, in February of 1997 David Bowie, a popular pop artist in the 1980's, securitized his future royalty payments from a 250 song catalogue. The bond issue raised $55 million in 10 year debt at a coupon of 7.9%. Interestingly, 10 year U.S. Treasury-Notes ("risk free" fixed income instruments) issued at this time had coupons of 6.3%. It is also interesting to note that Moody's Investor Services rated the bonds "investment grade" (single A3) and that the entire issue was immediately purchased by an institutional investor, Prudential Insurance.

Following David Bowie's lead, in 1999 a few other popular artists have decided to securitize their copyrights. For instance, the rock band, Iron Maiden, raised $30 million on its catalogue. The legendary "Motown" songwriting trio of Holland/Dozier/Holland also raised $30 million in a bond underwriting backed by its catalogue of best selling R&B hits. In November of 1999 Michael Jackson announced that he was considering a debt underwriting worth $100 million, securitized by future royalties from catalogues that he currently owns.

THE MUSIC PUBLISHING BUSINESS

The owner of a copyright has the right to control the performance, reproduction, sales and distribution of a musical composition, and also has the authorization to let others do so. The songwriter usually assigns control of these rights to a publisher and allows the publisher to manage and administrate these rights. As a result, the publisher becomes the salesman, manager, and guardian of the rights of these songs. (Whitsett)

Music publishers do not deal in the physical delivery of the song to the consumer, but rather delivery of the copyright to an agent or distributor (perhaps a record company). Given that publishers buy and sell intangible products (songs) and are unable to provide a physical copy of a copyright, they are most concerned with the ability to license a song. As a result, a song or a catalogue of songs is "rented" (licensed) to others for use and enjoyment. This poses conceptual difficulties as the "product" is not valued nor sold, but rented for a limited use (Peters).

The music publisher's primary functions within the music industry are (1) to acquire the copyrights of catalogues (catalogue, defined as a collection of copyrights of musical compositions) of music, (2) to exploit or "pitch" the licensing of their collection of copyrights to users (record companies, films, television) and (3) to ultimately collect royalties from end users (radio stations, recording studios, juke boxes….) who pay licensing fees to play, perform or distribute the music in a variety of different formats. Depending on how a song is used, publishers collect a percentage of royalties from (1) each reproduction of a song (album, tape, CD…sold - "mechanical royalties"), from (2) each live or recorded public performance of a song ("performance royalties"), from (3) each recording of a song as part of a soundtrack of a motion picture of television or film ("synchronization royalties"), from (4) each printed copy of a song's sheet music ("print royalties"), from (5) each use (mechanical, performance…) of a song outside of the United States ("foreign royalties") and from (6) each use of a song on the internet ("digital royalties").

Hopefully, the better a job the publisher does and the more connections or contacts are "pitched" to, the more likely the copyright will be licensed for use on the radio, in a CD or other product/use. The

expected result is that the publisher will collect a license fee for the limited use of its songs. It is important to note that the collection of fees, the majority of which are typically "performance" and "mechanical" royalties, is normally completed by various organizations set up to perform this task (Whisett). Such organizations include both the mechanical rights organizations like the Harry Fox Agency as well as the performing rights organizations such as ASCAP, SESAC, and BMI.

The most significant risk assumed by a publisher is its ability to identify the publics' tastes and acceptance of its song collections. A publisher also risks capital that is tied to writers' advances, the acquisition and promotion of songs and the opportunity cost of forgoing other opportunities. These capital expenses can be broken down into several layers:

- Product acquisition
- Signing writers, buying copyrights
- Product Development
- Cost of producing demo tapes and masters, writer salaries
- Marketing
- Pitching and marketing songs to users
- Copyright Administration
- Copyright registration, legal fees
- Operating Overhead
- Office supplies, equipment, support, salaries, etc.

To compensate for such risk and expense, what level of royalty income can a publisher expect? Why are investors interested in the music publishing industry? To answer these questions, it is important to consider that the ownership of a catalogue's copyright has a potentially endless life. For instance, new copyrights issued today are protected under private ownership for the life of the owner +70 years. Also, it is important to realize the appreciation in market value some copyrights can achieve given the popularity of certain songs within a catalogue. Recently, Paul McCartney lost his bid to buy the ATV catalogue, consisting of Beatles copyrights. The copyright representing the entire catalogue of Beatles songs had been purchased for $40 million and sold ten years later to Sony for $110 million (Whitsett). In another example, the Otis Redding catalogue was purchased for $1 million and sold six years later for $10 million. Further, Polygram sold its Chappel Music catalogue in 1984 for $100 million. To Polygram's regret, the Chappel catalog was also recently sold for $200 Million (Whitsett).

In light of these examples, the music publishing business can be incredibly profitable if a publisher can acquire a catalogue of popular songs that will have future demand from users. As a result, success in this business is not solely dependent on one's ability to provide or create a competitive good or service that is innovative and superior in quality. Instead, a music publisher's success is dependent on good fortune, insight into future trends within the music business, the ability to recognize the potential use of a catalogue and the ability to successfully promote a catalogue. As expected, the initial cost and anticipated royalty income of a catalogue containing "lifeless" Beatles hits is entirely different than a catalogue containing songs from a new writer and unknown artist.

Attempting to quantify the initial investment in a catalogue and the future cash inflows (royalties) that eventually spawn from the investment can be difficult, at best. A catalogue is obviously not a tangible product with a limited and defined "shelf-life". It is a challenge to project and quantify both the initial expense of a catalogue as well as its future royalties. As a result, it is the purpose of this paper to use a historical example to offer an explanation on how the cost of a catalogue is derived and measured. In terms of future royalty inflows, it is seemingly impossible to accurately predict their size and length. Therefore, the remainder of this paper will focus on the sources of such income.

THE CASH FLOWS

The Base Cash Flow of a Catalogue:

Fortunately, there is an industry standard when trying to project the initial cost of a catalogue. Most publishers will "grade" the value of a catalogue based on its past Net Publishers Share (NPS) of the royalties and a subjective "multiple".

Typically, the first step in deriving a present value of a catalogue is to calculate the average NPS for the past 3, 4 or 5 years. The NPS, in this case, includes receipts of any portion of the publisher share in revenues, including the writer's share and less any third party payments. Chart 1 will best illustrate how the NPS is derived.

Process in Calculating the Initial Cost of the Catalogue:

When a publishing company is considering purchasing all or part of a song catalogue, its first obvious consideration is determining what the catalogue should actually be worth. In order to derive such a value, it usually follows a step-by-step process. The first step in calculation is the establishment of past royalty statements and the average Net Publishers Share per song (NPS). This involves collecting and totaling the gross royalties. Total performance royalties are subtracted as these fees go directly to the writer and publisher. The remainder is the total royalties from Mechanical and all other incomes. This is multiplied by .5 (50%), or whatever other percentage of ownership is due the writer. This amount equals the total due to the writer. The final step is to subtract the writer's share from the total gross royalties. This is the NPS or Net Publishers Share.

Aside from the historical average NPS, the "multiple" used is the most important number used to calculate the present day value of a catalog of copyrights. To derive the final cost of the catalogue, the purchasing publisher simply multiplies the past year's average NPS times a multiple. Therefore, the value assigned is the multiple of the average annual net earnings. Commonly, multipliers used are ranging between 5-15, with the Nashville average in country music ranging between 6-9 (Smith). Seven and eight multiples are common in the industry and are not known to raise any financial eyebrows. As buyers wish to maximize the risk, a buyer is more disposed to a conservative multiple; however, the limit on a multiple seems to be as much on the writers estimation on their potential worth, plus the actual value of the current catalog. The factor derivation is purely subjective. Factors weighed into the valuation are as follows:

1.) The duration of the copyrights:

This will allow an expectation of future cash flows as well as a general feel on the maturity of the copyrights. Older more mature copyrights, which are still generating income beyond a general 8 year span, are considered "classics" that are expected to maintain a steady revenue stream in the future. In the country market these are songs such as "Crazy" performed by Patsy Cline, or "King of the Road", performed by Roger Miler, and in the pop world songs such as "Rock around the Clock." These are expected to supply uses through licensing and even re-recording by current artists, as well as performance license fees from use in movies, television and radio.

2.) Contractual commitments to writers advances:

Are there copyrights that are attached to writer advances still maintained within the purchase?

3.) Advances owed to publisher by writers:

Are there allowances for repayment of advances to writers due to publishers in cases where advances are cross-collateralized (This is where song advances are recouped or collected from total earning of writer share? In this case advances, demo costs, etc., are used to collect monies due to publisher before disbursement of writers share.)

4.) Income trend over the past several years:

Is the copyright use matured or still in the initial release. Are there monies in the "pipeline" (Are there units sold that have not been collected yet.)

5.) The appraisers opinion of the catalog's future worth:

This is based on the subjective reputation and past performance of the writer.

The final step is to assign a multiple and calculate the ultimate cost given the two combined catalogues. In this case a mixture of scenarios is given to demonstrate the effects of a change in the multiple. Again, the multiples are simply multiplied by the average Annual NPA or Net Publishers Average. This is a straight average with no weight on either the age of the catalogue or the distribution of

"hit" (i.e., is the catalogue weighted to one or two hits, or is there an even distribution of strength or breadth of the collection?).

FUTURE CASH INFLOWS (ROYALTY INCOME)

As already stated, the publisher's reason for valuing and purchasing a song catalogue is to ultimately find users and collect royalty income. Even though there are hundreds, if not thousands, of variables that effect this process, the publisher still has the daunting task of trying to project future cash inflows. However, as each genre of music is different, so is each catalogue of songs unique in its appeal and future potential (profitability). Therefore, given that there does not exist a formal, "industry-standard" approach to projecting future royalty income, it is important to outline and explain how these sources of royalty income are actually created.

A.) Mechanical royalties are the easiest to calculate and possibly estimate. There currently exists a federally mandated statutory rate of $.071 for every reproduction (CD, Tape, Album, DVD…) of a song that is sold. In other words, if a publisher owns the copyright to two songs on a CD and the CD "goes gold" (sells 500,000 copies), its mechanical royalties would be calculated as follows: 500,000 x .071 x 2 = $71,000. It is interesting to note that a publisher can supplement its per song mechanical royalty inflows by releasing the rights to record a song in multiple genres (i.e. the same song is recorded by a popular artist in the pop market and by another artist in the rap market).

B.) Performance royalties, on the other hand, are much more difficult to quantify. These royalties come from "performing rights" that are granted by the U.S. Copyright Act to owners of musical works (publisher) to license those works for public performance. (BMI) Businesses which typically license music (broadcast radio, TV stations, cable radio, nightclubs, hotels, discos….) acquire the rights to play or perform a publisher's catalogue through a "performing rights organization (PRO) such as BMI, ASCAP and SESAC. In turn the PRO grants a blanket license to an organization to play its entire repertoire of music covering thousands of catalogues. The fees for this license are collected and ultimately distributed to the owners of the copyrights, less a percentage for the PRO's efforts. These fees make up more than 44% of all of a publisher's or copyright owner's royalty income. (Trigon)

For example, according to BMI's 1998 fee schedule, if a nightclub with a maximum capacity of 151-225 people wanted to simply play pre-recorded music on CD, it would pay BMI an annual fee of $300. This fee is easily modified depending on several other circumstances – live music also played, dancing offered, audio-visual used and a user's estimated annual entertainment costs. It is important to note that this $300 fee to BMI is an example of a fee paid to a single PRO; to play songs licensed under ASCAP and SESAC, separate fees would be paid.

How are performance royalties that are collected by the PRO's later disseminated? This question is one of the primary reasons it is so difficult to project such royalty income. After much inquiry, the only answer found is that those decisions are based on statistical sampling of radio air-play. Furthermore, the ultimate decisions in how these royalties are distributed are at the PRO's discretion.

It is important to note performance royalty income can be significantly stronger in the first two-three years of a "hit" song. For example, a #1 country hit today can expect to draw $200,000+ (Net Publisher's Share) in royalty income in its first 2 years. (Music Row – December 1999) This income drastically diminishes with time as the song loses air-play and is replaced with other popular hits.

C.) Synchronization royalties that represent fee income received from users who have authorization to integrate a recording of a musical work into an audio/visual work. If a song is "synchronized" with images on a screen, the user simply must acquire a synchronization right, hence the name. Typically the user must negotiate and pay a fee directly to the publisher. This fee is usually negotiated based on the length of song being used, where in a film it is used and whether the song is pre-recorded and performed live.

D.) Print royalties are derived from licensing arrangements between the publisher and the creator of sheet music, folios, arrangements for a particular musical instrument and concert editions of printed music.

E.) Foreign royalties represent all performance, mechanical, print, synchronization and digital royalty income from outside the U.S. Given geographical constraints, publishers are typically dependent on performing rights organizations in other countries to track and collect these fees. Also, piracy overseas poses problems for collecting such royalties.

F.) Digital royalties represent all types of musical usage on the WEB. The designer of the Web page usually deals directly with the publisher to negotiate a fee based on how a song is used (print, audible recording…). Given that the use of the internet is a relatively new form of communication, these royalties are difficult to track by PRO's and copyright owners.

For a more comprehensive outline of the various types of royalty income in music publishing, see the attached "Sources of Royalty Income".

CALCULATING A DISCOUNT RATE TO MEASURE THE COST AND FUTURE INFLOWS

What is the effective rate of return on these evaluations? What needs to be calculated, or backed out from the cash flow valuation is the opportunity cost of the money. That is, the rate of return you could earn on alternative investments. This amount is reflected in the multiple totals. The multiples are the present value of these averaged cash flows, that if allowed to grow at a stated interest rate would produce a cash flow equivalent to the expected average Annual Net Publishers Share.

In order to calculate the discount rate, we start with the valuation model Po=D/(Ks-g). This model is used with a perpetuity, although in actual practice the cash flow models do not either expect to remain constant or last in perpetuity. However, this does seem to be the model used in the industry. Po is equivalent to the actual market price of the cash flow. D is the dividend or cash payment the buyer expects to receive and Ks is the minimum acceptable required rate of return. G, the dividend growth rate, is used if the dividend is expected to grow at a constant rate. (Brigham & Houston)

The expected rate of return is a measurement of both the riskiness and the returns available on other investments. This is an extension of the discount cash flow formula used in determining a present value of an annuitized cash flow stream represented by PV=Pmt/(1+I) n. (Brigham & Houston) In this formula PV = present value, Pmt = payment or cash flow and the denominator is 1 + your discount rate compounded to the nth power (number of periods). In the publishing case, the time line is assumed to be at the present and assumed to be a lump sum at the time of purchase, which is clearly not the case as future royalties remain in the payment stream as uneven cash flows towards the future.

PREMISE IN COMPUTING DISCOUNT RATE

By using the valuation model Po=D/Ks (without the growth rate – "G"), we can assume that Po equals the present value of the catalogue represented by the factor or multiple given (in Chart 5 the multiples are 7, 8, 7.5 & 8.5). Further, the value D equals the value of the first expected royalty payment. Again, the growth rate ("G") is not included because it is assumed that it will decay over time. In other words, once an established catalogue is purchased, its royalty income is fairly constant and experiences little growth.

Hence, the formula is solved for Ks and hence we arrive at Ks=D/Po. Therefore, if D equals the average NPS (first expected future royalty inflow assuming royalty income remains constant), Ks can be simply computed using Po as the initial cost of the catalogue. The result: the combined catalogue with a 7 multiple has a discount or expected rate of return of .1429 or 14.29%. Again, this is the expected rate of return if a catalog is purchased at a 7 multiple. Looking at the figures given, this assumption is confirmed. The other multiples for catalog summary are calculated as follows:

Relative to other investment opportunities, the above discount rates should be compared to the expected rates of return and measurements of risk on alternative investment choices. This would enable the potential buyer to gauge these potential returns

CONCLUSION

Since music publishers exist as agents, or brokers of a commodity – in this case a catalogue of copyrights, it is our ultimate hope to quantify the initial cash outlay as well as the future cash inflows (NPS) with a high degree of consistency and predictability. Also, our ability to measure such cash flows would certainly be aided by a definite period of time; specifically, a date when royalty income would completely cease.

Instead, we are limited to trying to value and measure the profitability of a set of outflows and perpetual inflows that are dependent on hundreds of subjective variables and industry trends. As a result, it is difficult to use a Net Present Value or Internal Rate of Return calculation to measure the profitability of such flows.

Regardless, exploring the music publishing industry for investment opportunities is intriguing. It is interesting that every song played on the radio, used in a tavern or recorded on a CD can be rooted back, through general licensing arrangements and statistical sampling, to the owner of its copyright who ultimately will receive a royalty payment for such a use. As the industry evolves and adapts to changes in technology, it will also be interesting to monitor a catalogue's cost and multiple as well as its future royalties from various licensing arrangements.

Relevant to other traditional investment opportunities, copyright ownership through catalogue acquisition is now being viewed as a viable alternative. Given the recent trend in investment banking to securitize future royalties on established catalogues, this industry may still become more lucrative and profitable as potential investors seek ownership in song copyrights.

SOURCES OF ROYALTY INCOME

Mechanical
Compact disc, tape, record sales
Compilation records of popular songs
Instrumental tapes
Medleys
Novelty or parody albums
Record clubs
Sampling
Sing-alongs/karaoke
Special products albums
Television album packages

Performance
Clubs
Concerts
Jukeboxes
Mechanical performance (foreign territories)
Performance rights societies worldwide
Radio
Restaurants
Theatres

Synchronization
Commercials
Foreign theatrical royalties (motion pictures)
Home video (television programs)
Karaoke videos
Motion pictures
Promotional video (recording artists)
Public service announcements
Television and motion picture background scores
Television commercials for motion pictures

Television programs and motion pictures based on songs
Television series
Video jukeboxes

Print & Lyrics
Books about an artist, composer or lyricist
Books based on motion pictures
Instructional magazines
Lyric reprints in fan magazines
Lyric reprints in novels or non-fiction books
Lyrics on albums, cassettes and CD packages
Lyrics on T-shirts
Monthly song lyric and sheet music magazines
Overhead transparencies
Sheet music and folios

Specialty & Other
Broadway musicals
Computer and board trivia games
Dolls and toys
Greeting cards
Rentals
Theme parks

OPTIMAL PORTFOLIO FOR NPD PROJECTS

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ABSTRACT

For continued success in the market place firms should introduce new successful products into the market, and gradually retire older mature products. The introduction of new products should be timed properly; it should also produce an appropriate product mix so that the strategy of the firm is continued and strengthened. The portfolio of new product development (NPD) projects should be structured such that the goals of the firm are met.

There has been considerable interest in this field recently. Though much has been written, there is very little theoretical work on the development of optimal portfolios. Most of the literature focuses on what some companies have been doing in this new area, which is to classify the projects into cells in a two-dimensional matrix. A wide variety of dimensions are used. Also, there is no linkage between the classification and the strategy of the firm.

The paper develops a theoretical framework for relating a firm's strategy with the type of R&D and NPD portfolio it should have, based on a new classification scheme for NPD and R&D projects.

INTRODUCTION

With rapid new product introduction being the norm in many industries, it is important that firms plan for their new product introductions with great care. To protect oneself against possible failure of a new product in the marketplace, firms should develop a sufficiently large number of product ideas so that a number of new products of the right type and market size enter into the market. This means that firms should have a sufficiently large number of new product projects in their portfolio, as the success rate of NPD projects is not very high –hardly one out of ten NPD projects are successful in the market (Wall Street Journal, 1992). Having a large number of NPD projects is obviously resource draining. To get the best use from the R&D resources, a firm should plan on having an optimum portfolio of NPD projects.

Firms embark on new product developments based on inputs from any number of sources - marketing, sales, R&D, engineering and so on. The new product ideas are subjected to a preliminary analysis to determine the size of the market and its profitability, as well as the production and distribution issues. Consideration is also given to the technological aspects of developing the new product, especially if the project requires developing new technology. With this information, the product idea is screened for its feasibility for its promotion to the full-scale development stage. Many methods of screening projects have been developed and discussed in the literature. See for example Balachandra (1989) or Martino (1995) for a comprehensive discussion of R&D project selection.

The projects meeting the selection criteria are then ranked according to certain criteria (depending on the firm). Budget is then allocated to the projects in the order of their rank until the budget is exhausted. The projects with budget allocation comprise the portfolio of projects. In the past, very little consideration had been given to the composition and mix of these projects. These issues would have been subjectively considered at the time of ranking and approving the project for development and budget allocation.

With the growing concerns towards making organizations and their product lines a viable source of competition, there is a perceived need for developing an optimal portfolio of NPD projects. Such a

portfolio would bring in a continuous stream of new products timed perfectly for matching the market needs and to replace tired, old and obsolete products from the product line. It gradually replaces the unprofitable ones by new and profitable products. And of course, the firm should accomplish these tasks within the planned resources. It should also be consistent with the firm's strategy.

R&D AND NPD PROJECT PORTFOLIO

Products in a company's business follow the typical product life cycle. A well managed company will anticipate the decline and obsolescence of its products, and be ready with a new product to take the place of those that are about to become obsolete due to its technology or competition from other products. Therefore, firms should always have a stream of new products to replace those products the firm wants to withdraw from the market or those which are being forced out of the market.

The new product stream should also produce the so-called "stars and cash cows" - products that produce increasing amounts of revenues and profits, and generally have a comfortable market share. NPD projects that don't lead to such products should be de-emphasized or removed from the project portfolio, and be replaced by projects that are more likely to succeed and meet the financial and strategic goals of the firm.

The timing of the projects in the portfolio is also important. Some projects are of short duration, while some may take a long time to complete. The completion dates of the projects should be planned such that the products are released according to a well thought out sequence.

In addition, the firm's NPD project portfolio should reflect the firm's strategic vision in terms of technology, growth and anticipated areas of business in which the firm intends to be active.

To summarize, an optimal R&D and NPD project portfolio should have the following characteristics:

1. It produces a constant stream of successful new products.
2. The product mix resulting from these projects and the existing products reflect the strategy of the firm.
3. The product line will have a good balance between improving established products and new emerging potentially successful products.
4. The timing of introduction of new products resulting from the portfolio will match the withdrawal of older unprofitable, outdated products.

These issues are discussed in a later section.

Although these characteristics are considered essential by the industry, there are hardly any comprehensive procedures to develop optimum portfolios. Cooper et al [1998] has described a number of approaches taken by firms to represent their portfolios. Typically these consist of a two dimensional matrix. The projects are represented as bubbles (the size of the bubble represents the budget) in the matrix located according to the values obtained by the project in the dimensions. (See Figure 1 for an example.)

There is no consistency in the choice of the dimensions. Some of the dimensions used by firms are:

a) Market Risk, Technology Risk
b) Importance, Ease of Execution
c) Market Attractiveness, Financial Attractiveness
d) Value, Probability of Success
e) Market Attractiveness, Ease of Implementation
f) Probability of Success, Net Present Value
g) Risk, Reward
h) Strategic Intent, Market Segments, and so on.

The common characteristics of these dimensions are that they represent some type of risk and/or some type of reward. The first set of dimensions, for example, uses the two common risks for NPDs. Ideally, firms would like to have more projects in the quadrant with low risk values for the two types. A

progressive firm with a long-term outlook may have a few projects in the quadrant with the high-risk values for both dimensions. However, linking the positioning of the projects with the company's strategy is not clear with this representation.

Though the matrices using any combination of the above listed dimensions can represent the portfolio of NPD projects, it is very difficult to make a link between the portfolio and the strategy of the firm. Ideally, one would like to have projects all in the upper right hand quadrant in the matrix, as that is the most attractive quadrant in terms of potential for success and profitability. But that is not always possible; there should be an optimum mix. Moreover, some of the unattractive projects may possibly be made attractive by infusion of additional funds or by some breakthroughs in technology.

There is a second problem with these representations – the timing of the projects and their completion is not considered at all. Some projects in the portfolio may be completed within the next few months, while others may take a number of years. Linking these times of completion to the life cycles of existing products has not been attempted.

The contextual framework developed by Balachandra and Friar (1997) provides a way out of some of the difficulties. After an exhaustive study of the success factors for R&D and NPD projects in the literature, it was observed that not only were there too many factors identified as success factors (72 in the 20 studies they examined), but also some of the findings were contradictory in nature. For example, while some studies claimed that an exhaustive market research was necessary for the success of an NPD, some others claimed that it was unnecessary or even useless in some cases (radical innovations). The authors suggested that the reasons for the plethora of success factors and the seeming contradictions are because there are essential differences in the nature of the projects. These differences require that different sets of factors be applied to evaluate them, as well as different sets of importance measures for these factors.
With such reasoning, the authors develop a contextual framework to characterize R&D and NPD projects. The framework consists of a three dimensional matrix. To simplify matters at this stage, each of the three dimensions has only two values, resulting in a contextual cube with eight cells. (See Figure 2)
The three dimensions are:
Market – Existing, New
Type of Innovation – Incremental, Radical
Technology – Familiar, Unfamiliar
A brief description of the three dimensions follows.

a) The Market Dimension:

In an existing market, the new product meets an existing need but with some improvements, and therefore the market uncertainty is relatively low. In a new market, the new product is expected to meet a latent need, and therefore, the uncertainty of the market can be very high. The market analyses for the two types are completely different (Maidique and Zirger, 1984).

In existing markets, the customers are fairly cognizant of the nature and uses of the product. They may also have discovered some weaknesses in the product and may have been craving for changes. Such information is easy to collect, and transmit to the design team. The size of the market is also relatively easy to estimate, as there is considerable data about past sales not only for the product but also for competing products. Using simple statistical and econometric methods one can estimate the market size. It is relatively easy from there to estimate the size of the potential market for the product based on the expected market share.

Though the approach seems simple, it is not necessarily easy to estimate the market for versions of existing products. The perceptions of the customers regarding the new product may be vastly different from the test panel's perceptions, throwing market estimates based on the test panel into the winds. Still, there is usually an abundance of data regarding the market, the customers, and other useful factors so that market analysis can be more thorough.

In new markets, on the other hand, there are many unknowns. The actual customer profile itself can be wrongly defined. The potential use of the product may not be identified correctly. One has to

make a number of assumptions about the customer profile and the likely usage for the product. Consequently, the size of the market cannot be estimated with any degree of certainty (Shanklin and Ryan, 1987).

The quality of the information one can discover about the market and customers will differ between the two. As Maidique and Zirger (1984) found, market understanding for existing markets comes from proactive approaches such as market and customer surveys, while in new markets it comes from passive understanding of user needs using gut feel or experience. This gut feel may play an important role in the decisions about the market size.

Take the case of a small US printer manufacturer, who wanted to enter the Far East Market, introducing a slightly modified version of their US product. There was practically no competition. Being a new product in this area, with very little competitive presence, there was no information about the market size. The company had to literally make some educated guesses about the size of the market.

b) The Innovation Dimension:

In an incremental innovation the basic technology and product configuration remain essentially the same, and only minor modifications are made to the performance, flexibility, appearance and other similar characteristics. It has a higher probability of technical success as the technology is well understood and has been working successfully in the earlier product. The budgeting and scheduling of the project activities are simpler as the tasks required for completing the project are well defined, and the project milestones can be clearly established. These activities, however, take on a more important role, as the cost and time pressures are more acute. New ink jet printers and the Sony Walkmans are good examples of incremental innovation.

The success factors for this type of project are more oriented towards success in the market place, and the organizational issues of the project. The technology factors are not so important as the technology is well understood and there are usually no surprises.

In a radical innovation, the product design may be solely based on the creative instincts of the designer by understanding the user needs through empathy with the user world (Leonard-Barton and Wilson, 1994). The way companies organize for projects of a radical innovation type has been shown to be completely different from the way they do for incremental innovations (Balachandra and Friar, 1997; Johne and Snelson, 1988). The budgeting and scheduling activities have to be more flexible to take into account the larger uncertainties in completing the technical tasks. The probability of technical success will generally be lower as the technology may not be well understood, though sometimes it may be familiar. There may be many practical problems in implementing some of the required design features. It requires a more flexible organizational structure.

The market success factors are not so important for this type of project as the market may not be well defined. Organizational issues are more oriented towards developing a more flexible approach. Product superiority may also be difficult to judge, as there may be no comparable products in the market. For example, when Apple introduced Newton, there were hardly any other products in the market to compare with. Strategic alliance with the company's product line may take on a more important role than for the incremental innovation. These projects differ from the incremental innovation type projects in a number of other characteristics as well.

This phenomenon can be illustrated with the case of Apple's Lisa Computer introduced in the late 70s. When it was introduced into the market, it was a completely new product with the interface being so much different from the available computers. It had the mouse and the icons. There was no data about who the customers would be. Consequently, it was not very easy to estimate the market demand. The internal estimates of sales in the first year ranged from 1000 to 50,000, showing the degree of uncertainty that can exist even with people familiar with the product.

This aspect is further confounded by a phenomenon recently discussed by Friar and Balachandra (1999). Their study showed that radical innovations in new technologies do not usually replace current applications of older technologies which the new technology was expected to replace. Instead, the new technologies often find completely new applications, leading to highly uncertain market estimates.

c) The Technology Dimension:

Although classifying technology is hard, one useful classification for our purposes is how familiar a company is with the underlying technology of the new product. Familiarity with the technology reduces the technical risk. If it is an unfamiliar technology the company may have to either develop it or acquire it from another firm that has the technology. This is always fraught with risk. However, that risk should not be a deterrent from pursuing the project. For example, one firm routinely gave the go ahead signal even if the probability of technical success (the technical risk) was as low as 0.7 for an unfamiliar technology, while killing projects with a technical risk of 0.9 for projects which were using familiar in-house technology. In other words, the threshold for the technical risk levels will be different depending on the contextual nature of the project.

The level of familiarity with the technology of the new product affects a number of issues in project management. With familiar technologies, the new product development becomes more of an engineering design project. On the other hand, for unfamiliar technologies, the new product development takes on an entirely new aspect. Depending on whether the new technology is being developed within or procured from the outside, the organizational structure of the project team will be different.

If the technology is from outside the firm, a strong technology transfer team has to be organized. If it is being developed from within, adequate funds should be provided to make the technology successful and for effective internal transfer of technology to engineering and manufacturing. There should be more flexibility in the organization. The interface between R&D, engineering and manufacturing should be much stronger in the case of unfamiliar technology. Organization factors requiring formal systems may prove to be unnecessary, while the presence of a project champion to push the project through the difficult stages may be essential.

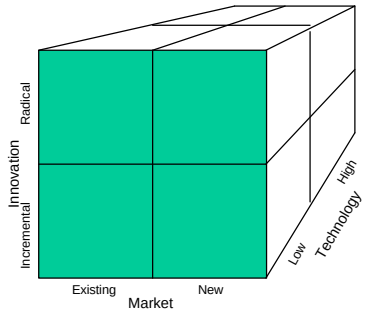
In familiar technology, the technological areas are well defined. The new products have to conform to many well-established standards and practices; they have to provide an advantage within this structure. Consequently, the developmental tasks are well defined; benchmarks are easily set; schedules are more accurate and can be adhered to more easily. The tasks are more focused on engineering than on technology.

The availability of market information, however, does not depend on the nature of technology. It depends on the other two contextual variables. The approach to managing the projects in the two types of technologies is different as explained earlier.

The foregoing description of the three contextual variables helps to understand the contextual model for NPD projects. It is a cube with the three variables forming the three orthogonal dimensions. As each variable has two levels, the model has eight cells (Figure 2).

This model allows one to categorize any NPD project into its contextual cell. From the discussion in the previous section, we can see that such categorization helps in determining which factors are important for evaluating the project for its success potential. It can further lead to guidelines about the approaches for better management of the project.

Figure 2
Contextual Cube for NPD Projects



Some examples of NPD projects belonging to the different cells are given in Table I.

TABLE I
EXAMPLES OF NPD PROJECTS

No	Inn.	Mkt.	Tech	Cell	Example
1	I	E	F	IEF	Tartar control toothpaste
2	I	E	U	IEU	Windows 98
3	I	N	F	INF	Water Pik Oral Hygiene Machine
4	I	N	U	INU	Microwave Wave Disposal System
5	R	E	F	REF	Continuous casting steel mill
6	R	E	U	REU	MPP Super computers
7	R	N	F	RNF	Home Cappuccino Machine
8	R	N	U	RNU	Digital Video Disk

Notes:

E - Existing Market; F - Familiar Technology; I - Incremental Innovation; N - New Market
R - Radical Innovation; U - Unfamiliar Technology

STRATEGY AND NPD PORTFOLIO

As discussed earlier. It is important to relate the NPD and R&D project portfolio with the strategy of the firm to derive an optimum portfolio. The NPD portfolio should fit the strategic vision of the firm in terms of:

Technology

Growth
Areas of Business

The representations usually used by firms as described in an earlier section do not show how the projects in the portfolio fit the strategic needs of the company. What one needs is a representation that can clearly identify the holes in the portfolio if it were to meet the needs of the organization. It should also show whether the portfolio is consistent with the strengths of the firm. And finally, it should also show where there may be an over representation of projects.

The contextual cube helps to resolve these issues. It clearly shows where the holes in the portfolio are, and where the over representation of projects is. Using this representation one can develop an optimum portfolio of NPD projects consistent with the strategy of the firm, and determine the appropriate number and type of projects one should have in each of the cells of the contextual cube.

For example, if the firm's strategy is to grow and maintain strength in the current markets, the portfolio should have more projects in the cell corresponding to Existing Markets, Incremental Innovation, and Familiar Technology. A significant proportion of the R&D budget should be apportioned to these projects. On the other hand, if the strategy is to enter new related markets and grow, then there should be more projects in the cells corresponding to New Markets, Radical Innovation and Either Familiar or Unfamiliar Technology.

Consider the NPD portfolio of a hypothetical company shown in Table II.

TABLE II
NPD PROJECT PORTFOLIO

Cell	Innovation	Market	Technology	Project	Budget	Total for this cell
IEF	Incremental	Existing	Familiar	A, F	2.0, 0.5 MM	$2.5 million
INF	Incremental	New	Familiar	B	0.75 MM	$0.75 million
REF	Radical	Existing	Familiar	E	1.0 MM	$1.0 million
RNF	Radical	New	Familiar	C	0.8 MM	$0.8 million
IEU	Incremental	Existing	Unfamiliar			
INU	Incremental	New	Unfamiliar	G	2.0 MM	$2.0 million
REU	Radical	Existing	Unfamiliar	D	0.75 MM	$0.75 million
RNU	Radical	New	Unfamiliar	H	1.0 MM	$1.0 million
					Total	$8.8 million

The portfolio is shown in the contextual cube in Figure 3. From figure 3, we can see that the portfolio appears to be well balanced. It has two projects (A and F) which appear to be incremental improvements for existing projects. This is good for maintaining the current market position. Project B is a project capitalizing on an existing product and familiar technology, but attempting to enter a new market. Project E is for a product that is a radical innovation but aimed at current customers, while project C is aiming at a related new market.

The firm has also invested heavily in Project G planned for a new market, but requiring new technology. The decision to embark on such a project may be based on the long-term goals of the organization, which may want to enter new markets. Project D may need new technology and a radical departure but may cater to the current market. Project H is the pie in the sky project. It is planned for new, unfamiliar technology, involving a radical innovation, and is being planned for new market.

Is this portfolio optimum? It depends on the strategy and goals of the firm. If the firm had wanted to maintain a strong position in its current markets, while exploring new markets for the future, this appears to be balanced portfolio.

The type of mix of projects in the portfolio for a specific strategy has to be determined based on the strengths and weaknesses of the firm, as well as the managerial style of the organization. A very general set of guidelines is proposed in table III below. This takes into account the nature of the projects, the type of effort involved and the strategic fit of the projects with the firm's strategy. Since there can be

many variations of strategy for any firm regarding its product line, this table shows only a few of the more common types of strategies.

TABLE III
Some Common strategies and their appropriate NPD portfolios

No.	Strategy	Portfolio
1	Maintain and improve strength in current markets e.g., P&G, Coca Cola etc.	1.Focus on projects in the IEF cell (80% of budget). 2. Have a few in the INF cell (10% of budget). 3. Have one or two projects in the RNU cell (10% of budget).
2	Develop and move to new markets e.g., Philip Morris, RJR etc.	1. Focus on the INF cell (60% of budget). 2. Have a few in the INF cell (10% of budget). 3. Have a number of projects in the RNU, and INU cells (30% of budget)
3	Be in the forefront f technology e.g., Sony etc.	1. Focus on the IEU cell (60% of budget) 2. Distribute remaining budget in INU and RNU cells.

CONCLUSION

This paper presents an approach towards developing an optimum portfolio of NPD projects. It is based on the contextual cube for classifying projects. This classification can be used to determine whether the portfolio of projects is in consonance with the strategic goals of the organization. If it is not, the scheme informs where the discrepancies are – whether some types of projects are more than what the firm needs, and whether there are some types of projects that the company is neglecting.

The question of timing has not been addressed in this paper. Also, the issue of whether a truly optimum portfolio can be developed using a mathematical programming approach has not been considered. These two issues are currently being studied.

REFERENCES

Balachandra, R., (1989) *Early Warning Signals for R&D Projects*, Lexington, MA: Lexington Books, 1989.

Balachandra, R., and Friar, J.F., (1997) "Factors for Success in R&D Projects and New Product Innovation: A Contextual Framework," *IEEE Transactions on Engineering Management*, Vol. EM-44, No. 3, pp. 276-287, August 1997.

Cooper, R.C., Edgett, S.C., and Kleinschmidt, E.J.,(1998) *Portfolio Management for New Products*, Reading, MA: Addison Wesley, 1998

Friar, J.F., and Balachandra, R., (1999) "Spotting the customer for emerging technologies," *Research*Technology Management*, vol. 42, no. 4, pp.37-43, July – August, 1999

Johne, F.A., and Snelson, P.A., (1988) "Success factors in product innovation: A selective review of literature, *J. of Product Innovation Management*, vol.8, pp.240-251.

Leonard-Barton, D., and Wilson, E., (1994) "Commercializing technology: Imaginative understanding of user needs," Harvard Business School, Cambridge, MA, Case Study, No. 9-694-102.

Maidique M.A., and Zirger, B.J.,(1984) "A study of success and failure in product innovation: The case of the U.S. electronic industry," *IEEE Transactions on Engineering Management*, vol. EM-31, no. 4, pp. 192-203.

Martino, Joseph, P. (1995) *R&D Project Selection*, New York, NY: Wiley Interscience, 1995.

Shanklin, W.L., and Ryans, J.K., (1987) *Essentials of Marketing High Technology, Essentials of Marketing High Technology*, Lexington, MA: Lexington Books.

Wall Street Journal, (1992) January 13, 1992, p. B1.

PERFORMANCE IMPLICATIONS OF THE PROACTIVE STRATEGY-MARKETING CULTURE

COALIGNMENT: A DUAL PERSPECTIVE ANALYSIS

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ABSTRACT

Although the marketing culture of an organization and the strategy of an organization have been independently related to organizational performance, there is a lack of research concerning their combined impact. This study examines the relationship of the fit, congruence or coalignment of a firm's marketing culture and strategy to the performance of the firm. In the context of this study, marketing culture is operationalized as the culture that generates, disseminates, and responds to market intelligence. The strategy of interest is proactiveness. Two distinct analytical perspectives, the interactionist perspectives and the profile deviation perspectives are used to assess the culture-strategy fit. Use of these perspectives allows for method triangulation and thus provides a more robust assessment of the performance implications of the culture-strategy fit.

INTRODUCTION

Several recent articles in the marketing literature have generated interest in the culture that organizations cultivate and maintain (Deshpande and Webster 1989; Deshpande, Farley and Webster 1993; Webster 1991; Webster 1990). Of specific interest to marketing scholars and practitioners is a culture that will "put the customer in the center of the firm's thinking about strategy and operations" (Deshpande and Webster 1989, p. 3). Consequently, such a culture may be expressed as the degree to which an organization has adopted the marketing concept.

A review of the marketing literature regarding organization culture reveals that two types of research methods have been used. The first method focuses on the comparison of culture types to determine which culture type is most effective. Deshpande, Farley and Webster (1993) used this approach to examine the four culture types of hierarchy, clan, adhocracy and market. Their analysis indicated that of these culture types, the market culture resulted in the highest performance.

The second method focuses exclusively on the relationship between marketing culture and performance. Narver and Slater (1990), Kohli and Jaworski (1990) and Jaworski and Kohli (1993) examined the construct of Market Orientation, which has been defined as the implementation of the marketing concept. Results of these studies indicate that a positive relationship exists between market orientation and business performance.

While each of the studies using the above research methods do take into account the operating environment external to the firm, none account for specific strategies used by firms. However, many believe strategy to be important. Calori and Sarnin (1991), for example, explicitly state that the relationship between organization culture and economic performance is contingent upon factors such as "the firm's strategy, the competitive system, and the macro-cultural environment" (p. 50). This view is consistent with the earlier work of Schwartz and Davis (1981) who argue that the successful implementation of a strategy depends upon the "fit" between the existing culture and the proposed strategy. Further support for the importance of a "fit" between an organization's culture and strategy is provided by Schien (1985) who relates:

> Many companies have found that they can devise new strategies that make sense from a financial, product, or marketing point of view, yet they cannot implement these strategies because they require assumptions, values, and ways of working that are too far out of time with the organization's prior assumptions. (p. 30)

Marketing culture and business level strategy have each been identified as important factors that influence firm performance. Several authors have contended that the culture and strategy of an organization should be consistent in order for the organization to maintain a high level of performance. The effect of the fit or consistency between culture and strategy on performance has not, however, been empirically investigated.

PURPOSE

The purpose of this study is to examine the relationship of the fit, congruence or coalignment of a firm's marketing culture and strategy to the performance of the firm. This framework is functionally grounded in contingency theory. As such, superior performance is contingent upon the fit of marketing culture and strategy at the business level.

BACKGROUND

There has been a great amount of theoretical research dedicated to examining organizational culture, but little empirical work. Each stream of research regarding the topic differs depending on how the researcher perceives the concept of culture. Smircich (1983) provides a review of five paradigms associated with organizational culture. The relevance of each of these paradigms to marketing has been elaborated upon by Deshpande and Webster (1989) and will consequently not be discussed here.

While each paradigm discussed by Smircich (1983) and Deshpande and Webster has some degree of merit, the most useful paradigm to marketers is generally identified as the contingency paradigm. Under the contingency paradigm, culture is perceived as a variable that can be consciously changed, managed, or modified by the marketing manager. This perspective holds that culture is an independent variable where beliefs and values are unique to the organization. Organizations are seen as the producer of not only goods and services, but of culture as well (Deshpande and Webster 1989).

The basic research agenda associated with the contingency management paradigm focuses on how culture may be manipulated. More specifically, research using the contingency paradigm focuses on how the manipulation of culture can enhance business performance, customer response, and employee response. The contingency perspective is the perspective on which this study will focus.

Regardless of the paradigm, a commonly recurring theme identifies culture as a pattern of shared beliefs and/or knowledge. For instance, Schien (1990) defines culture as:

> A pattern of basic assumptions, invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore is to be taught to new members as the correct way to perceive, think and feel in relation to these problems. (p. 111)

The central theme of "shared beliefs and/or knowledge" has been well received in the marketing literature. The focus in marketing has been primarily on a culture that Aputs the customer in the center of the firm's thinking about strategy and operations" Deshpande and Webster 1989, p.3). Deshpande and Webster (1989) identify the culture of interest as the marketing concept.

The typical attitude associated with the marketing concept is that the profit of a firm is related to the creation of opportunities to more effectively satisfy customer needs within a certain set of limitations (Payne 1988). The most current definition of the marketing concept focuses on the actual implementation of the marketing concept and is termed the market orientation. Market Orientation is the term used to describe the actual implementation of the marketing concept and concerns a firm's ability to generate, disseminate, and respond to market intelligence (Kohli and Jaworski 1990). The definition follows:

> Market Orientation is the organization wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization wide responsiveness to it. (p. 6)

Narver and Slater (1990) provide a slightly different, but consistent conceptualization of market orientation. These authors propose the following definition of market orientation:

> The market orientation is the organization culture that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers and, thus, continuous superior performance for the business. (p. 21)

The above definition was refined by Narver, Park and Slater (1992, p. 1) to "a business culture in which all employees are committed to the continuous creation of superior value of customers."

The strategic management literature is rich with discussions, definition, and typologies relating to strategy. However, many studies do not make distinctions between corporate and business level strategies. Beard and Dess (1981) provide a discussion of such distinctions. Under their framework, a corporate level strategy is concerned with determining which business to compete in. The authors further explain that a corporate strategy is concerned with the "distribution of firm assets, sales, employment, capital budget, or other indexes of firm resources among the range of existing industries" (Beard and Dess 1981, p. 666).

Alternatively, a business level strategy may be defined in terms of variation in firm characteristics relevant to competitive successes or failures within a given industry" (Beard and Dess 1981, p. 666). According to this view of business level strategy, a firm will have a different operating strategy for each industry in which it competes.

The intra-industry oriented definition of business level strategy has historically been examined using strategic typologies. While many such typologies exist in the literature, those proposed by Miles and Snow (1978) and Porter (1980) are the most frequently recognized in the strategic management literature. The basic premise behind strategic typologies is that given a particular set organizational characteristics and environmental conditions, one specific type of strategy will provide a firm with a competitive advantage, thus allowing that firm to outperform competitors.

The ideal strategies proposed by Miles and Snow (1978) and Porter (1980), however, represent the endpoints of a continuum along which all firms are represented.. Venkatraman (1989a) labels such typologies as the classificatory approach. By classifying or categorizing strategies, much information may be lost. The information loss is similar to the situation in which length is measured with a ruler having only a 1-inch and a 12-inch indicators. Variation between 1 inches and 12 inches is vague and inexact. Using broad strategy classifications that define the endpoints of a continuum is also vague and inexact. Venkatraman (1989a) argues that the comparative approach is a much more fruitful method and states (1989a, p. 943- 944) that under the comparative approach, "the focus in less on categorization into one particular cell of the typology, but on measuring the difference along a set of characteristics that collectively describe the strategy construct."

Of particular interest to marketers is a strategic dimension that considers the degree of forward thinking in terms of customers, competitors, and environmental trends. Venkatraman (1989a) terms such a strategic dimension as Proactiveness. Venkatraman (1989a) further indicates that the proactive strategic dimension will be evident in firms that seek new opportunities, introduce new products and brands ahead

of their competition, and strategically eliminate operations in the mature or declining stages of the product life cycle.

The discussion above has identified the marketing culture and business level strategy as individual antecedents of firm performance. Furthermore, a synergistic effect between culture and strategy is proposed. The synergistic effect is based on the fit, congruence, or coalignment between culture and strategy. The greater the consistency or fit between a firm's culture and
and strategy, the greater the probability of attaining organizational goals (i.e., performance). Consequently the following hypothesis is proposed.

H1: The greater the degree of fit, congruency, or coalignment between a firm's marketing culture and strategy, the greater that firm's performance.

Fit, congruency, or coalignment however, can and should be assessed from several different perspectives. Van de Ven and Drazin (1985, p. 358) recommend that "contingency studies should be designed to permit comparative evaluations of as many forms of fit as possible." Along similar lines, Venkatraman (1989b) calls for explicit justification of the specification of fit and promotes the use of competing models or perspectives, "especially in cases in which the extant research may not be powerful enough to suggest rejecting theories outright" (p. 440). Such is the case with the variables of marketing culture, strategy and performance. The current study makes use of two different analytical perspectives in testing the hypothesis above.

METHODOLOGY

Hoover's Masterlist of Major U. S. Companies was chosen as the sampling frame for this study. It was deemed the most efficient in terms of time and cost. From this sampling frame, a random, national sample of 2200 organizations was generated.

Both the CEO and CFO were initially contacted by FAX to ask for their cooperation in this study. These individuals, as key members of top management, are intimately familiar with the overall picture of marketing within an organization. As stated by Lusch and Laczniak (1987, p. 4), "executives are the makers and executors of decisions in an organization. They respond and adapt to the competitive intensity. They develop and foster the culture of the organization."

It must be noted, however, that when collecting information from top management executives, there is a possibility that in responding, the executives may rationalize their present and past decisions or may vary their responses according to a desired rather than an actual behavior or state (Huber and Power 1985). To reduce such possibilities, respondents were instructed to respond in a manner consistent with actual behaviors or beliefs of interest. Huber and Power (1985) make several specific recommendations regarding the selection of strategic-level managers as key informants. Each of these recommendations was used in collecting information for this study.

Approximately 2,200 publicly traded firms were contacted requesting that they participate in the study. A willingness to participate was expressed by 342 firms. Respondents were also asked to indicate whether they wanted the questionnaire mailed or faxed. Of the 342 firms who indicated a willingness to participate, 118 returned completed questionnaires. While response rates were not as high as hoped for, sufficient responses were obtained for the exploratory nature of the current study. The firms represented in the sample came from 82 distinct industries as classified by the primary four digit Standard Industrial Classification code.

The marketing culture variable referred to in earlier sections is operationalized as the implementation of the marketing concept and termed market orientation. More formally, Kohli, Jaworski, and Kumar (1993, p. 468) define the market orientation of a firm as "the organization wide generation of market intelligence pertaining to current and future needs of customers, dissemination of intelligence within the organization and responsiveness to it." Operationalizing the marketing culture of a firm in such a manner has been questioned by Deshpande, Farley and Webster (1993) who claim that market orientation is synonymous with customer orientation. It is the contention of the current study that the generalized concept of culture, defined as "the pattern of shared values and beliefs that help individuals

understand organizational functioning and thus provide them with the norms for behavior" (Deshpande and Webster 1993, p. 4), allows for many alternative manifestations of culture. Thus, implementation of the marketing concept or market orientation represents the manifestation of marketing culture dealing primarily with the generation, dissemination and responsiveness to market information.

As operationalized above, marketing culture was measured using the MARKOR scale developed by Kohli, Jaworski, and Kumar (1993). The scale consists of twenty, seven-point likert type items (anchored by 1 = Strongly Disagree to 7 = Strongly Agree) designed to measure intelligence generation, intelligence dissemination and responsiveness activities associated with market oriented firms. Internal consistency associated with the measurement of marketing culture was assessed using Cronbach's Alpha. Alpha was estimated at 0.90 which exceed the threshold level recommended by Nunnally (1967) and are comparable to those reported by Jaworski and Kohli (1993).

Strategy is operationalized in this study as a pattern of critical decisions made at the business level which focus on the means adopted for enabling firms to achieve their desired goals. Defined as such, the domain of the strategy construct allows for the examination of the relationships between strategies and goals in different contexts (Venkatraman 1989a). In addition, Venkatraman (1989a) states that the examination of strategy at the business level facilitates an understanding of strategic response to competitive moves, technological changes, and the entry and exit of competitors. Strategy, as defined above, can vary among many different, yet related dimensions. However, for the purposes of the study at hand, the strategy relating to the proactive behavior of a firm is the primary focus. The proactive strategy of a firm was measured using five, seven-point likert type items (anchored by = Not At All and 7 = To An Extreme Extent / summated range from 5 to 35). Content of these five items focused on a firm's strategic thinking in terms of competitive response, brand introductions, and the overall product mix. Cronbach's Alpha was estimated at 0.57. This low reliability estimate will be discussed as a limitation.

Each industry maintains different standards for above average, average and below average performance. Consequently, the performance of a firm must be defined and measured in a manner relative to the industry in which the firm operates. In this study, industry is defined as the principle four digit SIC industry in which the firm is normally placed (Venkatraman and Ramanujam 1987). In addition to industry standards, performance should reflect the overall operating performance of a firm as opposed to functional performance (i.e., earning per share is primarily a financial indicator). Keeping these concerns in mind, this study defines performance as the degree to which a firm maintains above average business returns in relation to its competitors.

A multitude of performance indicators have been identified in the organization culture and strategy literature. Measures generally are either self-report, multi item scales (Venkatraman 1989a; Jaworski and Kohli 1993; Deshpande Farley and Webster 1993; Govindarajan and Fisher 1990) or financial indicators (Beard and Dess 1981; Dess and Davis 1984; Narver and Slater 1990). Given the definition provided above, a combination of subjective and objective performance indicators was used. A linear combination of six separate indicators was used to provide a profile of the overall operating performance of respondent firms. The first indicator was composed of the composite score of five items introduced by Lusch and Laczniak (1987). The second indicator was composed of the composite score of the four item scale utilized by Deshpande, Farley and Webster (1993). The third indicator, relative return on sales, provided an objective indicator of firm performance. Relative return on sales refers to the return on sales of the respondent firm minus the return on sales in the primary industry. This value was then scaled to a seven point scale with a seven indicating a return on sales that is a great deal above the industry average and a one indicating a return on sales that is a great deal below the industry average. ROS data was obtained from information filed with the Securities and Exchange Commission and industry norms were obtained from Dun and Bradstreet's *Industry Norms and Key Business Ratio 1993-1993*. The remaining three indicators asked respondents to compare product profitability, new product success rate, and market share growth rate with their competition. This highly diverse, six indicator composite measure of organizational performance resulted in an estimate of Cronbach's alpha of 0.71 which exceeds the threshold level identified by Nunnally (1967).

RESULTS

As previously indicated, this study makes use of two separate and distinct models of fit. Analysis from two different analytical perspectives greatly enhances the generalizability of the findings of the current study. A general discussion relating to the rationale for each perspective and the results of analysis are presented below

Van de Ven and Drazin (1985) define the scope of the interactionist perspective of fit as relating to the dependence of organizational performance on the blending of contextual factors within the organizational setting. Specifically, these authors operationalize this perspective as "the interaction of pairs of organizational context-structure factors on performance" (p. 335). Interaction effects may be examined from several slightly differing analytical methods. The current study utilizes the analytical framework provided by Joyce, Slocum and Von Glinow (1982) as it allows for distinctions between three competing forms of alignment within the interactionist perspective. More specifically, the Joyce, Slocum and Von Glinow (1982) framework allows for interactions to be associated with effect, general, or functional types of congruency. Effect congruency is additive in nature and occurs when two independent characteristics combine to make independent and linear contributions to the dependent variable. General congruency proposes interaction effects that emphasizes the matching of levels of independent variables. Functional congruency represents a more general model and focuses on the existence of substitution or blocking effects. As indicated in the Joyce, Slocum, and Von Glinow (1982) framework and by Venkatraman (1990), the linear combination of scores for both the culture and strategy dimensions were calculated and then dichotomized. Dichotomization was performed using a median split (Table 1). Analysis of variance (Table 2) indicates that the both the main effects ($F_{2,100} = 19.01$, $p < 0.000$) and the two way interaction ($F_{1,100} = 4.36$, $p < 0.039$) between culture and strategy are significant. Examination of the cell contrasts suggested by Joyce, Slocum, and Von Glinow (1982) reveal that a form of functional congruency exists.

To examine the sensitivity of ANOVA results to the method of dichotimization, a second analysis using the upper and lower 40% of consitutent scores (middle 20% of scores was excluded) of the dimensions of interest was performed. Again, both the main effects ($F_{2,72}=16.374$, $p<0.000$) and the two way interaction($F_{1,72}=7.588$, $p<0.008$) between culture and strategy are significant. Functional congruency was again determined to exist using the contrasts identified by Joyce, Slocum, and Von Glinow (1982).

The second specification of fit employs a profile deviation analysis. Van De Ven and Drazin (1985) explain this method of analysis as "testing at the aggregate level by analyzing deviation in the pattern of a given organizational unit from its ideal type pattern or mode" (p.348). The basic assumption of this analytical mode is that each of the cultural and strategy components contribute to overall firm performance. In the context of the current study, an ideal mix of the culture and strategy components will result in maximal performance outcomes. Any deviation from the ideal profile will result in lower levels of performance. Completion of the profile deviation analysis requires the completion of three steps. First, an ideal profile must be either theoretically or empirically derived (Van de Ven and Drazin 1985; Venkatraman 1989a). In the current study, the ideal type was derived empirically by using a calibration sample consisting of the top 10% of performers (n= 11, some cases were excluded due to missing values). The mean scores of the culture and strategy elements were then calculated for this calibration group. These mean scores represent the ideal amount of each element. The second step involves determining the extent to which firms not included in the calibration sample differ from their ideal types. This is accomplished by the following Euclidean distance formula (Venkatraman 1990):

$$\text{Misalign} = \sum_{j=1}^{n} (X_{ij} - x_{ij})^2$$

where:

X_{ij}: = the score for the unit along the jth cultural dimension

x_{ij}= the mean for the calibration sample along the jth cultural dimension

The third and final step involves examining the relationship of the criterion variable, in this instance firm performance, and the derived distance measure of Misalign for firms not included in the calibration sample. It is expected that the greater the Euclidean distance from the ideal cultural - strategy pattern, the lower the performance of a firm. Stated simply, a significant, negative correlation should exist.

As presented in Table 3, a significant, a negative correlation does exist between the derived Euclidean distance measure of Misalign and the firm's level of performance. To examine the sensitivity of the results to calibration sample size, two additional sets of analyses were completed using the upper 15th (n=17) and 25th (n=28) percentiles as the calibration sample Results appear to be robust to variations in the calibration sample size. In each case, the negative correlation was found to be statistically significant at the 0.01 level,

DISCUSSION AND CONCLUSIONS

The findings of this research have significant implications for managers. First, this model suggests that the marketing culture of a firm and the strategy of that firm should match, A firm whose marketing culture and strategy match should experience increased performance. Such an implication is very intuitive. For example, a firm that maintains a marketing culture that does not stress the generation, dissemination and responsiveness to market intelligence or information should not attempt to implement a strategy that requires continual updating of information. Conversely, a firm that maintains a marketing culture that actively stresses the generation, dissemination and responsiveness to market intelligence will be wasting resources if the firm's strategy does not take advantage of such information.

The importance of this finding may be demonstrated by the success enjoyed by the 3M Corporation. The culture, as described by Peters (1987) is one in which environmental scanning or the collection of market information is stressed. This culture was successfully matched with a strategy of innovation which makes use of an information sensitive culture. The result was a firm that outperformed most, if not all, of its competitors. Similar culture - strategy matches have been reported to exist at other highly successful firms including Microsoft, Apple, and Lockheed.

The second managerial implication is that firms need to accurately assess both the existing marketing culture and strategy. The goal of achieving a fit between the marketing culture and strategy is attainable only if firms collect and maintain such information. As norms for the attainment of fit do not exist, firms must create their own benchmarks, This requires that the information concerning both the marketing culture and strategy of a firm critically examined over time. In this manner, a firm can gauge progress relative to the information collected in previous time periods.

This study assessed the fit or coalignment of marketing culture and strategy using the interactionist and profile deviation perspectives. Future research should assess fit from the additional perspectives of fit, covariation, and congruency identified by Van de Ven and Drazin (1985) and Venkatraman (1990). The use of all additional analytical perspectives will allow for method triangulation in the analysis stage of research, thus enhancing the generalizability of results.

While marketing culture and strategy are two important organizational characteristics, future research should focus on the identification of other characteristics on which firm performance might be contingent. For example, Mckee, Varadarajan and Pride (1989) examine the relationship of the marketing function to formalization, centralization and complexity. Thus, the relationships between the structural characteristics of formalization, centralization, complexity, marketing culture, and strategy need to be further examined, While initial research relating to the contingent effects of environmental factors has demoted the importance of such factors, common sense dictates that environment, either actual or perceived, plays an important role in contingency planning. Consequently, further examination of the effects of environmental conditions (i.e., industry structure, legal environment, and environmental hostility) is necessary. Future research should also focus on the identification and analysis of marketing and other functional sub-cultures that exist within an organization. Saffold (1988) indicates that different functional areas (i.e., marketing, finance, production) may maintain different cultural norms.

Consequently, research that specifically addresses the relationship of the functional sub-cultures to the dominant marketing culture is needed. Operationializing constructs such as marketing culture, overall firm strategy, and performance is difficult at best. Even more complex are the issues of designing measures of these constructs. The psychometric properties of the multi-item scales utilized in the current study have been examined extensively (Deshpande, Farley, and Webster 1993; Jaworski and Kohli, 1993; Kohli and Jaworski 1993, 1990;Venkatraman, 1989b;Lusch and Laczniak 1987). However, psychometric analysis is only one piece of evidence necessary towards establishing the validity of these measures (Peter 1981) and of the research in general. In this particular study, analysis of reliabilities revealed that the measure of proactive strategy maintained a low reliability. While this potential problem is acknowledged, the robust study design and analytical framework make it unlikely that the overall study findings were invalidated due to this low reliability estimate. A similar situation is documented in Desphande, Farley and Webster (1993).

Finally, there is a need for longitudinal studies regarding the evolution of marketing culture and strategy. Organizational culture and strategy are in a continual state of flux. In other words, the relationships between marketing culture and strategy are in a dynamic state. Longitudinal studies provide the means necessary to examine such a dynamic relationship.

REFERENCES

Beard, Donald W. and Gregory G. Dess (1981). "Corporate-Level Strategy, Business-Level Strategy, and Firm Performance." *Academy of Management Journal,* 24 (4), 663-688

Calori, Roland and Philippe Sarnin (1991). "Corporate Culture and Economic Performance: A French Study." *Organization Studies,* 12 (1), 49-74.

Deshpande, Rohit, John U. Farley, and Frederick E. Webster, Jr. (1993). "Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms: A Quadrand Analysis." *Journal of Marketing,* 57 (January), 23-27.

Deshpande, Rohit and Frederick E. Webster, Jr. (1989). "Organizational Culture and Marketing: Defining the Research Agenda." *Journal of Marketing, 53* (January), 3-15.

Dess, Gregory G. and Peter S. Davis (1984). "Porter's (1980) Generic Strategies as Determinants of Strategic Group Membership and Organizational Performance." *Academy of Management Journal, 27* (3), 467-488.

Govindarajan, V. and Joseph Fisher (1990). "Strategy, Control Systems, and Resource Sharing: Effects on Business-Unit Performance." *Academy of Management Journal,* 33 (2), 259-285.

Huber, G. P. and Power, D. J. (1985). "Retrospective Reports of Strategic-Level Managers: Guidelines for Increasing Their Accuracy." *Strategic Management Journal,* 6, 171-180

Jaworski, Bernard J. and Ajay K. Kohli (1993). "Market Orientation: Antecedents and Consequences." *Journal of Marketing,* 57 (3), 53-70.

Joyce, W., J. Slocum, and M. Von Glinow (1982). "Person-Situation Interaction: Competing Models of Fit." *Journal of Occupational Behavior,* 3, 265-280.

Kohli, Ajay K. and Bernard J. Jaworski (1990). "Market Orientation: The Construct, Research Propositions, and Managerial Implications." *Journal of Marketing,* 54 (April), 1-18.

Kohli, Ajay K., Bernard **J.** Jaworski and Ajith Kumar (1993). "MARKOR: A Measure of Market Orientation." *Journal of Marketing Research, 30* (November) 467-77.

Lusch, Robert F. and Gene R. Laczniak (1987). "The Evolving Marketing Concept, Competitive Intensity and Organizational Performance." *Journal of the Academy of Marketing Science,* 15 (3), 1-11.

McKee Daryl O., P. R. Varadarajan, and William M. Pride (1989). "Strategic Adaptability and Firm Performance: A Market-Contingent Perspective." *Journal of Marketing,* (53 (July), 21-35.

Miles, Raymond E. and Charles C. Snow (1978). *Organizational Strategy, Structure, and Process,* New York: McGraw-Hill Book Company.

Narver, John C. and Stanley F. Slater, (1990). "The Effect of a Market Orientation on Business Profitability." *Journal of Marketing,* 54 (October), 20-35.

Narver, John C., Swong Y. Park, and Stanley F. Slater (1992). "Market Orientation, Information, and Marketing Strategies." *American Marketing Association Summer Educators Conference.*

Nunnally, Jum (1967). *Psychometric Theory,* New York: McGraw-Hill Book Company

Payne, Adrian F. (1988). "Developing a Marketing Oriented Organization." *Business Horizons,* (May-June), 46-53.

Peter, J. Paul (1981). "Construct Validity: A Review of the Basic Issues and Marketing Practices." *Journal of Marketing Research,* 18 (May), 133-45.

Peters, Thomas J. (1987). *Thriving on Chaos,* New York: Harper and Row

Porter, M. E. (1980). *Competitive Strategy,* New York: The Free Press.

Schein, E. H. (1985). *Organizational Culture and Leadership,* San Francisco: Jossey-Bass

Schein, E. H. (1990). "Organizational Culture." *American Psychologist,* 45 (2), 109-119.

Schwartz, Howard, and Stanley M. Davis (1981). "Matching Corporate Culture and Business Strategy." *Organizational Dynamics,* (Summer), 30-49.

Smircich, Linda, (1983). "Concepts of Culture and Organizational Analysis." *Administrative Science quarterly* 28 (September), 339-358.

Van de Ven, Andrew H. and Robert Drazin, "The Concept of Fit in Contingency Theory. *Research in Organizational Behavior, 7,* 333-365.

Venkatraman, N. (1989a). "The Concept of Fit in Strategy Research: Toward Verbal and Statistical Correspondence." *Academy of Management Review, 35* (August), 942-962.

Venkatraman, N. (1989b). "Strategic Orientation of Business Enterprises: The Construct, Dimensionality, and Measurement." *Management Science,* 35 (August), 942-962.

Venkatraman, N. (1990). "Performance Implications of Strategic Coalignment: A Methodological Perspective." *Journal of Management Studies, 27* (1), 19-41

Venkatraman, N. and Van de ven Ramanujam (1987). Measurement of Business Economic Performance: An Examination of Method Convergence." *Journal of Management,* 13 (1), 109-122.

Webster, Cynthia (1991). "A Note on Cultural Consistency within the Service Firm: The Effects of Employee Position on Attitudes toward Marketing Culture." *Journal of the Academy of Marketing Science,* 19 (4), 341-346.

Webster, Cynthia (1990). "Toward the Measurement of the Marketing Culture of a Service Firm." *Journal of Business Research,* 21, 345-362.

TABLE 1
PERFORMANCE MEANS & STANDARD DEVIAIONS

	Low Proactiveness	**High Proactiveness**
High Market Orientation	*Cell 1* Median Split = 3.87 Std. Dev. = 1.00 40% Split = 3.51 Std. Dev. = 1.19	*Cell 2* Median Split = 5.38 Std. Dev. = 0.85 40% Split = 5.49 Std. Dev. = 0.81
Low Market Orientation	*Cell 3* Median Split = 4.17 Std. Dev. = 1.02 40% Split = 4.13 Std. Dev. = 1.01	*Cell 4* Median Split = 4.88 Std. Dev. = 0.74 40% Split = 4.78 Std. Dev. = 0.75

TABLE 2
RESULTS OF ANOVE (INTERACTIONIS PERSPECTIVE)

Possible Contrasts in ANOVA Design	**Contrasts Required for Functional Congruency (Blocking Effect)**	**T-Value**	**D.F.**	**Pr>T (two-tail)**
Row Effects				
Cell 1 vsCell 2	Cell 1 ≠ Cell 2	-4.85	34	0.00
Cell 3 vsCell 4	Cell 3 ≠ Cell 4	-2.12	40	0.04
Column Effects				
Cell 1 vsCell 3	One and only one	-1.29	36	0.204
Cell 2 vsCell 4	equality	2.11	38	0.04
Diagonal Effects				
Cell 1 vsCell 4	Immaterial			
Cell 3 vsCell 2				

TABLE 3
RESULTS OF PROFILE DEVIATION ANALYSIS

	Calibration Sample			*Profile Deviation Analysis*		
		Means				
	n	Market Orientation	Proactiveness	n	Correlation of Misalign with Performance	Significance of Correlation
Upper 10% of Performers	11	6.11	5.46	102	-0.339	0.001
Upper 15% of Performers	17	6.10	5.26	96	-0.306	0.010
Upper 25% of Performers	28	5.87	5.08	85	-0.29	0.010

PRACTICALITY OF A TRADITIONAL CHANNEL STRUCTURE: HOW REALISTIC IS IT?

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ABSTRACT

The purpose of this paper is to review the increasing use of electronic commerce (e-commerce) in marketing and examine the challenges associated with its use in marketing channels. E-commerce has been having an incredible impact on the way companies do business. It is the newest and most pronounced paradigm shift in how firms do business since the assembly line changed the way manufactured goods were produced in the early 1900s. In 1998, e-commerce between businesses was estimated at $43 billion, over five times the size of the consumer area. As e-commerce becomes the marketing channel of choice for many businesses, the concept of traditional channel structure is no longer as realistic as it used to be. Accordingly, this paper reviews the issues associated with aligning the current channels with the realities of e-commerce practices.

INTRODUCTION

The Internet began as a tool of the US military. The military built this "*network of networks*" during the Cold War to ensure ongoing communication in the event of a nuclear war. It was a single network called the Advanced Research Project Agency Network. It began as a US Department of Defense project in 1969. The primary concern was how to communicate within the US following a nuclear attack. A single command center was ruled out because it would be a primary target and it was apparent that wires and switches of a network could not be protected from a nuclear explosion. The solution was to build a network with no central command center, allowing it to continue operations piecemeal if something happened to a portion of it. The network could accommodate different computers and communications equipment as long as they used standard protocols. Essentially, a military-motivated solution in 1970 provided the basis for what was to become the Internet (Callon, 1996).

In 1995, Netscape Corporation introduced the first user-friendly browser capable of using the Internet to surf the World Wide Web (the Web) and open it up to commercial use. Prior to that, large corporations could trade electronically only with companies that could afford to do business over private networks, using an older technology called Electronic Data Interchange (EDI). EDI is usually used over private networks and is somewhat expensive, complex and inflexible. The system transmits rigidly

formatted electronic documents. EDI systems are still in use with an estimated $250 billion of business transactions expected to occur in 1999 (Reinhardt, 1998).

Today, the term e-commerce relates to buying and selling transactions conducted on the Web using the Internet. The marketing focus is at the consumer as well as the industrial level for both products and services. It is the newest and most profound paradigm shift in how firms do business since the assembly line changed the way manufactured goods were produced in the early 1900's.

E-COMMERCE AND BUSINESS WORLD

E-commerce has been having an incredible impact on the business world. The first and most crucial shift in thinking is to move away from the idea that any business is more or less a freestanding entity. The objective for large companies must be to become e-commerce hubs and to establish smaller companies as vital spokes within that hub. The companies must be willing to bring suppliers and customers deep into their business processes and to develop a similar understanding of their business partners' processes. That implies a degree of openness which is somewhat new to many businesses.

The new business model springing up amongst e-commerce companies bears little resemblance to the old rules. A prime example is that managers who operate in the traditional model focus on the constant demand for a penny or two more in earnings per share. There are now e-commerce companies whose market capitalization exceeds some of the largest companies on the Fortune 500 list. This market capitalization allows e-commerce companies to use their credit and capital stock to move into a variety of areas, establish market share, and buy-up competitors. This creates a difficult situation for some of the large businesses which are still in the "e-commerce" learning process. Many of these companies have re-engineered their organizations numerous times and are hesitant to undertake another major revision. However, it appears, if they are to compete in the future, e-commerce will become a necessary part of their business strategy. E-commerce is rapidly breaking industry boundaries and creating a new breed of competitors (Christensen, 1997).

It is impossible to foretell exactly where all these ever-increasing activities in e-commerce will lead. However, it is apparent that even the "brick-and-mortar" organizations will be forced to move to the Internet in order to survive. Since the Internet provides instant communications with a firm's every supplier, partner, and customer, it appears that success may be dependent on a changing organizational structure. It is very probably that most of the traditional business functions of such as marketing, purchasing, accounting and finance, and human relation will see dramatic changes.

As more and more sales revenues are generated on the Internet, the marketing and sales functions will have to adapt quickly. In the future, one of the key advertising mediums will be the firm's home page. Marketing strategy may be predicated on the use of the Internet as the primary source of information and customer contact. The information technology specialist will possible be as, or more, important than the marketing staff and salespersons presently out on the street.

The purchasing function will change just as dramatically with a highly automated purchasing department. The Internet communication process allows each to communicate directly with each other. For example, the careful crafting of a "*just-in-time*" inventory system between a firm and its suppliers will be tremendously enhanced. That supply chain will become a supply web, allowing suppliers and shippers to communicate directly with each other and, in many cases, the firm's own database to determine future demand and delivery schedules.

The advantages of technology, and in particular, the advent of fast computers and data base technology, have changed the accounting and finance function. The availability of software programs has created tremendous advances in internal and external financial reporting and moved the burden of accounting transactions from the bookkeeper to the computer. Financial transactions can now be initiated entirely online. Money can be borrowed and repaid, short-term investments can be made in money markets, and hedging transactions can be conducted in financial instruments and derivatives. Information about potential investments in financial instruments or other companies is readily available and easily accessed on the Internet.

Since the Internet allows easy communications from anywhere, the hierarchical structure of the organization will also change. Employees will no longer be sitting in an office, but will be able to work, make necessary contacts, acquire information, and conduct meetings from anywhere there is an online connection. It appears that the trend of outsourcing employees will accelerate as e-commerce continues to increase in importance. This will have a profound and important effect on human relations departments.

While all these changes and developments are equally important, a field of distribution becomes a subject which is highly sensitive to the use of e-commerce. After all, e-commerce results in direct distribution at times by eliminating some of the traditional parties who are the traditional members of traditional channels.

E-COMMERCE AND MARKETING CHANNELS

The use of e-commerce shortens the channel structures, allowing the producer of the product or service to make direct connections with their customers. Because of this, entirely new companies and business models are emerging in industries ranging from chemicals to trucking to bring buyers and sellers together in super-efficient new electronic marketplaces. The end-result of this is rather impressive. It appears that use of e-commerce helps to lower costs dramatically across supply and demand chains, increases and enhances customer service, eases the entry to new markets, creates additional revenue streams and redefines business relationships (Van del Poel and Leunis, 1999).

Most companies have already focused on establishing new and more efficient distribution channel networks. It would appear, however, that a change more profound than taking and fulfilling orders on line is expected to occur. Businesses that do e-commerce successfully will differ from the traditional ones in a variety of ways. It is expected that services will become increasingly more important than tangible products. The Internet is capable of delivering customized services such as the assistance that Cisco Systems provides for a customer in configuring its system. Businesses will collaborate as and when needed to provide instant one-stop shopping. Demand will drive production via the extended value chain and "*just-in-time*" inventory will become a reality. Increasingly, fixed prices will give way to prices that reflect market conditions and treat different kinds of customers appropriately (Yamada, 1997).

On the other hand, there have been some concerns about the "not-so-positive" effects of e-commerce on marketing channels (Machlis, 1998). The term "disintermediation" which refers to "cutting out the middleman" has been presented as a significant threat that the use of e-commerce creates in channel structures. Similarly, another term "infomediaries" has also been introduced to refer to a different kind of channel participants which in a way replaces the category of traditional intermediaries. Whether traditional channel members and/or participants are eliminated or replaced, the fact remains that the use of e-commerce changes the basics of distribution channels. Accordingly, the concept of traditional channel structure is no longer as realistic as once it used to be.

CONCLUDING REMARKS

Most senior managers no longer need convincing that the Internet is the wave of the future. A recent worldwide survey of some 500 large companies indicates that more than 90 percent of the top managers believe the Internet will have a big impact on the global marketplace by the year 2001. It is also projected that Internet sales will double every year over the next five years, surging from $43 billion in 1998 to $1.3 trillion in the year 2003. If the value of services exchanged online were included, the figures would be even more staggering.

The effect of e-commerce has already been tremendous. E-commerce came of age early in the computing and electronics industries. It is estimated that the effect will move from a handful of "*early-start*" companies such as Cisco Systems, General Electric, Dell Computer, Ford Motor Company and Visa to a myriad of suppliers and customers. As both buyers and sellers reduce costs and increase efficiency by investing in the capacity to do business on the Web, it is in their interest to persuade more and more of

their business partners to do the same. This will create a self-reinforcing circle. On the other hand, many managers have already been through outsourcing, downsizing and re-engineering during the last decade. Some have implemented packaged information-technology applications designed to automate internal processes and manage supply chains, know collectively as "*enterprise resource planning*" and are still wondering whether it was worth spending all those millions of dollars. Nearly all embraced the low cost and flexibility of personal computer based called client/server computing at the start of the 1990s, only to discover the perils of decentralized data and distribution complexity. And, of course, over the past several years, they have invested lots of time and money into nothing more exciting than the hope of avoiding a systems meltdown on the first day of the new millennium. As a result, most of these managers are naturally wary of consultants and visionaries who promise new paradigms and tidal wave technology. A recent global survey of chief executives' attitudes about already-implemented information technology indicates that only 25 percent believe it made a significant contribution to the bottom line and more than 80 percent are disappointed by its contribution to the competitiveness of the company.

Finally, the potential changes that use of e-commerce brings into the marketing channels create another consideration area for those managers. While traditional channels are subject to numerous problems, there is a significant amount of uncertainty about how channel members and participants adopt and cope with the changes initiated by the use of e-commerce. One needs to remember that this uncertainty has to be eliminated to avoid any potential conflict in channels. That might mean that one may need to be patient and examine the results of current practices before automatically adopting them. Unfortunately, this course of action may also result is being late in the marketplace and being left out. It appears that the right strategy is mostly situation-specific and almost subjective, which makes that traditional analysis completely unrealistic. It is hoped that the recognition of this "confusion" will provide the channel researchers with added incentives to study the marketing channels with more practical insights brought up by the use of e-commerce.

REFERENCES

Callon (1996). *Competitive Advantage Through Information Technology*. Mc-Graw Hill, Co., Inc., San Jose, CA.

Christensen (1997). *The Innovator's Dilemma*. Harvard Business School Press, Boston, MA.

Machlis (1998). "Channel Conflicts Stall Web Sales." *ComputerWorld.* Volume Thirty-Two, Number Seven, February 16, 1998, 2.

Reinhardt (1998). "Log On, Link Up, Save Big." *Business Week*, June 1998, 1-9.

Van del Poel, & Leunis (1999). "Consumer Acceptance of the Internet as a Channel of Distribution." *Journal of Business Research*, Volume Forty-Five, Number Three, Fall 1999, 249-256.

Yamada (1997). "Internet to Drive '97 Channel Growth." *Computer Reseller News*, January 20, 1997, 34.

PROTECTING COPYRIGHTS THAT ARE MARKETED AND DISTRIBUTED OVER THE INTERNET

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ABSTRACT

The marketing and distribution of recorded music over the internet has created a unique set of problems related to the music's copyright protection, most notably piracy of songs over the Internet. As major and independent record labels, music publishing companies and recording artists promote, sell and distribute music over the Internet, primarily through digital downloading, Internet piracy of copyrighted songs has increased dramatically. To combat the growth of this piracy over the Internet, the Secure Digital Music Initiative (SDMI) was formed. SDMI's mission was to create industry standards that would provide effective digital rights management for the copyright owners of music marketed and distributed over the Internet.

Digital downloading technology has created a Pandora's box for the music industry. On the one hand, this technology has created unique opportunities for the marketing and distribution of recorded product over the Internet. On the other hand, Internet pirates have illegally copied music files and placed them on the Internet, thus infringing on the rights of the songwriters, music publishers, artists and record labels. Recently, EMI Group, PLC let consumers buy and then download David Bowie's latest album, via the Internet, using digital downloading technology. (Peers, 1999) EMI noted that this would be the first time that an entire album, from a major artist, was available for digital downloading (it should be noted that the album's music was available for digital downloading for two weeks, beginning September 21, 1999. Thereafter, the album itself was available for sale at record stores on October 5, 1999).

The primary facilitator of unauthorized Internet copying of songs is MP3 (otherwise known as MPEG1, Layer 3 audio standard) technology. MP3 compression technology was released in 1992 (the first widely used device utilizing MP3 compression technology was Diamond's Rio Player, also called a portable device). MP3 technology resulted from an intergovernmental attempt to create standards for interactive television. In its present form, MP3 allows music files to be easily copied (due to the compression technology), vicariously encourages piracy and does not provide for an accounting to the copyright holders of the downloaded music. (Anonymous, 1999).

The music industry had no way of knowing the potential impact of MP3. During the early 1990's, several factors were emerging that would lead to the success of MP3: first, the Internet was creating a world-wide web connecting millions of music listeners around the world; and second, Intel's Pentium chip allowed personal computers a degree of processing power that enabled the real-time decoding of MP3-like files. MP3 allows a person to take music copied from a CD, compress it and either send it to a friend or post it on a private Web site, allowing unlimited and unrestricted copying of the copyrighted work. (Dibbell, 1999)

As a result of the dramatic increase in unauthorized digital downloading of music, the Secure Digital Music Initiative (SDMI) was formed in late 1998. SDMI consists of more than 120 companies and organizations from information technology and consumer electronics businesses, Internet service

providers, security technology companies and members of the worldwide recording industry. SDMI provides a forum to develop the voluntary, open framework for playing, storing and distributing digital music. There are two tracks being developed by SDMI: the first track has already produced a standard, or specification, for portable devices. The second track, scheduled for completion in late 2000, will provide the framework for an overall architecture for delivery of digital music in all forms. It should be noted that SDMI will not produce a single format but allows a variety of competing technologies and download formats to be used within its system. Ultimately, SDMI aims to create a framework where artists, labels, songwriters and publishers may protect their music while providing consumers with the ability to digitally download music in a secure format.

SDMI's members promote the concept that copyrights should be protected over the Internet and that digital downloading should be encouraged, but in an arena where adequate digital rights management is in place. Digital rights management will include blocking the playing of illegal copies of newly released songs, as well as the incorporation of predetermined digital usage rights. (Anonymous, 1999) Initially, SDMI specifications will apply to portable devices and PC software, but future specifications will address other devices such as car stereos. Portable devices and compatible software, manufactured for sale during the 1999 holidays, will contain an audio watermark technology developed by ARIS Technologies Inc. (Anonymous, 1999) This watermarking technology will indicate when software used by the Phase I, or portable devices, should be upgraded to incorporate Phase II technology. (Anonymous, 1999) Until that time all music, whether in a protected or unprotected format, will be playable. (Robinson, 1999) When Phase II technology is available, and a consumer attempts to play new music releases incorporating SDMI technology, the Phase I device's detection of the watermark will automatically let consumers know that their software can be upgraded to play the new music. If the consumer chooses not to upgrade, the device will not play new music releases that incorporate SDMI technology. (Livingston, 1999)

In December 1999, SDMI published a document outlining the technical functionality for the Phase II screening technology for portable devices and future applications. SDMI will soon issue an official Call for Proposals inviting responses from interested technology vendors. The Phase 2 Screen shall determine whether the content (a file that has been digitally downloaded) has undergone unauthorized compression. It will need to transmit and detect a "no more copy' status as well as to re-mark, re-encode or otherwise change the state of particular content (e.g. "one generation copy allowed" to "no more copies"). The key technical factors likely to be considered by SDMI, from companies submitting proposals for Phase 2 Scrreening requirements include:

1. audibility;
2. robustness;
3. tamper resistance;
4. reliability (e.g. no false positives);
5. renewability;
6. ease of implementation;
7. commercially practicable;
8. efficiency of operation (e.g. computational requirements); and
9. should not significantly affect the abIlity to compress the content.

CONCLUSION

The digital downloading of music over the Internet has created an environment where the legal rights of copyright owners are continuously infringed. With compression technology such as MP3, web users may place copyrighted music on the Internet for illegal downloading or retrieve digital downloads from sites that have not obtained the copyright owners permission. As an industry response to the ever increasing priacy of music over the Internet, SDMI was formed. SDMI consists of over 120 companies representing the recording, technology and computer industries. The purpose of SDMI is to facilitate the creation of technolgy that will allow the distribution of music, in a secure format, over the Internet. SDMI will implement its sweeping recommendations in two phases. Phase I was completed in the fall of

1999 and included audio watermarking technology, developed by ARIS Technologies Inc,. for use in the initial Phase I portable devices. Phase 2 technology (to be completed by late 2000), will allow detection of the watermark and allow consumers to upgrade their Phase I devices. If the consumer chooses not to upgrade, the device will not play new music releases that incorporate SDMI technology. By providing a way for music to be delivered in a secure format, SDMI systems will protect the copyright owner's rights while expanding the opportunities for music to be marketed and distributed over the Internet.

REFERENCES

Anonymous (1999). "The Big Five Hit The Web." *The Economist*, Volume 351, May 1999, 63-64.

Anonymous (1999). "Science and Technology: Dgital Rights and Wrongs." The *Economist*, Volume 352, July 1999, 75-76.

Anonymous (1999). "SDMI Watermark Selected." *Electronic News*, Volume 45, August 1999, 22.

Anonymous (1999). "SDMI Grounds The Rumors." *Audio*, Volume 83, September 1999, 25-26.

Dibbell, Julian (1999). "A Chat with Mr. MP3." *Rolling Stone*, Volume 812, May, 1999, 97-98.

Livingston, Brian (1999). "Readers Share Their Opinions about The New Music Standard and Why It Will Fail." *InfoWorld*, Volume 21, August, 1999, 46.

Robinson, Sara (1999). "Recording Industry Escalates Crackdown on Digital Piracy." *New York Times*, C (October 4, 1999), 5.

Yoshida, Junko (1999). "Secure Digital Music Initiative Hits Sour Note." Electronic Engineering *Times*, Issue 1080 (September 27, 1999), 4.

FAMILY LIFESTYLE DETERMINANTS OF AUTOMOTIVE SHOPPING BEHAVIOR

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ABSTRACT

Historically, when business used the lifestyle concept in marketing, the unit of analysis has been the individual. If the unit of analysis is changed from the individual to the family, many of the same techniques used in individual lifestyle analysis should be appropriate for analyzing the family lifestyle. The purpose of this study was to determine if there was an association between the family lifestyle and the purchase of new and used cars. For both new and used cars, family lifestyle was found to be significantly related to purchase behavior. An examination of the results helps small businesses and entrepreneurs in providing an understandable portrait of customers. Family lifestyle research can play an integral part in the quest to better understand the consumer for business enterprises from the smallest to the largest.

INTRODUCTION

The lifestyle of individuals has been of much interest to marketers. During the late 1960's, in response to the pressing need to better understand their customers, marketers started to combine demographic analyses of their customers with information on their customer's lifestyles. This research, in which the patterns in which people live were examined, came to be known as psychographic research, and consisted of analyzing the consumer's Activities, Interests, and Opinions (AIO). As a result, the term AIO research and psychographic research have come to represent the same type of lifestyle analysis.

Although the actual psychographic research is quantitative in nature, it is also qualitative in that it offers marketing practitioners an understandable portrait of their customers. Thus, lifestyle research plays an integral part in the quest to better understand the consumer. Marketers have, over the past decade, developed measures of individual lifestyle that have proven to be both reliable and valid. The technique used is known as AIO research or psychographic research. This research questions individuals as to their activities, interests, and opinions. If the unit of analysis is changed from the individual to the family, many of the same AIO techniques should be appropriate for conducting sociographic research on the family lifestyle (Wind and Green, 1974). This change in terms of unit of analysis is in line with other behavioral sciences, which have used the lifestyle concept to analyze not only individuals, but also groups such as families (Hawkins, Best, and Coney, 1998).

The logic behind utilizing the same techniques for the measurement of family lifestyle as an individual's lifestyle is the premise that within the family relationship, individuals develop and maintain a shared perspective of the world (Olson, et al., 1983). Therefore, rather than considering just an individual's perception of the world, it is possible to consider a family's view of the world (Reiss, 1981). In order to measure the family's view, couple average lifestyle scores were computed for the AIO items, i.e., families were conceptualized as having a shared perspective on their activities, their interests, and their opinions.

METHOD

The data analysis presented determined if the concept of family lifestyle is useful in predicting family purchasing behavior for both new and used cars for families in the Preschool Age Stage of the family life cycle purchase. Purchasing behavior is often considered an integral part of the lifestyle conceptual frameworks (Cosmas, 1982). Therefore, it was logical to include purchase variables as indicators of the purchasing habits of the family, rather than the individual, and thereby link the family consumption process with the family lifestyle. The analysis determined if there were significant differences in family lifestyle scores between families that purchased new and used cars vs. families that did not purchase an automobile. H1 is the general null hypothesis investigated.

H1 For families in the Preschool Age Stage of the family life cycle, the family lifestyle scores will not be significantly different on the basis of purchase behavior.

In line with the above, a pool of AIO statements was analyzed to determine those which were compatible with the concept of family lifestyle. These AIO statements were based on general patterns of lifestyle as opposed to product-specific AIO analysis (Engle, Warshaw, and Kinnear, 1994). Most of the AIO statements in the pool came from the research conducted by Wells and Tigert (Wells and Tigert, 1971). These general AIO statements have been successfully utilized by numerous other marketing researchers (Burnett, 1981). The analysis resulting in picking 36 AIO statements which measured eleven conceptual factors. The eleven conceptual factors were:

Sports Orientation Community Orientation Credit Orientation Cultural Orientation
Price Consciousness Adolescent Orientation Market Innovativeness Home Orientation
Depth of Horizons Financial Satisfaction Financial Optimism

In order to select the purchasing variables to investigate, it was necessary to examine past research on items purchased during different stages of the family life cycle. Fortunately, the stage investigated in this research was the same as the Full Nest I stage of the traditional family life cycle (Ferber and Lee, 1974). There exists a wealth of research on purchasing habits for each of the stages of the traditional family life cycle (Murphy and Staples, 1979). The purchasing habits studied here were based on items which past family life cycle research has shown to be consumed during Stage 2 (i.e. Full Nest I) of the family life cycle. Also, items frequently purchased during Stage 1 and Stage 3 that could logically be purchased during Stage 2 were also investigated (Kotler, 1997). These two purchase variables selected were:

Number of new cars purchased in the past 24 months.
Number of used cars purchased in the past 24 months.

For this study, data was randomly gathered from 672 families with children between the ages of 0 to 6. Both the husband and the wife were asked to use a five-point Likert-type scale to indicate their agreement with each lifestyle statement. In order to measure the family's view, couple average lifestyle scores were computed for the thirty-six AIO items, i.e., families were conceptualized as having a shared perspective on their activities, their interests, and their opinions. The husband was also asked to the number of new and used cars purchased in the past 24 months.

The purpose of this study is to determine if there is an association between the family lifestyle and the purchase of new and used cars. Testing the difference between the means of two samples is the appropriate technique to determine these associations. Since the universe standard deviations are not known, the theoretical sampling distribution of differences is assumed to be a t distribution.

Data on the two purchase variables are presented in two forms. First, for each purchase variable, the significance levels of the 36 family lifestyle variables are presented. Second, the mean family lifestyle

scores for the family lifestyle variables that are significant different between the families that purchased new or used cars vs. those that didn't are presented.

RESULTS

In Table 1, the significance levels of family lifestyle scores vs. the number of new and used cars purchased in the last 24 months are presented.

Table 1

Significance Levels of Family Lifestyle Scores vs. Number of Cars Purchased in Last 24 Months

Significance	New Cars	Used Cars
Sports Orientation:		
L04 I thoroughly enjoy conversations about sports.	.630	.136
L14 I usually read the sports page in the daily paper.	.442	.053
L28 I like to watch or listen to baseball or football games.	.087	.054
L36 I would rather go to a sporting event than a dance.	.788	.628
Community Orientation:		
L07 I do volunteer work for a hospital or service organization on a fairly regular basis.	.893	.249
L08 I like to work on community projects.	.861	.920
L16 I am an active member of more than one service organization.	.039	.728
L31 I have personally worked in a political campaign for a candidate or an issue.	.077	.487
Credit Orientation:		
L15 It is good to have charge accounts.	.000	.000
L19 We like to pay cash for everything we buy.	.013	.115
L20 We buy many things with a credit card or a charge card.	.000	.004

L24 To buy anything, other than a house or a car, on credit is unwise. .965 .024

Cultural Orientation:

L01 I enjoy going through an art gallery. .480 .003

L03 I enjoy going to classical concerts. .414
.205

L17 I like ballet. .776
.704

Price Consciousness:

L02 In our family, we usually watch the advertisements for announcements of sales . .038 .539

L06 In our family, we shop a lot for "specials." .198
.104

L23 A person can save a lot of money by shopping around for bargains. .994
.148

L29 I find myself checking the prices in the grocery store even for small items. .642
.031

Significance Levels of Family Lifestyle Scores vs. Number of Cars Purchased in Last 24 Months

Significance

New

Used

Adolescent Orientation: *Cars*
Cars

L10 We take a lot of time and effort to teach our children good habits. .018
.582

L33 Our children are the most important thing in our lifes. .013
.561

L34 When our children are ill in bed, we drop most everything else .786
.686
in order to see to their comfort.

L35 We try to arrange our home for our children's convenience. .281
.921

Market Innovativeness:

L25 I often try new brands before my friends and neighbors do. .362
.874

L26 When I see a new brand on the shelf, I often buy it just to see what it's like. .597
.531

L30 I like to try new and different things. .657
.381

Home Orientation:

L09 I like parties where there is lots of music and talk. .668
.626

L18 I would rather spend a quiet evening at home than go out to a party. .479
.807

L22 I am a homebody. .603
.886

Depth of Horizons:

L11 We'd like to spend a year in London or Paris. .471
.507

L27 We would like to take a trip around the world. .664
.712

Financial Satisfaction:

L13 Our family income is high enough to satisfy nearly all our important desires. .000
.059

L21 No matter how fast our income goes up, we never seem to get ahead. .000
.412

L32 I wish we had a lot more money. .120
.712

Financial Optimism:

L05 We will probably have more money to spend next year than we have now. .685 .641

L12 Five years from now the family income will probably be a lot higher than it is now. .333 .284

NEW CARS

As indicated by Table 1, four of the family lifestyle variables for purchasing of new cars are significant at the .01 level or greater. In Table 2, the mean scores for the family lifestyle variables that are significantly different between the families that purchased new cars vs. those that didn't are presented.

Table 2

Average Lifestyle Scores vs. Purchase Data

L 13 = Our family income is high enough to satisfy nearly all our important desires.
(1 = strongly agree, 5 = strongly disagree)

Number of New Cars Purchased in Last 24 Months
None u = 2.809
One or More u = 2.372
Overall u = 2.622, T = 5.237, Sig. = .000

L 15 = It is good to have charge accounts.
(1 = strongly agree, 5 = strongly disagree)

Number of New Cars Purchased in Last 24 Months
None u = 3.177
One or More u = 2.874
Overall u = 3.047, T = 3.962, Sig. = .000

L 20 = We buy many things with a credit card or a charge card.
(1 = strongly agree, 5 = strongly disagree)

Number of New Cars Purchased in Last 24 Months
None u = 3.605
One or More u = 3.185
Overall u = 3.425, T = 5.302, Sig. = .000

L 21 = No matter how fast our income goes up, we never seem to get ahead.
(5 = strongly agree, 1 = strongly disagree)
Reverse Scored

Number of New Cars Purchased in Last 24 Months
None u = 3.353
One or More u = 3.005
Overall u = 3.226, T = 3.802, Sig. = .000

An analysis of the above table allows us to gain significant insight into families that have purchased new cars within the last 24 months. Family lifestyle variables L13 and L21 both measure the concept of Financial Satisfaction. The mean of variable L13 goes from 2.809 for families that have not purchased a new car to a mean of 2.372 for families that have purchased a new car. This movement indicates that families which have purchased a new car are more likely to agree with the statement that "Our family income is high enough to satisfy nearly all of our important desires." The mean of variable L21 goes from 3.353 for families that have not purchased a new car to a mean of 3.005 for families that have purchased a new car. Since this variables is reverse scored, the movement indicates that families which have purchased a new car are more likely to disagree with the statement that "No matter how fast

our income goes up, we never seem to get ahead." Therefore the purchasers of new cars are more likely to be satisfied with their financial position.

Family lifestyle variables L15 and L20 both measure the concept of Credit Orientation. The mean of variable L15 goes from 3.177 for families that have not purchased a new car to a mean of 2.874 for families that have purchased a new car. This movement indicates that families which have purchased a new car are more likely to agree with the statement that "It is good to have charge accounts." The mean of variable L20 goes from 3.605 for families that have not purchased a new car to a mean of 3.185 for families that have purchased a new car. This movement indicates that families which have purchased a new car are more likely to agree with the statement that "We buy many things with a credit card or a charge card." Therefore the purchasers of new cars are more likely to be users of credit. In summary, purchasers of new cars are more likely to be both satisfied with their financial position and users of credit.

USED CARS

As indicated by Table 1, three of the family lifestyle variables for purchasing of used cars are significant at the .01 level or greater. In Table 3, the mean scores for the family lifestyle variables that are significantly different between the families that purchased used cars vs. those that didn't are presented.

Table 3

Average Lifestyle Scores vs. Purchase Data

L01 = I enjoy going through an art gallery.
(1 = strongly agree, 5 = strongly disagree)

Number of Used Cars Purchased in Last 24 Months
None u = 3.086
One or More **u = 3.314**
Overall u = 3.173, T = 3.035, Sig. = .003

L 15 = It is good to have charge accounts.
(1 = strongly agree, 5 = strongly disagree)

Number of Used Cars Purchased in Last 24 Months
None u = 2.938
One or More **u = 3.223**
Overall u = 3.048, T = 3.642, Sig. = .000

L 20 = We buy many things with a credit card or a charge card.
(1 = strongly agree, 5 = strongly disagree)

Number of Used Cars Purchased in Last 24 Months
None u = 3.337
One or More **u = 3.574**
Overall u = 3.428, T = 2.898, Sig. = .004

An analysis of the above table allows us to gain significant insight into families that have purchased used cars within the last 24 months. Family lifestyle variables L01 measures the concept of Cultural Orientation. The mean of variable L01 goes from 3.086 for families that have not purchased a used car to a mean of 3.314 for families that have purchased a used car. This movement indicates that families which have purchased a used car are more likely to disagree with the statement that "I enjoy going through an art gallery."

Family lifestyle variables L15 and L20 both measure the concept of Credit Orientation. The mean of variable L15 goes from 2.938 for families that have not purchased a used car to a mean of 3.223 for families that have purchased a used car. This movement indicates that families which have purchased a used car are more likely to disagree with the statement that "It is good to have charge accounts." The mean of variable L20 goes from 3.337 for families that have not purchased a used car to a mean of 3.574 for families that have purchased a used car. This movement indicates that families which have purchased a used car are more likely to disagree with the statement that "We buy many things with a credit card or a charge card." Therefore the purchasers of used cars are less likely to be users of credit and less likely to enjoy cultural events. In summary, purchasers of new cars are more likely to be both satisfied with their financial position and users of credit as opposed to purchasers of used cars who are less likely to be users of credit or less likely to enjoy cultural events.

CONCLUSIONS

The purpose of this study was to determine if a non-multivariate analysis of family lifestyle variables would result in a better understanding of purchasers of various durable products. An examination of the results indicates that the family lifestyle is a most useful concept in that it truly helps marketing practitioners provide an understandable portrait of their customers. Thus, family lifestyle research plays an integral part in the quest to better understand the consumer.

REFERENCES

Burnett, J. (1981). Psychographic and Demographic Characteristics of Blood Donors. *Journal of Consumer Research*, 8, 62-66.

Cosmas, S. (1982). Life Styles and Consumption Patterns. *Journal of Consumer Research*, 8, 453-455.

Engel, J., Warshaw, M. & Kinnear, T. (1994). *Promotional Strategy: Managing the Marketing Communications Process.* 158.

Ferber, R. and Lee, L. (1974) Husband-Wife Influence in Family Purchasing Behavior. *Journal of Consumer Research*, 1, 43-49.

Hawkins, D., Best, R. and Coney, K. (1998). *Consumer Behavior*. 434.

Kotler, P. (1997). *Marketing Management: Analysis, Planning, Implementation, and Control*. 180.

Murphy, P. and Staples, W. (1979), A Modernized Family Life Cycle. *Journal of Consumer Research*, 6, 12-22.

Olson, D., et al. (1982). *Families: What Makes Them Work*.

Reiss, D. 1981. *The Family's Construction of Reality*.

Wells, W., and Tigert, D. (1971) Activities, Interest, and Opinions. *Journal of Advertising Research*, 11, 27-35.

Wind, J. and Green, P. (1974). Some Conceptual, Measurement, and Analytic Problems in Life Style Research, in *Life Style and Psychographics*, ed., Wells, 99-126.

SALARY AND PH.D. PRODUCTION TRENDS FOR MARKETING FACULTY

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ABSTRACT

Salary and Ph.D. production and position vacancy rates for marketing faculty have varied substantially over the past couple of decades. Using data from the the AACSB – The International Association for Management Education (available in the AACSB publication "Newsline"), the trends in production and demand for marketing faculty, as well as salaries, versus overall business disciplines are examined. The trends are compared over a period of a decade and a half and analyzed as to the possible reasons and implications for the future.

SALES MANAGERS IN DISTRIBUTION CHANNELS

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ABSTRACT

Some scholars and practitioners have speculated that sales managers are de facto "channel managers" whose responsibilities go far beyond traditional sales management tasks and functions. To learn to what extent sales managers may be involved in distribution channel management, a national survey of sales managers was conducted. Findings revealed that many sales managers are indeed heavily involved in managing their firm's distribution channels.

INTRODUCTION

Evidence from related distribution channel management research suggests that there is a general absence of "channel managers" in firms (Jackson and Walker 1980; Walker, Keith and Jackson 1985). Therefore, it has been argued theoretically that sales managers are the de facto "channel managers," responsible for the administration of their firm's distribution channels (Rosenbloom 1985). Thus, the primary intent of this study was to bridge a gap in the literature by empirically verifying the extent to which sales managers are engaged in distribution channel management.

DISTRIBUTION CHANNEL MANAGEMENT

Distribution channels can be defined as the external contractual organization which firms operate to achieve their distribution objectives (Rosenbloom 1999). Like other areas of business, distribution channels need to be skillfully administered to help firms obtain differential advantages (Moore and Eckrich 1976; Kotler 1997; Ghemawat 1986). Distribution channel management refers to the process of analyzing, planning, organizing, and controlling a firm's marketing channels (Rosenbloom 1995). It includes the following core decision areas: (1) formulating channel strategy, (2) designing marketing channels, (3) selecting channel members, (4) motivating channel members, (5) coordinating channel strategy with channel members, (6) evaluating channel member performance, and (7) conflict management.

RESEARCH APPROACH

This study sought to determine whether or not sales managers are also channel managers involved in administering their firms' distribution channels. A national sample of sales managers was undertaken to assess sales manager involvement in distribution channel management practices from the perspective of the sales managers. In part one, a self-administered survey was used to gather information from sales managers on the extent to which they were involved in performing tasks pertaining to the seven core decision areas of distribution channel management. In part two, information was sought on general company characteristics and personal data of respondents. The survey was pre-tested using a convenience sample of thirty sales managers. From 500 surveys mailed, a total of 178 questionnaires or 36 percent were returned.

FINDINGS AND CONCLUSIONS

Results revealed that responding sales managers are actively involved in managing all seven core decision areas of distribution channel management. Only 11 percent of responding sales managers indicated that their company had a designated "channels manager." Sales managers were most involved (in descending order) in the following activities: selecting channel members, designing marketing channels, coordinating channel strategy, evaluating channel member performance, conflict management, formulating channel strategy, and motivating channel members. Based on this investigation, it can be inferred that sales manager are widely involved in distribution channel management practices; and a key managerial implication is that sales managers need specific training in the different areas of channel management.

REFERENCES

Ghemawat, Pankaj (1986), "Sustainable Advantage," Harvard Business Review, September-October, 53-58.

Jackson, Donald W., Jr. and Bruce J. Walker (1980), "The Channels Manager: Marketing's Newest Aide?" California Management Review, 23 (Winter), 52-58.

Kotler, Philip (1997), Marketing Management: Analysis, Planning, Implementation, and Control, 9th Edition, Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Moore, James and Donald W. Eckrich (1976), "Marketing Channels From a Manufacturer's Perspective: Are They Really Managed?" in Marketing 1776-1976 and Beyond, Kenneth L. Bernhardt et al. (eds.)., Chicago, IL: American Marketing Association.

Rosenbloom, Bert (1999), Marketing Channels: A Management View, 6th Edition, Hinsdale, IL: The Dryden Press.

Rosenbloom, Bert (1995), "Channel Management," in Encyclopedia of Marketing, Michael J. Baker (ed.), London: Routeledge, 551-570.

Walker, Bruce J., J. E. Keith and Donald W. Jackson, Jr. (1985), "The Channels Manager: Now, Soon Or Never?" Journal of the Academy of Marketing Science, 13 (Summer), 82-96.

STRIKING GOLD BY MARKETING ON THE INTERNET

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The various roles of E-Commerce or Internet firms are the focus of this article including, as an analogy to the California Gold Rush, the Access Providers, the Equipment and Services Providers, and the Miners/Prospectors. Due to the high number and relative difficulty of the last group's attaining profitability, attention is given to four possible marketing strategies or avenues the Miners/Prospectors might follow in order to achieve success.

The recent growth of the Internet as a medium for conducting commerce has been nothing short of phenomenal. It's difficult to think of a product or service category that isn't already available via the Internet, with its inherent advantages over conventional marketing systems based on cost efficiencies, worldwide targets, added customer convenience, and breadth and depth of selection. As testimony to the growth of the Internet/E-Commerce activity, consider the following: 1) In the aggregate, E-Commerce generates economic activity estimated for 1999 at $300 billion (as a frame of reference, the auto industry accounts for some $350 billion); 2) from 1996 to 1999, the number of U.S. Internet "surfers", i.e. those who are on-line more than four times a week for more than a total of 2 hours, increased from 7% of the adult population to 34%; 3) worldwide, it's estimated there are currently 160 million surfers with the expectation this will increase to some 500 million in 2003. Revenues of products and services sold on-line, including retail and business to business sectors, is anticipated to increase from some $50 billion in 1998 to over $1.3 trillion in 2003.

The economic impact of E-Commerce has been compared to that of the Industrial Revolution from the late 19th to the early 20th Centuries, whereby very significant efficiencies and improvements in our standard of living resulted from mass production processes, the ability to distribute products as the railroads prospered, and more effective communications systems including the teletype and telephone. According to the U.S. Department of Commerce, the business activity the Internet has generated accounts for up to one-half of the economic growth the U.S. has enjoyed during 1995-1998, by simultaneously creating 1.2 million jobs which pay, on the average, 75% more than is typical, while holding inflation in check.

While the macro-oriented or general benefits to our economy resulting from E-Commerce are certainly significant, the purpose of this article is to highlight the micro-oriented E-Commerce activities which focus on the various players or roles fulfilled by individual firms. It is proposed that many parallels exist between E-Commerce and an event that took place some 150 years ago, namely the California Gold Rush. These parallels or analogous activities will be discussed regarding three components, namely: first, the Miners/Prospectors whose fortunes were wholly dependent on their finding gold; second, the Equipment and Services Providers, who sold the "tools of the trade" to the Prospectors/Miners allowing them to search for gold; and third, the Access Providers, who routed the Prospectors/Mines to California, often from great distances, and subsequently to the areas in California offering the most potential to successfully stake a claim. The following is a discussion of the parallels between these three types of Gold Rush participants with their Internet counterparts, highlighting the key players and necessary success ingredients for each. The order will be reversed from that given above with the Miners/Prospectors given the final and greatest focus for two reasons, namely that there are far more Internet competitors that fit this category, i.e. those firms that sell things via the Internet, and, furthermore, their ability to make a profit has, for the most part to date, been very elusive.

ACCESS PROVIDERS

The gold miners' options to get to California were relatively few, including the railroads, ships, wagons, or even walking, resulting in more a choice of necessity as opposed to a discretionary one. Once they arrived, getting to a specific local destination for the purpose of mining, even fewer options existed , as they typically walked or rode horses or even mules. Fortunately, today's Internet users, in contrast, can make a more informed decision as to their Access Provider, or link to the Information Highway, and can consider such competitive criteria as cost, reliability, convenience, speed of service, etc. While there is a dominant Internet Service Provider (America On-Line or AOL currently has some 20 million subscribers since the acquisition of Netscape), competitive and technological challenges to this dominance abound, including: a recent merger of two ISPs, MindSpring and EarthLink, resulting in some 4 million subscribers, making this new firm #2; recent upstarts such as Freeserve and Netzero offer free Internet access (vs. AOL's $20 monthly fee), anticipating enough revenue from advertisers will keep them solvent; also, with AOL's dependence on dial-up services, a need for increased capital expenditures to convert to broadband capabilities seems imminent; finally, a major competitive threat looms from computer manufacturers who are bundling Internet access at no charge with the purchase or lease of their equipment.

Another supplier segment of Access Providers are the "portals", or "search engines", who provide a linkage to a specific Website, typically with the use of key descriptors or search terminology. Dominant in this category is Yahoo!, who recently surpassed AOL in user activity. Their growth has been fueled by acquisitions that generate revenue from subscribers as well as advertisers, as evidenced by GEOCITIES and Broadcast.com joining the Yahoo! Family. While these Access Providers have become very profitable, their capital intensity requires large usage and multiple revenue services including usage fees as well as advertising. The dynamics will certainly charge based on increased consolidation with anticipated entry by joint ventures headed up by Microsoft, Apple, and AT&T, acquiring such portals as Excite/@Home, Infoseek, Peoplelink, Prodigy, and Alta Vista.

EQUIPMENT AND SERVICES PROVIDERS

Just as those who sold picks and shovels, mules, apparel, etc. to the gold miners prospered , as have a multitude of firms, including IBM, Dell, Microsoft, Compaq, Gateway, Cisco, Sun Microsystems, Oracle, Novell, Apple, etc. prospered by selling hardware and software to Internet users. Opportunities in this sector continue to abound as illustrated by: 1) Cisco's recent acquisition of Cerent for $6.9 billion; although Cerent’s revenues were only some $10 million in the past year, they offer a unique technology that allows high-speed optical fibers to blend voice and data transmissions everywhere, resulting eventually in free Internet voice calls; 2) Red Hat's LINUX operating system offers ease of use and universal application and has been rewarded with a 600% increase in the stock price from their mid-August 1999 initial public offering (IPO) as of 6 weeks later; 3) the increase in joint ventures as IBM has agreed to sell its chip components to key competitors such as CISCO, generating $2 billion over 3 years, and Dell, anticipating $22 billion in revenue over 5 to 7 years regarding both parts and computer services.

MINERS/PROSPECTORS

As previously indicated, the Internet has not only created a tremendous demand for goods and services sold by the Access Providers (ISPs and portals) and the Equipment and Services Providers (hardware and software), but it in addition has or will significantly affect the marketing and distribution of goods and services of all other industries. For our Gold Rush analogy, the Miners/Prospectors are those who sell products and services via the Internet and whose risk/reward trade-off seems much higher then the two previously discussed categories. For example, in the case of books and music CD's,

Amazon.com's annual sales are some $1.2 billion, with an anticipated loss of over $150 million, and a market capitalization of over $21 billion. In contrast, Barnes & Noble, operating as a conventional retailer, will generate greater sales this year than Amazon, will turn a profit, but has a market capitalization of only $1.8 billion. Why the huge difference regarding how investors value the two companies? The answer is pretty straightforward and typical of the Internet-related efficiencies that can be realized. Amazon's sales are being achieved with a capital and equipment investment of some $56 million. In order for Barnes and Noble to sell $1.2 billion worth of books and CD's, it requires an investment more then four times that of Amazon to build and operate some 240 stores. In addition, Amazon's investment generates the capacity to sell up to $15 billion. Business Week projects E-business related to retailing alone will increase from $18.2 billion in 1999 to some $108 billion in 2003. Existing E-businesses sell such products direct to consumers as cars, computers and electronics, apparel and shoes, sporting goods, jewelry and watches, groceries, pet supplies, financial services including stocks, bonds, and insurance; appliances, furniture, musical instruments, travel and transportation services, toys, art and antiques, bridal registry/wedding planning services, health products such as prescription drugs and vitamins, cosmetics, and many others. However, as encouraging as future Internet sales projections are, many of these Miners/Prospectors may go broke waiting for prosperity, due to their relatively high break-even points resulting from significant start-up costs, including capital investment and promotion expenses, as well as the difficulty in building a sustainable competitive advantage resulting in high customer loyalty. In contrast to the Amazon.com model, which includes the consumer marketing example cited above whereby losses will typically endure for years, four Miner/Prospector models or strategies will be proposed which demonstrate profitability can be achieved via Internet marketing in relatively short order. These include first, business-to-business (B2B) marketing, second, being an electronic broker (of both products and information services), third, generating subscription fees, and fourth, practicing niche marketing with its inherent relationship-building capabilities.

BUSINESS TO BUSINESS (B2B) MARKETING

It is projected that B2B sales via the Internet will increase from $43 billion in 1999 to some $1.3 trillion in 2003. Why the phenomenal increase and why will firms operating in this sector likely reach profitability in their early stages? Since B2B marketing typically involves large transactions, economies of scale can be realized. In addition, the nature of B2B products being a combination of high-tech and commodity-oriented products suggests a need for product customization for the former (for example Dell and Cisco generate some 80% of their total revenues via the Internet), and high efficiency resulting in low prices for the latter. Vertical Net.com has developed websites and serves as an intermediary creating transactions connecting seller and buyers for 43 B2B markets ranging from poultry and meat, wastewater treatment, plastics, and many others. Free-Market.com allows B2B purchasers to post on the Internet what products/quantities they desire, resulting in suppliers then bidding for the transaction. Another opportunity for a B2B Internet firm is to serve as a "hub" for many players in a system, which allows electronic updates or messages to replace paper-based processes, as illustrated by Bid.com, which targets the construction industry. The benefit of electronically coordinating the activities of the architect, developer, owner, general and sub-contractors, vendors and planning/approval agencies can typically result in a 20% or more savings of time and money necessary to plan and build a factory, office building, shopping mall, highway, bridge, etc.

ELECTRONIC BROKERS

In contrast to sellers of products over the Internet such as Amazon.com, whose gross margins are some 10 to 20% due to high investments in warehouses, inventory and accounts receivables, brokers or auctioneers such as eBay and ONSALE receive a commission on products with no corresponding investments, and thus generate margins of over 80%. A related concept to this that is gaining momentum

is the "reverse auction", whereby those desiring to buy a product or service post their target purchase bid on the Internet, and suppliers then either accept or reject this offer. Examples include Priceline.com, which focuses on travel, lodging and car rental services, as well as Ewanted.com, which deals in a broad range of products. As previously mentioned, Freemarket.com also operates under a reverse auction format in the B2B sector.

GENERATING SUBSCRIPTION FEES

The benefits of an Internet service based on generating subscription fees are numerous, including a predictable revenue stream (assuming customer loyalty), a one-time sign-up or recruiting expense, and the ability to communicate to advertisers the subscriber profile. Obviously, the ISPs followed the examples of subscription-based services or products such as magazines, newspapers, Cable TV, lawn care, etc. Numerous Internet firms currently offer flat-rate services typically charging a monthly fee, including: AutoBytel, which charges car dealers $1,000 a month for prospects who have indicated an interest in the cars they sell; Quote.com, which provides analysis of the business/financial outlook and provides stock-buying tips for $20 a month; UltimaGames.com, which provides subscribers access to video games for $15 a month; Golf-Web.com, which allows subscribers access to golf-related history, instructions/lessons, and discounted trips or equipment; and, PayMyBills.com, which for $8.95 a month will pay up to 40 bills electronically.

NICHE MARKETERS

Just as being a niche marketer (or being a big fish in a little pond) has historically rewarded entrepreneurs or innovators, similar experiences exist on the Internet, as illustrated by eBay's origins resting on the interest of collecting and trading Pez dispensers. Some examples of Internet firms with a narrow /niche offering but a deep assortment include first, Salami.com, specializing in Italian meat, cheeses, and pasta. This firm, which is located in New York, has generated very loyal Japanese customers, who even though their shipping costs can be nearly equal to the product costs, are loyal due to total cost savings and greater quality relative to Japanese suppliers of similar products. Similarly, HOT2HOT.com has an international clientele while offering 160 brands of chili sauce as its total product line. Special Exped.com offers trips to destinations having unique ecological, geological, or sociological elements with experts providing education to a select clientele group. As a result, these niche marketers can often provide interactive services for their clientele through chat rooms, contests (sweb-stakes), educational programs and other means of building and maintaining relationships to further a customer's special interests, such as a vacation or hobby.

In summary, while the Internet offers entrepreneurs and innovators a myriad of opportunities, the relative risks and rewards need to be assessed when selecting a market target and product/service offering. For the miners/prospectors who attempt to strike gold via Internet marketing, appreciating the four avenues or strategies to early profitability discussed herein can make the difference between failure and success.

REFERENCES

Auerbach, Jon G. (1999). "Internet Giants Pool Their Bids for Auction Site to Rival *eBay." The Wall Street Journal*. September 17, *B*1.

Brown, Eryn (1999). "9 Ways to Win on the Web." *Fortune*. May 24, 112-125.

Eldridge, Earle (1999). "Auto Selle's Growing Tangled Web." *USA Today*. September 21, 3B.

Forest, Deon (1999). "EarthLink to AOL: Watch Your Review Mirror." *Business Week*. October 11, 130.

Grover, Mary Beth (1999). "Land Grab." *Forbes*. August 23, 90-91.

Gunther, Mark (1999). "The Newest Addiction." *Fortune*. August 2, 122-123.

Hof, Robert D. (1999). "eBay vs. Amazon.com." *Business Week*. May 31, 128-140.

Hof, Robert D. (1999). "A New Era of Bright Hopes and Terrible Fears." *Business Week*. October 4, 84-89.

Maloney, Janice (1999). "The E-trade Stampede." *Time*. September 6, Time Select Business.

Page, Susan (1999). "E-World Fuels World's Economy." *USA Today*. June 22, 1A-2A.

Reinhardt, Andy (1999). "Meet Mr. Internet." *Business Week*. September 13, 128-140.

Wingfield, Nick (1999). "Products to Watch." *The Wall Street Journal*. July 12, R34.

Zellner, Wendy and Stephanie Anderson Forest (1999). "The Big Guys Go Online." *Business Week*. September 6, 30-32. (1996). "Making Money on the Net." *Business Week*. September 23, 104-115.

TENDENCIES OF CONTEMPORARY BUSINESS STUDENTS TOWARD MACHIAVELLIANISM: DOES THE UNIVERSITY ENVIRONMENT HAVE AN INFLUENCE?

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ABSTRACT

The tactics and strategies that were suggested by Niccolo Machiavelli in The Prince (1513) have become synonymous with manipulative and unethical practices. Although Machiavelli wrote to the politician, his writings have been used to describe business leaders as well. Although the literature indicates that Machiavellian tactics do not guarantee business success, we do not know if students are cognizant of this lack of relationship. The research we report examined the Machiavellian tendencies of college students. This research examined the student's propensity toward Machiavellianism distinguished by major and type of school. The data were collected from students at a regional, public business college located in the Midwest and a small, private university with strong fundamental religious ties located in the South. We report findings that are contrary to Hunt and Chonko (1984). We believe these findings provide insight for understanding the dynamics of simultaneously being a contemporary college student and a so-called Generation X person.

Machiavellianism -- where are we today? Should academicians and practitioners be concerned, encouraged, or ambivalent toward the Machiavellianism of today's college graduate? The study reported here investigated those questions.

Niccolo Machiavelli, by some standards the quintessential political scientist, wrote and published *The Prince* in 1513. The work is frequently cited in politics and business. We have become accustomed to the label indicating a person who is manipulative and unethical. Frequently the concept describes a method that is neither right nor wrong, just effective. Calhoon (1969) defines a Machiavellian administrator as an individual who employs aggressive, manipulative, exploitive, and devious methods to achieve goals without regard for feelings, rights, and needs of others.

A body of literature exists in various business disciplines that describes the Machiavellian manager. Robinson and Shaver (1973) define a Machiavellian-orientation as a strategy to manipulate others in interpersonal situations. In an earlier work, Calhoon (1969) notes that a Machiavellian person achieves individual and organization objectives through an aggressive, manipulative, exploitive and devious manner in dealing with other individuals. A scale was developed by Christie and Geis (1970) to measure this trait and has been successfully used in several studies. Hunt and Chonko (1984) examined the question if certain professions were more Machiavellian than others were, and did the more Machiavellian individuals in those professions achieve a higher degree of success. They were particularly interested in the marketer. Hunt and Chonko reviewed several studies and reported that marketing is perceived to be Machiavellian, and that marketers are equated with insincerity in dealing with others.

Furthermore marketers employ deceptive practices in advertising messages and engage in unethical business practices. The topic is especially appropriate for the study of marketing majors because students described a sales career with words such as "insincerity, deceit, high pressure" (Dubinsky 1978, p 8).

The results reported by Hunt and Chonko (1984) were contrary to expectations. Marketers were no more Machiavellian than the rest of society. They concluded that the positive regression between income and Machiavellian in their sample was attributable to age. The relationship was not significant when the regression controlled for age. Another contrary finding was that women had a higher Machiavellian score that did men. Hunt and Chonko concluded that it is indeed appropriate for your son or daughter to marry a marketing person.

The research we report examined the Machiavellian tendencies of college students. If we conclude from the literature that Machiavellian tactics do not guarantee business success, does the contemporary college student recognize this lack of relationship? Is the propensity toward Machiavellian related to major and type of school? Our data were collected from two groups of students: a midwest regional public business college, and a small southern private university with strong, fundamental religious ties.

RESEARCH QUESTIONS

Previous research has used various demographic variables as descriptors for the sample. Generally, younger people tend to have higher Machiavellian scores. Christie and Geis (1970) reported that college students had higher Machiavellian scores that did college-educated adults. Christie and Geis suggest that less educated, older adults may be more willing to admit to Machiavellian tendencies than would the college student. They also concluded that demographic-type variables do not explain much of the variance in the Machiavellian scores. Rayburn and Rayburn (1996) reported that students paid more attention to ethical considerations than did business people. They reported that a higher IQ hides Machiavellian tactics. These results offer interesting questions for further examination. Furthermore, do college students, regardless of educational major exhibit similar Machiavellian tendencies? Should students be grouped together (i.e., one size fits all), or does the focus of the respective academic program impact a student's perception of how to "get ahead"? Does the supposed adherence to a particular religious dogma suggest an unwillingness to resort to Machiavellianism and instead display a more socially acceptable demeanor? The specific research questions examined in this research are the following:

RQ 1: Can college students be delineated by certain descriptor variables?
RQ 2: Does the academic focus impact the student's reported behavior?

METHODOLOGY

Sample

We asked two distinct groups of business college students to complete the questionnaire. One group was students from a public midwest university with an accredited business college. The university has an admission policy that requires a specified ACT score and high school rank. The student body is a mix from rural areas and a major metropolitan area. The second group of students was from a private, southern university with a religion affiliation. The university has a diverse student body from rural communities and a smaller metropolitan area. The nature and purpose of the study was not revealed to students. The researchers believed this to be important because of the desire to measure tendencies and beliefs, and avoid demand effect as much as possible. That is, the research methodology sought to measure reported behavior, not what the individual believed to be the appropriate or the socially desirable behavior. A minimal amount of explanation was provided to students to preclude, or at least reduce the confounding influence of socially unacceptable responses.

Students in upper-level business classes were asked to complete the questionnaire. Although this method constitutes a convenience sample and therefore compromises the generalizability of the results to a student population, it is nonetheless appropriate for a preliminary research effort that will serve as a pilot study. The researchers propose to employ a more formal and rigorous methodology with the conclusions drawn from the research reported here. A total of 280 usable questionnaires were received. A summary of the sample is presented in Table 1.

Table 1
Description of Samples
Public University
Religion Affiliated University

	MEN			WOMEN		
	Major			Major		
Public	Marketing	Other Business	Non-Business	Marketing	Other Business	Non-Business
N = 149	32	23	11	37	37	9
Religion Affiliated	Marketing	Other Business	Non-Business	Marketing	Other Business	Non-Business
N = 131	3	49	14	10	49	6

Measures

The 20-item Mach IV scale, developed by Christie & Geis (1970), was used in the research (Appendix A). The Likert format, anchored by Strongly Disagree (1) and Strongly Agree (7), included reverse scored items so that a high score indicated a high Machiavellian score. Following the format used in previous research (Christie and Geis 1970; Hunt and Chonko 1984), a total Machiavellian score is computed by summing the 20 items and adding a constant of 20 to all scores. Therefore, the maximum score is 160 (7.0 * 20 items + 20), and the minimum score is 40 (1.0 * 20 + 20). The data reported in the tables reflect this method of computation. The total Machiavellian score is labeled "**Mach**" in the research tables.

The 20-item Christie and Geis scale measures the facets of the construct. Nine items measure Machiavellian tactics, e.g., "The best way to handle people is to tell them what they want to hear." This facet is labeled "**tactics**" in our research tables. Nine items measure views of human nature, e.g., "It is hard to get ahead without cutting corners here and there." This facet is labeled "**views**" in the research tables. Two items measure abstract morality, e.g., "All in all, it is better to be humble and honest than important and dishonest." This facet is labeled "**morality**" in the research tables. We computed mean scores for the facets identified by Christie and Geis and report the means in the tables. The computed Cronbach's alpha of .68 indicates the scale is an appropriate measure of the construct and, although a

lower Cronbach's alpha, compares favorably with previous applications, i.e., Christie and Geis (.79) and Hunt and Chonko (.76).

We included an additional classification question to further distinguish the student groups and to possibly capture the underlying influence. Specifically, students provided their major field of study which was collapsed into three categories: marketing, other business, and non-business. Table 1 presents a summary comparison of the two schools.

RESULTS

A Machiavellian score of 100 or more is generally considered to be high Mach (Hunt and Chonko 1984). A summary comparison of our results and some of the previous research results is presented in Table 2. This comparison follows the presentation format used by Hunt and Chonko and therefore facilitates the discussion. The current student results indicate higher Mach scores for both sample groups than the previous research results. However, the current sample groups had the lowest standard deviation, thereby indicating less variance among student responses. The cell sizes were too small to permit statistical comparisons among the major fields of study. This aspect of the research project will be examined in a larger and more comprehensive data collection methodology in the future research suggested by this pilot study.

TABLE 2
Machiavellian Scores of Different Populations*

Mean	S.D.	N	Reference
108.3	12.9	105 male employees	Touhey (1973)
99.6	12.6	122 purchasing managers	Chonko (1982)
94.0	10.7	149 public university	Present Research
90.9	9.6	131 private university	Present Research
90.7	14.3	1782 students	Christie & Geis (1970)
85.7	13.2	1076 marketing professionals	Hunt & Chonko (1984)
84.5	Not reported	1477 adults	Christie & Geis (1970)

(*partial list, Hunt and Chonko 1984)

Comparisons of public school students versus private school students are reported first. Table 3.1 indicates a statistically significant difference between public versus religion affiliated schools in the total Machiavellian score, the tactics facet, and the morality facet. The mean scores for public students is the higher score in all instances and thereby indicates that public school students have a higher level of Machiavellianism *vis-a-vis* religion affiliated students. Tables 3.2 and 3.3 report the scores for comparing

men only (public versus private), and for women only (public versus private). Again, higher levels of Machiavellianism are reported for the public school students.

TABLE 3.1
Public versus Religion Affiliated
All Students

Measure	Significance	Mean* Public	Religion Affiliated
Mach	.01	94.04	90.89
Tactics	.00	29.95	27.12
View	N/S		
Morality	.00	7.38	5.92

(*Higher mean indicates a higher level of Machiavellianism)

TABLE 3.2
Public versus Religion Affiliated
Men Only

Measure	Significance	Means* Public	Religion Affiliated
Mach	.034	95.35	91.76
Tactics	.001	30.31	27.00
Views	N/S		
Morality	.007	7.53	6.40

(*Higher mean indicates a higher level of Machiavellianism)

TABLE 3.3
Public versus Religion Affiliated
Women Only

Measure	Significance	Means* Public	Religion Affiliated
Mach	.094	93.00	90.05
Tactics	.012	29.65	27.25
Views	N/S		
Morality	.000	7.25	5.43

(*Higher mean indicates a higher level of Machiavellianism)

The next series of tables report the comparisons of men versus women students. Table 4.1 reports the comparison of all male students versus all female students irrespective of school. The mean scores for the morality facet are statistically significant different, men greater than women. Table 4.3 further explains that difference in that the men in the religion affiliated school report a higher level of Machiavellianism in the morality facet than do women. This comparison was not statistically significant in the public school setting (Table 4.2).

TABLE 4.1
Men versus Women
All Students

	Significance	Means*	
		Men	Women
Mach	N/S		
Tactics	N/S		
Views	N/S		
Morality	.09	6.96	6.45

(*Higher mean indicates a higher level of Machiavellianism)

TABLE 4.2
Men versus Women
Public Students Only

	Significance	Means*	
		Men	Women
Mach	N/S		
Tactics	N/S		
Views	N/S		
Morality	N/S		

TABLE 4.3
Men versus Women
Religion Affiliated Students Only

	Significance	Means*	
		Men	Women
Mach	N/S		
Tactics	N/S		
Views	N/S		
Morality	.024	6.41	5.43

(*Higher mean indicates a higher level of Machiavellianism)

DISCUSSION

Encouraging results are reported in several tables. The literature indicates that a business code of ethics must be enforced to change ethical behavior (Rayburn and Rayburn 1996). The results reported here seem to confirm that argument in that we would expect a higher ethical standard at the religion affiliated school. The expected standard would become the norm if the standard was enforced, or encouraged. The public school students report higher Machiavellian scores than the religion affiliated students. Compared to the previous sample of students (Christie and Geis 1970), religion affiliated students report a slightly higher degree of Machiavellianism, and the public university students report a higher mean score. Although a first interpretation of the data may be discouraging, similar data would need to be gathered from a current adult population before drawing conclusions. That is, what would we learn from students and adults in 1999 juxtaposed with students and adults in previous research results. The present results offer only tenuous comparisons.

The literature generally reports that men are more Machiavellian (or less ethical) than women. Recall that Hunt and Chonko (1984) report a contrary finding of a higher Machiavellian score for women than for men. The current research reports no statistically significant difference between men and women in the total Machiavellian score. The findings reported here note differences only in the morality facet when all students (men versus women) are considered, and when only religion-affiliated students (men versus women) are considered. Recall that the morality facet measures abstract morality. Men were more Machiavellian than women were. This finding would benefit from additional current research to compare adult men and women along the same dimensions. A clarification or further explication of this difference, if it exists in the adult population, would aid our understanding of Machiavellian tendencies and perhaps identify the slope of the trend line for the tendencies.

REFERENCES

Grant, E. W., Jr. and L. S. Broom (1988), "Attitudes Toward Ethics: A View of the College Student." *Journal of Business Ethics* 7, 617-619.

Hunt, Shelby D. and Lawrence B. Chonko (1984), "Marketing and Machiavellianism." *Journal of Marketing* 48, 30-42.

La Barbera, Priscilla A. and Zeynep Gurhan (1997), "The Role of Materialism, Religiosity, and Demographics in Subjective Well-Being." *Psychology & Marketing* 14, no 1, 71-97.

Likierman, Andrew (1989), "Ethical Dilemmas for Accountants: A United Kingdom Perspective." *Journal of Business Ethics* 8, 617-629.

Petersen, Andrea (1999), "All the Hot Gen X Pundits, Like, Vanished." *Wall Street Journal* August 31, 1999, B1.

Rayburn, J. Michael and L. Gayle Rayburn (1996), "Relationship Between Machiavellianism and Type A Personality and Ethical-Orientation." *Journal of Business Ethics* 15, 1209-1219.

APPENDIX

Please respond to the following statements candidly…there are no "right" or "wrong" answers. Use the following scale to report your agreement with the following statements. Write a number to the left of the statement on the blank line.

1._____The best way to handle people is to tell them what they want to hear.

2._____When you ask someone to do something for you, it is best to give the real reasons for wanting it, rather than giving reasons which might carry more weight.

3._____Anyone who completely trusts anyone else is asking for trouble.

4._____It is hard to get ahead without cutting corners here and there.

5._____Honesty is the best policy in all cases.

6._____It is safest to assume that all people have a vicious streak, and it will come out when they are given a chance.

7._____Never tell anyone the real reason you did something unless it is useful to do so.

8._____One should take action only when sure it is morally right.

9._____It is wise to flatter important people.

10._____All in all, it is better to be humble and honest than important and dishonest.

11._____Barnum was very wrong when he said there's a sucker born every minute.

12._____People suffering from incurable diseases should have the choice of being put painlessly to death.

13._____It is possible to be good in all respects.

14._____Most people are basically good and kind.

15._____There is no excuse for lying to someone else.

16._____Most men forget more easily the death of their father than the loss of their property.

17._____Most people who get ahead in the world lead clean, moral lives.

18._____Generally speaking, men won't work hard unless they're forced to do so.

19._____The biggest difference between most criminals and other people is that criminals are stupid enough to get caught.

20._____Most men are brave.

Gender M F Your Major_____

THE ANOMALY OF CONSUMER PROTECTION IN HONG KONG: AN EXPLORATORY STUDY OF SUPERMARKET SCANNER AND SCALE ACCURACY

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ABSTRACT

The objectives of this research were to provide a brief review of Hong Kong's consumer protection laws pertaining to weights and measures, and product labeling, and to test the accuracy of Electronic Point of Sale Scanners and scales in selected Hong Kong supermarkets. The results showed that while 97% of the price scan tested were accurate, only 88% of scales tested were. Moreover, confusion in price labels was alarmingly common. The study uncovered many areas seriously in need of statutory legislation to protect consumers against such anomalies.

INTRODUCTION

The growth of supermarkets in Hong Kong accelerated in 1973 and showed signs of maturing around 1985 with some 500 outlets reported (Ho, 1994). Now, the total number of supermarkets in this special administrative region (SAR) of China has grown to approximately 760 where the two main supermarket chains, Wellcome and Park'N Shop, alone account for 380 of them. In fact, supermarkets was the only sector to experience any growth in 1998 (Ma and McAllister, 1999).

In order to increase efficiency, in April 1991 the big and medium-sized supermarket chains in Hong Kong installed the Electronic Point of Sale Scanning System. The primary objectives were to speed up retail transactions, minimize pricing errors, save labor costs, improve operational efficiency and inventory control, and capture critical data to help the supermarkets make better business strategies.

The Consumer Council in mid-1993 tested these scanner systems in 59 different retail outlets (51 of which were from the two big supermarket chains) and found pricing errors in about 3% of the products surveyed. This error percentage was slightly higher than that found in the United States (Supermarket Business, 1999). Considering that a large supermarket chain such as Wellcome has more than 200 supermarket stores and 13 million monthly visitors, an error of $0.1 or 0.1gram can cause consumers to be overcharged millions of dollars more per month.

Surprisingly, while the number of complaints received by the Consumer Council relating to supermarkets had been on the rise in recent years, it is relatively small considering the volume of yearly

transactions (Ho, 1994). Only 125 of the 26,800 complaints lodged in 1993 pertained to supermarkets. Ho (1994) surmised that that the problems might have been resolved at the store level. Given that complaints related to supermarkets appear in newspapers and magazines regularly, it suggests we may not know the full extent of consumer's concerns in this regard.

In this study, we wish to evaluate the adequacy of Hong Kong's consumer protection laws concerning product weights and measures and false label problems; test the accuracy of point-of-sales scanners and scales in a sample of selected supermarkets; and discuss implications for supermarkets and the Hong Kong government.

CONSUMER PROTECTION IN HONG KONG

Hong Kong does have a set of laws to protect consumers who buy from supermarkets. Following is a brief introduction to some ordinances that have direct impact on this paper's development. The materials are based on information provided by the Hong Kong Government Department of Justice's web site. Readers may wish to peruse the site for greater details.

The Weights and Measures Ordinance was enacted in 1987 to protect consumers who buy weighted goods in supermarkets. Its purpose is to regulate trade transactions regarding goods supplied by weight or measure including pre-packed goods, and to provide for the enforcement against offences and the forfeiture of weighing or measuring equipment and goods in the case of certain contravention.

The enforcement of the Weights and Measures Ordinance is the sole responsibility of the Customs and Excise Department. Authorized officers, appointed by the Commissioner of Customs and Excise, act in response to complaints, and also conduct spot checks on traders' premises to verify the accuracy of their equipment. Under the Ordinance, the onus of maintaining accuracy of equipment is on the trader. Prices of products are based on their weights. If that is different from the weight shown in the label, consumers can report it to the Customs and Excise Department. Where clear evidence of fraud is detected, prosecution will be initiated against the suspected offenders. The Ordinance prescribes a maximum penalty of a $25,000 fine and six months' imprisonment.

The Trade Descriptions Ordinance prohibits "false trade descriptions, false marks and misstatements in respect of goods provided in the course of trade". The ordinance confers power to require information or instruction relating to goods to be marked on or to accompany the goods or to be included in advertisements. It restates the law relating to forgery of trademarks. Any person who commits an offence under the Trade Descriptions Ordinance shall be liable to a maximum fine of $500,000 and to imprisonment for 5 years.

Another law is the Public Health and Municipal Services Ordinance. It does a similar indication in labeling and advertisement with The Trade Descriptions Ordinance and includes the control of false labeling and advertisement of food or drugs. It holds any person who publishes, or is party to the publication of, an advertisement which falsely describes any food or drug or is likely to mislead as to the nature, substance or quality of any food or drug guilty of an offence.

The Consumer Council was established in April 1974 to fulfill its statutory functions as prescribed in the Consumer Council Ordinance. These functions are to protect and promote the interests of consumers of goods and services and purchasers, mortgagors or lessees of immovable property.

In addition to legal protections, all major supermarkets in Hong Kong are members of a self-regulatory agency, the Hong Kong Article Numbering Association (HKANA). It states in its Code of Practice that all its members must display prices clearly, provide customers with detailed receipts and records of purchases, and give customers the lower prices in the event of a price discrepancies.

METHOD

We chose three of Hong Kong's largest supermarket chains for this study. The Wellcome supermarket and Park'N shop chains were included because they constitute the largest chains in Hong Kong, each with over 150 shops in Hong Kong. Jusco, a Japanese hypermarket chain, was included as the

third subject because of its increasing popularity and success. In all, thirty-seven supermarkets were surveyed. Since it was not the purpose of this study to evaluate the performance of individual supermarket chains, every effort has been made to protect the identity of the chains and branches. Only aggregate results are reported whenever possible.

In this study, we considered a price scan as accurate when it matched the price labeled on the product. For products with only an aisle price display, we considered the price scan as accurate if it matched the displayed price on the shelf.

From previous experience, we know that scanner errors happen most often with newly changed price codes. So we randomly tested goods that had just been advertised in a discount curricular during the week of data collection. As the three supermarket chains all use Central Pricing Systems, we did not believe the selection of which scanner to test was important.

We tested scale accuracy in two ways. Some scales inside the stores were attached to checkout counters and were accessible to customers. For those, we loaded a coin purse to exactly 150g on the scale and used it to check the scales' accuracy.

To test the weights of pre-packaged goods**,** we bought goods in the selected stores and weighed them in a certified scale.

RESULTS

Scanner results from our survey are reported in Table 1. Price scans of items tested in the Chain-A and Chain-C stores were 100% accurate. But out of 28 price scans tested in Chain-B stores, only 92.86% were accurate. The aggregate accuracy across 59 price scans in 37 stores was 96.6%. Overall, the error rate was only 3.4%. In fact, if results from this survey were generalizable to all supermarkets in Hong Kong, it would indicate no significant departure from the Consumer Council findings in 1993.

Table 1: Scanner Accuracy by Supermarket Chain

Chain	No. of Products Tested	No. of Correct Scans	Accuracy
A	17	17	100%
B	28	26	92.8%
C	14	14	100%
Total	*59*	*57*	*96.6%*

Overall results of scale accuracy are reported in Table 2. In Chain A, the unit of measurement used in its electronic scale was in kilogram (kg) with increments of 0.005kg(5g). We tested 56 scales in 15 store, only 3 were inaccurate. Two had discrepancies of +5g while the third was off by +20g. In Chain B, the unit of measurement used in its electronic scale was in pound (lb.) with increments of 0.01lb. (0.16 oz.). We tested 63 scales in fifteen stores, 11 of them were inaccurate. They discrepancies varied from + 0.21 lb. to –0.16 lb.

In Chain C, there wasn't any scale in the cashier counters. Hence, we purchased the goods then weighed them afterwards. Out of eleven items, the weights posted on the labels were by and large correct. However, the packaging materials amounted to anywhere from 0.5% to 2.4% of the weight on which the final prices were based.

Worth noting is that Chains A and B use "net weight" to measure their meats, fruits and vegetables but Chain C does not. It means that consumers should not overlook the weight of packaging materials used in pre-packaged products sold in Chain C.

Table 2: Scale Accuracy by Supermarket Chain

Chain	No. of Scales Tested	No. of Correct Reading	Accuracy
A	56	53	94.6%
B	63	52	82.5%
C	n.a.	n.a.	n.a.
Total	*119*	*105*	*88.2%*

DISCUSSION

Although the price scans tested were by and large accurate, it only meant that the scanner systems were updated properly to reflect new price changes. However, we uncovered serious discrepancies between the price tags on the shelves and the price labels on the goods. In Chain A, almost all information on price and weight posted on the shelves was different from that shown on the labels of the products. In some cases, unit prices for individual items in the same vegetable bin varied. For example, wombok vegetable that was packed on 01/30/99 showed $5.9/kg but the ones packed on 2/2/99 were tagged $6.9/kg.

We asked the manager in a Chain-A store about these discrepancies. He replied that the prices of the meats, vegetables and fruits shown on the shelves were just for reference. These were not actual prices. This was because the purchase prices of meats, fruits and vegetables could vary from day to day; hence their retail prices would be different. Moreover, when a pack of vegetable had not been sold after a few days, he added, the store would remove the spoiled sections, re-pack it, re-scale it and re-label it according to the market price provided by the buyer. Customers would only be charged the price that was shown on the label of the product.

We also found serious mistakes in the vegetables & fruits counters, meat freezers and seafood freezers in four out of seven Chain-C stores we visited. Most of the prices shown on the shelves were different from the information on product labels. The fact that Chains A and B use net weight when pricing their goods but Chain C uses gross weight makes comparison difficult.

Even a representative of the Custom & Excise Department we spoke to admitted that it was very difficult to judge the weight accuracy of a pack of vegetable, fruit or meat because it is measured when it is packed. It means that if the weight of a pack of vegetable is different from the weight shown on its label, we still cannot say that it is inaccurate because weight might have been lost after packing for a number of reasons such as, among others, evaporation. But he assured us that consumers are encouraged to report any discrepancy between weight printed on price labels and actual weight to the Custom & Excise Department immediately because the Custom & Excise Department investigates only when it has received a complaint. No wonder customers in Hong Kong have gotten tired of problems at the checkout counters (Bickers, 1998).

We found fewer such price discrepancies in Chain-B stores. Perhaps because they only showed the name of the goods and have shied away from displaying unit price on shelves altogether. However, it had a different problem. Chain B had been promoting its “Price Watch” program for some time before our survey was conducted, which guaranteed the lowest price of any product on its Price Watch list. However, we found at least one item, the *95g PRINGLES Potato Crisps,* priced 9% higher than in another supermarket chain. Although the manager offered to send a floor clerk to verify our claim and sell it to us at the lower price, he said he wouldn’t be able to change the price on the floor even if our claim were proven valid. One couldn’t help but wonder how many unsuspecting customers would be charged the higher price.

IMPLICATIONS

Our study has shown that the notion of consumer sovereignty remains a privilege and continues to elude the average Hong Kong customer. We have uncovered the low level of awareness Hong Kong consumers have and how easy the retailers can use improper methods to increase their profits. Unfortunately, it doesn't surprise us to learn that the government does not check the accuracy of supermarkets' scanners and scales regularly, and few retailer in Hong Kong have ever been fined for overpricing, left alone brought up on criminal charges.

Examples of the Hong Kong government's lax attitude towards consumer protection can be found in other incidents as well. Take fraud in Chinese herbal medicine sales for example. In 1999 the Consumer Council has numerous complaints related to the same handful of Chinese medicines and health food stores that had been exposed in local newspapers for misapplying unit price to defraud unsuspecting tourists on ginzeng and other expensive medicinal products. It took the government till the end of 1999 to launch an undercover investigation of these violations. Consider another recent case where a highly sought-after kindergarten had received HK$10 million in ill-gotten gains from illegally over-enrolling students beyond its licensed limit over a two-year period. Yet the school was fined HK$50,000.

Clearly, neither the existing legal or voluntary regulatory mechanism is adequate. The time has come for the Hong Kong government and businesses to take proactive measures to restore consumers faith in their purchases. The Hong Kong Tourist Association promotes Hong Kong as a "shopping paradise" and has been touting the completion of a Disneyland in Hong Kong by 2005 to revitalize the local economy. Until the increasing number of consumer complaints could be controlled and the Hong Kong government demonstrates an earnest effort to take direct actions against consumer-fraud offenders, it will mean a slow but certain demise to Hong Kong's image as a shopping center.

CONCLUSION

A scanner survey in 1998 conducted by the deputy agricultural commissioner for San Diego County and sealer of weights and measures, showed that more than 10 percent of the merchandise that went through the checkout scanners in San Diego County stores might be mispriced (Ignelzi, 1998). And the odds were the mistakes would be overcharges, not undercharges. The authority estimated that scanner overcharges cost county consumers $33.5 million annually, and cost consumers statewide a total of $250 million every year. It appears the citizens of Hong Kong six thousand miles away are suffering from the same misfortune.

As Hong Kong citizens become more knowledgeable about their rights, the consumer movement gains momentum, and multinational corporate giants continue to aggressively promote their service guarantees, long-term profitability and survival will be determined by lifelong relationships with customers. Supermarkets and other local businesses alike can only hope to create and retain customers by "surprising" them with honesty and trust.

Meanwhile, consumers should keep a close eye on the cash register at time of checkout.

REFERENCES

(1999). "Supermarkets Found Best for Scanner Accuracy." *Supermarket Business*, Vol. 54, No. 1, 11.

(1997). "Store Scanners Still Flawed." *Tribune News Services*, November 27, 3.

(1994/95). "Household Expenditure Survey." *Census and Statistics Department of Hong Kong.*

Bickers, Charles (1998). "Check This Out." *Far Eastern Economic Review*, Vol. 161, No. 13, 64-65.

Ho, Suk-ching (1994). "Report on the Supermarket Industry in Hong Kong." *Hong Kong Consumer Council*.

Hong Kong Department of Justice (1998). "Sale of Goods Ordinance." *Current English Ordinance*, Chapter 26 (available at www.justice.gov.hk).

Hong Kong Department of Justice (1997). "Weights and Measures Ordinance." *Current English Ordinance*, Chapter 68 (available at www.justice.gov.hk).

Hong Kong Department of Justice (1997). "Trade Descriptions Ordinance." *Current English Ordinance*, Chapter 362 (available at www.justice.gov.hk).

Hong Kong Department of Justice (1997). "Public Health and Municipal Services Ordinance." *Current English Ordinance*, Chapter 132 (available at www.justice.gov.hk).

Hong Kong Department of Justice (1997). "Consumer Council Ordinance." *Current English Ordinance*, Chapter 216 (available at www.justice.gov.hk).

Ignelzi, R.J. (1998). "Why the Total on Your Store Receipt Doesn't Always Add Up." *The San Diego Union-Tribune*, November 5, E-1.

Ma, Canny and McAllister, David (1999). "Retail Industry Profiles-Selected Economies: Hong Kong SAR." *Stores*, Vol. 81, No.2, Section 2, S40.

Reda, Susan (1999). "Supermarket Payments." *Stores*, Vol. 81, No. 2, Section 1, 22-26.

Ross, Julie Ritzre (1997). "Study Validates Industry Efforts to Improve Price Scanning Accuracy." *Stores*, Vol. 79, No. 1, 90-96.

THE CITY AS A SERVICE PROVIDER: AN EXAMINATION OF COMPLAINING CITIZENS

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INTRODUCTION

Cities provide a host of services to resident citizens. Many such services, including gas, water, electric, sanitary sewers, and police and fire protection, are considered basic necessities by residents. Others, such as the recruitment of potential employers and other forms of economic development, have a direct impact on the economic well being of citizens. Still others contribute to the overall quality of life enjoyed by its citizens. Streets must be cleaned, storm refuse, ice, snow, and garbage must be removed, parks and recreational centers developed, and codes passed and enforced to ensure citizen safety as well as to create and maintain a pleasant community atmosphere.

The providers of such city services consist of a diverse, somewhat unique group. Some, such as council members, aldermen, mayors and others are elected by citizens and act as their representatives. These politicians assemble a city management team, often including of a city manager who, in turn, is responsible for assembling and directing the resources needed for the provision of services. Included among these resources will be the many departmental managers and employees who provide the actual services rendered.

The city manager must satisfy both elected city officials and private citizens with the services provided under his or her leadership. Each group will evaluate the efforts made by paid employees of the city's government. In the process of delivering city services, service failures can occur. Electric, gas, or sewer utilities may be disrupted. Storm and other debris may accumulate. Codes may not be enforced. Police and fire services may be inadequate. Such service failures, if not corrected, can create a chain of events that can have political and other negative ramifications. Hart, Heskett, and Sasser (1990) note that a dissatisfied customer (citizen) will normally tell eleven others about a negative experience, while a positive experience will be told to only six others. Consequently, in city politics, bad news can travel fast. Mayors, aldermen, and council members may be blamed by the citizens they are to represent and risk losing their elected position. Conflicts among the city manager, elected officials, and residents may develop as these parties attempt to remedy the failures. These conflicts can spill over to departmental managers and employees. This disruption can lead to additional service failures. It is therefore important

for all involved in delivering services to guard against service failures, as well as to monitor citizen satisfaction and to take appropriate corrective actions as needed.

While all residents must be satisfied with services provided by the city, service failures may lead some citizens to engage in more direct efforts to resolve problems related to the failures than others did. These individuals may be the most likely to engage in unfavorable word-of-mouth and to file complaints with service providers. They may also be the most critical in their evaluations of city management and employees. It is therefore most important to understand the type of person most likely to engage in such behaviors, as well as to determine the causes of their dissatisfaction. Consequently, the purpose of this paper is to examine the complaining citizen.

BACKGROUND

In order to understand satisfaction with city services and the responses demonstrated by complaining, dissatisfied citizens, three sets of factors should be considered. First, personal characteristics such as age, gender, years of residence in a community, and income level may predispose some citizens to be more critical of services and providers than are other citizens. Second, the nature and extent of past personal experiences with service failures and personnel involved in correcting the failures (service failure recovery) can be expected to influence the extent to which citizens will engage in complaining behavior. Third, complaining behavior can be expected to be related to the ways in which city employees and management respond to service failures, sometimes referred to as *service recovery strategies*. These include being prompt and courteous in dealing with complaints, making a concerted effort to resolve problems as they occur, and exhibiting employee professionalism.

DEMOGRAPHIC PREDICTORS OF CITIZENS SATISFACTION AND COMPLAINING BEHAVIOR

Demographic variables might be expected to be associated with responses to service failures and related service recovery strategies. Age may be one determinant, as older individuals will have had longer-term exposure to the benefits provided by a city. In comparison to younger residents, older citizens may have more realistic expectations of the probability of service failure occurrences and service recovery procedures. They may also have "mellowed" and consequently feel less strongly about either positive or negative experiences. Just as older employees routinely report greater levels of satisfaction with and commitment to an employer organization (e.g., Baack and Clow, 1996; Mathieu and Zajac, 1990), older citizens might be inclined to file fewer complaints and report greater satisfaction with city services. Conversely, younger citizens with less experience and perhaps higher expectations might be expected to report less satisfaction and be more inclined to complain.

The relationship of income to satisfaction and complaining behavior is more difficult to anticipate. On one hand, persons earning more money are able to purchase homes in nicer neighborhoods located near better schools. These upscale neighborhoods may also experience less crime and receive better treatment in the delivery of city services (e.g., snow, storm, trash and litter debris removal, street lighting, and street cleaning) and therefore experience fewer service failures. Thus, higher income residents are less likely to encounter some of the negative aspects of life in any given community. This would suggest higher levels of satisfaction and fewer complaints from such individuals. Alternatively, these individuals may also have developed the highest expectations regarding service delivery and service failure recovery efforts. They may therefore be more discerning and demanding than their lower income counterparts. Due to these conflicting eventualities, income is not anticipated to be significantly related to complaining behavior or ratings of service failures and recovery efforts.

One's gender may also be related to satisfaction. While men and women might be expected to be equally likely to evaluate such things as cleanliness of streets and neighborhoods, street conditions, and many other city aspects, men might be expected to more often play an instrumental role when dealing with city service related problems (Assael, 1998). Purely as a matter of conjecture, men might therefore be expected to feel less satisfaction and be more likely to engage in complaining behavior.

Education is another of the demographic variables that may or may not be related to complaining behavior. Better-educated individuals may have more knowledge of what should realistically be expected from city service and better informed about city management and problems. They may also be more active in community activities and projects and provide greater input regarding what the city should and should not do. Because of these and other factors, the response of city employees might be quite different from how they would respond to less well educated residents. But, it does not necessarily follow that the better-educated citizen will be more satisfied and better treated. He or she might also have higher expectations that must be met for satisfaction to occur. Based on these conflicting possibilities, no a priori position can be taken regarding the relationship of education, satisfaction, and complaining behavior.

PAST INCIDENTS

There are three logical sources of satisfaction or dissatisfaction with services. These include: (1) a previous experience in which the service rendered was satisfactory (or better), (2) a previous dissatisfying experience, and (3) exposure to unfavorable word-of-mouth influences in which the individual bases his or her responses to city services based on what others have said. Both dissatisfactory experiences leading to unfavorable evaluations and negative word-of-mouth may be reduced if the individual feels attempts at resolving problems (service recovery) are adequate. The failure to resolve such problems in a timely manner will further alienate dissatisfied individuals. Others, who have not personally experienced service failures, may also become alienated from negative word-of-mouth.

Filing a complaint over service failure and/or recovery efforts potentially reflects a response substantially more negative than simply feeling dissatisfied. For the complaint to be filed, the problem must have been perceived as being significant. Efforts to alleviate the problem prior to the filing of the complaint must also have been insufficient. Complaining behavior therefore can result from actual failures to solve the problem through effective service recovery efforts or from perceived deficiencies in providing service recoveries. The first failure (inadequate solution) is caused by not fixing the problem. The cause of the second failure is less tangible, and may stem from perceptions of "how" service providers respond to service failures (inappropriate response). As discussed in the next section, appropriateness of response may be discerned from the interactions between dissatisfied citizens and city personnel. In these interactions, dissatisfied residents should be made to feel that their concerns are being quickly and correctly addressed, and that they are being treated in a professional, courteous manner.

MANAGEMENT STRATEGIES

The service recovery literature deals with how firms handle dissatisfaction with a given product or service along with the actions employed to satisfy or remedy the customer's dissatisfaction (Hoffman, Rotalsky, 1995). The processes used in this setting provide analogies for understanding citizens served by cities. Customers who are dissatisfied with a product or service can be recovered. In fact, customers will often rate their experience *more favorably* after a firm has successfully corrected dissatisfying experiences (McCollough and Bharadwaj, 1992), and often the degree of satisfaction will be even higher than with previous other, more agreeable, interactions. Citizens might be expected to behave similarly if their problems are adequately handled. This suggests that citizens, who might otherwise be angry, complain,

and engage in negative word-of-mouth in telling others of their experiences, might be converted to highly satisfied if city management and personnel correctly resolve service failures through their service recovery efforts.

Five basic forms of service recovery are identified in marketing literature (e.g., Johnston and Hewa, 1997). They include: (1) *the squeaky wheel* approach, where the firm reacts to complaints on a case-by-case basis; (2) *a systematic response* method, where the firm attempts to provide a reliable system to respond to failures; (3) *a distant early* warning (DEW) *line,* where the company tries to generate a proactive warning system before the failure occurs; (4) *a zero defects approach,* in which there are no failures in service delivery; and (5) *the on-deck method* where the firm responds to failures by other firms. Complaining citizens represent very good examples of the "squeaky wheels" city personnel must respond to on a case-by-case basis. The squeaky wheel approach is the most easily implemented service recovery strategy and is widely practiced. The problem associated with this method is that only the most vocal customers tend to complain. They may represent the proverbial "iceberg's tip." Many others who are dissatisfied may never complain and therefore receive no redress for their complaints. In city government experiences, the citizens personifying the "squeaky wheel" represent potential catalysts, who may further agitate dissatisfied, non-complaining individuals. Such citizens can be expected to experience increasing dissatisfaction and anger over time. Correctly accommodating complaining citizens is therefore of more importance than the sheer number of complaining citizens would suggest.

Complaining behavior, as earlier stated, will occur only if citizens feel they have been offered an "inadequate solution" and/or "inappropriate response." Inadequate solutions represent service recovery efforts that have simply not worked sufficiently well to solve the problem. Storm or sewage drainage problems may, for example, require rebuilding drainage systems or by re-designating some areas as flood planes. Given the nature of city finances, less expensive solutions will often be employed. The drainage system may be cleaned instead of replaced. The procedures to follow to improve satisfaction and decrease the likelihood of complaints stemming from "inadequate solutions" are relatively straightforward. Since errors in resolving problems result from *what* is done, find and use appropriate solutions. Dissatisfaction arising from "inappropriate response," on the other hand, results from perceptions of deficiencies in *how* city personnel respond to service failures. The service recovery literature suggests four important methods by which constituents will respond more positively to service providers. These methods would appear to be equally applicable to municipalities. They include promptness, courtesy, effort, and a sense of professionalism.

Promptness means the customer or citizen received a quick response to a problem, even if the reply was unsatisfactory. For example, a phone call questioning a new city ordinance may not yield a change in the ordinance, but the caller may be impressed that his or her questions were answered expediently. Since there are so many stories about slow and cumbersome reactions to problems with city services, a citizen who is pleasantly surprised by a prompt action or answer should feel more satisfaction with both the city service and the manager who is in charge of that service (Johnston and Hewa, 1997). Conversely, if responses are not prompt, lower levels of satisfaction will occur. This is one of the factors potentially contributing to complaint related behavior. Complaining citizens may feel city personnel do not deal with their problem(s) promptly.

Courtesy is also expected to build satisfaction with city services, and service in general. In governmental settings, it is not unusual to expect uncaring, impolite, even rude interactions with employees. Therefore, one who receives what is perceived to be a polite response should report greater satisfaction as a result.

A concerted effort to resolve a problem is going to impress the recipient of any service. Again, even if the result is less-than-satisfactory, the simple effort made to garner a favorable solution should generate greater satisfaction with city leaders and the services they try to provide (Hoffman, Kelley, and

Rotalsky, 1995). Thus, discourteous treatment is an additional factor capable of resulting in complaining behavior.

Complaining behavior may also reflect perceptions of lack of professionalism in handling problems, since it has been shown to be related to satisfaction with services provided (Folkes, Koletsky, and Graham, 1987). Most customers feel more assured and comfortable when they believe they are dealing with someone who "knows what (s)he is doing."

Perceptions of “inappropriate responses”, and complaining behavior, can result from any of the above. Therefore, to ensure service recovery efforts succeed, city managers should create *managerial strategies* to increase promptness, courtesy, effort, and professionalism exhibited by employees. Hiring practices, training and education programs, reward systems, reminders, and even discipline can be tailored to focus city workers on the importance of providing not only quality services, but also quality in terms of the manner in which those services are provided to local citizens.

HYPOTHESES

In summary, five hypotheses were tested in this research effort. Stated as the null, they were:

H1: Complaining citizens will not differ significantly from non-complaining citizens in satisfaction with services provided by the city.

H2: Complaining citizens will not differ significantly from non-complaining citizens in overall satisfaction with city management.

H3: They will not differ significantly in how satisfied they are with each department of city management.

H4: Complaining citizens will not differ from non-complaining citizens in evaluations of employee professionalism, courtesy, efforts to resolve problems, or promptness in dealing with problems.

H5: Complaint behavior is not significantly correlated with citizen demographics.

METHODOLOGY

The authors of this study were retained to prepare, distribute, and analyze a citizen survey in a small Midwestern city. As part of the arrangement, the authors were given permission to write academic reports based on additional analyses of the data. The data were collected via a random-sample mailing. The city was divided into quarters, with one portion of town receiving a slightly higher percentage of surveys, due to the socio-economic conditions in that area. This area was a lower-income neighborhood, where lower response rates would ordinarily be expected. The tactic worked, and a more representative sample was achieved. A total of *1,500* questionnaires were sent to individual households within the community. A cover letter written by the mayor encouraged recipients to respond, and the local media provided significant coverage of the process. Following a two-week waiting period, a second mailing of questionnaires was sent to non-respondents.

SAMPLE

Seven hundred and seven (707) usable questionnaires were returned, representing a 47.1% response rate. The small size of the community (15,000 persons) was believed to have contributed to the high response rate. Demographic information regarding this sample is as follows:

- The sample consisted of 41% male and 59% female participants.
- The ages of respondents were:
  18 to 24 years old, 71 persons (10%);
  25 to 34 years old, 105 persons (15%);
  35 to 49 years old, 201 persons (29%);
  50 to 64 years old, 126 persons (18%);
  65 years or older, 195 persons (28%).
- The income levels of respondents may be summarized as follows: under $15,000, 141 respondents (22%); $15,000-$29,000, 175 persons (27%); $30,000-$49,999, 170 people (26%); and $50,000-$74,999, 63 people (10%).
- The average years of residence in the city was 26.2. Only 46 (7%) of the surveys indicated that the individual had lived in the city one year or less. The two most common answers regarding their workplace were: (1) the respondent worked locally, or (2) was retired. Similar results were obtained regarding the workplaces of respondents' spouses.
- Two hundred and forty-two of 707 respondents indicated that they had voiced complaints with one or more departments within the city government.

MEASURES

Discussions with city management, concerned citizens, elected officials, and community and business leaders generated a list of 16 city services respondents were asked to rate through the use of a five point bipolar scale ranging from 1 = very poor to 5 = very good. The last item of the list asked for an "overall" rating of city services through the use of the same scale. Respondents were also asked to follow a similar process to rate city administration and six different functional areas or departments identified as service providers. Respondents were given the opportunity to indicate "not applicable" (coded as a missing value) for areas with which they had no interaction. Additional rating scales were used to evaluate the citizens' interactions with City employees in general over variables of promptness, courtesy, effort, and professionalism. Each was assessed through the bipolar scale 1 = very poor to 5 = very good. Demographic information was collected as follows. Age was reported in various ranges, including 18-24,25-34, up to 65 and older. Years of residence were reported as ranges, beginning with one year or less and with 30 years or more at the other extreme. Income was reported in $15,000 increments, beginning with less than $15,000 at one extreme; and over $75,000 at the other. Reporting a past complaint with the city was measured through a dichotomous yes-no choice.

ANALYSIS

Multivariate analysis of variance was employed to produce all data used in examining the study's hypotheses. This procedure permits the testing of joint and individual means for multiple dependent variables across groups, as well the use and testing of the nature and effects of covariates (Hair, Anderson, Tatham and Black, 1998). This study examined three different group comparisons. Two groups were formed, persons having filed one or more complaints versus persons not filing a complaint. The groups

were then compared over (1) the 17 items used in rating city services, (2) the seven items involved in ratings of City administration and six departments or functional areas, and (3) the ratings of the four items of employee professionalism, courtesy, efforts, and promptness. In each of the analyses, complaining and non-complaining citizens were compared over their *joint* answers to the specific set of items. Multivariate analysis of variance also produces univariate f-test results that indicate which specific items of an examined set contribute significantly to differences identified in joint mean comparisons. These univariate results were used to more specifically identify how complaining residents differed from non-complaining. Finally, selected demographic characteristics were used as covariates in all analyses. These covariates were examined to determine whether demographics were or were not related to complaining behavior.

RESULTS

The original hypotheses were stated in the null. Results generated from the analyses indicate that all five hypotheses must be rejected in favor of the alternative. Tables 1 through 4 contain data related to each hypothesis tested. The first hypothesis tested was:

H1: Complaining citizens will not differ significantly from non-complaining citizens in satisfaction with services provided by the city.

As the data of Table 1 Indicate, this hypothesis was rejected. Complaining citizens differed in their joint responses to the various items measuring satisfaction with city services (sig.=.000). The univariate results indicate the groups differed significantly over satisfaction with removal of snow and ice, residential street lighting, general condition of streets, debris, weed, and junk removal, neighborhood storm drainage, removal of storm debris, animal control service, and police department service. They also differed in their overall satisfaction with services provided by the city. It would therefore seem that complaining citizens were primarily dissatisfied with the overall cleanliness of the city, efforts to handle drainage problems, and with the condition of streets and lighting. However, complaining citizens did not differ significantly from non-complaining citizens in their satisfaction with fire department services, recreational programs, airport facility and services, memorial auditorium events, water services, and downtown parking.

Table 1: Comparison of Complaining versus Non-Complaining Groups: Satisfaction with Services City Provides - Analysis of Variance

EFFECT .. Complaint Group
Multivariate Tests of Significance (S = 1, M = 7 1/2, N = 242)

Test Name	Value	Exact F	Hypoth. DF	Error DF	Significance
Pillais	.11698	3.78721	17.00	486.00	.000
Hotellings	.13247	3.78721	17.00	486.00	.000
Wilks	.88302	3.78721	17.00	486.00	.000
Roys	.11698				

Note: F statistics are exact.
Univariate F-tests with (1,502) D. F.

Item Rated	Group Mean Complaint Filed			
	Yes	No	F	Significance
Removal of Snow and Ice	3.254	3.477	5.28959	.022
Residential Street Lighting	3.056	3.382	10.25378	.001
General Condition of Streets	2.864	3.119	6.67358	.010
Fire Department Service	4.254	4.315	.79346	.373

Debris, Weed, Junk Removal	2.350	3.040	41.10128	.000	
Neighborhood Storm Drainage	2.797	3.312	20.88913	.000	
Removal of Storm Debris	3.249	3.584	12.27895	.000	
Animal Control Service	3.282	3.541	6.55469	.011	
Sanitary Sewer Service	3.655	3.820	3.64600	.057	
Police Department Service		3.644	3.911	7.75394	.006
Parks and Rec. Facilities	4.062	4.220	3.78440	.052	
Recreational Programs	3.836	3.963	2.00933	.157	
Airport Facility and Service	3.056	3.183	1.60723	.205	
Memorial Auditorium Events	3.729	3.713	.03129	.860	
Water Service	3.763	3.719	.20048	.655	
Downtown Parking	3.345	3.428	.66326	.416	
Overall City Services	**3.469**	**3.694**	**9.76743**	**.002**	

The second and third hypotheses, which follow, examined group satisfaction with City administration and various departments or functional areas.

H2: Complaining citizens will not differ significantly from non-complaining citizens in overall satisfaction with city management.

H3: They will not differ significantly in how satisfied they are with each department of city management.

The process through which these hypotheses were tested differs from those used in other tests. This was necessary because respondents were given the option of indicating they had not interacted with the various areas. Such responses were assigned a missing value code. Consequently, there was some variation in the number of respondents evaluating each area. MANOVA analyses exclude missing values list wise. Only those who answered all items are included. The number of respondents doing so was substantially less than the total number of participants (324 of 707). Consequently, to provide a more complete comparison of the two groups, separate "oneway" analysis of variance comparisons were conducted for each item. This permitted the inclusion of *all* respondents evaluating a specific item. Table 2 contains the results of both the multivariate and oneway analyses. The procedures produced highly similar results. The sole difference was satisfaction with the police department. When all respondents rating the departments were included, complaining citizens differed significantly from non-complaining. The two groups did not differ in the multivariate analysis.

Hypotheses 2 and 3 were rejected. As the data of Table 2 indicate, complaining citizens differed significantly from their non-complaining counterparts over all but one of the items (satisfaction with the fire department) included in evaluating City administration and departments. The multivariate analyses indicate the differences were joint and global; complaining respondents exhibited overall lower levels of satisfaction. As illustrated by the univariate results, the means for this group were consistently lower than for non-complaining citizens. They assigned lower scores to City administration, parks and recreation, the finance department, both departments of Public Works (engineering and codes and streets and sewers), and the police department.

Table 2: Comparisons of Complaining versus Non-Complaining Groups: City Administration and Departmental Evaluations - Analysis of Variance

Multivariate Comparison of Groups (S = 1, M = 2 1/2, N = 157)

Test Name	Value	Exact F	Hypoth. DF	Error DF	Significance
Pillais	.10100	5.07160	7.00	316.00	.000
Hotellings	.11235	5.07160	7.00	316.00	.000
Wilks	.89900	5.07160	7.00	316.00	.000
Roys	.10100				

Note: F statistics are exact.

Univariate Group Comparisons (1,322) D. F.

Item Evaluated	Multivariate Group Mean Complaint Filed				Oneway Group Mean Complaint Filed			
	Yes	No	F	Sig.	Yes	No	Sig.	
City Administration	3.425	3.863	13.37102	.000	3.35	3.88	.000	
Parks and Recreation	3.693	4.056	10.79403	.001	3.88	4.11	.004	
Finance Department	3.740	4.061	8.26034	.004	3.89	4.12	.004	
Engineering and Codes	3.150	3.822	27.38314	.000	3.06	3.83	.000	
Streets/Sewers	3.276	3.843	18.87961	.000	3.38	3.84	.000	
Police Department	3.913	4.041	1.13776	.287	3.91	4.09	.041	
Fire Department	4.339	4.401	.50541	.478	4.45	4.44	.837	

The next hypothesis examined appears below. It maintains that there will be no significant differences between the groups in evaluations of employee conduct. As the data of Table 3 indicate, this hypothesis was also rejected. Complaining citizens differ significantly from non-complaining citizens.

H4: Complaining citizens will not differ from non-complaining citizens in evaluations of employee professionalism, courtesy, efforts to resolve problems, or promptness in dealing with problems.

As with each of the previous analyses, joint, global differences existed between the two groups. Complaining citizens were significantly less well satisfied than were non-complaining. The univariate results indicate the lower levels of satisfaction felt by complainants were universal. They felt employees were less courteous and professional. They also reported less satisfaction with city employees' promptness and efforts to resolve their problems.

Table 3: Comparison of Complaining versus Non-Complaining Groups: Employee Evaluations - Analysis of Variance

EFFECT .. Complaint Group
Multivariate Tests of Significance (S = 1, M = 1 , N = 317)

Test Name	Value	Exact F	Hypoth. DF	Error DF	Significance
Pillais	.10339	18.33466	4.00	636.00	.000
Hotellings	.11531	18.33466	4.00	636.00	.000
Wilks	.89661	18.33466	4.00	636.00	.000
Roys	.10339				

Note: F statistics are exact.

EFFECT .. Complaint Group
Univariate F-tests with (1,639) D. F.

Item Rated	Group Mean Complaint Filed			
	Yes	No	F	Significance
Employee Courtesy	3.771	3.963	5.651	.018
Employee Professionalism	3.496	3.867	20.04891	.000
Promptness in Dealings	3.110	3.775	56.07856	.000
Efforts to Resolve Problems	3.157	3.790	49.87194	.000

The final hypothesis implied there would be no significant differences in demographics between the two groups:

H5: Complaint behavior is not significantly correlated with citizen demographics.
This hypothesis was tested in a less direct fashion than all previous hypotheses. To determine whether complaining behavior was correlated with demographics, selected demographics were entered as covariates in each of the previously described multivariate analyses of variance. The results in Table 4 show which demographic covariates were significantly correlated with each of the various items of the survey. The previously reported means for the groups were not, however, adjusted for these covariates. This would have had the effect of modifying the various means to remove and "control for" differences in demographics occurring between the groups. Since demographic characteristics might be anticipated to be among the factors determining whether a citizen will complain, their effects should not be so removed.

Based on the results of the various multivariate analyses, it is unclear whether the final hypothesis should or should not be rejected. There is ample evidence of a consistent relationship between age and most of the items evaluated. Of the 17 items rated in evaluating satisfaction with services provided by the city, 16 were significantly correlated with age (Table 4). Since the relationships were consistently positive, older citizens appear to be better satisfied with services provided, and therefore less likely to complain, than younger citizens. The only item not correlated with satisfaction was "debris, weeds, and junk removal." This may have been the result all respondents assigning a relatively low level of satisfaction to this component (complaining group mean = 2.35, non-complaining group mean = 3.04). Gender was only correlated with "events from memorial auditorium" and "downtown parking". Males were less well satisfied than females. Income was positively correlated with one factor, "parks and recreation facilities." Neither income nor education was correlated with the various items measuring satisfaction with City administration and department or functional area. Nor were they related to satisfaction with the characteristics of employees (courtesy, promptness, efforts, and professionalism). Gender was correlated with evaluations of two of the city's departments or functional areas (Parks and Recreation and Police Department). Both areas were rated more favorably by women than men. Gender was also correlated with evaluations of "efforts made" to solve problems and "promptness" in solving problems. In each instance, men assigned lower evaluations than women did.

Age was once again the only demographic characteristic found to consistently correlated with ratings of the items related to City administration and departments as well as with satisfaction with employee responses. Older respondents evaluated all items of both categories more favorably than did younger respondents.
Based on the above results, the final hypothesis should be rejected. Demographics are correlated with dissatisfaction and therefore with complaining behavior. However, there is a substantial lack of consistency in these correlations. Sometimes gender matters, other times not. There is very little evidence to suggest that education be related to satisfaction and complaining behavior. Income is seldom related to such behavior. Age is the only characteristic that can be consistently counted on to influence feelings of satisfaction and complaint behavior. For whatever reason, younger citizens appear to be consistently more critical than older citizens.

Table 4: Demographic Correlations with Satisfaction

	Gender		***Age***		***Education***		***Income***	
Services Provided	**Coef.**	**Sig.**	**Coef.**	**Sig.**	**Coef.**	**Sig.**	**Coef.**	**Sig.**
Snow and Ice Removal	--		.264	.000	--		--	
Residential Street lighting	--		.156	.000	-.138	.017	--	
General Condition of Streets	--		.218	.000	--		--	
Fire Department Service	--		.127	.000	--		--	
Debris, Weed, Junk Removal	--		--		--		--	
Neighborhood Storm Drainage	--		.121	.009	--		--	
Removal of Storm Debris	--		.110	.004	--		--	
Quality of Animal Control Service	--		.085	.047	--		--	
Sanitary Sewer Service	--		.072	.044	--		--	

Police Department Service	--		.218	.000	--		--	
Parks and Rec. Facilities	--		.141	.000	--			
.083 .045								
Quality of Recreational Programs	--		.162	.000	--		--	
Airport Facility and Service	--		.246	.000	--		--	
Events from Memorial Auditorium	.329		.001	.191	.000	--		--
Quality of Water Service	--		.295	.000	--		--	
Downtown Parking	.222	.031	.279	.000	--		--	
Overall Satisfaction with Services	--		.177	.000	--		--	
City Management/Departments								
City Administration	--		.185	.001	--		--	
Parks and Recreation	.277	.021	.139	.006	--		--	
Finance Department	--		.147	.004	--		--	
P.W. Engineering and Codes	--		.121	.042	--		--	
P.W. Streets/Sewers	--		.211	.000	--		--	
Police Department	.254	.042	.336	.000	--		--	
Fire Department	--		.149	.000	--		--	
Service Delivery								
Employee Courtesy	--		.236	.000	--		--	
Employee Professionalism	--		.157	.000	--		--	
Promptness in Dealings	.251	.007	.164	.000	--		--	
Efforts to Resolve Problems	.186	.048	.158	.000	--		--	

DISCUSSION AND CONCLUSIONS

As noted earlier, this study investigated the effects of both controllable and non-controllable, demographic factors which might influence perceptions of satisfaction with city services and consequential complaint behavior. The findings reveal that age is the single non-controllable factor consistently correlated with evaluations of city services and complaint behavior. Gender is a factor of only occasional influence. Income and education are of even less importance. It therefore appears satisfaction and complaint behavior stem primarily from controllable factors. These are the things the city does or does not do to solve problems and the perceived manner, in which employees do or do not do those things. Inadequacies in these areas were earlier identified as “insufficient solutions” and “inappropriate responses.” All cities will inevitably experience service failures. Storm damage happens. Water rises and sewer systems overflow. Litter and trash accumulate, ad infinitum. If elected officials, city management, and city employees want to prevent dissatisfaction, negative word-of-mouth and complaint behavior, service recovery strategies must offer both “sufficient” and “appropriate” problem solutions and responses.

Each of the analyses indicate a significant global effect will occur in how dissatisfied, complaining residents respond to service failures. If they reach the point of complaining, they will be dissatisfied with more than simply the area(s) related to the complaint(s). This study showed that most of the city services examined were rated lower by complainants than by non-complainants. This global effect will apply to ratings of city management as well. Residents reaching the point of filing complaints will perceive the city manager and his or her departmental or functional managers and employees less favorably than residents not filing complaints will. These individuals will be less well satisfied with the behavior of employees with which they interact, rating them lower on professionalism, courtesy, efforts to resolve problems, and the promptness with which they respond.

Earlier, *the squeaky wheel* approach, *systematic response* method, *distant early* warning (DEW) *line, zero defects approach,* and *the on-deck method* were identified as ways firms handle dissatisfaction with a given product or service along with the actions employed to satisfy or remedy the customer's dissatisfaction (Hoffman, Rotalsky, 1995). The "squeaky wheel" approach emphasizes taking care of the most noticeable of dissatisfied customers. For cities, complaining citizens represent the wheel that squeaks loudest. As noted in the service recovery literature, a person who has a problem effectively resolved is more likely to report greater satisfaction with the organization (McCollough and Bharadwaj, 1992). Similarly, citizens will react to correctly solved problems positively. Therefore, the clear message for city managers and their employees is to effectively and positively resolve as many complaints as possible to generate greater levels of goodwill toward the city's government. Residents can be expected to respond positively when their contacts with the city are met with "appropriate responses." While managers may lack the ability to immediately offer "sufficient solutions" to all problems, they can and should make concerted efforts to improve relations with the public. These efforts should include instilling employees with the importance of prompt, courteous and professional attempts to resolve problems and answer complaints. Employee reward systems should include commitment to quality service as a most important component.

Future studies may be geared toward better understanding how other factors influence dissatisfaction and complaining behavior. There should be an attempt to develop a better understanding of how citizens form their perceptions regarding the employees' courtesy, professionalism, promptness, and efforts to resolve problems. These are abstract concepts. They may be formed as a result of specific behaviors engaged in by employees, or by inferences drawn from things *not done* by employees. It may not be possible to develop effective training and educational programs and strategies to increase the level of satisfaction with city services without knowing how such perceptions are formed. Furthermore, additional research might address the issue of what constitutes an "acceptable" level of these behaviors. This could provide more specific information for use in creating more "appropriate responses" in service recovery efforts. Future studies might also attempt to determine how strategies other than the *squeaky wheel approach* might be employed to reduce citizen dissatisfaction and complaining behavior. While it is not realistic to expect providers of city services to provide zero defects, since many of the problems cities encounter are uncontrollable, some cities may use the s*ystematic response* method in anticipating the needs of citizens. Others may rely upon a *distant early warning* (DEW) *line* approach. Still others may use the *on-deck method*. Research might compare the satisfaction of residents of either of the latter types of cities to that of residents of other cities using a *squeaky wheel* approach to determine which provides the highest levels of satisfaction.

BIBLIOGRAPHY

Assael, Henry (1998). Consumer Behavior and Marketing Action. Cincinnati, OH: South-Western, 6 edition.

Baack Donald and Kenneth E. Clow (1996). Organizational Commitment Levels Among Clergy: An Empirical Investigation. *Journal of Ministry Marketing and Management,* Vol.2 (2), 8 1-95.

Baack Donald, Kenneth E. Clow, and Jerry D. Rogers (1998). Service Failure, Service Recovery, and Satisfaction with *City* Services. *Proceedings,* Southern Marketing Association meeting, New Orleans, Louisiana.

Clow, Kenneth E. and Altan Erdem (1998). The Role of Consumer Expectations on Attributions, Service Recovery, and Brand Attitude in Service Failure Situations, *Proceedings* OF the *Southwest Decision Sciences Institute,* meeting, Dallas, Texas, in press.

Cohen, Jacob and Patricia Cohen (1983). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences.* Hillsdale, NJ: Lawrence Edbaum Associates, Publishers, second edition.

Folkes, Valarie S., Susan Koletsky, and John L Graham (I 987). A Field Study of Causal Inferences and Consumer Research Reaction: The View From the Airport. *Journal of Consumer Research,* Vol. I 3 (March), 534-539.

Hair, F. H. Jr., R. E. Anderson, R. L. Tatham, and W. C. Black, (1998). Multivariate Data Analysis. Upper Saddle River, NJ: Prentice Hall, fifth edition.

Hart, Christopher W.L, James L. Heskett, and Earl W. Sasser (1990). The Profitable Art of Service Recovery. *Harvard Business Review,* Vol.68, July/August, 148-I 56.

Hoffman, K. Douglas, Scott W. Kelley, and Holly M. Rotalsky (1995). Tracking Service Failures and Employee Recovery Efforts. *Journal of Services Marketing* Vol.9, No.2, 49-61.

Johnston, Timothy C. and Molly A. Hewa (1997). Fixing Service Failures. Industrial Marketing Management, 26, 467-473.

Mathieu, J.E. and D.M. Zajac, (1990). A review and Meta-Analysis of the Antecedents Correlates, and Consequences of Organizational Commitment. Psychological Bulletin, Vol. 108 (2), 171-194.

McCollough, Michael A. and Sundar G. Bharadwaj, (1992). The Recovery Paradox: An examination of Consumer Satisfaction in relation to Disconfirmation, Service Quality, and Attribution Based Theories. Marketing Theory and Application, C.T. Allen, ed. Chicago: American Marketing Association.

Warren, William E. and Faye W. Gilbert, (1993). Complaint Intentions and Behavior for Products Versus Services. Th Journal of Marketing Management, Vol. 3, Spring/Summer, 12-22.

THE COMMUNITY COLLEGES: A RESOURCE FOR BUSINESS STUDENTS

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Enrollment decline in the undergraduate business schools is a serious problem that has been generated by both internal and external circumstances. It is obvious that most four year colleges and universities depend on their admission and outreach programs to generate the needed students to fill the freshman classes and a maintain a growth environment. In some instances, the admission and orientation office does not invite the business school faculty or staff to attend the freshman orientation sessions. The admission counselors in most situations discourage the business faculty and staff from doing more than a causal nod or basic acknowledgement during on campus orientation sessions. Most often business school staff and faculty are not invited to high school career days or recruitment events. It appears that the hidden agenda is to fill the core classes and support the general education curriculum, which is basically a liberal arts curriculum. Little time is given to present the expansive opportunities in the fields of marketing, management, accounting and finance to the freshmen so they can prepare to enter the business school with a smooth transition. The freshman can take some of the prerequisites prior to declaring a business major and still meet core subject requirements. The students should be encouraged to plan a summer of worthwhile jobs or internship that will acquaint them with a business career track or acquaint them with the persons who can hire them when they finish their education.

At some community colleges I have visited, marketing students wonder why their credits in marketing were not accepted at a four year university, when they were not told to take economics as a pre-requisite. A potential management student could not figure out why he was having problems with his transfer credits when no one explained the difference between business administration and management. In another example a basic college math course was substituted for Statistics, another requirement for business management. The counselor did not seem to know the difference between math and statistics. The accounting sequence has a number of problems as well. Accounting courses were not taken in a logical order and the general education courses looked more like were geared for a liberal arts degree than a preparatory for accounting. Accounting students should have had basic administration courses before they enter accounting. This affords them the knowledge of being familiar with the business structure so they can understand the difference between a partnership and sole ownership.

The basic concept is to encourage students at the high school; community college and community based organization level to think about a career track in business. There are more jobs for skill managers in manufacturing than people who are qualified. There are more jobs in various phases of marketing than people available. Glance at the major cities Sunday classified sections. There are jobs for those who can sell, manage, develop and execute a strategic plan. I refer to the areas of marketing that are in desperate need of trained marketing managers and customer service personnel. Persons who know product distribution, product introduction and development and who can take a product into the market place with a well executed strategic plan are always in demand. This is an inclusive statement covering all of the marketing areas, from sales to customer service.

The purpose of this discussion is to present a marketing program for all departments of the business school. A comprehensive program should start with high school seniors and continues at the college freshman level ending when the student declares business as their major. The end of this sequence is to enter the business school as a junior.

Our first prerequisite in marketing is to know the product, in this case the business school. This means knowledge of the assets and down side of the business school's faculty, staff and ability to help place graduates in career track jobs. Each member of the marketing department faculty should know the product and should be able to compare with the best marketers in their geographic location. Now the situation is to present that product to the best of the business school's abilities. Each of the marketing professors should be able to analyze the market. They should be able to develop the print and other materials needed to encourage students to look toward a business school education. The same principle would apply to the other disciplines in the business school that might vary from college to college.

There are jobs in most every phase of marketing, management and administration. I would include the accounting sequence in the administration area. This is a situation that most CPA's would differ.

Our plan basically pin points all the different career tracks and positions that one can achieve with a business degree. There is a another plan of paid internships and part time jobs that can enhance the ability of the student to be part of our 'Working Through School" program. This is not just a summer type job, but the start of a career track.

The balance of the paper describes the successful marketing program that has taken the Manufacturing Technology program to just under 100 students within three and a half years. The key issue is placing students in the business school by utilizing the community college pre-business program.

The key elements of the program are involvement, follow up, designing events that will attract the students and cooperation from the business community.

During this past summer the need for skilled machinists posed a situation for a community college. The college needed to fill job request from their advisory board and faced the low enrollment for summer. Using the basic marketing principles, a hard look was taken at the program. No high school student wants to attend a summer program, no matter how with while. Going back to his neighborhood a telling his friend he' in summer school denotes less than acceptable. The popular concept is that the dummies go to summer school. The fact that after successfully completing the summer program they would qualify for an internship at $7.50 to $10.00 per hour does change the 'summer school dummy syndrome. By changing the name of the summer program to "Advance Placement Program in Manufacturing Technology and Machining" and advertising the program would only take 12 students for the summer, if qualified was an unusually successful. The class was fill and 10 of 12 had job at the end of summer. Most will continue on with their education and have a job to pay for school.

Another special tour of the Illinois Institute of Technology campus was the cooperation of the community outreach program at the Instrumented Factory for Gears (INFAC) program. The program sponsored by the U.S. Army Aviation and Missile Command and the IIT Research Institute. The tour is especially interesting for students as they can see first hand what is involved in manufacturing and learn about the gear industry.

At the high school level one college invited seniors to visit an ad agency, a factory and an accounting firm each an experience that should the students the practical aide of several career track positions. In the sales area visits were conducted at newspapers and other media firms that are in desperate need of sales staffs along with customer service people. The one rule we had was the students can asked any questions, but talking about jobs was not permitted.

In another case a 'career night' was held at a local factory. This enabled the parents to come along and see a modern plant, complete with carpets on the floor and robots on the floor. They parents learned quickly that very good paying jobs are available. The fact that two parents obtained jobs at the plant in addition to three internships was a plus for the evening.

In summary a good look should be take a using modern marketing techniques to increase the enrollment in the business school. The best job security is a full enrollment.

REFERENCES

McKee, Keith E. and Field, Jerry J. (1997) Report on the Bachelor of Manufacturing Technology Program. 1997.

Peter Johnson and Field Jerry J. (1997)Report on Activities for the Fund for the Improvement of Post Secondary Education. (FIPSE) 1997 and 1996.

Parnell, Dale. (1995) Why Do I have To learn This. 1995. Cord Publishing, Waco Texas. ISBN 1-55502-519-6

Boyett, Joseph H, and Boyett Jimmie T. Beyond Workplace 2000. 1995.Dutton, New York, ISBN Not List in pre- publication

THE EFFECT OF WEB-BASED PRETESTING ON STUDENT PERFORMANCE IN MARKETING COURSES

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ABSTRACT

It has been argued that computer competency has become a necessity for marketing professionals and that educators should assist students in developing positive attitudes and skills related to that technology (Divine, Wilson, and Daubek 1997). In a recent report to the Council for Higher Education Accreditation, the Institute for Higher Education Policy identified two things as being important catalysts for the rapid growth in distance learning: that students should have access to education irrespective of where they live and that greater emphasis is being placed on "knowledge media" (the convergence of computing, telecommunication, and learning sciences) (Phipps, Wellman, and Merisotis 1998). The key ingredient for both of these catalysts is the Internet.

Does taking an online practice test have a significant positive effect on formal exam performance? Can taking multiple versions of an online practice test improve formal exams scores? Do they make a substantive difference in overall course grades?

A review of the literature, including a meta-analysis of 40 studies by Kulik, Kulik, and Bangert (1984), regarding student practicing for formal or standardized tests shows that there are real benefits to practicing. However, no examination has been made regarding the effects of electronic or online practice tests through the Internet.

A study was conducted that examined the formal exam scores and course point accumulations for three separate marketing courses in which on-line practice exams were used. Across all three courses, there were positive correlations between practicing for a formal exam and actual formal exam performance, most all at significant levels. For all ten practice cases examined (ten total exams across three courses), those students who practiced for a given exam ended up with a higher point accumulation for the course than those who did not practice for that given exam. In addition, for all three courses studied, those students who practiced every opportunity (practiced for each exam in a course) versus those who chose to never practice (did not practice for any exam in a course) outscored them by an average of 32 points (326 versus 294 total class points), 28 points (250 versus 222 total course points), and 24 points (238 versus 214 total course points) respectively. The findings indicate rather clearly that in most cases grades can be substantially improved by providing students the opportunity to take practice tests on the web as much as they want.

This study has shown how students can use the web to prepare for exams any time of the day or night, on campus or the other side of the world. Professors benefit too by not having to allocate as much

valuable lecture time or office hours to discussions of formal exam content and format. The challenge for researchers in the next few years is to provide much needed evidence that these opportunities produce very real benefits. The study reported here is just an initial step in providing that evidence and it is hoped that it will be followed soon by further relevant research so that marketing educators can make informed choices among the many options available to them.

REFERENCES

Divine, Richard L., J. Holton Wilson, and Hugh G. Daubek (1997), "Antecedents of Student Attitudes toward Computers", *Journal of Marketing Education*, Summer, 54-65.

Kulik, James A., Chen-Lin C. Kulik, and Robert L. Bangert (1984), "Effects of Practice on Aptitude and Achievement Test Scores", *American Educational Research Journal*, Summer, 21:2, 435-447.

Phipps, Ronald A., Jane V. Wellman, Jamie P. Merisotis (1998), "Assuring Quality in Distance Learning: A Preliminary Review," *A report prepared for the Council for Higher Education Accreditation Institute for Higher Education Policy, Washington, CD: Institute for Higher Education Policy.*

THE EFFECTS OF FOUR FACTORS IN STIMULATING PARTICIPATION IN A MAIL SURVEY

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ABSTRACT

This paper presents the results of a full factorial experiment that was used to test various aspects of a data collection methodology that was designed to increase response rates in mail surveys. In this experiment, four factors were tested in order to determine their relative effectiveness in stimulating potential respondents to participate in a recently conducted national automobile safety survey. These factors were: (1) the use of a prior notification letter to inform potential respondents of the upcoming arrival of a survey questionnaire, (2) the mailing of a replacement questionnaire to survey non-respondents, (3) the number coding of the survey questionnaire compared to the use of a separately mailed back postcard and (4) the specific design of the booklet in which the survey questionnaire was placed.

INTRODUCTION

Researchers have investigated numerous factors in order to determine their effectiveness in stimulating potential sample members to participate in a mail survey. In recent years, particular aspects of a data collection methodology first proposed by Dillman (1978) and subsequently revised by Salant and Dillman (1994) has received considerable attention and widespread use.

The following are the principal features of the methodology: (1) a prior notification letter is mailed to potential respondents shortly before the arrival of the survey package, (2) the questionnaire is contained in booklet form with an attractive front cover and an open back cover where respondent comments can be written, (3) each questionnaire is number coded so as to be able to identify respondents from non-respondents, (4) the survey package contains a personalized cover letter that is individually signed, (5) a follow-up reminder postcard is mailed to all sample members between four and eight days after the original mailing of the questionnaire, (6) an incentive to respond is provided, (7) a stamped return envelope is enclosed and (8) a second questionnaire and a new personalized, individually signed cover letter is sent approximately three weeks after the first mailing of the questionnaire to all non-respondents. Additional details are provided in Salant and Dillman (1994).

In 1999, the authors of this paper conducted a large-scale national automobile safety survey that allowed for various aspects of the Salant and Dillman approach to be tested for their effectiveness. In the next section of this paper, the factors identified for investigation are discussed. The presentation and discussion of the research design, the experimental results and the implications for the conduct of future mail surveys follow this section.

FACTORS

Three pages of survey questions were required in this study. The questionnaire that was constructed was contained in a booklet and all selected sample members were provided with an individually signed cover letter, an incentive to respond and a postcard follow-up that was mailed five days after the initial mailing of the questionnaire. First class postage was used and a stamped return envelope was provided. While all potential respondents received the above, the remaining aspects of the data collection strategy differed as four factors (each at two levels) were isolated for investigation.

More specifically, this study sought to determine the relative effectiveness of (1) prior notification letters, (2) second mailings of the survey questionnaire, (3) alternative methods for identifying respondents from non-respondents and (4) alternative formats for the design of the questionnaire booklet. Each of these factors is discussed below.

The purpose of the prior notification letter is to get potential respondents interested in the study so that they would at least open up the survey mailing when it arrived. Past studies have indicated that the use of either a prior notification letter or postcard has increased the response rate (Yammarino, Skinner, and Childers, 1991). Offsetting this positive aspect of a prior notification mailing, however, is the additional cost that is involved in terms of both money and time.

The purpose of the second follow-up mailing, which is sent to only the survey non-respondents, is to highlight, once again, the importance of each selected sample member to the ultimate success of the study. In the design stage of most mail surveys, especially those with financial cost constraints, questions often arise as to (i) whether a second follow-up mailing (which includes a copy of the questionnaire and a return envelope) is worth the additional cost and (ii) whether a prior notification letter or a second follow-up mailing would bring about the greatest increase in the response rate. Previous studies, conducted some time ago, have suggested that repeated mailings will produce a somewhat higher response rate compared to prior notification letters and that including a copy of the questionnaire will produce a small increase in the response rate compared to follow-up reminders that do not include another copy of the questionnaire (Linsky, 1975; and Heberlein and Baumgartner, 1981).

Because only non-respondents receive a second mailing of the survey questionnaire, it is necessary that there be some means for identifying the survey respondents from the non-respondents. In the Salant and Dillman approach, each questionnaire contains an identification number. In order to alleviate any respondent concerns about this number code, sample members are told in the cover letter that the reason for such a coding is to enable the researchers to be able to check each respondent's name off of the mailing list once their questionnaire is returned. In the present study, respondents were also told that the number code had another purpose. This was that the number code would serve as their entry number into a raffle in which a new color television set would be awarded to three randomly selected survey participants.

An alternative approach, which guarantees anonymity to respondents, was tested in this study in order to determine its relative effectiveness versus the Dillman and Salant questionnaire number coding approach. More specifically, selected sample members received a postcard in their original survey package that contained an identification number on it. These potential respondents were told to mail back their postcard separately at the same time they mailed back their completed questionnaire. Potential respondents were told that this identification number would enable the researchers to check their name off of the mailing list and also be used as their entry into a raffle in which three sample members would be randomly selected to receive a new color television set. No past studies were found in which the effects of number coding a questionnaire versus the use of a postcard had been tested.

Salant and Dillman stress the importance of the placement of the questionnaire in booklet format, which includes an attractive front cover so as to make the questionnaire look interesting. They also indicate that the back cover of the questionnaire booklet should contain as much open space as possible so as to enable respondents the opportunity to write-in any final comments regarding the survey that they might wish to make. As indicated previously, a three page questionnaire was required in this study. Two booklet versions were tested. The first consisted of an attractive front cover and used the two inner pages of the booklet and the back cover for the survey questions. The second version of the questionnaire used the front cover and the two inner pages for the survey questions and left the back cover open for

comments. Thus, the specific approach suggested by Salant and Dillman (attractive front cover and blank back cover) could not be tested due to questionnaire length. However, this study will give some indication as to which has the greatest impact on the response rate -- an attractive front cover or a blank back cover which provides space for respondent comments.

RESEARCH DESIGN

A full-factorial design in which there were four factors, each at two levels, was used in this study. More specifically, the design is shown in Exhibit 1.

	Second questionnaire		*No second questionnaire*	
	Number Code	*Postcard Code*	*Number Code*	*Postcard Code*
Prior notification letter	A	B	C	D
Attractive front cover				
No prior notification letter	E	F	G	H
Prior notification letter	I	J	K	L
Open back cover				
No prior notification letter	M	N	O	P

Exhibit 1. Experimental Design

As shown above, there were sixteen different treatments (A-P) used in this full factorial design. Sixteen replicate samples, each containing ninety sample members, received questionnaires using the descriptions provided above. For example, in the cell labeled A, each of the ninety sample members received a prior notification letter, a number coded questionnaire that had an attractive front cover and a second replacement questionnaire (if their original questionnaire was not returned). Similar descriptions apply to the remainder of the cells. Thus, in total, there were 16x90=1,440 potential respondents.

The population consisted of households within the United States and the sample was obtained from a nationally known firm specializing in the production of high quality and representative samples. The subject matter of this survey consisted of respondent opinions regarding proposed rules and regulations related to various automobile safety issues. If a particular survey questionnaire package was returned due to an incorrect address or because the selected respondent had recently moved, a replacement questionnaire was mailed to another randomly selected respondent.

EXPERIMENTAL RESULTS

Five hundred twelve of the 1,440 (35.5%) questionnaires were completed and returned by the survey cut-off date. The smallest percentage of completed returns came from cell G where only 24.4% (22/90) questionnaires were returned. The highest rate of response came from cell A where 44.4% (40/90) of the questionnaires were returned. The response rate for each of the sixteen cells is given in Exhibit 2.

Standard procedures (Davies, 1967) were used to determine main and interaction effects of the four factors. The results of this statistical analysis are given in Table 1. Two of the main effects were found to be significant -- one at the .01 level and the other at the .05 level of significance. More specifically, the use of the second follow-up mailing (40% vs. 31%) was highly significant at the .01 level and the use of the prior notification letter (38% vs. 33%) was significant at the .05 level. Neither of the other two main effects -- the number coding of the questionnaire or the type of booklet that was used significantly affected the decision to respond. The same result was obtained for all of the two-way and higher order interaction effects.

	Second questionnaire		*No second questionnaire*	
	Number Code	*Postcard Code*	*Number Code*	*Postcard Code*
Prior notification letter	44.4%	42.2%	30.0%	40.0%
Attractive front cover				
No prior notification letter	35.5%	37.7%	24.4%	25.6%
Prior notification letter	38.9%	43.3%	32.2%	30.0%
Open back cover				
No prior notification letter	38.9%	41.1%	33.3%	28.9%

Exhibit 2. Response Rate by Cell

Table 1
Analysis of Variance Table

Source of variation	Effect	Mean Square	DF	F ratio
Main effects:				
Attractive front cover (A)	- .007	.5625	1	.16
Prior notification letter (B)	.046	68.0625	1	7.12*
Number code on questionnaire (C)	- .013	5.0625	1	.53
Second mailing of questionnaire (D)	.096	297.5625	1	31.12**
Two-way interaction effects				
AB	..040	52.5625	1	5.49
AC	.013	5.0625	1	.53
AD	.001	.0625	1	.06
BC	.010	3.0625	1	.32
BD	.007	1.5625	1	.16
CD	.004	.5625	1	.06
Error (higher order interactions)		9.5625		5

*Significant at the .05 level; **Significant at the .01 level.

DISCUSSION

As indicated previously, each of the n=1,440 potential respondents in this survey received a personalized, individually signed cover letter, a stamped return envelope, an incentive to respond and a postcard follow-up mailing five days after receipt of their survey package. This particular experimental study looked at the incremental effects of four additional factors that were thought to affect the overall response rate. The experimental results indicated that a second mailing of a duplicate questionnaire and the use of a prior notification letter significantly increased the response rate. Further, the results indicated that these effects were additive.

The use of a number coded return postcard to guarantee anonymity to respondents was shown not to be worth the additional cost compared to the number coding of the questionnaire as recommended by Salant and Dillman. Similarly, it does not appear to matter whether an attractive front cover or a blank back cover is used. Ideally, both could be used in a survey although this was not possible in this experiment.

In summary, given the basic ingredients of a mail survey data collection strategy of (1) an individually signed, personalized cover letter, (2) a stamped return envelope, (3) an incentive to respond and (4) a follow-up postcard mailing, these results indicate that a significant increase in the response rate can be achieved by using both a prior notification letter and a follow-up mailing which includes a replacement questionnaire.

REFERENCES

Davies, *Design and Analysis of Industrial Experiments*. New York:Hafner Publishing Company, 1967.

Dillman, *Mail and Telephone Surveys: The Total Design Method*. New York:John Wiley & Sons, 1978.

Heberlein and Baumgartner (1981), "Is a Questionnaire Necessary in a Second Mailing," *Public Opinion Quarterly*, Volume Forty-five, Number One, 102-108.

Linsky (1975), "Stimulating Responses to Mailed Surveys: A Review," *Public Opinion Quarterly*, Volume Thirty-nine, Number One, 82-101.

Salant and Dillman, *How To Conduct Your Own Survey*. New York:John Wiley & Sons, 1994.

Yammarino, Skinner, and Childers (1991), "A Meta-analysis of Mail Surveys," *Public Opinion Quarterly*, Volume Fifty-five, Number Four, 613-669.

THE GOING GLOBAL PARADIGM

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ABSTRACT

There are three issues in going global. The first is why does a firm want to go global? The second is how does the firm go global? The third has to do with the problems in going global. These problems involve the differences between countries. The purpose in writing this paper is to discuss and connect these three issues.

INTRODUCTION

This paper represents an approach to teaching international or global marketing. It is also a primer for anyone who wants to expand a business beyond their national boundaries.

There are three steps in discussing international or global marketing. The first is to explain why a firm would go global. The second is a brief outline of the various methods of going global. The third looks at the problems in going global. This is important because there is still a belief that the whole world can be satisfied with a single marketing mix.

WHY GO GLOBAL?

Ansoff's (1965) growth matrix explains why a firm would expand beyond its national boundaries. Ansoff identified four growth opportunities, Market Penetration (old product - old market), Product Development (new product - old market), Market Development (old product - new market) and Diversification (new product - new market). A foreign market represents a clear opportunity for Market Development, a new market for the existing product.

There is an adage that, it is better to own a market than to own a product. This thinking leads to the suggestion that Product Development is superior to Market Development. The problem is that domestically there are a limited number of opportunities for a new product to the old market. Internationally there are so many new markets that no one global company has yet to cover them all. Although new products to the old market might represent a better opportunity, there are many more opportunities in going global to find new markets for the old product. As will be discussed in the third part of this paper, new markets do pose special problems.

Another way to view going global is that it is market segmentation, specifically geographic segmentation. A new country not only represent a new segment, but as will be noted below further segmentation within a country is required.

HOW TO GO GLOBAL

Table 1 covers the various methods of entering and operating in a foreign market. To some extent, this list is sequential. The farther down Table One, the more involved the firm is in international marketing. The risk-reward situation changes as the firm progresses down Table One. Risk increases as the firm becomes more deeply involved but so does the reward.

WHAT IS THE PROBLEM?

There is a big problem in going global. That problem is in the differences between our country and other countries. The areas of concern are shown in Table Two. These differences can be dealt with successfully and profitably. That is if they are recognized and respected.

There are two schools of thought on global marketing. One takes the view, there are so many similarities among the people of the world a firm can use one marketing mix for everyone. This is a production or selling concept approach. It is not the marketing concept approach. This production or selling approach is so risky that it surprising that people continue to believe in it, but some do. Flikkema (1998) claims that:

> " … in most cases, marketers make too much of cultural differences and their effect on marketing. In marketing terms … the world is becoming increasingly homogenous."

The problem with this "everybody is the same" approach is seen in a supposedly homogenous market like the United States. There are so many differences among groups (segments) in this country that it is not possible to try to cover everyone with one marketing mix. If the firm does this it ends up appealing to only one part of the total market. Trying to be all things to everybody is mass marketing. It is called the majority fallacy.

For example, the East and West Coasts of the United States are considered trend-setters but roller blading became popular on one coast long before it was popular on the other coast. Nova, the name of a popular make of automobile that is no longer in production, means "no go" in Spanish. Forget that this might be a problem in Spanish speaking countries, it was a problem in American cities like Los Angeles and San Antonio.

In this paper, recent examples of the problems caused by these differences are cited. This is not new material but it is worth repeating and updating to counteract the idea a firm can take an existing marketing mix and use it, unchanged, everywhere in the world. There are also some suggestions on how to deal with differences.

The situation is further complicated because a segmentation strategy is indicated.

The opposite approach to "everyone is the same" has the firm putting together a special mix for every country and parts of a country. This could be customer orientation carried too far. The requirement for segmentation is a function of the sophistication of a country's economy and the diversity of its culture. The more advanced and diverse a country is the increased probability of the existence of well-defined segments. In an advanced country, a single marketing mix may appeal to one of the segments. Rather then hope that it is a major segment, the first step would be to select a target market

ALTERNATE MARKETING MIXES

The strategy is to have individual mixes with as many common elements as possible. One strategy is to start with separate mixes and combine when possible. The other is to start with one mix for everyone and adjust for local conditions. There are examples of both strategies working and not working.
In foreign markets the local environment usually controls price and place. The more controllable variables are product and promotion (communication). Using these two parts, standardization versus localization represents the extremes. The ideal is a mix of the two. This is shown in Figure One. A typical export is marketing the old mix (Quadrant I), while a total adaptation is a new marketing mix (Quadrant IV). The other two quadrants in Figure One represent altered marketing mixes where one part is changed while holding the other part constant. All four quadrants, however, represent growth opportunities for the firm. The chance for success is low in Quadrant I, higher in II but still low, higher in III and highest in IV.

TABLE ONE
ENTRY & OPERATING STRATEGIES FOR A FOREIGN MARKET

I. Export
- A. Indirect Export
  - 1. Domestic Export Distributor
  - 2. Domestic Export Agent
  - 3. Cooperative Export Organization
- B. Direct Export
  - 1. Domestic Export Department
  - 2. Foreign Distributors or Agents
  - 3. Traveling Export Salesperson
  - 4. Foreign Sales Office or Branch

II. Joint Ventures
- A. Licensing
- B. Management Contracting
- C. Contract Manufacturing
- D. Joint-Ownership Ventures

III. Direct Investment
- A. Foreign Marketing Subsidiary
- B. Foreign Assembly
- C. Foreign Manufacturing

IV. Multinational (Global) Marketing

This is a modification of a Figure by Kotler.

TABLE TWO
AREAS OF DIFFERENCES IN ENVIRONMENT AMONG COUNTRIES

1. Culture
   - A. Aesthetics
   - B. Religion
   - C. Education
   - D. Social groups
   - E. Technology
2. Politics and government
   - A. Type of Government
   - B. Instability and political risk

C. Political parties
D. America's image

3. Legal factors
A. Code law versus common law
B. Commercial disputes
C. Arbitration
D. Jurisdiction
E. Intellectual property rights

4. Economic factors
A. Overall level of the economy
B. Economic change
C. Evaluating economic data
D. Business cycles, inflation, unemployment

5. Trade barriers
A. Barriers prohibiting foreign trade and investment
B. Restrictions on the movement of goods
C. Restrictions on the movement of currency
D. Restrictions affecting business structure
E. Restrictions affecting business operations

This table is based on the work of Cateora and Keaveney.

FIGURE ONE
PRODUCT-PROMOTION STRATEGY FOR INTERNATIONAL MARKETS

		PROMOTION (COMMUNICATION)	
		STANDARDIZE	LOCALIZE
PRODUCT	STANDARDIZE	I Typical Export, Old Marketing Mix	III Promotion Adaptation, Old Marketing Mix except for Promotion
	LOCALIZE	II Product Adaptation, Old Marketing Mix except for Product	IV Total Adaptation New Marketing Mix

This figure is based on an approach by Keegan

The needs, customs, culture and potential of markets vary widely and must be researched, tested and respected before going into other countries.

The firm must be sensitive and prepared when doing business in a different country. Adapting to the existing environment is key for marketing programs and business plans throughout the world. This does not guarantee success but it decreases the chance of failure.

There are many considerations in studying a country. The focus here is on general business practices, mannerisms, and non-verbal messages as in colors and symbols. The basic principles remain the same, regardless of the country and are summed up as:

1) Research,

2) Training,

3) Language,

4) Experience,

5) Exchange and

6) Adaptation.

RESEARCH, RESEARCH, RESEARCH

Information on customs, practices, mannerisms, language, art, folklore, holidays, symbols, educational and religious institutions, media, demographics, psychographics, geography, climate, monetary and political systems provides important input to the marketing process. Conducting extensive research can aid the marketer in reducing the risks of failure. There are no guarantees of success even with thorough research. Prominent companies have had painful learning experiences when marketing in different countries. For example, major American shopping center operators have failed to develop the concept in Europe. Quoting a financial analysis McQuaid (1999) notes that although Europe is under-retailed,

> " ... in expanding to Europe, Prime Retail will have to overcome numerous cultural and logistical obstacles that have hampered the Mills Corp., the Rouse Co., Federated Department Stores Inc. and others who have tried unsuccessfully to cross the Atlantic with American shopping concepts. I've seen many American retailers fail in Europe, but this is a long-term strategy for them. Europe is a hungry market and its (sic) very under-retailed."

The demand is there but these American firms have yet to execute a successful strategy.

Hartley (1998) discusses the opening of Euro Disney in 1992, near Paris. It was expected to be a success as was the Disney Parks in Florida, California, and Japan. The park was a $4.4 billion enterprise sprawling over 5,000 acres (Hartley, 1998). Disney expected major growth. They worried that the park might not be big enough to handle the crowds of people they expected. This was based on their American experience. Europeans accounted for almost three million visits to the U.S. Disney parks. They spent $1.6 billion on Disney merchandise.

By the end of 1992, Disney had not meet revenue projections. They were puzzled. They did not realize they had opened the park in the middle of a recession. Many of the visitors were not spending as much money as expected. This may have been due to pricing. Park admission was $42.25 for adults (even higher than the American parks) and a room at a hotel at the entrance to the park cost $340 a night.

According to Hartley, the problem was not public acceptance. Europeans loved Euro Disney. Errors and miscalculations, mostly cultural, hurt the enterprise. At the opening there was no alcohol allowed in the park. This created a controversy in a country where wine was a tradition at lunch and dinner. The policy has since been reversed. The park was understaffed early in the week because they expected more visitors at the end of the week. The opposite happened.

Disney was told Europeans did not eat breakfast, so they limited the facilities available for breakfast. What happened? People came to the park demanding breakfast. By the end of September 1993, the amusement park had lost $960 million, and the future of the park was in doubt.

Although the future seemed dim, it was not that bad. The park was generating an operating profit. It was other costs that were causing the financial problems. By the beginning of 1994, Euro Disney was revamped to lower the cost for the typical tourist. Its staff was also given proper training to deal with the different cultures. By 1996, things looked better. Disney arranged for financial help so they could go ahead with further development plans. In the middle of 1996 Euro Disney announced a profit of $29.4 million. It took time but Euro Disney was getting there. This is what happens when management is not

open to new ideas or to needed revisions of old success patterns. It is an example of why expansion into different environments is more difficult and riskier.

LANGUAGE

A word, a phrase, a color, or a symbol can be interpreted differently from one language to another. Thoughts can lose something in the translation to another language. At other times, a thought gains something that was not intended. Some examples verified by linguists taken off the Internet by Schuster and reported by Carpenter (1998):

1) The Dairy Association's brought its "Got Milk?" advertising campaign to Mexico. The problem was the Spanish translation said, "Are you lactating?"

2) Clairol introduced the "Mist Stick," a curling iron, into Germany only to find "Mist" is slang for manure. Few people wanted a "manure stick."

3) An American T-shirt maker in Miami printed shirts for the Spanish market honoring the Pope's visit. Instead of "I saw the Pope" (el Papa), the shirts read "I saw the potatoes." (la papa).

4) Coors slogan, "Turn it loose," came out in Spanish as "Suffer from diarrhea."

Jokes can be a problem because they may not be understood in another culture.

TRAINING PROGRAM

The politics, history and economics of the foreign country must be studied because they have a major impact on attitudes. Kemper (1998) discusses the need for and importance of training.

Training programs are required for understanding, being comfortable and being effective in foreign environments. Family members should be included in these studies where appropriate because the support system requires information, orientation and consideration as well.

According to Duan (1997), "when in Rome, do as the Romans" refers to success by knowing and understanding the culture. Protocol Training Services offers etiquette programs as well as many other organizations that enhance knowledge and behavior of people in other countries. A lack of sensitivity to or understanding of cultural differences can damage deals. A well meaning American may not know most of the aspects of protocol when doing business overseas, however they should. This knowledge can be key asset. Employees are ambassadors of their companies. When they get into uncomfortable situations in dealing with customers and counterparts in other countries, it looks as bad for the company as it does for them.

"Employees who are going to be interacting with people overseas need to have the same type of diplomacy training as a high-ranking diplomat," says Sandra Morisset. She is a graduate of the Protocol School of Washington and a former United Nations employee who runs her New York based firm, Protocol Training Services. All levels of employees from corporate officers to project managers and engineers need to learn the ins and outs of proper behavior.

Kemper (1998) discusses how the increased globalization of business significantly affects the training profession. In today's environment, training professionals and organizational consultants have to have intercultural skills and understanding. Training must be adjusted for multi-cultural settings. Learning how to be flexible and change ideas and approaches according to the specific country is important.

EXPERIENCE

Keeping in a protective mode and limiting contact with different people and experiences can cancel the benefits of crossing national borders. The information gathered and training will familiarize one with things to know, avoid, and do. It is impossible to learn everything ahead of time and there is no substitute for being there, doing it, seeing it, asking, listening, and observing.

Hartley goes on to discuss the situation in early 1994 when PepsiCo tried to tap into the Brazilian market. It was worth a try. Brazil had the third largest soft-drink market in the world, behind only the U.S. and Mexico due to a growing teen population. It also gave them a chance to compete with their archrival Coca-Cola, who was already established in Brazil.

This was not the first time Pepsi tried to enter this market. Earlier campaigns had failed. This time they vowed to be more aggressive. Pepsi planned its strategy around Charles Beach who had been in the business but had a bad experience with Coke. He was indited on charges of price fixing. He soon expanded Pepsi in Latin America by building bottling plants, buying new trucks and introducing products and packages. It was a failure. Pepsi's plants were running at a third of capacity and they were in major debt. Coca-Cola was following every step with success. Coca-Cola leads the way in almost every foreign market. The contrast with Coca-Cola is significant. Seventy percent of Pepsi's beverage profits come from the U.S. Coca-Cola gets eighty percent from overseas.

What exactly were the Pepsi's mistakes? It tried to expand too quickly. It should have established relationships and moved in more slowly. It also did not watch foreign operations closely enough or soon enough to prevent rash expansion of facilities and burdensome debt. Did Pepsi learn from its past mistakes? Finally, it may be that Pepsi is not doing a bad job, it may be that Coke is doing a better one.

EXCHANGE

The flow of ideas, goods and services between countries is how and why the world is becoming a global economy. As in marketing, the goal is a mutually satisfying exchange. Exchange is how we satisfy our wants and needs.

Exchange goes beyond goods and services. There is a crucial need for understanding and respect. Knowledge exchange should be a part of the marketing process. This is as important as the actual goods or services.

A product's use and meaning can differ from one culture to another. Shoes are forbidden in Muslim mosques and Buddhist temples. They should never be worn in Japanese homes or restaurants unless the host insists. In Indian and Indonesian homes, if the host does not wear shoes, the guest should not. Whenever shoes are taken off, they should be placed neatly together facing the door their owner came in - particularly in Japan. Marco (1998) notes that doing business overseas is a new ball game. Understanding the meaning and practice of shoes is a part of marketing shoes.

ADAPT

"When in Rome do as the Romans" is not an outdated adage. It is key for a successful experience whether it be personal or professional. This adage suggests giving the respect deserved to an established culture. Cultural understanding can be an important learning experience and mind-opener as well as an important part of a successful business experience.

In Japan, for example, the giving and receiving of business cards is such a serious occasion there is actually a name for it meishi. It relates to the ceremony that goes into the exchange of business cards where much reverence and attention is given to this activity. Giving a Chinese National a watch is about

as bad as giving a Hindu a briefcase made out of cow leather or a Muslim a bottle of wine. Duan tells us the Chinese consider clocks and timepieces to be symbols of death, the ticking away of one s life".

Some areas the astute marketer will consider adapting to the existing environment concern the product or service itself (for example, steering wheel on the right for the Japanese automobile market), the message, presentation, strategy, advertising, sales technique, taste, colors, symbols, characters used, the language and even intonations. Marketing principles of marketing are the same across national boundaries. It is the specifics that vary.

CONCLUSION

"Going Global" is a growing focus throughout the world. It is crucial that the firm be sensitive to the global environment. According to Maggie Gillian, President, Gillian & Co.:

> "I think a big store cannot just transplant what it has in the U.S. and expect it to fly overseas. They have to adjust to prevailing market conditions" (Curan, 1998).

Gilbert Harrison, chairman of Financo, adds to this view,

> "Every company that has failed, failed because it refused to adapt to the cultural changes in one country as compared to another" (Curan, 1998).

To quote the title of Curan's (1998) article, "Going Global? Act Like a Local."

There are four strategic decisions in going global.

1) Does the firm want to grow by marketing in another country?
2) What markets (countries) have the most potential? What needs to be learned about these new markets? What is the best target market(s)?
3) How deeply does the firm want to get involved? This will determine the organizational arrangements (Table One & Figure One).
4) Solve the big problem by understanding and adjusting to local conditions (Table Two).

REFERENCES & READINGS

This section includes material that is not cited in this paper. It is material that some readers can use to look at global marketing mistakes. Robert Hartley's book it a classic in the literature of marketing blunders, both global and domestic. David Ricks' book concentrates on international mistakes, but it is a little out of date.

Ansoff, Igor (1965). *Corporate Strategy*, McGraw-Hill.

Beaton, Harold and Johnston, Steve (1998). *Foundations of International Marketing*, International Thomson Business Press.

Benezra, Karen (1997). Going Global: Pepsi Plots to make 'Globe' logo Ubiquitous in '98, *Brandweek*, November 3, p.1 (2).

Blodgett, Mark S. and Carlson, Patricia (1997). International Ethics Standards for Business: NAFTA, Cauz Principles and Corporate Codes of Ethics, *Review of Business*, Spring, p.20 (4).

Carpenter, Richard P. (1998). What They Meant to Say Was *The Boston Sunday Globe*, August 2, 1998.

Curan, Catherine (1998). Going Global? Act Like a Local, *WWD*, February 9, p.16 (3).

Drezen, Richard S. (1997). The Intrigue Egomania, and Business Blunders that Topple an American Icon, *Library Journal*, November 15, p.63 (1).

Duan, Mary (1997). When in Rome, Landing Deals Overseas Means Knowing the Culture, *The Business Journal*, November 10, p.25 (2).

Edelson, Sharon (1997). 3 Retailers Tell Panel Going Global Isn't Easy, *WWD*, September 10, p.20 (1).

Flikkema, Luanne (1998). Global marketing's myth: Differences don't (sic) matter, *Marketing News*, July 20, p.4.

Hardy, Eric S. (1997). Going Global, *Forbes*, July 28, p.178.

Hartley, Robert F. (1998). *Marketing Mistakes and Successes*. 7th Edition, John Wiley and Sons, Inc.

Hartmann, Jan E. (1997). Going International: How Do You Get There From Here? *Franchising World*, March/April, p.30 (4).

Hollstein, Brian R. (1998). Don't Do As The Romans Do, *Security Management*, February, p.56 (2).

Kemper, Cynthia L. (1998). Global Training's Critical Success Factors, *Training & Development*, February, p.35 (3).

Klausner, Ronald (1997). The Political, Cultural and Economic Hazards of Conducting Business Abroad: How to Collect Payment, *Los Angeles Business Journal*, July 28, p.47 (2).

Lowe, Kimberly D. (1997). Going Global; Operating a Restaurant in Familiar Territory is Tough Enough. Some Companies Raise the Stakes by Going Overseas, *Restaurants & Institutions*, November 1, p.65 (6).

Marco, Dale (1998). Doing Business Overseas: It's a whole new ballgame, *USA Today*, September.

McElroy, John (1998). Blunder of the Decade: Will Acura, Lexus and Infiniti Go Down As The Greatest Business Blunders of the 1990's, *Automotive Industries*, November, p.92 (1).

McQuaid, Kevin L. (1999). Overseas next target for outlets, *The Baltimore Sun*, September 15, p.C1.

Okumura, Earle and Robinson, Raymond G. (1997). Japan and the U.S.: A Winning Combination, *Los Angeles Business Journal*, July 28, p.47 (2).

Pachter, Barbara (1997). The Five Biggest Mistakes Americans make when Doing Business Abroad, *Agency Sales Magazine*, December, p.40 (2).

Rasmusson, Erika (1997). Beyond Miss Manners: The Importance of International Business Etiquette, *Sales and Marketing Management*, April, p.84 (1).

Ricks, David A. (1993). *Blunders in International Business*, Cambridge, Blackwell Publishers, Inc.

Snoddy, Raymond (1997). ITN's Acquisition may have Found Hidden Treasure, *Marketing*, December 4, p.12 (1).

Stedman, Craig and Vijayan, Jaikumar (1998). News: Going Global Forces Changes, *Computer World*, March 16, p.3 (1).

Tansey, Lori A. (1996). Taking Ethics Abroad, *Across the Board*, June, p.56 (2).

Wilterdink, Nico (1994). Images of National Character, *Society*, Nov-Dec. 1994, p.43 (9).

THE INFLUENCE OF CULTURAL DIFFERENCES ON CONSUMER BEHAVIOR IN GERMANY, THE UNITED STATES AND JAPAN.

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ABSTRACT

There are marked differences in the behavior of consumers in various advanced societies, including Germany, the United States and Japan, reflecting the uniqueness of the cultural context within which individual purchasing and other economic decisions are made. Practices, which are sanctioned in one country, may be absolutely forbidden or frowned upon in another. In other instances past experience may create a strong aversion to engaging in a particular activity such as investing in the stock market or purchasing of homes. The recent slow-down in the Japanese economy was aggravated by the unwillingness of Japanese consumers to increase their spending inspite of massive governmental intervention including the near elimination of interest rates, while the American economy boomed under the willingness of the American consumer to take on an ever-increasing debt. In Germany, consumer behavior has been strongly influenced by the recent transfer of money fromWest to East and the absence of the credit-card mentality of "buy now, pay later" which fueled the American economy.

The purpose of this paper will be a comparison of consumer behavior in Germany and the USA with tie-ins to consumer behavior in Japan. A sample of 50 consumers of two age cohorts in the German and American environment will be used as the basis for this study focusing mainly on consumer behavior regarding the coping with negative shopping experiences and complaints and the recourse open to the respective consumer in his cultural venue. Additionally, the study will focus on consumer attitudes towards the use of credit cards and in engaging in new forms of shopping via TV and the Internet.

THE LISTENING PROCESS: MEASURING LISTENING COMPETENCE

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ABSTRACT

A number of authors including most recently Halone, Wolvin & Coakley (1997), have conceptualized the listening process using a five dimensional model consisting of (1) cognitive, (2) affective, (3) behavioral/verbal, (4) behavioral/nonverbal, and (5) behavioral/interactive components. Initial research results using this conceptualization appear to offer significant understanding into the components of listening and its role in the communication process.

Because an understanding of the listening process would seem fundamental to a number of marketing activities related to advertising, professional selling, and direct marketing, further investigation, testing, and extension of this proposed model seemed warranted. That listening is a complex, multidimensional construct as posited recently by Witkins (1990), and by Halone et al (1998), there would seem to be little doubt.

The present research utilized the listening process conceptualization of Halone et al (1998) to identify competent listening practices of students in the nonverbal behavioral dimension. Castleberry and Shepherd suggest that a key to listening effectiveness is "attending to nonverbal signals, such as body language, facial expressions, and proxemics." Data were collected from 596 students in 13 undergraduate classes on a 13 item nonverbal behavioral response questionnaire using the scales proposed by Halone et al (1998). Results show significant differences in listening scores associated with students' year in school, work experience, and academic major.

INTRODUCTION

Listening is the process of receiving, constructing meaning from, and responding to verbal and/or nonverbal message components (International Listening Association, 1995). There is little doubt that listening effectively represents an important communication skill and as such has been widely studied both as personal communication listening skills (Raudseep, 1993; Robertson, 1994; Schramm and Wayne, 1993; Stull and LaBonty, 1993) and as listening skills of employees within corporate settings (McKenzie and Clark, 1995; Miles, 1994; Stitt-Gohdes, 1996; Wolvin and Coakley, 1992).

As important as this skill might be, many people are not aware that they may be poor listeners. Without any formal training in listening, the average person listens at a 25 percent efficiency level (Robertson, 1994). Further, Raudseep (1993) concluded that only about 10 percent of Americans listen properly. Steil (1980) determined that faulty listening costs American businesses at least $1 billion per year. This calculation was based on the estimate that each of America's over 100 million workers commits at least one $10 listening error each year. No doubt this total estimate is much higher today, given inflationary effects and a larger work force. Thus, training and development programs which enhance listening skills potentially represent an important cost saving investment, particularly as changes in the work environment will create a greater need for enhanced listening skills.

One of the earliest researchers in listening skills (Mehrabian, 1971) discovered that 93 percent of the total impact of a message comes from the nonverbal aspects, both vocal and visual, of a communication. Other studies in nonverbal communication have found that as much as 90 percent of the impact of messages is based on the nonverbal aspects (Robertson, 1994; Samovar and Porter, 1994). Reik (1972) referred to this concept as listening with the "third ear;" i.e., the eyes.

Becker (1995) interviewed 31 marketing executives from a variety of United States corporations. All expressed the belief that listening and language skills, including knowledge of nonverbal skills, are essential for organizational efficiency and personal success. Further, people are not usually satisfied when others simply tell them that they are listening; they want to see for themselves the evidence that listening is occurring (Cole 1991); that is, reacting to the message, eye contact, and attentiveness, for example.

An essential activity in the improvement of listening competence is training in nonverbal communication. But, to be effective, such training requires an understanding of the nonverbal behavioral aspects of the trainee. Thus, to demonstrate the relationship between listening ability and nonverbal behavior, the present research investigates two research questions: (1) Is there a significant relationship between the nonverbal listening component and the demographic variables year in school, work experience, and type of major? and (2) Does listening ability improve as academic class category changes from freshman to senior.

METHODOLOGY

Undergraduate business students at a large midwestern university were chosen as the subjects of the present research. They were thought to be representative of the more general student population and represent future employees of business firms. A total of 596 students were used in the study.

A questionnaire was designed based on the research of Wolvin, Coakley and Halone (1995). Thirteen items were selected to measure the nonverbal behavioral dimension of listening competence. Each item consisted of a statement about listening to which the subject responded using a 5-point scale: (1) almost always; (2) often; (3) occasionally; (4) seldom; and (5) never. An ANOVA procedure was used to test for significant differences among the responses.

RESULTS

Table 1 presents the overall average score of all respondents by class standing. These results show significantly different scores as students move from freshman to senior standing, indicating a significant improvement in the nonverbal dimension of listening competence.

Table 1
Year in School

Class Standing – Mean Scores					
Class			Mean		
Freshman			2.0225		
Sophomore			1.9981		
Junior			1.9630		
Senior			1.8310		
ANOVA – Behavioral Nonverbal Average					
	Sum Sq	df	Mean Sq	F	Sig
Between Groups	3.780	4	.945	4.186	.002
Within Groups	135.463	600	.226		
Total	139.244	604			

Full-time work experience was significant but inconsistent with the nonverbal behavioral dimension as presented in Table 2. However, all students, regardless of the amount of full time work experience reported higher levels of listening competence.

Table 2
Full Time Work Experience

Work Experience - Mean Scores					
Experience			Mean		
None			2.0652		
1-12 months			1.9152		
13-24 months			1.9902		
25-36 months			1.8497		
37+ months			1.8693		
ANOVA – Behavioral Nonverbal Average					
	Sum Sq	df	Mean Sq	F	Sig
Between Groups	2.732	4	.683	3.019	.018
Within Groups	130.548	577	.226		
Total	133.280	581			

Part-time work experience produced results similar to those of full-time work experience (Table 3). Students reported higher levels of listening competence if they had part-time work experience. Tables 2 and 3 together clearly show the positive effects of work experience on the nonverbal behavioral component of listening competence. This result has implications for approaches to business education which encourage students to gain work experiences either through employment or internship programs.

Table 3
Part Time Work Experience

Work Experience - Mean Scores					
Experience			Mean		
None			2.1464		
1-12 months			1.9217		
13-24 months			1.9492		
25-36 months			2.0082		
37+ months			1.8738		
ANOVA – Behavioral Nonverbal Average					
	Sum Sq	df	Mean Sq	F	Sig
Between Groups	2.752	4	.688	3.044	.017
Within Groups	129.304	572	.226		
Total	132.056	576			

Choice of major also had a significant impact on the nonverbal behavioral dimension of listening competence, perhaps because of differing amounts, nature, and importance given to the communication process in the area of study.

Table 4
Major Course of Study

Major - Mean Scores					
Major			Mean		
Marketing			1.8169		
Business Admin			1.8706		
Accounting			1.9366		
Finance			1.9537		
Management			1.9761		
Operations Mgmt & Info Systems			2.0332		
ANOVA – Behavioral Nonverbal Average					
	Sum Sq	df	Mean Sq	F	Sig
Between Groups	2.433	4	.608	2.812	.025
Within Groups	108.786	503	.216		
Total	111.219	507			

DISCUSSION

Listening competency is behavior that is "appropriate" and "effective". Appropriateness requires the understanding of the content of the interaction and does not violate conversational norms or rules. Competency is the successful adaptation to situations and the achievement of intended or desirable results through communication. A competency perspective may represent a productive approach for listening researchers and listening educators to further understanding of this complex behavior and develop meaningful measures of what the listener knows, does, and feels about listening (Wolvin and Coakley, 1994).

Listening competence may be as significant as reading skills or academic aptitude in college students' achievement and retention. In business it is important in both entry-level positions and in long term career competence and organizational success. Because of listening's importance to success, it may be one of the most essential skills a business student and manager can acquire. In contrast, colleges and universities have devoted much less time and effort to building listening skills than have business and industry. Certainly, the business community is looking to higher education to address listening competency skills in college graduates.

Marketing relies heavily on communication skills, and listening in particular is critical to several marketing areas (cost, et al 1992). According to Weitz, et.al (1998), 50 percent of the information people acquire in face-to-face communication comes from nonverbal behavior.

This study surveyed 596 college of business students from freshman to senior. A 13 item scale adapted from Halone et al (1998) was used to measure the nonverbal behavior dimension of listening. Results showed significant differences in listening competency associated with the areas of (1) year in school, (2) full-time work experience, (3) part-time work experience, and (4) major.

In general, achievement of higher scores on the nonverbal behavioral dimension of the listening competency scale require a sensitivity to nonverbal signals. Students' self reported listening competencies in nonverbal responses (e.g., body, eyes, face, etc.) increased from freshman level to senior level. This result could indicate increased empathy and desire to relate to others as students move through their academic degree program.

A significant finding from the study was the positive impact of work experience with the nonverbal behavioral dimension. Findings support the relevance of work with students' nonverbal listening behavior. Perhaps with work experience students learn to "read" others and adapt more effectively. This result would certainly support and encourage the increased use of internship experiences to improve listening competency.

Findings from the study also seem to support curricular improvement efforts designed to place increased emphasis on integrating communications skills into business curricula over the past several years. It appears that students, as self-reported, are benefiting from this increased emphasis with their nonverbal listening competence. It may be that faculty are both teaching and role modeling these behaviors in interactions in and outside the classroom to the benefit of students.

An ability to effectively practice nonverbal listening skills is universally beneficial. Through appropriate eye contact, body language, and facial expressions, a listener can encourage a friend, co-worker, or client to openly communicate. Nonverbal behaviors, when done effectively, suggest openness and trust on the part of the communicator and often lead to enhanced relationships. Certainly marketing educators and practitioners value those outcomes.

REFERENCES

Becker (1995). "Listening Across Cultures: An Exploratory Study of Perceived Training Needs Among a Group of Internet Executives." Unpublished doctoral dissertation, The Union Institute, 1995, *ProQuest-Dissertation Abstracts International*, Volume Fifty-six, Number Three, 1028A, AAC 9522948.

Castleberry and Shepherd (1993). "Effective Interpersonal Listening and Personal Selling." *Journal of Personal Selling & Sales Management*, Volume 13, Winter, 35-49.

Cole (1991). "Paying Attention Pays Off." *Working Mother*, Volume Fourteen, March, 34-37.

Cost, Bishop & Anderson (1992). "Effective Listening: Teaching Students a Critical Marketing Skill." *Journal of Marketing Education*, Spring, 41-45.

Halone, Wolvin & Coakley (1997). "Accounts of Effective Listening Across the Life Span: Expectations and Experiences Associated with Competent Listening Practices." *International Journal of Listening*, Volume Eleven, 15-38.

Halone et al (1998). "Contextual Characteristics Influencing the Listening Process: Implications for the Measurement of Listening Competence." *Listening Dimensions*, Kansas City, MO: Annual Convention of the Annual Listening Association, 1-33.

International Listening Association (1995). "A ILA Definition of Listening." *ILA Listening Post*, Volume Fifty-three, April, 1-4.

McKenzie and Clark (1995). "The All-in-One Concept: How Much Must Listening Research Include?" *International Journal of Listening*, Volume Nine, 29-43.

Mehrabian (1971). *Silent Messages*, Belmont, CA: Wadsworth.

Miles, (1994). "Preparing Students for a Changing Work World." In A McEntee (Ed.), *Expanding Horizons in Business Education Yearbook*, Reston, VA: National Business Education, Number 32, 66-80.

Raudseep (1993). "Listening Lessons: Poor Listening Habits Cost Qualified MBAs Job Offers and Promotions." *Minority MBA*, 36-39.

Reik (1972). *Listening with the Third Ear*, New York: Pyramid Publications.

Robertson, (1994). *Listening for Success: A Guide to Effective Listening*, Burr Ridge, IL: Irwin Professional Publishing.

Samovar and Porter (1994). *Intercultural Communication: A Reader*, Seventh Edition, Belmont, CA Wadsworth.

Schramm and Wayne (1993). "Can Listening Skills Be Taught in Business Communication Classes?" *NABTE Review*, Volume Twenty, 25-32.

Steil (1980). "Secrets of Being a Better Listener." *U.S. News & World Report*, Volume Eighty-eight, 65-66.

Stitt-Gohdes (1996). "Business and Industry Need Qualified Workers." In H.R. Perreault (Ed.), *Classroom Strategies: The Methodology of Business Education, National Business Education Yearbook*, Reston, VA National Business Education Association, 1-9.

Stull and LaBonty (1993). "Teaching Interpersonal Skills in Entrepreneurship." *Business Education Forum*, Volume Forth-seven, Number Three, 10-12.

Weitz, Castleberry & Tanner (1998). *Selling: Building Partnerships*, Third Edition, Burr Ridge, IL: Irwin-McGraw Hill.

Witkins (1990). "Listening Theory and Research: The State of the Art." *Journal of the International Listening Association*, Volume Four, 7-32.

Wolvin and Coakley (1992). *Listening*, Fourth Edition, Dubuque, IA: William C. Brown Publishers.

Wolvin and Coakley (1994). "Listening Competency." *Journal of the International Listening Association*, Volume Eight, 148-160.

Wolvin, Coakley and Halone (1995). "A Preliminary Look at Listening Development Across the Life Span." *International Journal of Listening*, Volume Nine, 62-83.

APPENDIX A

LISTENING SURVEY

I encourage the speaker to talk by looking at him/her.
I refrain from doodling and drawing pictures while I am listening.
I avoid doing personal grooming chores (picking hangnails, cleaning eyeglasses, etc.) while I am listening.
I encourage the speaker to talk by maintaining an "open" body posture.
While someone is talking to me, I refrain from engaging in some other task (such as reading, watching television, etc.)
I refrain from wearing a judgmental/evaluative/critical face while I am listening.
I vary my note taking style according to the speaker's style of presenting and according to my need to take notes.
I avoid walking away from a speaker while he/she is speaking to me.
I avoid faking attention to a speaker.
I am aware of the nonverbal responses (vocal, body, facial, etc.) that I send while I am listening.
I recognize and "read" the speaker's nonverbal cues.
I write down important points when I am listening to an oral presentation.

THE MAIN STREET PROGRAM AND ITS IMPACT ON DOWNTOWN RETAILING

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ABSTRACT

In an effort to change both the reality and perception of downtown, in early 1999 the citizens and merchants of Cape Girardeau, Missouri formed a committee to explore the benefits of enacting the Main Street Approach to downtown revitalization. The Main Street program comprises a multi-faceted approach aimed at utilizing a community's historic built environment as the cornerstone for promoting economic revitalization. By identifying a community's assets, including its historic buildings, and coordinating its promotion and design activities, the Main Street approach allows downtown business districts to compete more successfully with malls and strip shopping centers. As the committee was being formed it became clear that involving as broad a spectrum of the community as possible would be key to the success of the program. In an attempt to both assess the needs of the downtown and broaden support for the program, the Main Street Steering Committee commissioned Southeast Missouri State University to conduct a study of residents' attitudes toward shopping in the various shopping districts of the city, and their feelings about the historic building fabric downtown and its preservation. This paper details the modifications of the standard business survey instrument to meet the needs of Cape Girardeau's Main Street Steering Committee, and reports the survey's assessment of the strengths and weaknesses of existing businesses and the community's attitudes toward preservation of the city's historic built environment.

INTRODUCTION

In 1977, the National Trust for historic preservation developed a program designed to promote the economic redevelopment of the business districts of American small towns, which had been in decline since the 1950s and 60s. The Main Street program comprises a multi-faceted approach aimed at utilizing a community's historic built environment as the cornerstone for promoting economic revitalization. By identifying a community's assets, including its historic buildings, and coordinating its promotion and design activities, the Main Street approach allows downtown business districts to compete more successfully with malls and strip shopping centers. Assessing the needs of the downtown businesses as well as the community's perceptions of downtown business and historic preservation is, as outlined in this study, an important first step in the establishment of any successful downtown revitalization effort. Using the experience of Cape Girardeau, Missouri, this paper details the modifications of the standard business survey instrument to meet the needs of Cape Girardeau's Main Street Steering Committee, and reports the survey's assessment of the strengths and weaknesses of existing businesses and the community's attitudes toward preservation of the city's historic built environment.

MAIN STREET

Established in 1977 as a pilot program involving three communities, the Main Street program has grown into a national and international success. Kennedy Lawson Smith, Director of the National Main Street Center, reported that by 1995 "almost 1,100 towns and cities in 40 states and the Commonwealth of Puerto Rico . . . launched local Main Street programs." Smith also noted that Main Street served as a model for downtown revitalization programs in Canada, Venezuela, the United Kingdom, Australia and New Zealand (Smith, 1995, p. 51). In its pilot program, the National Trust provided the three communities they selected (Galesburg, Illinois; Madison, Indiana; and Hot Springs, South Dakota) with architectural and economic consultants who assessed the strengths and weaknesses of each community's downtown district, and recommended appropriate changes to stimulate economic revitalization. The Trust hired full-time managers for each community to coordinate promotion and redevelopment activities. Acting as "catalysts for change," these program managers helped work out the basic guidelines of the Main Street Approach (National Trust for Historic Preservation, n.d.). Based on the pilot project's success, the National Trust established the National Main Street Center to promote the idea and disseminate information about how to make it work. Initially restricted to cities and towns under 50,000 in population, the Main Street Center launched a program to include cities with populations larger than 50,000, and in 1988 expanded it to include both neighborhood districts in very large cities and very small towns with populations under 5,000 (National Trust for Historic Preservation, n.d.). Today, communities as varied as Clarkesville, Missouri, population 480, and the City of Boston, which began with 10 neighborhood commercial centers in 1995 and hopes to ultimately involve up to 20 separate districts, have signed on to the Main Street Approach (Menino, 1995).

The basic guidelines of the Main Street Approach were worked out in the initial three-city pilot project, and refined in the subsequent six-state, thirty-city expansion begun in 1980. The pilot project established the fundamental importance of having "a strong public-private partnership, a committed organization, a full-time program manager, a commitment to good design, quality promotional programs and a coordinated, incremental process" (National Trust for Historic Preservation, n.d., p. 2). In expanding the pilot program, the Main Street Center realized the importance of establishing state coordinators who could help develop networks, mobilize resources, coordinate state efforts, and share experiences. Another key change involved having the communities hire their own full-time staff so they could be stronger advocates for their communities.

The continued success of the Main Street Approach lies in its ability to promote positive economic change in the communities that adopt it. During the three years of the initial pilot project, significant economic advances occurred. The National Main Street Center reports that "seven new businesses opened in Hot Springs, six in Madison and thirty in Galesburg. Sales tax revenues increased by 25 percent in Hot Springs, while the downtown occupancy rate in Galesburg rose to 95 percent." In addition, and perhaps more importantly, for every dollar spent on developing and running the Main Street program, the private sector invested approximately $11 dollars in rehabilitation and adaptive-use projects (National Trust for Historic Preservation, n.d.). Over the long term the results are even more impressive. Kennedy Smith reports that nationally, by 1993, "every dollar a participating community spent to manage its local Main Street program was leveraging an average of more than $25 in new investment" in physical improvements. According to Smith, when you factor in increases in property values, retail sales, wages, jobs, etc., the "actual average reinvestment ratio tops $60+ for every local administrative dollar" (Smith, 1995, p. 52). In Missouri's participating downtowns alone, over 500 new businesses and 1,500 jobs have been created since the program began in 1989. In addition, these towns have also seen 465 building renovations and over $56,000,000 in local reinvestment (Missouri Department of Economic Development, n.d.).

MAIN STREET'S FOUR POINT APPROACH

The Main Street Approach focuses on four fundamental areas: economic restructuring, design, promotion and organization. Most successful Main Street programs focus on all four areas simultaneously, and have committees devoted to pursuing the goals of each.

Economic restructuring involves rethinking the purpose and function of downtown so that it can respond to today's changing markets. Gone are the days when downtown met all of one's shopping needs, but downtown businesses can be restructured to fill shopping needs left unmet by regional shopping malls and big box store discounters. By helping successful businesses expand, and recruiting appropriate new businesses, Main Street programs help convert empty storefronts and second floors to productive uses. Although many business owners believe economic restructuring is the most important aspect of Main Street, successful programs pursue all four goals equally (National Main Street Center, n.d., a).

Main Street's emphasis on design, and its commitment to preserving the historic built environment as part of downtown's overall distinctiveness, is what sets the Main Street Approach apart from other economic redevelopment efforts. Helping to call attention to the historic quality of downtown buildings and promoting the improvement and rehabilitation of historic properties are key aspects of improving downtown's image. In addition, other improvements can also make downtown a more inviting place, such as street lights, window displays, signage, parking and street furniture. Successfully getting the downtown in top physical shape can help lay the foundation for building success in the other areas that comprise the four-point approach (National Main Street Center, n.d., a).

Old attitudes do not disappear overnight. Changing people's image of downtown involves more than improving storefronts and adding more parking. Downtown needs to be sold, and Main Streets' Promotion committees are the mechanisms whereby this occurs. The Promotion Committee Members *Handbook* suggests that "by focusing attention on downtown's best assets and potential," longstanding, and generally unfavorable, community attitudes can be changed. Furthermore, successful promotion of the historic downtown district can help restore downtown as the center of community life, and as such, turn the downtown business district into a vibrant and exciting place that attracts investors and shoppers alike. In addition to these very important goals, however, promoting downtown through the Main Street program can build a unified image of a shopping district that fills a specific market niche for products and activity (National Main Street Center, n.d., a).

Much of the material produced by the National Main Street Center stresses that "organization is the key to a successful downtown revitalization effort" (National Main Street Center, n.d., b). Ensuring that the local organization is strong and committed, and enjoys broad-based support, is an important aspect of successful downtown revitalization. Full-time management and volunteer-based committees provide the backbone of the organization, and a clear work plan based on all four points of the Main Street Approach facilitates strong public-private partnerships. Successful organization means that everyone is working for the same general goals, and all the people or groups that have an economic stake in the economic vitality of the downtown are included (National Main Street Center, n.d., b).

In addition to the four points discussed above, successful Main Street programs also incorporate the following eight principles. Mostly these principles are designed to keep the organization focused, but they are useful to review in order to better understand the nature of the Main Street program. The first two principles indicate that the revitalization effort must be *comprehensive* and *incremental*. Being comprehensive ensures the long-term success of the program because efforts must extend beyond a single project or set of projects. But because success cannot come overnight, regardless of peoples' expectations, and because often success in smaller projects will spur success in larger ones, the notion that change will come incrementally is an important principle to remember (Missouri Department of Economic Development, n.d.; National Main Street Center, n.d., a).

The next two principles suggest that successful Main Street programs involve *self-help* and *public/private partnerships*. The National Main Street Center and the various state program officers can provide support and direction, but successfully revitalizing a particular downtown requires that the people of that town have the desire and will to succeed. But since both the public and private sectors have a

vested interest in the economic viability of the downtown district, each sector has a role to play. Working in a partnership under the umbrella of Main Street will enable each to be more successful than they could acting alone (Missouri Department of Economic Development, n.d.**;** National Main Street Center, n.d., a). Perhaps one of the key guiding principles, and the one that sets Main Street apart from other revitalization efforts, is the emphasis on *identifying and capitalizing on existing assets*. For most downtowns, this refers to the unique environment created by the collection of historic buildings and streetscapes. Downtown districts built during the early-twentieth century and before tend to offer a more pedestrian-friendly and welcoming environment than do business buildings built with the automobile in mind. These historic resources, and the unique shopping environment they offer, lie at the core of all of Main Street's revitalization efforts (Missouri Department of Economic Development, n.d.; National Main Street Center, n.d., a).

The last three principles suggest Main Street organizations, and the programs they offer, need to reflect *quality*, be *implementation-oriented*, and recognize both the need for and inevitability of *change*. Part of the reason downtowns declined in the 1960s and 70s is because of a perceived decline in quality, both of the physical environment and of the goods and services offered. Reversing these perceptions requires emphasizing the genuine quality of the buildings (they really don't build them like they used to anymore), the goods and services offered by today's businesses, and the organization and its programs. Keeping the organization implementation-oriented ensures people see that something is being done are more willing to lend a hand. Witnessing the small changes that occur downtown, and realizing changes in both attitudes and practices are necessary to improve economic conditions, can help public support grow as the program itself grows. Following these eight principles in enacting the four points of the Main Street Approach has helped over 1,000 communities across the United States improve their economies and revitalize their downtowns (Missouri Department of Economic Development, n.d.; National Main Street Center, n.d., a).

RETAILING TRENDS

The Main Street Program has a proven track record of addressing retailers' concerns in downtown areas: low store traffic; diminishing sales trends; lack of cultural and entertainment attractions in the downtown area; and an overall poor image associated with the downtown area. Downtown merchants are not alone in resolving retailing patronage issues. Recent trends indicate that mall patronage is declining. Wakefield and Baker (1998) report three reasons for this decline, based on information from the shopping center industry. First, there are numerous malls that offer much of the same merchandise, with few distinguishing merchandise. Second, more consumers feel time-pressed, making fewer trips to the mall. When consumers shop, they seek to maximize their shopping time (Ashley 1997). The third reason relates to a finding that fewer consumers enjoy the experience.

Despite these problems with retail center patronage, there are success stories. Ashley (1997) indicates that even though consumers' lives are more time-pressed, they will find the time to engage in activities they enjoy. Furthermore, they will drive past weaker malls to reach destinations that have the best variety of stores and merchandise. Mall developers strive to entice customers by creating an exciting mix of shopping and entertainment activities. Similarly, those involved in the revitalization of downtown shopping areas desire to obtain an attractive mix of stores, merchandise, entertainment and cultural experiences to better attract customers.

The concept of experiential consumption may be valuable in understanding the factors which consumers feel are necessary to improve a downtown's offerings. "In the context of consumer habitats, a location may itself be a source of pleasurable experiences consumed by visitors" (Bloch, Ridgway, and Dawson, 1994, pg. 25). The physical habitat itself (downtown) may reflect the experiential consumption desires apart from merchandise-focused activities. In their study of consumption benefits pertaining to malls, Bloch, Ridgway, and Dawson (1994) found a variety of perceived benefits that motivate consumer presence in mall habitats: aesthetics (an appreciation of the physical design or appearance of the mall); escape (relief from boredom and an escape from routine); exploration (desires for variety or novelty in exploring products or stores); flow experiences (pleasurably absorbed so as to lose track of time);

knowledge gains (receipt of information about new stores and new products); and social (opportunities to talk to and socialize with others).

Parallels can be drawn to the consumer habitat of the downtown shopping district. The concept of aesthetics includes the maintenance and preservation of historical buildings often found in downtowns. In addition, the natural environment of the downtown (the green-space, the scenery of the area) should be a motivating factor drawing consumers to the area. Many downtown revitalization efforts have tried to create excitement in the downtown area by creating special events, with a focus on entertainment and cultural experiences. This effort would be consistent with the motivating factors of escape, flow experiences and social dimensions. Efforts to improve the tenant variety (stores, dining and related services) in the downtown area would address the remaining factors of exploration and knowledge gains.

The concept of excitement in a shopping location was studied by Wakefield and Baker (1998). Excitement had a significant positive effect on desire to stay at the mall, which was the type of shopping center studied. The results of their study suggests that an exciting shopping environment is more likely to generate repeat patronage and become a part of the customer's shopping routine. The opposite would be true of low excitement levels. Factors which were found to have an influence on excitement were tenant variety (food service, stores, and entertainment), involvement with shopping, and physical environment (ambience, interior design and décor, and layout). Leaders in downtown revitalization efforts similarly focus on improvements to tenant variety and physical environment in order to alter emotional states toward downtown as a shopping area.

In an effort to change both the reality and perception of downtown, in early 1999 the citizens and merchants of Cape Girardeau, Missouri formed a committee to explore the benefits of enacting the Main Street Approach. As the committee was being formed it became clear that involving as broad a spectrum of the community as possible would be key to the success of the program. In an attempt to both assess the needs of the downtown and broaden support for the program, the Main Street Steering Committee commissioned Southeast Missouri State University to conduct a study of residents attitudes toward shopping in the various shopping districts of the city, and their feelings about the historic building fabric downtown and its preservation.

METHODOLOGY

The research design consisted of "intercept" interviews (personal interviews at shopping districts), a non-probability technique. The intercept interviews were conducted in the major shopping districts of Cape Girardeau, Missouri: Downtown, a major strip center and a regional mall. This technique was selected due to the desire to interview "shoppers" and the need to show participants a map of the shopping areas being discussed during the interview process.

The questionnaire for the intercept interviews was based on typical customer satisfaction measures and shopping center characteristics (Shim and Eastlick,1998 and Bellenger, Robertson, & Greenburg, 1977). The instrument was pretested on a subset of subjects and then revised prior to the final interview procedure. Students in a marketing research class underwent three hours of training on the interview process as well as on-going monitoring by the professor during the entire research process. In order to obtain a sample which was representative of the Cape Girardeau adult population, age and gender quotas were given to the interviewers, a technique typically used in intercept interviews. Store coupons were given to those agreeing to be interviewed as a sign of appreciation for their participation.

Student interviewers (21) completed 310 surveys of individuals who had been to downtown at least once during the past year. Excluded from the interviews were retailers and employees of any retailers in the shopping districts in this study. Also excluded were those less than 18 years of age. The interview period was from April 6-18, 1999, covering all days of the week and all day parts (10:00 AM to 8:00 PM) at multiple locations for each of the three shopping areas (Downtown with 23% of responses; the strip center with 31% of the responses; and the regional mall with 46% of the responses).

The study's sample was representative of the population characteristics of Cape Girardeau County with a few noted exceptions. The study had a slightly greater proportion of females (58% in the study as compared to 52% in the 1990 Census). The project had more affluent demographics (29% in the $50,000 annual family income level and up as compared to 23% in this category noted in the 1998 Survey

of Buying Power, Sales and Marketing Management Magazine). Additionally, the study had a higher percentage in the 18-34 age group (57% in the study versus 31% in the 1990 Census).

RESULTS

Participants in the survey research project were asked to identify the major strengths of the downtown area and rank them in priority order. Items ranked as being first in priority order included the following: seeing the Mississippi River (18.7%); dining (14.8%); atmosphere (12.9%); nightlife (11.9%); history of the buildings and area (10.6%) and variety of shops (10.0%). When these open-ended responses were combined across all respondents' rankings, topics involving the river, scenery and the general atmosphere were mentioned by 27.1% of the respondents. Shopping topics were addressed by 15.1% of the respondents. Similarly, 15% of the respondents mentioned architecture or historical buildings of the downtown area. Topics on dining received a 13.4% response rate and entertainment/nightlife was addressed by 12.2% of the respondents.

A four-point scale of importance (not important, somewhat important, very important and essential) was used to assess how important respondents felt particular services and historic preservation were for Downtown Cape Girardeau. The historic preservation questions received the highest ratings of importance. Thirty-seven percent of respondents rated "maintaining the distinctive architecture from the past" as "essential," followed closely by an "essential" rating for the "preservation of historic buildings" by 36% of the respondents. "Adding more fixtures and décor which build on the historic identity of downtown" was rated as "essential" by 22% of the survey participants. The combined ratings of the top two importance levels (essential and very important) yielded the following percentages of responses across all respondents: preservation of historic buildings = 81%; maintaining the distinctive architecture from the past = 82%; and adding more fixtures and décor which build on the historic identity of downtown = 70%.

Historic Preservation Concept	Essential	Very Important	Somewhat Important	Not Important
Maintaining the distinctive architecture from the past	36.5%	45.8%	14.8%	2.9%
Preservation of historic buildings	35.5%	45.5%	14.8%	4.2%
Adding more fixtures and décor which build on the historic identity of downtown	21.6%	48.4%	25.5%	4.5%

Base = 310 respondents

A chi-square test for determining whether a significant relationship existed between any of the demographic variables and any of the historic preservation concepts was applied. A significant relationship (95% level) was found between the age of respondents and importance of maintenance of distinctive architecture from the past. Greater percentages of the age categories of 65 and above (96.7%) and 45-64 (92.6%) believed historical architecture is important (combination of "essential" and "very important" as compared to the younger age categories: 18-24 (78.6%) and 25-44 (75%). Another significant relationship (95% level) was found between respondents having children at home or not and the importance of the preservation of historic buildings. A greater percentage of those with children at home (87.8%) believed the preservation of historic buildings to be important (combination of "essential" and "very important") as compared to those without children in the home (78.2%).

A comparative analysis was used to determine how well the Downtown area met key customer satisfaction ratings relative to the other two major shopping districts in the community, a strip center and a regional mall. Respondents were asked to rate each shopping district on a variety of categories using the rating scale of one being "very dissatisfied" and five as "very satisfied." The results of this comparison

revealed that Downtown had higher ratings (using a comparison of both mean ratings and "top box" ratings—combination of "somewhat satisfied" and "very satisfied") than the other two shopping districts on the features of "variety of food/dining choices," "special events and activities," and "types of entertainment." "Customer service" of Downtown received a slightly higher mean rating than the other two areas, but the top box rating was lower than that of the mall. Downtown was rated higher than the strip center in the areas of "attractiveness of window displays" and "shopping atmosphere." Downtown had lower satisfaction ratings than the strip center and the mall in the following areas: variety of stores; parking convenience; shopping hours; up-to-date merchandise; quality of products and services; safety of parking and shopping areas; and value for money spent.

An analysis of derived importance of attributes and satisfaction levels of consumers was conducted to diagnose the direction leaders in Downtown could take to improve its performance.

Primary Areas to Maintain: (Consumers have expressed high levels of satisfaction and high importance for each of these areas. These are areas Downtown is doing well relative to expectations and should continue to maintain.) These areas include shopping atmosphere (including capitalizing of the River and Historical dimensions); cleanliness and maintenance; and window displays.

Secondary Areas to Maintain: (Consumers have expressed high levels of satisfaction and low importance for each of these areas. Downtown is sufficiently addressing these areas to meet expectations and should continue to maintain, but perhaps place secondary importance on these areas in their strategies.). These areas involve customer service; dining (variety of food choices); types of entertainment choices; and special events and activities.

Secondary Opportunity Areas: (Respondent consumers have expressed lower satisfaction levels and lower importance associated with these areas. Attributes within this category represent areas in which Downtown is not performing well, and which are also lower in priority for improvement strategies.). These areas comprise value for money spent and safety.

Primary Opportunity Areas: (These are attributes which are highly important to customers yet satisfaction with these attributes is lower. The Downtown area should concentrate on these areas to improve performance in order to increase overall satisfaction.). These areas include variety of stores; parking convenience; shopping hours; quality of products and services; and up-to-date merchandise.

CONCLUSIONS

The survey results support the notion that the preservation of historic buildings in a downtown area is an effective economic development strategy. In this study customers of the community placed a high level of importance on historic preservation dimensions in their downtown. The Main Street approach emphasizes that the rehabilitation of historic properties leads to an improvement of the downtown image and furthermore to its economic revitalization.

The results of the study also support the concept of the downtown area as an experience to be consumed. The consumption experience of a downtown should be focused on its uniqueness, rather than the replication of a mall environment. Customers in this study enjoyed the historic atmosphere of the downtown area and its natural environment since it was adjacent to the Mississippi River. The desirability of shopping, dining, sightseeing and socializing in the atmosphere of the downtown area were found to be appealing to respondents. However, this study also highlights areas for improvement that are typical of downtown centers: safety; variety of stores; parking convenience; more convenient shopping hours; and image of the product offerings (quality and latest styles).

The Four-Point Approach of the Main Street Program provides a framework for maintaining and improving this downtown area as well as others. The Main Street approach has been formalized in Cape Girardeau, Missouri by the creation of four committees to address issues in economic restructuring, design, promotion and organization. The four committees are now equipped with vital information about customers' perceptions of downtown's strengths and weaknesses in order to implement necessary changes to the area.

REFERENCES

Ashley, Barbara (1997). "Are Malls in America's Future?" *Arthur Andersen Retailing Issuer Letter*, 9 (6), Texas A & M University Center for Retailing Studies.

Bellenger, Danny, Dan Robertson and Barnett Greenberg (1977). "Shopping Center Patronage Motives." *Journal of Retailing*, Volume 53, Number 2, 29-40.

Bloch, Peter, Nancy Ridgway, and Scott Dawson (1994). "The Shopping Mall as Consumer Habitat." *Journal of Retailing*, Volume 70, Number 1, 23-40.

Menino, Thomas (1995). "Boston and the Main Street Program," *Historic Preservation Forum*, Spring, 47.

Missouri Department of Economic Development, (n.d.) *Missouri Main Street Program.*

National Main Street Center (n.d., a), *Main Street Committee Members Handbook* (National Trust for Historic Preservation), 2-4.

National Main Street Center (n.d., b), *Main Street Guidelines: Board Members' Handbook* (National Trust for Historic Preservation), 1.

National Trust for Historic Preservation (n.d.), *The Main Street Approach to Downtown Revitalization*.

Shim, Soyeon and Mary Ann Eastlick (1998). "The Hierarchical Influence of Personal Values on Mall Shopping Attitude and Behavior," *Journal of Retailing*, Volume 74, Number 1, 139-160.

Smith, Kennedy Lawson (1995). "Main Street at 15," *Historic Preservation Forum*, Spring, 51-52.

Wakefield, Kirk and Julie Baker (1998). "Excitement at the Mall: Determinants and Effects on Shopping Response." *Journal of Retailing*, Volume 74, Number 4, 515-539.

THE ROLE OF ETHICS IN MAINTAINING CUSTOMER LOYALTY

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ABSTRACT

Marketing theorists and practitioners alike have become highly focused on the issue of relationship marketing and the importance of retaining a loyal customer base. The present study examines the sensitivity of customer loyalty to changes in the ethical behavior of an organization, which was in this case a not-for-profit public radio station. A representative sample was selected from a list of all current (fee-paying) member-supporters of a large metropolitan public radio station, using probabilistic sampling techniques. In a telephone interview, member-supporters were asked questions designed to ascertain customer loyalty by measuring their likelihood to renew their membership under current conditions as compared with different hypothetical conditions in which the ethical behavior of the radio station changes. The results showed that even very loyal and satisfied customers would significantly (<.001) lower their likelihood to renew their membership if the radio station should allow a company that has engaged in some unethical practices to become a sponsor or underwriter of the station. If the radio station should allow a company to become a sponsor and that company behaves ethically but supports a cause with which the member does not agree, the member's likelihood to renew still dropped significantly (<.001). In light of these findings, the sensitivity and vulnerability of customer loyalty to an organization's ethical standards will be discussed.

INTRODUCTION

The value of relationship marketing and the importance of retaining a loyal customer base have become matters of central concern to marketing theorists and practitioners alike. In relationship marketing, the marketer focuses on building long-term relationships with the target customers, who are encouraged (through a variety of incentives) to continue their involvement with the marketer and to develop loyalty to the product (Kotler & Andreasen, 1996). Customer loyalty is a multidimensional concept that includes not only past purchasing behavior and purchasing intentions, but also the customer's attitudes and value system. Loyalty to certain products can be intimately connected to a customer's value system and self-concept (Sudharshan, 1995). Indeed, the more intimately connected it is, the more stable the customer loyalty, because changing an attitude towards the product would involve changing a number of other beliefs and attitudes that the customer holds about him or herself.

The present study examines the stability of customer loyalty and its sensitivity to changes in the ethical behavior of an organization, which was in this case a not-for-profit public radio station. Customer loyalty to non-profit organizations can be very strong because of the way such organizations and their causes tend to be linked to a customer's value system and self-concept. We tested the strength and vulnerability of customer loyalty to a non-profit organization when the organization's ethical standards change and could become a matter of concern.

METHODOLOGY

Respondents were selected from a comprehensive list of all current member-supporters of a public radio station broadcasting in a large metropolitan area of the Eastern U.S. Each member became listed after voluntarily paying the yearly subscriber fee. Respondents for this study were chosen from the complete list of members on the basis of a probabilistic sampling technique known as systematic sampling. A total of 148 respondents participated in the study.

The radio station members were contacted by telephone, and were interviewed by MBA students from a marketing research class. The interview lasted approximately 10-15 minutes, and consisted of 40 questions. Two different measures of the members' satisfaction levels were taken. In addition, several questions were designed to ascertain customer loyalty by measuring the members' likelihood to renew their membership under current conditions as compared with different hypothetical conditions in which the ethical behavior of the radio station changes. The hypothetical circumstances proposed were meant to test the vulnerability and sensitivity of customer loyalty to questions of ethics.

In order to obtain a baseline measure of customer loyalty, we asked the respondents: "How likely are you to renew your membership?" The respondents used a five-point scale to respond, with choices ranging from "Very Likely" to "Likely", "Neutral", "Unlikely" and "Very Unlikely". Later, to measure the sensitivity of their loyalty to matters of ethics, they were asked to use the same five-point scale to rate their likelihood to renew their membership "if a company or organization that you believe has engaged in some *unethical* practices becomes an underwriter of this radio station". In a second hypothetical scenario, the members were asked their likelihood to renew "if a company that you believe behaves *ethically* but supports a cause you do not agree with, were to become an underwriter of this radio station". Responses to these three questions were compared and the results are presented in the next section.

Demographic information was collected for the entire sample, covering the education, income, age, and gender of respondents, as well as other background information. There was a nearly even break in the number of male and female respondents. The sample proved to be a highly educated one, with over 80% of respondents having earned a college degree. The income of 28% of respondents was under $50,000, another 20% of the sample reported incomes between $50,000 and $75,000, and 20% reported incomes above $75,000. (Seven percent of the sample declined to answer the income question.)

RESULTS

Two different measures of satisfaction of the radio station members were taken, and both concurred in finding the members to be highly satisfied. Specifically, when asked to rate the way the station has treated its members, over 75% said they were either "satisfied" or "very satisfied" (the top two levels of satisfaction on a five-point scale). Similarly, when asked to rate the way the station has used its revenues from membership fees, over 80% stated they were either "satisfied" or "very satisfied". Taken together, these results suggest a highly satisfied group of customers.

As an indication of customer loyalty, we took a baseline measure of the respondents' likelihood to renew their yearly membership. The results revealed an extremely high level of customer loyalty, with 62% reporting they were "very likely" and another 22% reporting they were "likely" to renew (see Table 1 below). These results, combined with the responses to the two questions above regarding customer satisfaction, suggest clearly that the radio station membership is exceedingly satisfied and plans to continue its relationship with the station into the future.

After establishing a baseline for likelihood to renew, we posed two hypothetical scenarios (as mentioned in the methodology section) to see how customer loyalty (operationalized as "likelihood to renew") might be affected. When asked to rate their likelihood to renew "if a company that you believe behaves ethically but supports a cause you do not agree with, were to become an underwriter of this radio station", the members' likelihood to renew dropped considerably from the baseline measure. Indeed, only 21% reported they would be "very likely" and 30% "likely" to renew. This drop from the baseline measure proved to be statistically significant (=142.2, <.001; see Table 1).

TABLE 1

Likelihood to Renew Membership under Current Conditions, When the Radio Station Accepts an Ethical but Disagreeable Underwriter, and When the Radio Station Accepts an Unethical Underwriter

LIKELIHOOD TO RENEW

	Very Likely	Likely	Neutral	Unlikely	Very Unlikely
Current conditions	62%	24%	7%	2%	5%
Disagreeable underwriter	21%	30%	23%	11%	16%
Unethical underwriter	14%	20%	22%	15%	29%

In the other scenario, we asked the respondents to use a five-point scale to rate their likelihood to renew "if a company or organization that you believe has engaged in some *unethical* practices becomes an underwriter of this radio station". The likelihood to renew dropped precipitously from the baseline, with only 14% reporting they would be "very likely" and 20% reporting they would be "likely" to renew. This fall from baseline levels of likelihood to renew also proved to be highly significant (=342.7, <.001). Finally, when the levels of likelihood to renew under the two hypothetical circumstances were compared with each other, the differences also were found to be highly significant (=19.9, <.001; see Table 1 below).

DISCUSSION

The results of the current study strongly demonstrate just how tenuous customer loyalty can be, and the important role that an organization's ethical behavior can play in destabilizing that loyalty. We examined a customer base (member-supporters of a radio station) that showed a *very* high level of satisfaction and high likelihood to continue as loyal customers. By any measure, this group is very strongly attracted to their product (the radio station and its broadcasts). While a company or organization should not take its customers or supporters for granted, these radio station members did not initially appear to be at risk for leaving the franchise.

It is therefore quite significant to find that even among satisfied, loyal customers with whom a strong relationship has developed, this bond can be easily and dramatically broken. In this study, an organization that hypothetically *behaved ethically* but became associated with an unpopular cause would lose many loyal and satisfied customers. If the company were associated with an unethical activity, the defection would be even greater.

While we could split hairs and possibly discuss the fact that ethical but unpopular behavior does not have quite as strong an impact on the relationship between customer and marketer as does unethical behavior, both behaviors significantly and dramatically sever the basic tie between the two parties. The current findings are of special importance to charitable and non-profit organizations in particular. These organizations are very vulnerable to the effects of seeming to support, or being supported by, unpopular and/or unethical groups and causes. Such connections pose a serious threat to the individual's value system and self-concept. In addition, an intrinsic reward for supporting a charity or non-profit organization is the feeling of being altruistic, and the enhancement of one's self-concept as a result. If anything interferes with this "feel-good" feeling, support will obviously decline.

In summary, the present study highlights in a dramatic fashion just how vulnerable customer loyalty can be to the ethical behavior of an organization. If there are lessons to be learned from this research, they are: 1) Even among highly satisfied, loyal customers, a relationship can be quite easily broken; 2) association with unpopular causes or behaviors, even if ethical, can have a very strong negative impact on customer loyalty, at least in the case of non-profit organizations; 3) unethical behavior by an organization can have an even stronger negative impact on customer loyalty; 4) given the observed impact of unethical behavior and association with causes that an organization's supporters do not support, these factors must be carefully considered.

REFERENCES

Kotler, Philip and Alan Andreasen, *Strategic Marketing for Nonprofit Organizations*, NJ: Prentice Hall, 1996.

Sudharshan, D. *Marketing Strategy: Relationships, Offerings, Timing, and Resource Allocation*, NJ: Prentice-Hall, 1995.

TOWARDS A CONSUMER HOSTILITY MODEL IN MARKETING

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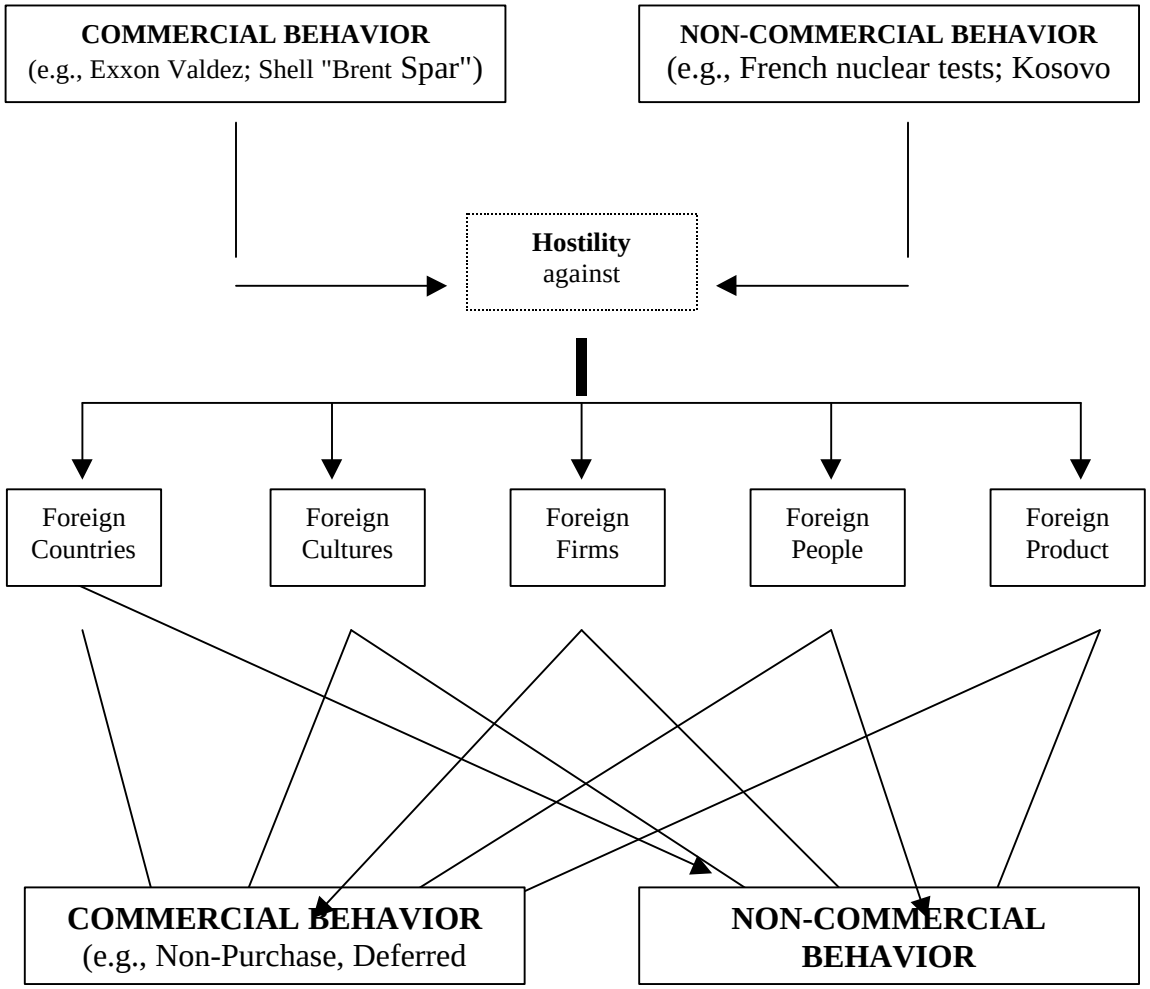
ABSTRACT

Previous research has shown that generally favorable product and quality judgments may still not lead to a willingness to buy the product, if other factors override the positive ratings. On an individual product level, these factors could include high price, little familiarity, high perceived risk, low social status demonstration, or high switching costs. On a more general level, overriding factors could be ethnocentrism, patriotism, or helping behavior. Whereas the former group has in common a very specific nature that will differ from one product to the other (although both products may come from the same country of origin), the latter group has in common that the constructs lead to a preference for all domestic products over all foreign products (independent from specific countries of origin). It is, however, possible, that only one specific country, and all of the products from that country, are affected. Consumer hostility could be an explanatory factor for such an effect. The present paper attempts the development of a Consumer Hostility Model. Hostility is defined as Animosity in Action.



TOWARDS AN INTEGRATED MODEL OF INTERNET ADDICTION

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ABSTRACT

The overwhelming success of the Internet has led to a controversial discussion on the addictive effects of this medium. Particularly with regard to the World Wide Web (WWW) and its user-friendly interface it has been proposed that extensive utilization can lead to internet addiction (IA). Several cases of IA have been reported primarily in the popular literature. At the same time, however, other authors have denied the existence of such a phenomenon. Since previous literature has primarily focused on undesired economic (e.g., high telephone bills) and social (e.g., loss of family contact) side effects of extensive internet utilization, it can be suggested that in order to understand and explain possible IA, systematic research is needed to investigate the potential addictive dimensions. More precisely, studies should scientifically analyze the existence and measurement of IA and its relationship to more general constructs, such as compulsive behavior. Additionally, the specific relationships of IA with personal disorders (PD) and obsessive-compulsive disorders (OCD) have to be evaluated.

The present paper addresses the phenomenon under consideration by investigating a potential similarity of patterns between IA and other forms of compulsive behavior, particularly compulsive buying. As a result, the study proposes to distinguish between internet addiction (IA) and internet addiction disorder (IAD), and to consider IA as one of several possible expressions of underlying psychological disturbances. The results also suggest that individuals susceptible to other forms of compulsive behavior, e.g. compulsive buying, obsessive dieting, or alcohol addiction, are more likely than other individuals to be susceptible to IA.

INTRODUCTION

According to the results of the April 1999 Internet Demographic Survey, conducted by CommerceNet and Nielsen Media Research, the number of Internet users in North America has now reached 92 million, 46 percent of them being female. The number of online shoppers, defined by the study as "researching and comparing the price and features of products and services online, regardless whether or not an actual online purchase was made," has reached 55 million, 41 percent of them female (CommerceNet, 1999). Research by Forrester Research Inc. shows that minorities are not excluded from this rapid development, predicting that by the end of 1999, 32 percent of black households in the U.S., 43 percent of Hispanic, and 67 percent of Asian-American households will be online (Crocket, 1999). These overwhelming numbers have led to a controversial discussion on the addictive effects of this medium, with most of the discussion to be found in the popular literature. Activities that can have addictive or compulsive effects include playing computer games, commitment in unmoderated newsgroups or chat rooms, surfing the net, browsing for programs, cracking system security for amusement, and perhaps even programming itself (Neumann, 1998). Newsweek is reporting that according to experts, 2 to 3 percent of the online community have serious internet addictions (Hamilton, & Kalb, 1995). Other articles show cases of a research lab assistant who spends up to six hours of her workday sending e-mail to friends and playing electronic games (Seaman, 1998), the confession of an individual who got addicted to Internet while recovering after an accident (Stephen, 1998), or people who are trading stocks, buying at auctions, or doing bets in a compulsive manner via the Internet (Wilcox, 1999). On the other hand, some authors are more cautious when using the term internet addiction, arguing that according to that logic, many

behaviors like long hours of reading had to be classified like addiction (Potera, 1998), or simply deny the existence of such a phenomenon (Levy, 1996).

COMPULSIVE BEHAVIOR AND ADDICTION

In order to define the term addiction more exactly, it seems to be useful to start with an adjacent concept, compulsive behavior. Compulsions are "repetitive and seemingly purposeful behaviors that are performed according to certain rules or in a stereotyped fashion" (American Psychiatric Association, 1985:234, cited in O'Guinn, & Faber, 1989:147). Compulsive consumption is defined by O'Guinn, & Faber (1989:148) as a "response to an uncontrollable drive or desire to obtain, use, or experience a feeling, substance, or activity that leads an individual to repetitively engage in a behavior that will ultimately cause harm to the individual and/or to others." Assuming that the use of the internet can be interpreted as an activity and therefore the definition can be generally applied, the question arises if there are cases of internet usage that 1) are the response to an uncontrollable drive or desire, 2) lead to a repetitive engagement in the activity, and 3) will ultimately cause harm to the individual and/or to others. We will return to this question later.

Compulsive consumption may include a broad category of behaviors, such as drug abuse, eating disorders, compulsive sexuality, pathological gambling, kleptomania, or compulsive buying (O'Guinn, & Faber, 1989). A scale to measure compulsive buying was developed by Faber, & O'Guinn (1992). Roberts (1998) found that, using the Faber & O'Guinn scale, six percent of a random sample of a student population in the state of Texas could be classified as compulsive buyers. Criteria for Binge Eating are reported by Faber, Christenson, de Zwaan, & Mitchell (1995:297) as including 1) eating an amount of food in a two-hour period that is definitely larger than most people would consume in that time period, 2) feeling a lack of control over eating during these episodes, 3) eating much more rapidly than usual, 4) eating until feeling uncomfortably full, 5) eating large amounts of food when not physically hungry, 6) eating alone because of embarrassment over the amount being eaten, and 7) feeling disgusted with oneself, depressed, or very guilty after overeating.

After defining the concept of compulsive consumption, we can now ask how to understand the term *addiction*. Referring to O'Guinn, & Faber (1989), Hirschman (1992) explains that compulsive consumption behaviors go beyond the bounds of normalcy and also exceed the consumer's ability to control them through reason and willpower, and states that "in this sense, addictive behaviors are analogous to extreme compulsive behaviors." (page 158). Adopting this point of view, we clearly have to reject definitions coming from the economic field, claiming, e.g., that "a person can be *addicted* to jogging, classical music, detective novels, attending church, and other activities that do not harm others and may yield future benefits to the individual in addition to increases in current utility" (Grossman, & Chaloupka, 1998:631).

Hirschman (1992) offers three theories to explain addiction: disease theories, social theories, and personality theories. *Disease theories* tend to see alcohol and narcotics users as victims of a disease, powerless over their actions and in need of treatment rather than ostracism. An important aspect of disease theories is the question if there are genetic abnormalities or tendencies that predispose some persons to be susceptible to addictive behavior. However, Du Pont (1998) suggests to detach from the old paradigm of addiction that someone gets addicted because she or he is ignorant of the risks of addiction, is unhappy, or lacks healthy opportunities, and once addicted, is hooked by physical dependence, and instead to understand addiction rather with a focus on "reward and the powerful experience of falling in love with the feelings that addictive behaviors produce" (page 231). *Social theories* refer to customs within different societies, for example heavy alcohol use at weddings or birthday parties, and the impact of social learning and group processes. *Personality theories* concentrate on personality traits, like trouble in establishing and maintaining emotional intimacy, feelings of loneliness and isolation, arousal seeking, nonconformism, etc.

At this point, I would like to classify these three theories into internal (disease and personality theories) and external (social theories). Concentrating on theories of internal factors brings us to the next section of this paper, obsessive-compulsive disorders.

OBSESSIVE-COMPULSIVE DISORDERS

Spitzer, & Sigmund (1997:7) describe obsessive-compulsive disorder (OCD) as a situation where "the patient experiences inappropriate thoughts or images intruding into the mind causing distress and anxiety. The patient knows that these ideas make no sense and are foreign to his mind, but he cannot control and easily dismiss them." Because most people probably can tell to have such experiences from time to time, a more concrete definition is needed that provides a clear cut-off criterion. A very comprehensive definition is offered by the American Psychiatric Association (APA) in their Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 1994). APA distinguishes between obsessions and compulsions, defining obsessions as 1) recurrent and persistent thoughts, impulses, or images that are experienced, at some time during the disturbance, as intrusive and inappropriate and that cause marked anxiety or distress, 2) the thoughts, impulses, or images are not simply excessive worries about real-life problems, 3) the person attempts to ignore or suppress such thoughts, impulses, or images, or to neutralize them with some other thought or action, and 4) the person recognizes that the obsessional thoughts, impulses, or images are a product of his or her own mind. Compulsions, on the other hand, are defined as 1) repetitive behaviors or mental acts that the person feels driven to perform in response to an obsession, or according to rules that must be applied rigidly, and 2) the behaviors or mental acts are aimed at preventing or reducing distress or preventing some dreaded event or situation. Jakes (1994) emphasizes that there is widely consensus in literature that subjects do not derive pleasure from their compulsive thoughts or activities, although they provide a release of tension. While the majority of people with OCD seems to engage in compulsive acts of cleaning, e.g., compulsive handwashing, and compulsive checking, up to 25 percent fall in the category of pure obsession, wherein cognitive, but not behavioral rituals predominate (Spengler, & Jacobi, 1998).

Further comparison between compulsive consumption and obsessive-compulsive disorder shows that both definitions have important points in common, but on the other hand do not overlap completely. Compulsive consumption can be distinguished from OCD especially by the condition that the behavior will ultimately cause harm to the individual and/or to others.

INTERNET ADDICTION DISORDER AND INTERNET ADDICTION

If we agree, as suggested above, to understand addictive behaviors as analogous to extreme compulsive behaviors, we can now return to the question if there are cases of internet usage that can be classified as compulsive consumption. Cases cited in the popular literature strongly claim that there is in fact an uncontrollable drive or desire to use the internet existent, that it leads to repetitive engagement in the activity, and that it causes harm to the individual and/or others. Harm is reported to be not only financial, e.g., high telephone bills or access to pay sites, but also social, e.g. loss of family relations or neglect of work duties. On the other hand, physical damages, apart from exhaustion due to lack of sleep (Wolfe, 1996), should usually not occur.

While the term "internet addiction" (IA) could be appropriate in extremely severe cases of compulsive use of the internet, I feel that we have to be very cautious with the linguistically very similar term "internet addiction disorder" (IAD). Excessive use of the internet should be seen as an expression of an underlying disorder, but not as a disorder itself. If we accepted to use the term IAD, we had to accept also terms like cocaine addiction disorder, beer addiction disorder, or handwashing disorder. However, we should avoid to treat addictions to different drugs or activities as singular, specific cases, and instead try to find the underlying patterns that lead to the existence of these phenomena. In this sense, Faber (1992), who classifies compulsive buying as the expression of an impulse control disorder, assumes that people with one type of disorder will also be more likely to have other types of the same disorder. Hirschman (1995) indicates that persons who suffer from mental illness also engage in addictive behaviors such as alcoholism, compulsive gambling, or cocaine and heroin addiction. Finally, Ellis (1998:25) observes that "sex and love addicts frequently, as you can well guess, compulsively drink, drug, smoke, overeat, and

make themselves over-dependent on people, things and what they will." He argues that some of these people have severe personality disorders (PD) that are expressed in different ways. In psychiatric terms, these tendencies are referred as *comorbidity* (Faber, Christenson, de Zwaan, & Mitchell, 1995).

Further research has to concentrate on the development of a reliable scale or screener to measure internet addiction, and should then try to find correlations or common patterns between IA and other forms of compulsive behavior. Because impulse control disorders like compulsive buying are normally skewed on the basis of gender (Faber, & O'Guinn, 1992), it would be interesting if any skewness of internet addiction can be observed. Only if no relations between IA and other forms of disorders or compulsive behavior can be found, IA should be treated like a *specific* disorder.

REFERENCE

American Psychiatric Association (1994). "*Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).*" Washington, D.C.: American Psychiatric Association.

CommerceNet (1999). "CommerceNet and Nielsen Media Research Issue Results of Spring 1999 Internet Demographic Study." www.commerce.net/news/press/fact0699.html.

Crocket, Roger O. (1999). "A Web that Looks like the World." *Business Week*, Issue3621, March 22, page EB46-47.

DuPont, Robert (1998). "Addiction: A New Paradigm." *Bulletin of the Menninger Clinic*, Vol. 62, Issue 2 (Spring), 231-242.

Ellis, Albert (1998). "Addictive Behaviors and Personality Disorders." *Social Policy*, Vol. 29, Issue 2 (Winter), 25-30.

Faber, Ronald J. (1992). "Money Changes Everything." *American Behavioral Scientist*, Vol. 35, Issue 6 (July/August), 809-819.

Faber, Ronald J., & Guinn, Thomas C. (1992). "Clinical Screener for Compulsive Buying." *Journal of Consumer Research*, Vol. 19 (December), 459-469.

Faber, Ronald J., Christenson, Gary A., De Zwaan, Martina, & Mitchell, James (1995). "Two Forms of Compulsive Consumption: Comorbidity of Compulsive Buying and Binge Eating." *Journal of Consumer Research*, Vol. 22 (December), 296-304.

Grossman, Michael, & Chaloupka, Frank J. (1998). "A Survey of Economic Models of Addictive Behavior." *Journal of Drug Issues*, Vol. 28, Issue 3 (Summer), 631-642.

Guinn, Thomas C., & Faber, Ronald J. (1989). "Compulsive Buying: A Phenomenological Exploration." *Journal of Consumer Research*, Vol. 16 (September), 147-157.

Hamilton, Kendall, & Kalb, Claudia (1995). "They Log On, But They Can't Log Off." *Newsweek*, Vol. 126, Issue 25 (December 18), 60-61.

Hirschman, Elizabeth C. (1992). "The Consciousness of Addiction: Toward a General Theory of Compulsive Consumption." *Journal of Consumer Research*, Vol. 19 (September), 155-179.

Hirschman, Elizabeth C. (1995). „Professional, Personal, and Popular Culture Perspectives on Addiction." *American Behavioral Scientist*, Vol. 38, Issue 4 (February), 537-552.

Jakes, Ian (1994). "The Definition of Obsessive-Compulsive Disorder." Journal of Mental Health, Vol. 3, Issue 3 (September), 287-299.

Levy, Steven (1996). "Breathing is also Addictive." *Newsweek*, Vol. 128, Issue 27 (December 30), 52-53.

Michaels, Robert J. (1988). "Addiction, Compulsion, and the Technology of Consumption." *Economic Inquiry*, Vol. 26 (January), 75-88.

Neuman, Peter G. (1998). "Are Computers Addictive?" *Communications of the ACM*, Vol. 40, Issue 3 (March), 128.

Potera, Carol (1998). "Trapped in the Web." *Psychology Today*, Vol. 31, Issue 2 (March/April), 66-69.

Roberts, James A. (1998). "Compulsive Buying among College Students: An Investigation of its Antecedents, Consequences, and Implications for Public Policy." *Journal of Consumer Affairs*, Vol. 32, Issue 2 (Winter), 295-314.

Seaman, Debbie (1998). "Hooked Online." *Time*, Vol. 152, Issue 15, 114-115.

Spengler, Paul M., & Jacobi, David M. (1998). „Assessment and Treatment of Obsessive-Compulsive Disorder in College Age Students and Adults." *Journal of Mental Health Counseling*, Vol. 20, Issue 2 (April), 95-111.

Spitzer, Manfred, & Sigmund, Dieter (1997). „The Phenomenology of Obsessive-Compulsive Disorder." *International Review of Psychiatry*, Vol. 9, Issue 1 (March), 7-13.

Stephen, Andrew (1998). "An Internet Addict Confesses." *New Statesman*, Vol. 127, Issue 4390, 26.

Wilcox, Melynda D. (1999). "Coming: A 12-Step Plan for Computer Addicts?" *Kiplinger's Personal Finance Magazine*, Vol. 53, Issue 9, 23-24.

Wolfe, Alexander (1996). "Cyber Junkies." *Electronic Engineering Times*, Issue 896 (April 8), 1-2.

TRENDS IN CUSTOMER BANKING OUTLETS

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ABSTRACT

Consumers are witnesses to continuing change and improvement in access to personal banking services. The modes of delivery and costs of access have been evolving, generally towards providing more effective and convenient transaction capabilities including telephone, in-store and Internet banking. We examine in-store banks, otherwise known as Supermarket branches (SMBs). We describe some of the characteristics of these mini-banks, the reasons for their rapid growth, and how well they seem to be performing. Prominent trends in the banking industry are discussed with a focus on those forces that guide restructuring efforts that include the establishment of in-store banks.

INTRODUCTION

Existing banking theory is mostly based on "Cost/Benefit Analysis" and offers an understanding of the rationale for the existence of financial intermediation in general. Benston and Smith [1976], Campbell and Kracaw [1980], Cebenoyan et al. [1993], Fama [1985] and Santomero [1984] describe this relationship. Most of the literature that develops this theory is from the perspective of corporate clients and the role of proprietary information generation and utilization by banks to mitigate credit and other risks. Relatively little work exists from the perspective of personal/individual banking accounts and how banks efficiently deliver this service.

TRENDS IN BANKING

The US banking industry has experienced increasing competition from other financial and non-financial firms, both domestic and foreign. Deregulation, wide-ranging technological innovation, the recent repeal of the Glass-Steagall Act, and the need to continuously enhance product and service offerings are all challenges to growth and competitive position. A generally well-accepted theory of multinational banking relies on the "Follow the Customer" thesis to explain the international location of bank branches as a service-enhancing strategy. A similar motivation seems to exist among banks to establish SMBs – go where your customers are and avoid having them "captured" by competitors.

The banking industry is evolving due to two strong forces: 1) The need for increased innovation due to intense deregulation-induced competition, and 2) The need for large capital

expenditures to enhance product and service delivery capabilities such as investing in technologically-enhanced information processing, monitoring and communication systems.

Decision-making has been impacted as a consequence of these forces. Improved technology facilitates decision-making by extending the reach of banking services such as lending, and automating various banking activities such as bookkeeping, accounting, and monitoring of transactions. More detailed, more reliable information about large numbers of individual clients is quickly available. This not only permits an improved decision-making process, but also allows banks to extend levels of service once only available to a few larger customers. More service can be provided at a speedier pace, such as faster turnaround in loan applications. This improved decision-making enhances customer service and bank profitability. Additionally, risk management can be improved, e.g. better scoring, standardized criteria or artificial intelligence or neural network systems that enable delegation of decisions lower down in the bank hierarchy can be developed.(See Gilbert, Krishnaswamy, and Pashley, November/December 1998, for a review of neural network applications.)

In addition to the trends described above, interest-rate volatility has increased during the last 20 years and rates are currently on an upswing. This has resulted in a major component of bank operating costs, the cost of funds, becoming more volatile and recently increasing. On the asset side, increased volatility has resulted in larger interest rate exposure, especially for longer duration assets. Banks must, therefore, be more proactive in managing this exposure and increase the use of Asset-Liability Management techniques to control this risk on a whole-bank basis. The greater range and sophistication of available financial market instruments assist banks' management of exposures as they continue to provide client-demanded products. The level and stability of Interest Rate Spreads, a component of Net Interest Margins, are carefully monitored and controlled. However, the limited ability of individual banks to impact interest rates, both for deposits and for loans, makes it critical for banks to focus on controlling the non-interest expense components of their costs and, at the same time, retain or enhance the bank's ability to provide services.

The non-interest cost component essentially represents the bank's "Fixed Cost," to use the term from manufacturing firms. Table 1 illustrates that the occupancy expenses per banking facility, i.e., the number of main offices plus branches, increased at a dramatic rate during the period of 1980 to 1993. The average amount of money spent on employee salaries and benefits also increased during the same period, even in the face of decreasing numbers of employees.

When confronted with the need to control costs, manufacturing firms enhance asset turnover [utilization]; i.e. limit their asset base while continuing to maintain the same level of output and revenue. Economic lessons from Corporate Finance about asset utilization are being applied more regularly to banking. Economic Value Added (EVA) is more frequently being utilized in the asset acquisition, retention and disposition decisions of firms.

Banks, either consciously or as a competitive response, are now considering reducing the asset intensity of their operations. Large banks were among the first to divest significant fixed asset investments and do sale-leaseback deals, especially for large real estate investments. These transactions released funds for more profitable utilization while providing continued access to operating facilities. In effect, brick and mortar edifices were transformed through reallocation of those funds into income producing technological assets such as computers and labor-saving software. For instance massive employment of ATMs resulted in the reduction of tellers and in the lowered number of bank employees during most of the time periods since 1990. [Table1] The cost cutting measures Wells Fargo implemented with the help of SMBs is a further example. (King and Lipin, January 24, 1996 and Weigers and Marsh, April 24, 1995).

Automated Teller Machines (ATMs) essentially enabled banks to move a large percentage of routine transactions out of the more expensive office-based manual system to an automated, remote and relatively inexpensive system. This reduction in the cost of bank operations also greatly benefited bank customers. Transactions could now be accomplished at thousands of convenient locations 24 hours a day through the use of multibank accessed ATM networks. In short, what was a financial advantage to the banking industry was simultaneously a benefit to millions of retail customers. Over the past decade and a half ATMs have become ubiquitous.

This explosion of ATMs, though reducing bank administrative expenses, has not, however, been cost-free. Noticeable defects of the ATMs are the lack of a single bank identity and the depersonalization

of the bank-client relationship. This change can have several unwanted side effects. For example, multibank cash machines offer no opportunity for a bank to reinforce its bank-client relationship. In addition, there is reduced possibility to "cross-sell" other products and services such as safe deposit boxes, CDs, money market accounts and similar income and/or fee producing services. Finally, having reduced banking to contact with an impersonal machine, rather than tellers who know them personally, the ATM system more easily permits customers to change banks. This, in turn, increases the cost of customer retention. In short, lowered transaction costs are now coupled with higher marketing costs. A comparison of the characteristics of full fledged branches, SMBs and ATMs is contained in Table 2. SMBs seem to provide an excellent via-media solution to the customer service dilemma for several reasons, enumerated in the next section.

TABLE 1

	1980	1985	1990	1991	1992
Number of Bank (Main Offices)	14,434	14,417	12,347	11,927	11,466
Number of Branches*	38,738	43,293	50,406	51,969	51,935
Total Banking Units*	53,172	57,710	62,753	63,896	63,401
Number of Employees**	1,433,000	1,545,000	1,565,000	1,539,000	1,518,000
Employees Salaries & Benefits	24,675,000	40,003,000	51,765,000	53,111,000	54,816,000
Employee Salaries & Benefits Bank Unit	431,100	657,000	728,000	831,210	864,592
Occupancy Expenses***	7,354,000	13,301,000	17,429,000	17,731,000	17,883,000
Occupancy Expenses/Bank	128,500	218,440	260,350	277,498	282,062
Number of SMBs	160	210	921	1203	1533
Number of ATMs	18,500	60,000	80,200	83,500	87300

* Statistical Abstract of the US

** US Industrial Outlook

*** Annual Report Board of Gov. (Table 13)

**** Wall Street Journal
^ American Banker 12/15/97 p.6 (as of June 1997)
^^ American Banker 12/15/97 p.11

TABLE 1 CONTINUED

1993	1994	1995	1996	1997
10,960	10,450	9,941****	9,528	9143*
52,868	55,144	56,513	57,788	60320*
63,828	65,594	66,454	67,316	69436*
1,503,000	1,521,000	1,532,000*		
58,204,000	60,607,000	63,439,000	67,047,000	53,416,000
911,888	923,972	954,630	996,004	
18,471,000	18,911,000	19,618,000	20,729,000	16,280,000
289,387	288,304	295,212	307,936	
1,938	2,505	3,142	4,800^	
94,800	109,100			165,000^^

TABLE 2

	TRADITIONAL BRANCHES	IN-STORE BRANCHES	ALL ELECTRONIC BRANCHES
HISTORY	at least 1000 years	Transactions since late '60s	since 1970's
NUMBER	Banks: 9,534(1998), 9216(1999) Branches: 61394(1998) Total # of offices: 70,150(1998)	1998-1999: between 6000 and 7000 owned by banks, S&Ls, SBs and CUs, from about 50 in 1970	ATMs: 165,000 (mid 1997)
SIZE	1,500 sq ft minimum	350-500 sq ft, starting at 27 sq ft plus safe dep. boxes	from 2' x2'
HOURS	max. downtown store hours	59 hrs/week,7 days/week open till 10 p.m. often	24 hrs.
EMPLOYEES	specialists: teller, custom rep., loan officer	general training including selling	none
CUSTOMER RELATIONSHIP	face to face, extra trip for customer	face to face,, customer is contacted by banker + ATM	faceless, electronic, software knowledge
MARKET SHARE	fairly fixed	expanding, attracting unconventional customers	expanding
PRODUCT	all retail operations	all but most specialized	limited due to automation
ACTIVITY	70% transactions 30% inv./loans decisions	30% transactions, 70% inv./loans decisions	100% transactions loan by phone?
FOCUS	operations and audit concerns	customers	operations specific
ADVERTISING	direct mail, TV, radio, newspaper	in-store adv., blue light sp. aisle walkers + traditional	none, but bank dependent
COMPETITION	other banks, S&Ls, SBs, CUs, finance co.	depository institutions and telephone banking, ATMs, Credit Cards	
SUCCESS	Independent	dependent on store: cross-selling	easiness of access and software safety

TRAFFIC	<50% of clients visit bank > 2x/month	2.2 visits/week/cust. for groceries, of these 62% use in-store branch 1.5x/week	NA
COST Hinterland: City:	$.5 M City: $1-1.5 M brick/mortar	In-store: $100,000 $200-250,000 plus rent or commission	$40,000 for two machines plus rent for niche

ADVANTAGES OF SUPERMARKET BANKS

Lower Costs: SMBs can be set up with far lower costs than full fledged branches, though they cost more than ATMs. (*San Diego Business Journal 6/27/94*, *Orlando Business Journal 8/12/94* and *The Business Journal 9/5/94*). A "full-sized" SMB (smaller than a full-fledged bank) would be appropriate in a store of at least 45,000 square feet and weekly customer counts of at least 20,000, an "express" SMB for stores of 30,000 to 45,000 square feet and traffic of 15,000 and a "mini-branch" for stores of less than 35,000 square feet.(Davidson, January 1998.)

Faster Implementation: being part of an existing supermarket, and a small structure within the overall premises, it is possible to have one up and running quickly.

Closer One-Bank Relationship is maintained than with an ATM network, since the SMBs are clearly identified as being part of a single bank network.

Personal Touch is maintained through non-automated transactions conducted by bank/supermarket employees representing the bank. And even for automated transactions, help is nearby. Opportunity to cross-sell products from the range of offerings of the bank, as well as the capacity to deal with custom requirements of clients *(The Business Journal 9/5/94)*.

Increased Customer Convenience arising from the ability of customers to do their banking while doing their shopping. This is cross-selling of a different kind, cross-selling between bank and store products. (Ferris, January 1994; Phillips, May 12, 1995*; Tribune Business News* 10/12/95).

High Traffic generated by the retail outlet increases the likelihood of success for the SMBs. (Ferris, January 1994). Stores that are chosen for SMB locations average 18,000 to 50,000 customers per week *(The Business Journal 9/5/94; 4/24/95, Tribune Business News 10/12/95*

Increased Market Segment Access, arising from the capacity to take banking services to a group of individuals that might otherwise not be reached by the traditional channels of banking. (*Philadelphia Business Journal 8/18/95*). Some of the potential new bank customers do most of their banking at grocery stores, by cashing their paychecks or being allowed to write checks for amounts of up to $50 beyond their grocery bills, effectively substituting the store for the ATM. If the bank would offer these services for free, as does the supermarket, it may pick up new customers. This is especially likely if the bank would offer these individuals borrowing possibilities.

Longer Open Hours, especially after 4 p.m. and on weekends. (*The Business Journal 9/5/94*, *American Banker 9/29/95)*.

Enhanced safety: SBMs, having traffic flow plus the presence of bank and store employees, provide a far higher level of safety to users. This is especially important in many urban areas where unsecured ATM machines have become a hangout for those seeking easy crime victims.

Entry into new markets: SMBs can be a cheaper way than acquisition to tap into new geographic customer bases.

DISADVANTAGES OF SUPERMARKET BANKS

There are, however, disadvantages if the SMB is a replacement for a full-fledged branch.Long-term leases for previously used facilities seem to be the greatest obstacle. Whether they are financial or

operating leases, they usually carry longer maturities, that may be harder or costlier to terminate than selling a bank owned facilty.

If the location was a reason for customers to choose the bank in the first place and the new facilities are elsewhere, the bank may lose such customers. This would occur especially in the case of retailers who for safety and expediency reasons want to deposit cash and checks frequently and safely in a bank nearby and who have no interest in combining banking with grocery shopping.

Freeing up employees from services that can be automated, e.g. by ATMs, and employing them in SMBs may backfire. Customers used to personal banking services may be disgruntled and go elsewhere. SMB employees should be sensitized to such problems and help especially older customers with automated transactions.

In any case, whether replacing a current facility or instituting a new one, the cost of a bank clerk for an SMB will increase over the pay for a teller beyond the initial training cost. Previous tellers or loan officers were never expected to be "sales"people. They were trained to do only a limited number of activities. The new job, however, demands the same employee to handle assertive selling in the aisles, process more complicated loan applications which could not be computerized, sell investment products, as for instance mutual funds, and give advice in those matters that the ATMs and loan machines do not handle. (Britt, July 1998.) People that are able to fulfill all these different functions in rather crammed conditions and at extended hours will demand higher pay, or their turnover will be high. Banks that view SMBs just as another branch, although in a supermarket, will not be successful as shown by the Dallas Equitable Bank which sold its unsuccessful SMBs after seven years to Nationsbank (*American Banker*, 8/22/95). SMB employees must be "sellers" more than "tellers." (Davidson, June 1998.)

Reports on SMBs (*News Release: International Banking Technologies 1/4/96, Philadelphia Business Journal 8/18/95*) usually stress that much of the new business picked up occurs in the lending area. There are no reports on the profitability of these loans and whether or not that increase in lending occurs mainly to marginally profitable borrowers or is evenly spread across all customer types. Thus the bank should carefully consider the clientele of the targeted supermarket before the implementation of SBMs and afterwards watch the risk of the banks loan portfolio. An increase in risk could be overcome through portfolio management techniques, but would increase the cost of lending.

Bankers should not rely on the name and identity of the supermarket alone, both Bank America and Key Bank can attest to that. They learned that *de novo* SMBs are unsuccessful without a strong identity of the bank name itself - astonishingly this happened even to Bank America despite its strong national presence as a credit card issuer. Nonetheless its SMBs in the Chicago area did not become profitable in the first two years and were sold at a loss in Fall of 1997 to TFC Financial Corporation. Key Bank, located mainly in Maine, found it necessary to change its marketing approach, going beyond the confines of the supermarkets in New Hampshire to make a name for itself and "to establish its own relationship with the locals." (Wellman, December 1997 and Davidson, January 1998.) More attention grabbing designs of the space also help communicate that in-store banks are not just transactions centers to cash checks and make deposit, but are sources of multiple products, some of which are more profitable to the banks.

PERFORMANCE OF SMBS

A recent estimate puts the number of in-store banks close to 7,000 or about 10% of total bank branches in the US (Shmuklen, February 1999). This is up from 1000 ten years before. While the growth of this phenomenon is unquestionable, the evidence regarding the level of success achieved by SMBs is mixed. Simmons and Conway (1998) report that mature SMBs have, on average, only about 40% as many customers as traditional branches and much lower average deposit balances, 50-60% of what a traditional branch has. Non-interest checking account balances are larger for SMB customers, however. IRA and time accounts for SMBs are about 90% of what they are at a traditional branch, perhaps due to promotions offering higher yields than those offered in traditional branches. Lower entry and exit costs should also be noted, however. And while foot traffic does not seem to pay off in higher

deposits(obtaining banking services is perhaps not really an "impulse buy" activity), at the very least, the in-store bank is highly visible and can be thought of as a valuable "billboard" promoting the bank's name.

On the other hand, anecdotal evidence is plentiful, describing case after case of successful utilization of the in-store banking strategy. Wells Fargo with Starbucks Coffee has created financial marketplaces where latte, loans, and laundry are handled simultaneously. Wells Fargo (Ferris, 1998) has also established hundreds of "mini" in-store banks, 27 to 60 square feet with small staffs of 1-2 people but offering close to full service. First Citizens and other banks have opened SMBs in Wal-Mart, often using Wal-Mart's greet concept to successfully attract customers. (Ferris, 1998) CFS Bank, a bank subsidiary of Haven Bancorp of Woodhaven, New York, had, as of February 1998, 38 of its 47 banks in an in-store format with plans to add more. Heritage Bank, a small, aggressive and innovative bank in Atlanta, opened several SMBs in Kroger stores, and facilitated its growth in a way that would not have been possible with full-fledged branches.

SUMMARY

SMBs represent the fastest growing channel for banks to extend their reach, and the pace of growth has picked up considerably in the past few years. They have evolved as a logical response to the conditions facing the industry, and are an excellent strategic response to the need to increase the branch network at the lowest possible costs while continuing to provide access to personal, convenient, one-on-one banking. Their relatively low fixed cost component, the ability to cross-sell, generate ancillary business (besides just transactions), and relieve the physical branches of all but the most complicated personal, and commercial transactions, make them an attractive way for banks to grow. As the emphasis on Asset Intensity Reduction as an operational imperative continues to grow, we can expect to see more banks use this mode of expansion. As further indicated, there may be a reduction in the benefits, as obstacles to former leases may have to be overcome, employees retooled and new ones hired. A likely increase of salaries per employee is to be expected because of the greater versatility demanded on the job. A few customers may jump ship because of location or automation in the event of full-fledged branches being replaced by SMBs. It also seems that SMBs are generating a great amount of loans, therefore, care must be taken to watch and manage possibly increased risk to the banks' loan portfolio. In any case the strategic aspects of locational advantages of SMBs are high enough to induce in the US the appearance of European supermarket chains invading banks.

Yet to receive much attention from academic researchers, this relatively new phenomenon is worthy of investigation, since its importance seems likely to increase in the years ahead. Even newer developments include "in-branch stores," such as a café in the South Umpqua Bank in Roseburg, Oregon (Clayton, 1998) and "mobile branches" (O'Sullivan, May 1998). As data are accumulated, it would be interesting to see whether market participants realize the competitive advantages of banks adopting SMBs as growth vehicles and price them differently.

REFERENCES

Academic Literature

Benston and Smith (1976). "A Transactions Cost Approach to the Theory of Financial Intermediation." *Journal of Finance*, Vol. 31, 215-231.

Campbell and Kracaw(1980). "Information Production, Market Signaling, and the Theory of Financial Intermediation." *Journal of Finance*, Vol. 35, 863-882.

Cebenoyan, Cooperman, Register, and Hudgins (1993). "The Relative Efficiency of Stock vs. Mutual S&Ls: A Stochastic Cost Frontier Approach." *Journal of Financial Services Research*, Vol 7.

Gilbert, Krishnaswamy and Pashley (November/December 1998). "Neural Networks: Tools For Financial Prophecy?" *Corporate Finance Review*, Vol. 3, # 3, 16-24.

Santomero (1984). "Modeling the Banking Firm: A Survey." *Journal of Money, Credit and Banking*, Vol. 16, 576-602.

Popular Press and Trade Journals

.
The American Banker (July 12, 1995). "Banc One Enters Atlanta Through Back Door." Vol. 160.

The American Banker (September 19, 1995). "Colonial Bank in Alabama Plans 7 Wal-Mart Branches." Vol. 160,#188, 4.

Britt (July 1998). "Training the In-store Staff." *America's Community Banker*, Vol. 7, Iss. 7, 30-31.

The Business Journal (September 5, 1994) "Going for Eggs and a Car Loan." Vol. 12, #22, 21(2).

Clayton (April 1998). "Branch Innovations." *America's Community Banker*, Vol. 7, Iss. 4, 12-19.

Davidson (June 1998). "Harvesting Growth in Supermarkets: A Case Study." *America's Community Banker*, Vol. 7, Iss. 6, 10-15.

Davidson(January 1998). "Supermarket Banking Comes to Town." *America's Community Banker*, Vol. 7, Iss. 1, 40-43.

Ferris (February 1998). "In-store Banking Success: Location, Location, Design!" *Bank Marketing*, Vol. 31, Iss. 2, 32-39.

Ferris (January 1994). "Store Owners Must Ask Themselves Key Questions Before Adding A Bank." *Tri-State Food News*, Vol. 39, #1, 1.

International Banking Technologies Inc. *News Release* (January 4, 1996). "In-Store Branching Trend Update."

King and Lipin (January 24, 1996). "Wells Fargo Sets Big Cuts in California After Merger." *Wall Street Journal*.

Orlando Business Journal *(August 12, 1994). "Supermarket Branches Produce for Longwood's First National." Vol.11 #10, 1(2).*

O'Sullivan (May 1998). "A Branch in All But Name." *U S Banker*, Vol. 108, Iss. 5, 18.

Philadelphia Business Journal (August 18-24, 1995*).* "Few Local Banks have followed Mellon's Move into Supermarkets."

Phillips (May 12-18, 1995). "Lettuce on Aisle 1, Loans on 2." *South Florida Business Journal,* 31A.

San Diego Business Journal (June 27, 1994) "Banks Put New Meaning In Term Green Grocers." p 14.

Shmulker (February 1999). "Wake up and Smell the Coffee in Your Bank." *America's Community Banker*, Vol. *8*, Iss. 2, 22-26.

Simmons (December 1998). "Supermarket Branches: More Myth Than Magic." *U S Banker*, Vol. 108, Iss. 12, 28.

Stroup (Winter 1998). "Beyond In-store Banking at Star Bank." *Journal of Retail Banking Services*, Vol. 20, Iss. 4, 19-26.

Tully(September 20, 1993). "The Real Key to Creating Wealth." *Fortune*, 38-49.

Wellman(December 1997). "Rethinking the Relationship." *Supermarket Business*.

Wiegers and Marsh(April 24-30, 1995). "Loan to Linguine at Local Market." *San Jose and Silicon Valley Business Journal,* 3.

VALIDITY OF ANOVA, MEDIAN TEST, MANN-WHITNEY, AND CONTINGENCY TABLE ANALYSIS FOR ANALYZING SIMULATED 5-POING RATING SCALE DATA WITH UNDERLYING NORMAL DISTRIBUTION

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ABSTRACT

This paper discusses a Monte Carlo simulation that studies the validity of several statistical methods for analyzing 5-point rating scale data. Normal distribution data is simulated, rating scale groups are generated, and the analysis of variance (Anova), Mann-Whitney, the Median Test, and Contingency Table Analysis are compared for validity.

Using SPSS-X syntax language, ten thousand samples are simulated for each of three situations.

The thrust of the paper is to determine the validity of specific statistical tests when the underlying distribution is normal. We define a measure of validity for tests based on the commonly used levels of significance by researchers. We use a range of parameter values for the mean and standard deviation of the normal distribution found from previous research.

Results show the Anova and Mann-Whitney are valid most often. Also, the Median Test and the Contingency Table Analyses are invalid for some cases.

INTRODUCTION

Attitudinal research for Management (see Zikmund, 1984) and Marketing (see Malhotra, 1996) relies heavily on rating scales such as the Likert scale. Customer attitudes about products, employee attitudes about upper management, and company attitudes about business school programs are examples where these scales have been used.

Development of scales has received considerable research in the Social Sciences. DeVellis (1991) outlines its rich history, including problems associated with deciding which statistical methods to use in order to make inferences about populations and constructs. The appropriate statistical method depends on statistical assumptions about the data. A major assumption has to do with the probability distribution underlying the data. If this underlying distribution is normal, common practice is to use normal distribution methods such as Analysis of Variance. When considered to be continuous but not normal, common practice is to use nonparametric methods, as advocated by Miller (1991). If it is considered categorical, then methods such as logit and loglinear models are endorsed by Agresti (1990). Other methods, such as those based on normal distribution assumptions such as Analysis of Variance, are "robust". That is, they are powerful even if the assumptions are not exactly satisfied.

These controversies underscore the need to study and understand rating scale data. An approach taken by Babakus and Ferguson (1988) is to assume an attitudinal measurement follows a probability distribution that may exist on a continuum. Common continuous distributions in Statistics are the normal, lognormal, beta, gamma, Weibull, uniform, and exponential. This can be studied using statistical simulation, such as are spelled out in Law and Kelton (1991). We take this approach in this paper.

Zeis, et al (1998) examine underlying distributions for common continuous probability distributions including the normal, lognormal, beta, gamma, and Weibull using goodness-of-fit tests applied to actual survey responses. They found that one or more of these common continuous distributions are "not unreasonable" fits for around half of the four hundred eighty four sample cases of 5-point Likert scale responses, from nine different survey sources, that they analyzed. The normal distribution was found to be a "not unreasonable" fit for 29% of these cases, tested at the 20% level of significance.

PURPOSE AND SIGNIFICANCE OF THIS RESEARCH

The purpose of this paper is to study the validity of the five specific statistical tests when the probability distribution underlying 5-point Likert scale responses is normal. We define a criterion for validity, and then examine using simulation the following statistical tests: Analysis of Variance (Anova), which assumes data follow the normal distribution for small samples, the Median test, which assumes the data are at least ordinal, Kruskal-Wallis, a nonparametric test that assumes that data are continuous and at least ordinal, and Contingency Table Analysis, which assumes data are multinomial (categorical only). See Conover (1971) for a complete discussion of assumptions behind the Median and Kruskal-Wallis tests. For Contingency Table Analysis assumptions, refer to Agresti (1990).

The contribution of this work is to shed light on which statistical analysis to use to test for differences for Likert scale data. As will be seen, when the underlying data is normal, Anova and Kruskal-Wallis are found to be more valid than the other tests. Also, Contingency Table Analysis is found to be more valid when Pearson's chi-square is used than when the likelihood ratio chi-square is used.

LIKERT SCALE DATA

We assume the continuous data are organized into discrete frequency groups. The rationale is given in Zeis, et al (1998). Briefly, the concept of underlying distributions in practice amounts to the following. It is possible to conceive of responses on continuous scales, and scales with many possible choices. We don't require this because it would require too much time and energy, the response rate would be low, and it would require subjective interpretation by the experimenter. Holmes (1974) discusses details of why survey scales use small numbers of selections.

To formulate the exact mathematical nature of the process underlying the resulting discrete responses is scientifically difficult, if not impossible. The Monte Carlo approach - simulating probability distributions that are frequently used by statisticians - is a common approach when the exact nature of the underlying process is difficult or impossible to define. See, for example, Mooney (1997).

Without losing generality, for discussion we will use the 5-point Likert scale as the rating scale response. The question will pertain to the level of agreement or disagreement typically seen in a survey as follows:

strongly agree	agree	neutral or indifferent	disagree	strongly disagree
1	2	3	4	5

.

Survey respondents are usually asked to circle their most appropriate choice. The numbers generated are 1's, 2's, 3's, 4's, and 5's. They are not decimal or fractional, and they are reported as discrete, not continuous.

SITUATIONS SIMULATED

The sampling situations considered are: a) two-independent-samples (normal) with sample sizes n1=25 and n2=25, b) two-independent-samples (normal) with sample sizes n1=50 and n2=50, and c) two-independent-samples (normal) with sample sizes n1=100 and n2=100.

Random normal samples are generated for the two-independent-samples situations using syntax code in SPSS-X^{TM}. Parameter values for the mean and standard deviations are selected from those typically obtained according to goodness-of-fit test results reported in Zeis, et al (1998). They are:

mean values = 1.75, 2.25, and 2.75, and
standard deviations = .75, 1.0, and 1.25.

Each mean and standard deviation combination is used, resulting in nine separate combinations. The assumption for analyzing validity for two-independent-samples is that the means and standard deviations are the same for both groups. Statistical analyses should not conclude the means are different more or less than the percentage determined by the significance level of the test.

Simulation experts such as Gentle (1998) and Mooney (1997) recommend checking simulated samples for validity of the random number generation process. Therefore, we checked the samples for validity using goodness-of-fit tests and by performing Anova on the original data. We refer to the Anova checks on the original, uncoded data as "bench" Anova tests. It will be seen that the "bench" tests are exactly as would be expected for normally distributed data.

CODING THE DATA TO SIMULATE LIKERT SCALE DATA

The normal variates are coded into the five Likert scale groupings using the following correspondence:

	Strongly Agree	Agree	Neutral or Indifferent	Disagree	Strongly Disagree
interval:	below 1½	1½ to 2½	2½ to 3½	3½ to 4½	4½ to above

The basic assumption is the original responses follow a normal distribution in the interval (½, 5½) . Babakus and Ferguson (1988) point out that respondents may not actually follow this coding scheme when responding to survey questions.

A CRITERION FOR VALIDITY OF HYPOTHESIS TESTS

Statistical tests of hypothesis are performed by rejecting a null hypothesis when the p-value calculated from the sample is smaller than a specified significance level. We define ranges for p-values based on significance levels commonly used in practice. The .05 significance level is common. Kendall and Stuart (1973), and Snedecor and Cochran (1996) suggest .05 and .01 are common. Kvanli, et al (1996), and many authors of Statistics texts, consider levels between .01 and .10 to be "rule-of-thumb"

inconclusive levels. Guyon et al (1998) imply the use of .10, .05, and .01 for character recognition applications. Occasionally, researchers use significance levels up to .20 . (See Chow (1996).)

We key on the common levels .01, .05, .10, and .20 to determine intervals to check p-values. We divide the range of possible p-values (0,1) into groups as follows:

Groupings for testing whether or not p-values are valid

group	1	2	3	4	5	total
range	0 to .01	.01 to .05	.05 to .10	.10 to .20	.20 to 1	
percent	1%	4%	5%	10%	80%	100%
expected	100	400	500	1000	8000	10,000

The "expected" row corresponds to what we expect when 10,000 samples are generated, when p-value results of significance tests validly follow their significance levels.

Again, the statistical analysis is valid if it does not conclude the means are different by more or less than the expected number of times determined by the significance level of the test. This is tested using the multinomial hypothesis

$$H_o: p_1 = .01,\ p_2 = .04,\ p_3 = .05,\ p_4 = .10,\ p_5 = .80\ ,$$

where the p's are the proportions corresponding to the expected ranges above.

The chi-square for this multinomial hypothesis thus provides a measure of lack-of-fit of the observed and expected numbers. The p-value for this multinomial hypothesis can be used to assess how poorly the test performs, and thus is a measure of validity (or, more correctly, lack-of-validity) of the test. When the p-value of this multinomial hypothesis is small, it indicates the test is invalid because the observed number of times the interval is achieved does not match what is expected.

SIMULATION PROCEDURE

Ten thousand (normal) samples are generated for each of the nine two-independent-sample situations described. Since menu-driven procedures in SPSS-X™ and other statistical packages typically run for limited numbers of samples, we wrote SPSS-X™ syntax programs to perform the analyses. P-values were found for each case using SPSS-X™ cumulative probability distribution functions.

SIMULATION RESULTS

Summary results are given in Tables 1, 2, and 3. They include the "bench" analyses, described under the "SITUATIONS SIMULATED" section.

Table 1: P-Values for Validity Test for Underlying Normal Distribution.

Results are for 10,000 samples, with n1=n2=100 items in each sample.
Small p-values indicate there are either too many or too few significant differences, compared with what is expected for significance levels defined earlier.

Test		Standard Deviation			
		mean	.75	1.0	1.25
bench (ungrouped)	1.75	.06219	.13911	.93917	
		2.25	.79978	.41054	.71753
		2.75	.38206	.22072	.94853

Anova	1.75	.84773	.33923	.68186
	2.25	.40926	.92831	.47551
	2.75	.06983	.51793	.09180
Kruskal-Wallis	1.75	.15025	.22027	.65451
	2.25	.77952	.23684	.48837
	2.75	.00802	.31012	.22295
Median	1.75	.88291	.00000	.62452
	2.25	.08566	.00073	.61491
	2.75	.00891	.07098	.94928
Crosstabs/Pearson	1.75	.21817	.00208	.09599
(Contingency Table)	2.25	.14206	.44696	.21466
	2.75	.27963	.19249	.41145
Crosstabs/LR	1.75	.01220	.00118	.05539
(Contingency Table)	2.25	.01754	.56545	.19155
	2.75	.00661	.13335	.31657

Table 2: P-Values for Validity Test for Underlying Normal Distribution.

Results are for 10,000 samples, with n1=n2=50 items in each sample.

Small p-values indicate there are either too many or too few significant differences, compared with what is expected for significance levels defined earlier.

Test		Standard Deviation		
	mean	.75	1.0	1.25
bench (ungrouped)	1.75	.40317	.02162	.26826
	2.25	.40320	.75054	.25322
	2.75	.46066	.99812	.82531
Anova	1.75	.53427	.49167	.43610
	2.25	.12236	.67838	.89035
	2.75	.02790	.96086	.24013
Kruskal-Wallis	1.75	.01352	.97718	.19234
	2.25	.46955	.39157	.32942
	2.75	.00004	.81092	.38791
Median	1.75	.00003	.83493	.00033
	2.25	.00161	.00617	.00299
	2.75	.00003	.44709	.00695

Crosstabs/Pearson	1.75	.80000	.07046	.60834
(Contingency Table)	2.25	.32790	.57535	.14712
	2.75	.00000	.02535	.25749
Crosstabs/LR	1.75	.20203	.00170	.34042
(Contingency Table)	2.25	.01735	.00164	.04876
	2.75	.00000	.00000	.00000

Table 3: P-Values for Validity Test for Underlying Normal Distribution.

Results are for 10,000 samples, with n1=n2=25 items in each sample.

Small p-values indicate there are either too many or too few significant differences, compared with what is expected for significance levels defined earlier.

Test		Standard Deviation		
		mean	.75	1.0	1.25
bench (ungrouped)	1.75	.99184	.83370	.72323	
	2.25	.52841	.42296	.87388	
	2.75	.57655	.29761	.21772	
Anova	1.75	.41736	.76101	.44354	
	2.25	.84522	.20754	.78508	
	2.75	.08572	.59780	.08987	
Kruskal-Wallis	1.75	.30458	.39019	.27812	
	2.25	.46889	.52752	.79679	
	2.75	.00662	.38783	.32202	
Median	1.75	.00432	.00002	.01544	
	2.25	.01423	.00000	.00000	
	2.75	.00117	.00434	.00004	
Crosstabs/Pearson	1.75	.04053	.34184	.02662	
(Contingency Table)	2.25	.30256	.78608	.02522	
	2.75	.01702	.00000	.00000	
Crosstabs/LR	1.75	.04156	.00001	.00049	
(Contingency Table)	2.25	.08420	.00126	.00000	
	2.75	.00000	.00000	.00000	

DISCUSSION

Tables 1, 2, and 3 give results for different sample size situations described earlier: table 1 uses n1=n2=100, table 2 uses n1=-n2=50, and table 3 uses n1=n2=25.

In general, we judge a test procedure to be invalid when p-values given are too small, which indicates the test is finding differences between the two independent samples, which are from the same normal distribution. Small p-values indicate the tests are finding differences when none exist.

First of all, note the bench tests are all as expected. We expect a chi-square result to be smaller than .10 about 10% of the time, and that is approximately what we observe. There is one p-value below .10 in tables 1 and 2, and none in table 3.

It can be seen from all three tables that Anova p-values follow the expected pattern more often than any of the other tests, followed by Kruskal-Wallis and then the other three. Furthermore, the likelihood ratio (LR) Contingency Table Analysis has more cases of unacceptably small p-values than the Pearson ones for all three sample sizes.

The Median Test also has unacceptably small p-values, as does both Contingency Table Analyses for certain combinations and sample sizes. P-values are smaller for smaller sample sizes more often than larger ones, for Median Test, and for both Contingency Table Analyses.

FURTHER RESEARCH

We can modify these procedures to analyze for validity of other continuous distributions. Other possibilities are uniform, exponential, gamma, beta, and Weibull. They can also be extended to rating scales of other lengths: 3,4,6,7,8, and 9 point scales.

The major step that remains to be done for assessing these methods is to run power tests for all the above situations. This means generate random datasets with known differences between the two groups, and calculate p-values to assess how well each of the above five statistical tests analyzes the cases.

REFERENCES

Agresti, Alan (1990). *Categorical Data Analysis*, John Wiley & Co.

Babakus, Emin; and Ferguson, Carl E. Jr. (1988). On choosing the appropriate measure of association when analyzing rating scale data, *Journal of the Academy of Marketing Science*, Volume Six, Number One.

Chow, Siu L. (1996). *Statistical Significance, Rationale, Validity, and Utility*, Sage Publications, London.

Conover, W.J. (1971). *Practical Nonparametric Statistics*, John Wiley and Sons, Inc., New York.

DeVellis, Robert F. (1991). *Scale Development, Theory and Applications*, Applied Social Research Methods Series, Volume Twenty Six, Sage Publications, Inc., Thousand Oaks, CA.

Gentle, James E. (1998). *Random Number Generation and Monte Carlo Methods*, Springer-Verlag, New York.

Guyon, I., Makhoul, J., Schwartz, R. and Vapnik, V. (1998). What Size Test Set Gives Good Error Rate Estimates?, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, Volume Twenty, Number One, January, 1998.

Holmes, Cliff (1974). Statistical evaluation of rating scales, *Journal of the Market Research Society*, Volume Sixteen, Number Two, April, 1974.

Kendall, M.G. and Stuart, A. (1973). *The Advanced Theory of Statistics*, Volume one, Distribution Theory, and Volume two, Inference and Relationship, Hafner Publishing Co., New York.

Kvanli, Alan H., Guynes, mC. Steven, and Pavur, Robert J. (1996). *Introduction to Business Statistics, A Computer Integrated Approach*, Fourth Edition, West Publishing Company.

Law, Averill M. and Kelton, W. David (1991). *Simulation Modeling and Analysis*, Second Edition, McGraw-Hill Book Company, New York.

Malhotra, Naresh K. (1996). *Marketing Research, an Applied Orientation*, Second Edition, Prentice-Hall, Upper Saddle River, N.J.

Miller, Delbert C. (1991). *Handbook of Research Design and Social Measurement*, Fifth Edition, Sage Publications, Inc., Thousand Oaks, CA.

Mooney, Christopher Z., (1997). *Monte Carlo Simulation*, Sage Publications, Inc., Thousand Oaks, CA.

Pearson, K. (1900). On a criterion that a given system of deviations from the probable in the case of a correlated system of variables is such that it can be reasonably supposed to have arisen from random sampling, Philos. Mag., Series five, number fifty, 157-175. Reprinted in *Karl Pearson's Early Statistical Papers*, edited by E.S. Pearson, Cambridge University Press.

Zeis, Charles, and Hailu Regassa, Abhay Shah, and Ahmad Ahmadian (1998). Implementing Goodness-of-Fit Tests for Rating Scale Data, *The International Business Schools Computing Association 26th Annual Conference Proceedings*, Denver, Colorado.

Zikmund, William G. (1984). *Business Research Methods*, The Dryden Press, New York.

A LONGITUDINAL REVIEW OF THE READABILITY OF THE *JOURNAL OF MARKETING*

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ABSTRACT

This paper examines the readability of the Journal of Marketing as determined by the Flesch score, of a series of samples taken from articles published in the Journal from 1936 – 1996. Findings show the articles are rated as difficult to read, and have become significantly more difficult to read over time. A sharp decline is observed during the period of 1966 to 1976, coincident with the increased use of multivariate statistics.

INTRODUCTION

There has been a need for information about the readability of manuscripts for many years in many professions. Journalists need to tailor their writing levels to match that of their targeted audience, either the current readership or the readership that the publication would like to have. Educators are concerned that the readability of a textbook matches the age and grade level of the students who will be using the book. Publishers (and authors) are concerned about the readability of (potentially) popular books, striving for a level high enough to make the book interesting but not so high as to scare off less sophisticated readers (often perceived to be the "mass market").

Those needing a measure of readability have been faced with the problem that readability is a concept, which cannot be measured with the scientific accuracy that a physicist might measure the atomic weight of gold. Traditionally, publishers relied on experienced and trained editors to read and evaluate the material to determine if it was appropriate for the intended audience. However, relying on human judgement poses at least three problems. First, such reading evaluations are subjective and therefore vary from one "expert" to the next. Secondly, training and keeping good quality editors is an expensive proposition. Thirdly, wholesale customers (such as school boards) often demand a quantitative, reproducible measure of readability to make choosing between competing products easier and, in appearances at least, more scientific.

Therefore, several techniques using methods that are intuitively appealing have been developed by researchers to give some usable measure of the readability of passages of text. These techniques use such measures as sentence length, word size, syllables per word and paragraph lengths to indicate how readable a document is. More difficult writing is presumed to use longer sentences and longer words; longer, polysyllabic words are more likely to be abstract, less used in everyday conversation, and are consequently viewed as more difficult.

MEASURING READABILITY

The readability measure chosen for this project was the Flesch Reading Ease Formula. The Reading Ease Formula was developed by Rudolf Flesch in 1946, has been widely used by educators and researchers for several decades, and is available in the Word word-processing program.

The Flesch Reading Ease Formula accounts for average word length and average sentence length – the longer the words and sentences; the more difficult the passage is presumed to be. More specifically, the Flesch Formula is as follows:

Reading Ease Score = 206.835 - Average Word Length (.846) - Average Sentence Length (1.015)

If the words and sentences are short, the resulting Reading Ease Score will be high, indicating that the document is easy to read. If the words and sentences are long, the Reading Ease Score will be low, indicating that the document is difficult to read.

LITERATURE REVIEW

A large number of articles have been published on the topic of readability with the bulk of them being in the area of education. Several articles in the business discipline have addressed the issue of applying readability formulas to business documents. Of particular interest here may be Stevens, et al (1992), which discussed whether readability formulas and the cloze procedure are meaningful when used to analyze business communications. Stevens suggests that while the cloze procedure is superior to readability formulas, both fall short when analyzing business communications. His major concern with the appropriateness of the procedures was that they don't take into account the fact that the business audience is a specialized adult population with expertise in the topical area of the manuscript. Therefore, the readers are probably better able to read the documents and better comprehend what is being written than the formulas report. While Stevens' conclusions and assertions are reasonable, we still choose to use the readability formulas in this paper.

Subramanian, et al (1993) studied the readability of annual reports of profitable and unprofitable corporations. They report that companies that were more profitable produced annual reports that were more readable. It appears that the companies that were unprofitable were trying to de-emphasize their performance and obscure useful information from the reader. McConnell (1986) found that President's Letters conveyed useful information and should not be dismissed lightly. Abrahamson (1996) also found that the President's Letter could be used to indicate a company's future performance. Courtis (1984) found that the chairman's address and footnotes were written well above the reading level of the general population but softened the implicit criticism of this observation by pointing out that most annual reports went to shareholders and this subgroup of the population was far better educated than most. Jones (1986) found that chairmans' narratives had become less readable since 1952 and that they became less readable if the company became a public limited company. Moore (1993) reviews the readability of product warranties as required by federal law (which required that the warranties be "easy to read and understand") and found them to be full of legalese and written at levels well above the education level of most Americans. Mader (1997) found that the Emergency Research Consent Form was written at levels above Americans' reading level, and that the reading difficulty increased as the medical procedure became riskier (comment: reflecting, perhaps, greater legal protection for the medical personnel at the expense of the sick or injured?).

Hartley and Meadows (1988) reviewed the results of ten studies, which examined the relationship between readability measures of journal articles and the journals' prestige rankings. Little evidence supported the hypothesis that prestige is inversely related to reading difficulty. In contrast, support for the inverse prestige/readability hypothesis is provided based on work by Armstrong (1982). An experimental study based on rewritten passages from 10 management journals showed that faculty seemed to be more impressed with the articles that were less readable. In fact, when the content of an article was poor, a lack of clear communication was especially helpful. It could be argued that journals are simply written to the level of their audience. Despite the fact that prestigious academic journals are written primarily by individuals with a doctoral education, the Journal of Marketing asserts that it seeks to bridge the world of the academic with that of the practitioner. This second audience is less likely to be enamored with difficult writing.

Based on the readability literature we posit two hypotheses;

Hypothesis 1: The articles in the *Journal of Marketing* have been difficult or very difficult to read over the last twenty-five years.

This period coincides with the advent of high-speed computer technology and increasing use of multivariate statistics.

Hypothesis 2: Readability of the *Journal of Marketing* has declined over the sixty-year study period.

SAMPLING

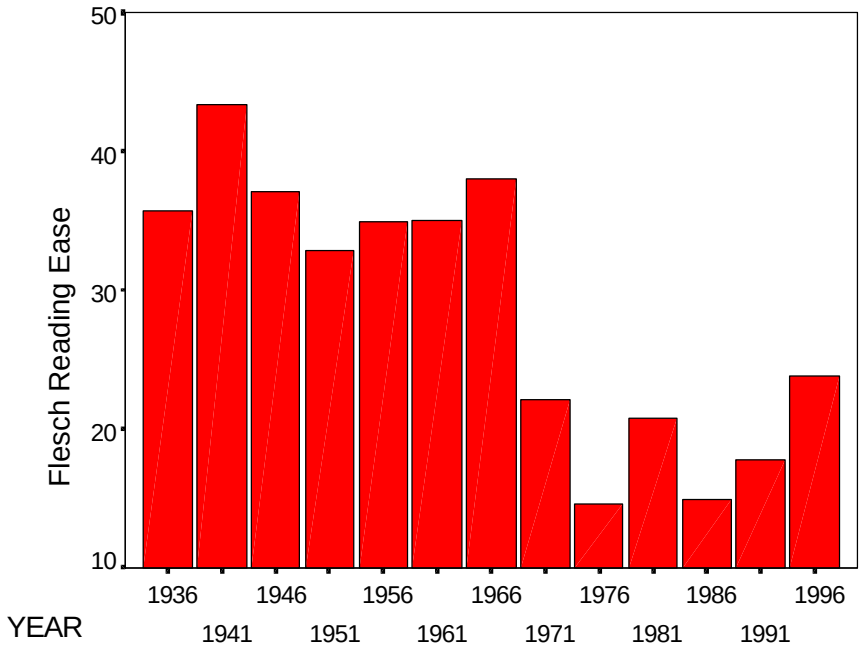
Samples were taken from the introductions of the first five articles in the first issue of the *Journal of Marketing* in each five-year period, beginning in 1936, and continuing through 1996. A total of 65 articles were sampled over the 60-year period. Readability techniques recommend a minimum sample size of 100 words; these samples ranged from 200 to 400 words. All samples were taken from the introductory section of each article. Sampling from the same place in each article increases comparability. In addition, the samples avoid the most technical sections of the articles. Such samples can therefore be argued as offering an even stronger test of the readability hypotheses. These passages may well overstate the readability ease.

RESULTS

Based on the 13 sample mean Flesch reading ease scores (see Table 1), seven were difficult to read (< 50) and six were very difficult to read (< 30). The overall mean was 28.5 (very difficult) with the range from 43.4 to 14.6. The standard deviation was 9.81. Hypothesis one is therefore supported. The reported mean Flesch reading score of under 30 is considered "very difficult" by Flesch (1948) standards.

TABLE 1 SAMPLE MEANS

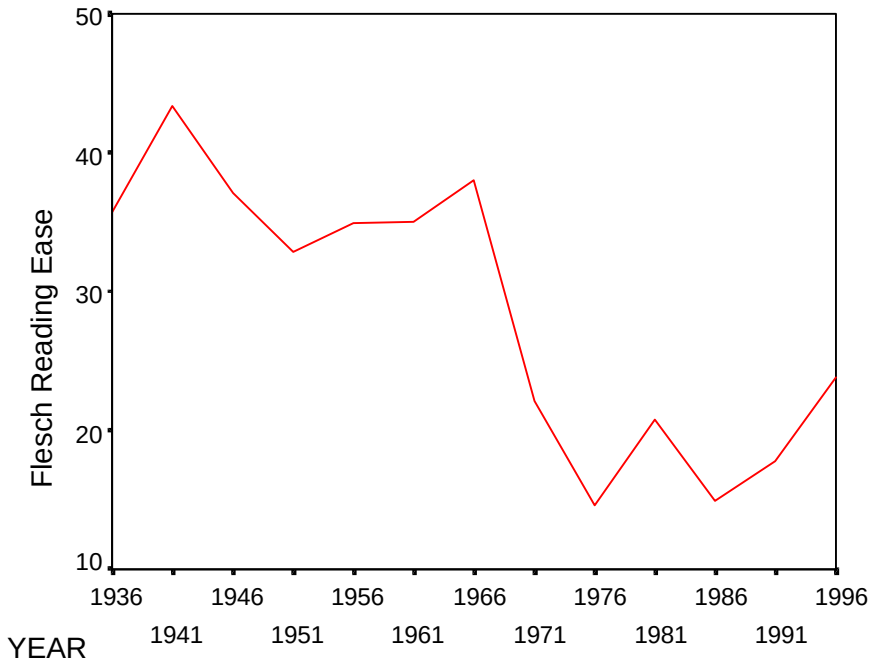
Year	Flesh Score Mean
1936	35.66
1941	43.40
1946	37.06
1951	32.80
1956	34.88
1961	35.06
1966	38.02
1971	22.16
1976	14.60
1981	20.78
1986	14.88
1991	17.76
1996	23.80



Overall Mean: 1936-96 = 28.5 Standard Deviation 9.81

The relationship between readability and time, as expressed by hypothesis 2, was tested using simple linear regression analysis (see Table 2). Results revealed a coefficient beta of -.823, significant at the .001 level with 12 degrees of freedom. The model generated an Adjusted R Square of .649. This reflects a significant downward trend in readability over time as stated in Hypothesis 2. A separate student t-test of the 1936-66 mean vs. the 1971-96 mean, showed a significant difference at the .001 level, (36.7 vs. 19.0 respectively).

TABLE 2



Evidence supporting both readability hypotheses was found. The *Journal of Marketing* has become significantly more difficult to read, especially so in the past 25 years. A large decline in readability scores occurred during the period of from 1966 to 1971,and 1976. This coincides with the advent of computer technology and multivariate statistics. But this finding is based on introductory passages and not the method sections. Future research might examine the more technical passages found in top journals. It should also be noted that the most recent periods examined, 1991 and 1996, showed modest improvements in readability, but were still well below those of thirty years earlier. It remains to be seen if the recent trend toward moderately less difficult readability will be maintained.

Readability was assessed using the Flesch index and of only one journal in marketing. The Flesch index is based only on syntactical complexity and word features. Measures of actual reader experience with these articles might be preferred if an appropriate method of assessing was available. But even given this proviso, a longitudinal assessment offers a worthwhile developmental picture of past and

present readability trends as reflected in the most respected and longest lived journal in marketing. While the current study should be viewed as exploratory, future research might replicate these findings in other journals within the business fields and beyond.

Previous research suggested that academic faculty may perceive articles that are more difficult to read as higher in quality. A quote by an unnamed professor goes to the heart of this issue; "If our undergraduates can understand your paper, it will never get published in a good journal." But if clarity of a journal is the goal, it is up to the editors of top ranked journals to provide the necessary leadership.

REFERENCES

Abbott, Susan (1987). Reading Between the Lines of a Public Fund Prospectus. *Futures: The Magazine of Commodities and Options*, 16(9), 50-51.

Abrahamson, Eric and Eli Amir (1996). The Information Content of the President's Letter to Shareholders. *Journal of Business Finance and Accounting*, 23(8), 1157-1183.

Anderson, Richard T. and Craig L. Piotrowski (1994). Write It So They'll Read It: Popular Annual Financial Reporting. *School Business Affairs*, 60(1), 56-59.

Armstrong, J.S. (1982). Creative Obfuscation, *IEEE Transactions on Professional Communication*, 25(1), 30-32.

Kaiser, Robert L. (November 9, 1998). Plain English is Toppling Bureaucrats' Tower of Babble. *Chicago Tribune*, Section 1-1.

Courtis, J. K. (1987). Fry, Smog, Lix and Rix: Insinuations about Corporate Business Communications. *The Journal of Business Communication*, 24(2), 19-27.

Courtis, J. K. (1984). An Investigation into Annual Report Readability and Corporate Risk-Return Relationships. *Accounting and Business Research*, 16(64),285-294.

Davison, A. and R. N. Kantor (1982). On the Failure of Readability Formulas to Define Readable Texts: A Case Study From Adaptation. *Reading Research Quarterly*, 17(2), 187-209.

Fisher, Steven A. and Michael Y. Hu (1988). Does the CEO's Letter to the Shareholders Have Predictive Value? *Business Forum*, Fall, 22-24.

Flesch, R. (1948). A New Readability Yardstick, *Journal of Applied Psychology*, 32(3), 221-233.

Hartley, J., M. Trueman, and A.J. Meadows (1988). Readability and Prestige in Scientific Journals. *Journal of Information Science Principles and Practice*, 14(2), 69-75.

Holliday, Karen Kahler (1994). Annual Reports as Marketing Tools. *Bank Marketing*, August, 23-28.

Jones, Karen H. and Dana M. Anderson (1994). Textbook Analysis for Trade and Industrial Education. *Journal of Industrial Teacher Education*, 31(2), 70-93.

Jones, M. J. (1986). A Longitudinal Study of the Readability of the Chairman's Narratives in the Corporate Reports of a UK Company. *Accounting and Business Research*, 18(72), 297-305.

Jones, Michael John (1994). A Comment to Contextualize "Performance and Readability: A Comparison of Annual Reports of Profitable and Unprofitable Corporations. *Journal of Business Communication*, 31(3), 225-230.

Jones, Mike (1994). The Readability of Accounting Narratives. *Management Accounting*, 72(4), 28.

Laderman, Jeffrey M. (1995). The Prospectus Tries Plain Speaking. *Business Week*, 34(?), 72.

Mader, Timothy J. and Stephen J. Playe (1997). Emergency Medicine Research Consent Form Readability Assessment. *Annals of Emergency Medicine*, 29(4), 534-539.

McConnell, Dennis, John A. Haslem and Virginia R. Gibson (1986). The President's Letter to Stockholders: A New Look. *Financial Analysts Journal*, 42(5), 66-70.

Moore, Ellen M. and F. Kelly Shuptrine (1993). Warranties: Continued Readability Problems After the 1975 Magnuson-Moss Warranty Act. *Journal of Consumer Affairs*, 27(1), 23-36.

Pasadeos, Yorgo and Yin Yeap (1991). Changes in Contents and Readability of Annual Reports. *Communication Research Reports*, 8 (), 121-125.

Schroeder, Nicholas and Charles Gibson (1992). Are Summary Annual Reports Successful? *Accounting Horizons*, 6(2), 28-37.

Selzer, J. (1981). Readability is a four-letter word. The Journal of Business Communication, 18(4), 23-34.

Stevens, K. T., K. C. Stevens, W. P. Stevens (1992). Measuring the Readability of Business Writing: The Close Procedure versus Readability Formulas. *The Journal of Business Communication*, 29(4), 367-382.

Subramanian, Ram, Robert G. Insley, and Rodney D. Blackwell (1994). Performance and Readability: A Response to Jones' Comment. *Journal of Business Communication*, 31(3), 230-233.

Subramanian, Ram, Robert G. Insley, and Rodney D. Blackwell (1993). Performance and Readability: A Comparison of Annual Reports of Profitable and Unprofitable Corporations, *Journal of Business Communication*, 30(1), 49-61.

USA Today (October 14, 1994). Mutually Understood: Buffett Decodes Fund Prospectus. 2B.

Wells, Barron and Nelda Spinks (1991). Readability: Theory and Practice. *Bulletin of the Association for Business Communication*, 54(4), 46-47.