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EDITORIAL PREFACE

Again this year a variety of papers were received from throughout the United States and the world for presentation at the conference and inclusion in the conference proceedings. It was the goal of this year's proceedings team to put together a product that will serve as a record of this year's conference; a reference for research; and as a source of ideas and information for all who come across it. We hope we have adequately met that goal.

Our thanks go to all who participated in, helped with, and/or arranged the 2009 Association of Collegiate Marketing Educators proceedings – also known as *Advances in Marketing*. A special thanks to Bob Vavricka and Alanna McElroy, both of East Central University, for their assistance, expertise and patience as this project was completed. A big thanks also goes out to the authors for their efforts to format their papers and to submit them in a timely manner.

We wish to acknowledge the assistance of ACME President Maxwell Hsu and ACME Webmaster Vaidotas Lukosius for their advice and assistance on various aspects of the conference proceedings. Please accept my apologies for any errors or admissions to these proceedings resulting from the effort to assemble many individual papers into one document.

It is sincerely hoped that everyone who has contributed to 2009 proceedings will continue to do so in the years to come. Next year's conference will be here soon. We hope that you will have a very productive and creative year with at least one submission for the 2010 ACME Conference in Dallas.

We hope everyone enjoyed their time in Oklahoma City and we hope to see you in Dallas next year.

Sincerely,

Patrick D. "Pat" Fountain
2009 ACME Program Chair and Proceedings Team Leader
Professor of Business Administration
East Central University
Ada, Oklahoma

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Denny Bristow, St. Cloud State University

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A Note on Modeling Service Capacity Allocation Under Varying Intensities Competition

by

Hongkai Zhang, East Central University

Jim Rauch, East Central University

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What Should Turkey's Marketing Strategy Be in Health Tourism

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Effect of Personality on Customer Orientation and Performance Outcomes

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A Note on Modeling Service Capacity Allocation Under Varying Intensities of Competition

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Jim Rauch, East Central University

Sports and Entertainment Marketing Track

Modeling Video Game Preference Modeling Using Personality and Motivation

Vaidotas (Vaidas) Lukosius, Tennessee State University

Ramprasad Unni, Tennessee State University

Marketing Education Track

Relationship of Student Perceptions of Instructor's Referent and Expert Power

With Their Learning/Course Experience:

A Comparison of Online and Traditional Classroom Learning Environments

Sarath A. Nonis, Arkansas State University

Shane Hunt, Arkansas State University

Gail I. Hudson, Arkansas State University

A NOTE ON MODELING SERVICE CAPACITY ALLOCATION UNDER VARYING INTENSITIES OF COMPETITION

Hongkai Zhang, East Central University
Jim Rauch, East Central University

ABSTRACT

Based on a linear deterministic price response function, sales revenue is analytically determined for five alternative policies for allocating service capacity over a two-period planning horizon for a service provider in a competitive environment, in which the intensity of competition varies over time. A numerical study is conducted to compare the performances of the considered policies and examine the impacts of competition and price sensitivity.

INTRODUCTION

Advance selling is widely practiced in service industries and there have been studies addressing service capacity allocation for a service provider (e.g., Png 1991; Lee and Ng 2001; Shugan and Xie 2005). In the marketing literature, a particularly important question still stands only partially answered. It is concerned with what is the best way of allocating a service capacity over time for spot and advance selling so that a certain performance measure is optimized. In this paper, we attempt to address the above question over a two-period planning horizon while taking varying intensities of competition into account.

In the next section, we first develop the models for the prices of service capacity over the advance and spot periods, respectively, and then the sales revenues of five alternative policies for service capacity allocation policies are analytically determined. The third section presents a numerical example to compare the performances of the five allocation policies and examine the impacts of price sensitivity and competition intensity. The paper concludes with a summary of its findings and managerial implications in the fourth section.

MODEL DEVELOPMENT

Let us consider a service provider (designated as the focal firm) in a competitive environment, which has a service capacity of K identical units available for allocation over a planning horizon of two consecutive time periods. The firm's sale revenue generated over the planning horizon is chosen to measure the performance of an allocation policy. The problem that we intend to solve can be specifically stated as follows: *What is the best scheme in a competitive environment to completely allocate a service capacity of K identical units over a two-period planning horizon for spot and advance selling so that the service provider's sales revenue will be maximized?* We make the following basic assumptions while formulating this optimization problem:

- (1) The price charged for a unit of service capacity is constant in a period but may vary across the two-period planning horizon.
- (2) The capacity is produced and consumed in the second period.
- (3) The timing of competitive entry and its captured market share are known for certainty.

Beginning from the starting point of the planning horizon, the two periods are successively denoted as Period i ($i = 1, 2$). Period 1 is referred to the advance period in which advance selling could occur, while Period 2 is called the spot period in which both spot selling and the consumption of service take place. Several terms used to formulate the optimization problem stated above are defined below:

- P_i the price of a unit of capacity in Period i ;
 x_i the amount of the focal firm's capacity allocated to Period i ;
 R_i the firm's sales revenue in Period i ;
 R the firm's total sales revenue over the two-period planning horizon;
 π the firm's profit over the two-period planning horizon;
 K the firm's total capacity available for consumption;
 $1/(\lambda+1)$ the fraction of the sales capacity taken by the competition upon entry ($\lambda > 0$).

We assume that price is a linear decreasing function of total capacity forecasted to be utilized at any point of time as in the price response function employed in the work of Lee and Ng (2001). Following Mesak (1990), we here introduce the parameters λ_i ($i = 1, 2$) to reflect the intensity of competition between the focal firm and its rival(s) in period i . It is assumed that if competition is present in Period i , a fraction of capacity, $(1/(\lambda_i+1))x_i$, is taken away from the focal firm in this period. Therefore, the fraction of capacity that can be sold by the focal firm in Period i is $(\lambda_i/(\lambda_i+1))x_i$. We may let $w_i = \lambda_i/(\lambda_i+1)$ for $i = 1, 2$. Apparently, w_i is a value in the interval $(0, 1)$. A larger value of λ_i means a smaller market share taken away by the competition and thus a larger market share (a larger value of w_i) achieved by the focal firm in period i .

Based on the above discussion, if competition is present in the advance and spot periods (i.e., Periods 1 and 2), the prices over the two-period planning horizon are given by Equations (1-1) and (1-2):

$$P_1 = \alpha - \beta_1(w_1x_1 + w_2x_2), \quad (1)$$

$$P_2 = \alpha - \beta_2w_2x_2. \quad (2)$$

In the expressions shown above, $\alpha > 0$, $\beta_i > 0$, $i = 1, 2$.

In these expressions, the coefficient β_i represents the price sensitivity for Period i , which measures the change in the price of service for Period i due to a unit change in the amount of service capacity available in that period. It is assumed in our present study that price sensitivity is constant over a single period but may vary across Periods 1 and 2.

The total sales revenue R of the focal firm generated by advance and spot selling over the entire two-period planning horizon is stated as

$$R = P_1 w_1 x_1 + P_2 w_2 x_2 = \alpha w_1 x_1 - \beta_1 (w_1^2 x_1^2 + w_1 w_2 x_1 x_2) + a w_2 x_2 - \beta_2 w_2^2 x_2^2. \quad (3)$$

Several main alternative types of policies for allocating service capacity are examined in this study. They are defined below:

- (1) *Pure Advance Selling Policy (PASP)*: Under this policy, the focal firm allocates its entire service capacity in the advance period (i.e., Period 1).
- (2) *Pure Spot Selling Policy (PSSP)*: Under this policy, the focal firm allocates its entire service capacity in the spot period (i.e., Period 2).
- (3) *Uniform Policy (UP)*: This is a policy in which the focal firm allocates an equal amount of its service capacity to each period of the two-period planning horizon.
- (4) *Pulsing Allocation Policy (PAP)*. According to this policy, the focal firm alternates between high and low levels of service capacity allocation. If the firm allocates a higher level of capacity in the advance period, the related policy is designated as PMP-I; otherwise it is designated as PMP-II. For illustrative purposes, we only consider in this study the special case for both PMP-I and PMP-II in which the high level of capacity allocated is twice the low level.

Given the allocation scheme of each policy discussed above and the service capacity K , the yielded sales revenue is analytically determined by model (3). Table 1 summarizes the allocation schemes and sales revenues. It is shown in Table 1 that the density of competition in the advance period, w_1 , does not affect the sales revenue yielded by pure spot selling (PSSP). In contrast, the density of competition in the spot period, w_2 , does not affect the sales revenue yielded by pure advance selling (PASP). It is also found that the densities of advance and spot periods interactively affect the sales revenues yielded under the other three allocation policies, UP, PAP-I and PAP-II.

A NUMERICAL EXAMPLE

For illustrative purposes, we present in this section a numerical example to compare the performances of the five policies for service capacity allocation. Such a numerical approach is commonly used in the marketing literature for conducting sensitivity analysis.

Suppose that the service capacity available for consumption in the spot period is $K = 3000$ units. Four pairs of (w_1, w_2) are chosen to examine the impact of competitive intensity on the performances of the five allocation policies: $(0.2, 0.8)$, $(0.8, 0.2)$, $(0.2, 0.2)$ and $(0.8, 0.8)$. The first two pairs of (w_1, w_2) indicate weaker and stronger competition in the advance period (Period 1), respectively. The last two pairs of (w_1, w_2) each indicate a lower and higher constant level of competitive intensity over the two-period planning horizon. We assume $\alpha = \$1000$. Four pairs of the price sensitivities (β_1, β_2) are considered to study the impact of price sensitivities on the optimal scheme of capacity allocation: $(0.3, 0.4)$, $(0.4, 0.3)$, $(0.3, 0.3)$ and $(0.4, 0.4)$. The first two pairs of (β_1, β_2) show a higher and lower price sensitivity in the spot period (Period 2), respectively. The last two pairs of (β_1, β_2) each indicate a constant distribution

of price sensitivity over the planning horizon. Lower price sensitivity in the spot period could be due to imminent perishability of the service (Lee and Ng 2001). For example, a consumer who has not made advance booking for a hotel room or a flight seat is likely to be less price-sensitive when he/she requires a room or a seat at the time of consumption than one who has made an advanced booking well ahead of the time of consumption. For the case of higher price sensitivity in the spot period, Xie and Shugan (2001) assert that buyers may pay a premium in the advance period over the spot price, because advance buying has a higher expected buyer surplus than waiting towards the consumption (spot) period as in most bakery services and high-fashion clothing. For the case of constant price sensitivity, customers are assumed to value the service equally over time. Examples of related services include catering, lawn care and repair services.

Table 1
Allocation Schemes and Sales Revenues of the Considered Policies

Policy	Allocation scheme	Sales revenue (R)
PASP	$x_1 = K, x_2 = 0$	$\alpha w_1 K - \beta_1 w_1^2 K^2$
PSSP	$x_1 = 0, x_2 = K$	$\alpha w_2 K - \beta_2 w_2^2 K^2$
UP	$x_1 = K/2, x_2 = K/2$	$\frac{1}{2} \alpha (w_1 + w_2) K - \frac{1}{4} \beta_1 (w_1^2 + w_1 w_2) K^2 - \frac{1}{4} \beta_2 w_2^2 K^2$
PAP-I	$x_1 = 2K/3, x_2 = K/3$	$\frac{1}{3} \alpha (w_1 + 2w_2) K - \frac{1}{9} \beta_1 (w_1^2 + 2w_1 w_2) K^2 - \frac{4}{9} \beta_2 w_2^2 K^2$
PAP-II	$x_1 = K/3, x_2 = 2K/3$	$\frac{1}{3} \alpha (2w_1 + w_2) K - \frac{2}{9} \beta_1 (2w_1^2 + w_1 w_2) K^2 - \frac{1}{9} \beta_2 w_2^2 K^2$

Table 2 reports the sales revenues of all the five alternative policies of capacity allocation in sixteen cases, together with the optimal policy identified for each case. For example, when the price sensitivities $\beta_1 = 0.3$ and $\beta_2 = 0.4$ and the competitive intensity parameters $w_1 = 0.2$ and $w_2 = 0.8$, the sales revenues generated by the Pure Advance Selling Policy (PASP) and the Pure Spot Selling Policy (PSSP) are \$49,200 and \$9600, respectively.

It is noted in Table 2 that if price sensitivity and competition intensity both remain constant over the two-period planning horizon, the optimal allocation policy appears to be UP, which generates the highest sale revenue, while both pure advance selling and pure spot selling produce the lowest sales revenue. This result is consistent with the analytical findings of Lee and Ng (2001). When price sensitivity increases or decreases over the planning horizon, on the other hand, the pulsing allocation policies (PAP-I or PAP-II), may be superior to the uniform policy (UP) in yielding sales revenue.

Table 2
Sales Revenue Generated by the Alternative Allocation Policies (in \$10,000)

(β_1, β_2)	(w_1, w_2)	PASP	PSSP	UP	PAP-I	PAP-II	Optimal policy
(0.3, 0.4)	(0.2, 0.8)	4.92	0.96	7.89	6.68	8.00	PAP-II
(0.3, 0.4)	(0.8, 0.2)	6.72	4.56	9.24	8.48	9.20	UP
(0.3, 0.4)	(0.2, 0.2)	4.92	4.56	5.10	5.00	5.12	PAP-II
(0.3, 0.4)	(0.8, 0.8)	6.72	0.96	9.60	8.00	9.92	PAP-II
(0.4, 0.3)	(0.2, 0.8)	4.56	6.72	8.88	8.88	8.16	UP, PAP-I
(0.4, 0.3)	(0.8, 0.2)	0.96	4.92	7.53	7.68	6.36	PAP-I
(0.4, 0.3)	(0.2, 0.2)	4.56	4.92	5.01	5.04	4.92	PAP-I
(0.4, 0.3)	(0.8, 0.8)	0.96	6.72	8.16	8.64	6.72	PAP-I
(0.3, 0.3)	(0.2, 0.8)	4.92	6.72	9.33	9.24	8.64	UP
(0.3, 0.3)	(0.8, 0.2)	6.72	4.92	9.33	8.64	9.24	UP
(0.3, 0.3)	(0.2, 0.2)	4.92	4.92	5.19	5.16	5.16	UP
(0.3, 0.3)	(0.8, 0.8)	6.72	6.72	11.0	10.6	10.6	UP
(0.4, 0.4)	(0.2, 0.8)	4.56	0.96	7.44	6.32	7.52	PAP-II
(0.4, 0.4)	(0.8, 0.2)	0.96	4.56	7.44	7.52	6.32	PAP-I
(0.4, 0.4)	(0.2, 0.2)	4.56	4.56	4.92	4.88	4.88	UP
(0.4, 0.4)	(0.8, 0.8)	0.96	0.96	6.72	6.08	6.08	UP

Table 2 shows that if price sensitivity increases over the planning horizon ($\beta_1 < \beta_2$), all the allocation policies produce higher sales revenue under the increasing competitive intensities ($w_1 > w_2$) than the decreasing ones ($w_1 < w_2$). In contrast, if price sensitivity decreases over time ($\beta_1 > \beta_2$), the above conclusion is reversed. It is also found that for all the four pairs of price sensitivity considered, a lower constant competitive intensity over the two-period planning horizon will allow UP, PAP-I and PAP-II to yield higher sales revenue than a higher constant

one. In addition, price sensitivity appears to have an impact on the performances of the allocation policies. As shown in Table 2, all the policies produce higher sales revenue under a low constant level of price sensitivity than a higher one.

SUMMARY AND CONCLUSIONS

In this study, a linear price response function is employed to describe the relationship between the price and the capacity projected for utilization in a competitive setting with varying competitive intensity over a two-period planning horizon. Sales revenue is analytically determined for five alternative policies of service capacity allocation, respectively. A numerical example is presented to compare the performances of the policies and shed lights on the interactive effects of price sensitivity and competition intensity. Managerial implications based on our main findings are summarized below:

- (1) The focal firm should not allocate all its capacity in the advance or spot period only. A combination of advance and spot selling characterized by UP or PAP would yield higher sales revenue.
- (2) The focal firm should consider the marketing mix variables to reduce consumers' price sensitivity.
- (3) Reducing the intensity of competition will improve the firm's profitability.

The modeling effort developed in this paper is exploratory, revealing several possibilities for future research. First, the price response function employed in our models has a linear and deterministic structure. A probabilistic price response function with a nonlinear may be considered for model development. Second, the sales revenues of the alternative policies are determined based on a two-period model. Such an analytical approach could be extended to a general n -period planning horizon. Third, the findings of our numerical study are valid for the chosen model parameters. A wider range of the parameter values should be used to obtain more general conclusions.

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**SHOULD WE LABEL? THE INFLUENCE OF FOOD SAFETY
INFORMATION ABOUT OFFSPRING OF CLONED ANIMALS
ON CONSUMER PURCHASE INTENTIONS**

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EXTENDED ABSTRACT

In January of 2008, after 6 years of deliberations, the Food and Drug Administration (FDA) announced that food derived from the offspring of cloned cows, pigs, and goats was safe for human consumption. Because clones are genetically and nutritionally indistinguishable from the parent (Miller, 2008), the FDA will not require any special labels on food from the progeny of clones (FDA Consumer Health Information, 2008). In spite of this ruling, food companies now face a dilemma determining the best way to persuade consumers to buy it. The Industry believes that food from clones could be tastier, higher in quality, and even healthier but without the labeling, they will not be able to communicate these benefits to consumers. On the other hand, it is highly likely that many consumers because of various moral, ethical and philosophical issues as well as their perceptions of the health and environmental risks from this technology will not purchase products from cloned animals. The purpose of this research is to determine if a credible source such as the FDA making a claim that food from the offspring of clones is safe for human consumption will have any impact on the purchase intentions of these products at various price levels.

Hypotheses

In this study, we hypothesize that providing information to consumers from a credible source stating that beef from the off-spring of cloned animals is safe for human consumption along with the benefits to them will increase their likelihood of purchasing beef at three different price levels: (1) same price as USDA prime, (2) 10% more than USDA prime, and (3) 20% more than USDA prime. The rationale for higher prices is the benefits these products offer to the consumer over what is provided by conventionally bred animals currently on the market. That is, if consumers believe that meat from the off-spring of cloned cattle is better quality than USDA prime, which is the best quality meat in the market today, then they will be more likely to purchase this meat if a credible source like the FDA states that the meat is safe for human consumption. This leads us to the first hypothesis.

H1: Information from a credible source, such as the Food and Drug Administration (FDA), stating that meat from cloned animals is safe for human consumption will increase the likelihood of consumers purchasing this meat at three different price levels: (1) same

price as USDA prime, (2) 10% more than USDA prime, and (3) 20% more than USDA prime).

The FDA does not require companies that produce food from the offspring of cloned animals to label them. However, one concern about labeling is that consumers might perceive this information as a warning. Considering that 65% of respondents in a recent survey (IFIC, 2005) stated that they were unlikely to buy food products from cloned animals, this study hypothesizes that consumers will be concerned if they find out later that they have consumed products from cloned animals without their knowledge.

H2: Consumers will have high levels of concern if they consume food from an offspring of a cloned animal without prior knowledge of it.

Because of the consumer's lack of knowledge about food from cloning, their perceptions of this technology are likely to influence their perceptions of food from this process. Also, assuring the safety and approval of this technology by regulatory agencies such as FDA is also likely to have a strong impact on consumer acceptance (Hallman and Condry, 2006). This leads to the next two sets of hypothesis:

H3A: Consumer perceptions of the ethical and moral issues about cloning will negatively correlated with intentions to purchase meat produced from an offspring of cloning.

H3B: The trust and credibility that consumer's perceive about the FDA will positively correlate with their intentions to purchase meat produced from an offspring of cloning.

H4: The attitude that consumer's have about cloning will positively correlate with their intentions to purchase meat produced from an offspring of cloning.

A consumer's propensity to take risks will influence his or her likelihood of purchasing meat from an offspring of a cloned animal even if available science has shown risks from these products to be no different to meat from conventional animals (Miller, 2007). This leads to the final hypothesis.

H5: Consumer risk aversion will negatively relate to intentions to purchase meat produced from the offspring of a clone.

Methodology

Data for this research were collected from students who were attending a medium size university (10,000+) in the Mid-South region of the U.S. They were first provided the following instructions. "You are at the grocery store and there is top quality (i.e., tender, lean, tastier etc.) USDA (U.S. Department of Agriculture) approved beef. However, the label also states that the beef is from an off-spring of cloned cattle." Participants were then asked to provide their intentions to purchase this meat at the 3 different price levels. Once this was completed, participants were shown a short 3 minute video clip that showed an official from the FDA making the claim that food from cloned animals was safe for human consumption and that there

were no verifiable differences between meats from cloned animals and other conventionally bred animals (BBC News, 2008). After this video message, participants were once again asked to respond to the same 3 questions about purchase intentions at the 3 different price levels. In addition, they responded to items that measured their beliefs and attitude about cloning, propensity to take risks, inert innovativeness and demographics. Data collection resulted in 145 usable surveys that were subject to further analyses.

All mean differences were statistically significant at $p < 0.05$ level indicating that credible information from a source such as the FDA increases the likelihood of consumers purchasing meat from a progeny of a clone at all three price levels. This supported the first hypothesis. Hypothesis H2 that evaluated consumer concern about product label not containing information about cloning was also supported. Most correlations were significant when the price level equaled top quality beef sold at the supermarket both before and after watching the video about meat from offspring of clones for beliefs, attitude, and risk averseness. However, at higher prices, relationships were only significant for attitude before and after watching the video. For beliefs, they were only significant after watching the video and at higher price levels not at the same price. Risk averseness did not demonstrate any significant relationships with purchase intentions before or after watching the video at the two higher price levels. These results generally supported hypotheses H3A, H3B, H4, and H5.

Discussion and Implications

Results show low levels of purchase intentions for these products even after emphasizing the quality attributes of them. Likelihood of purchasing went up after watching the video clip but the means were still more close to “probably would not buy” to “neutral.” At higher price levels, the likelihood of purchasing was even lower. This seems to indicate a lack of desire among people to purchase products from the offspring of clones when they are aware of it.

The findings seem to question the prudence of labeling food as safe even with an endorsement from the FDA. However, the fundamental question still remains as to how will firms communicate to their customers that these products are of better quality than what is available in the market without stating that they are from the offspring of clones? Also, results from hypothesis H2 found the displeasure of consumers to be high if they subsequently found out that they have been purchasing food from the progeny of clones without their knowledge. It would be a very risky strategy not to mention this to the consumer and some may even consider this unethical because of their belief that a consumer has a right to know what they are selecting.

This study also found, that ethics and morals have a negative impact on purchase intentions before and after watching the video at the same price level. Considering that we all are likely to have consumed food from natural clones at sometime or other, credible and easy to understand communication messages that educate consumers about the safety of these products could reduce the influence that people’s ethical and moral concerns have on their purchase intentions.

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**THE MODERATING EFFECT OF CUSTOMER
PARTICIPATION ON THE NEW PRODUCT CAPABILITY-
PERFORMANCE RELATIONSHIP**

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EXTENDED ABSTRACT

While the innovation and marketing of new products has become increasingly important to the profitability of corporations, the failure rate of new products continues to remain high. The primary reason for failure is poor understanding of customer needs. Thus, it is valuable to study, if, how, and how much companies involve customers in their new product development process and what results this involvement produces (Largrosen, 2005).

In these highly competitive markets a company's NPD resources and capabilities drive the greatest competitive advantage (Autio, Sapienza, and Alemedia, 2000). Kandemir, Calantone, and Garcia's (2006) propose important capabilities that match with new product development capabilities. The search for information about consumer's current and latent needs is essential for NPD success. Firms also should possess sufficient levels of testing resources and skills to coordinate their technical activities. Firms lacking these resources have difficulties launching new products and thus are likely to fail in the market. Therefore we predict that

P1: New product development capabilities (a) Idea generation, b) Idea screening, c) Technical development, d) Market test and e) Commercialization positively predict product competitive advantage.

Product advantage consistently appears as the most important characteristic in explaining the adoption and success of new products (Montoya-Weiss and Calantone, 1994). Henard and Szymanski (2001) also report that product advantage is one of the primary characteristics consistently related to new product performance.

P2: New product competitive advantage positively predicts new product performance.

Gruner and Homburg (2000) contend that new product development stage-specific aspects of customer interaction extend the previous research in an essential way and underscored the importance of customer interaction at different stages of the new product development process. Relationship marketing literature also suggests that information exchange and collaboration with users and other third parties is useful for successful NPD (More 1986). Studying customer information in all phases of new service development, Martin and Horne (1993) showed that successful firms had greater overall use of customer information compared to unsuccessful firms.

P3: The positive relationship between new product capabilities(a) Idea generation, b) Idea screening, c) Technical development, d) Market test e) Commercialization) and product competitive advantage is stronger, when customers participate in the new product development process.

Technological turbulence arises from changes in the underlying product technologies and their rates of obsolescence. Changes in the standards or specifications of end products, components, or services contribute to technological turbulence. Thus, in industries experiencing shorter cycles of technological innovation to obsolescence, it will be difficult for firms to accurately anticipate technical requirements without the participation of their customers.

P4a: Technological turbulence positively predicts customer participation in product development.

The market orientation literature suggests that market turbulence is likely to arise from the heterogeneity and rapid changes in the composition and preferences of customers in the market (Kohli and Jaworski 1990). Thus, a focal firm operating in a more turbulent market has to modify its products and approaches to market more readily to adapt to the changing preferences of its customers (Destan, Yaprak, and Cavusgil, 2006).

P4b: Market turbulence positively predicts customer participation in product development.

Consumers are likely to perceive higher risks when products are more complex because the difficulty in understanding the product leads to uncertainty, increasing the perception that an unknown negative outcome may occur (Burnham, Frels, and Shugan, 2003). Hence, companies must consider information on user perceptions of product complexity and incorporate this information into their product processes to reduce the perception. This effort will result in greater customer participation in the NPD process.

P4c: Product complexity positively predicts customer participation in product development.

According to Lin and Germain (2004), formalized and centralized structures should be more efficient for facilitating customer participation in product development. Formalization acts as an important signal that information use is important in the organization which may lead to increased information use and acquisition. In more formalized organizations, information sources are more likely to be specified and more extensive in scope than in less formalized organizations (Low and Mohr, 2001).

Numerous studies show that centralized organizational structures can limit market information generation and dissemination (Kohli and Jaworski, 1990). Market intelligence is critical for a successful NPD program and essential to making higher quality products that meet customer and supplier requirements (Sethi, 2000).

P4d: Formalization positively predicts customer participation in product development.

P4e: Centralization positively predicts customer participation in product development.

According to Kohli and Jaworski (1990) and Deshpande et al. (1993), customer orientation is an integral component of a general, underlying organizational culture and, thus, attention to information about customers' needs should be considered alongside the basic set of values and beliefs that are likely to reinforce such a customer focus and permeate the firm. This research suggests that firms with high levels of customer orientation collect more customer information and understand customers' needs from a customer view point. Much of this information will likely be collected through customer participation in new product development.

P4f: Customer Orientation positively predicts customer participation in product development.

Open-mindedness is an organizational value that measures receptivity to new and possibly different ideas (Sinkula et al., 1997). A high level of open-mindedness makes firms focus more on the outside world and stimulates them to monitor the customers' voice for successful new product development.

P4g: An open culture positively predicts customer participation in product development.

For future research, the next step in this research stream is to collect longitudinal data to track the relationship between various NPD capabilities and product competitive advantage as moderated by customer participation. An additional study might examine the NPD process from the customer's perspective. What leads customers to participate more in the NPD process? Which customer groups provide more valuable information through their participation? To improve our understanding of the management of the NPD process, a more comprehensive model should also be tested.

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**A PRELIMINARY INVESTIGATION INTO THE ROLE OF
INTERPERSONAL REALTIONS ON THE
COMPLAINT BEHAVIOR OF PURCHASING MANAGERS**

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EXTENDED ABSTRACT

There has been a recent trend toward a view of exchange which incorporates relational concepts. Arndt (1979) has even alluded to the fact that selecting firms with which to enter into long-term relationships is much the same as the selection of marital partners. With this in mind, a modified version of Moos and Moos' (1981) Family Environment Scale (FES) was utilized in an examination of the impact of interpersonal relationships on purchasing managers' complaint behaviors.

Two waves of questionnaires (approximately four weeks apart) were directed to a national sample of 2,000 purchasing managers. A total of 317 usable questionnaires were returned for a 15.9 percent response rate. Subjects were asked to recall a focal supplier (i.e., their third or fourth largest supplier). The subjects were then asked to think of a recent "critical incident" of dissatisfaction with a product or service involving the focal supplier. Subjects answered a battery of questions relating to the actions they took in response to this dissatisfaction.

A factor analytic model was utilized in establishing the dimensionality of each scale or group of scales. After the factor analyses, the reliabilities of the various scales were established by utilizing a measure of internal consistency. Items with low item-total correlations (less than .35) were eliminated from the various scales.

With regard to the scale measuring interpersonal relations, the initial factor analysis yielded a two-factor structure that was interpretable. These two factors were termed interpersonal solidarity (INTSOLID) and interpersonal hostility (INTHOSTL) as a face-valid representation of the underlying factor structure. Subsequently, each of the two constructs was subjected to reliability analysis. The two scales had good reliability levels with interpersonal solidarity ($\alpha = .95$) exceeding interpersonal hostility ($\alpha = .79$).

Correlational analyses were performed in order to ascertain whether or not any statistically significant associations existed between interpersonal relationships (INTSOLID and INTHOSTL) and the outcome variables of interest.

To begin with, confirmation of expectations (CONFIRM) evidenced a significant positive correlation with both interpersonal solidarity (INTSOLID) and interpersonal hostility (INTHOSTL). Purchasing managers who reported stronger interpersonal relations tended to evidence statistically significantly higher levels of confirmation of expectations (CONFIRM).

There was also a statistically significant relationship between overall satisfaction with the complaint outcome and process (OVERSAT) and INTSOLID and INTHOSTL. Purchasing managers who reported statistically significantly higher levels of INTSOLID and INTHOSTL (evidencing a stronger interpersonal relationship) had higher levels of satisfaction with the complaint outcome and process.

INTSOLID and INTHOSTL were both negatively associated with retained anger and hostility (RETDANGR). Those purchasing managers who reported a stronger interpersonal relationship evidenced lower levels of retained anger.

Stronger interpersonal relationships were also positively associated with intentions to complain in a similar manner in the future (COMPINT). Repurchase intentions (REINT) and relational satisfaction (RELATSAT) were also statistically significantly associated with INTSOLID and INTHOSTL. Stronger interpersonal relationships were associated with stronger intentions to repurchase from the vendor and greater levels of satisfaction with the relationship itself.

Certainly there is a chicken and egg issue here that warrants further study. Does the strength of the interpersonal relationship lead to the positive outcomes...or do the positive outcomes strengthen the interpersonal relationship. It is, perhaps, a bit of both. In the end, however, there seems to be little downside in having salespeople (and other personnel who are in frequent contact with purchasing managers) establish strong interpersonal relations with purchasing managers. This may be especially true when it comes time, as it most certainly eventually will, for the purchasing manager to complain. Since there is little downside to stronger interpersonal relations between individuals within buying and selling firms, such relationships should be fostered if at all possible.

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VARIABLE ASSESSMENT OF PRODUCT BENEFITS USING A MEANS-END APPROACH

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Abstract

Perceived benefits associated with product consumption are the main considerations for consumers in purchasing particular products or services. Taking perfume as an example, this study applied means-end chain theory to establish attribute-benefit-value (A-B-V) hierarchies, and further adopted centrality and prestige indices to assess the variable assessment of product benefits. The analytical results indicate that “hygiene”, “personal care”, “personal feeling”, “comfort”, “seduction” and “self imagery” are the key benefits for consumers when considering perfume purchases. Using centrality and prestige indices to evaluate the variable assessment of these key benefits, this study finds that consumers are primarily concerned with “personal feeling”, “seduction” and “self imagery” benefits. Marketers thus utilize the analytical results of benefit-variable assessment for product design and marketing strategy formulation.\

Introduction

In 1986, American and Canadian manufactures produced only around 12500 new products annually. To date, annual launches of new products have increased three times compared to 1986(Buzalka, 2006). However, the ability of these products to survive in the extremely competitive market depends on consumer preferences and support. Once new products become unable to meet consumer desires and expectations, these new products will undoubtedly disappear from the market place (Gruenwald, 1995). Bock and Uncles (2002) further addressed that different consumers have different understandings of the benefits of consumption. Thus, the benefits associated with a particular product may generate various types of product recognition among consumers. These different product recognitions will lead to different degrees of customer value satisfaction. Based on the perspective of previous researchers, the concept of benefit segmentation proposed by Haley (1968) provides marketers with valuable insights for differentiating the utility of product benefits. That is, firms should fully understand the benefits their product can provide to target customers, and should seek to satisfy those customers in order to increase their sales volumes and profits.

Haley (1968) contends that using causal factors for market segmentation is more appropriate than using descriptive factors, because the causal factors are derived from the benefits provided by a product. Furthermore, Day (1979) stated that the first step in adopting the

customer-orientated strategy is to understand whether the benefits provided by a particular product can achieve consumer value satisfaction. Obviously, product design should consider the benefits consumers most desire and which meet consumer value demand, enabling marketers to develop effective product strategies.

In the marketing literature, the means-end chain (MEC) methodology is the primary approach to understanding consumer psychological feelings associated with production consumption. The MEC methodology stresses that individual consumers prefer certain product attributes gain specific consequences of benefits open consuming such products, leading to the achievement of value satisfaction. That is, MECs assumes that product attributes, benefits and values are linked in a cognitive structure (Gutman, 1982). Constructing attribute-benefit-value (A-B-V) hierarchies can help marketers understand consumer-product knowledge. Zeithaml (1988) used the MEC methodology to confirm the importance of feelings of benefit resulting from product consumption. In fact, several researchers (Young & Feigin, 1975; Fourier, 1998) stress that benefit feelings and classifications are the key to successful market segmentation and product strategy formulation.

Given the importance of benefit variables, this study attempts to determine whether benefit feelings on consumption of a given product are consistent among different consumers, and whether the product can reveal various benefit feelings from specific consumers. Furthermore, this study aims to understand which benefit feeling can more easily fulfill consumer value demands, which can achieve greater consumer value satisfaction, and which can only be realized through more product attributes. This study thus adopted MEC theory and employed the method of centrality and prestige indices originally proposed by Knoke (1983) to evaluate the assessment of benefit variables, and thus developed an approach that marketers can use to develop effective product strategies.

Literature review

1. Means-end chains (MECs)

In marketing, MECs are extensively adopted to analyze product-customer relationships (Olson & Reynolds, 1983; Walker & Olson, 1991; Gutman, 1997). Based on consumer product knowledge, MECs identifies three categories of research variables: product attributes (A), consequences (C) and values (V). The basic concept is that product attributes are an effective means of achieving consumer desired ends (values), through product consumption (Gutman, 1982; Reynolds & Olson, 1998). Olson and Reynolds (1983) further employed attribute-consequence-value (A-C-V) lineage hierarchies to express the concept of abstractness that consumers use for mental organization, as illustrated in Figure 1. At the most fundamental level, product attributes can be either concrete or abstract. Concrete attributes are physical or tangible, and can be measured using units such as 'color' or 'price'; in contrast abstract attributes are intangible or unapparent and consumers thus have difficulty accurately describing them, with examples being 'style' or 'quality'. At the higher level, consequences can denote positive or negative feelings regarding product consumption. Positive feelings can be considered to be the benefits that consumers associate with product consumption, while negative feelings can be considered to be perceived costs or risks. At the highest level are values corresponding to the final status that consumers want to achieve. Recently, several researchers (Hofstede, Audenaert,

Steenkamp, & Wedel, 1998; Vriens & Hofstede, 2000; Herrmann, Huber, & Braunstein 2000) have stressed the importance of positive feelings, because marketers should focus on what the benefits a product can offer to their customers rather than merely considering cost. Thus, these researchers believe benefits represent a substitute for consequences in MEC theory. Figure 1 demonstrates the original attribute-consequence-value chain and the modified attribute-benefit-value chain.

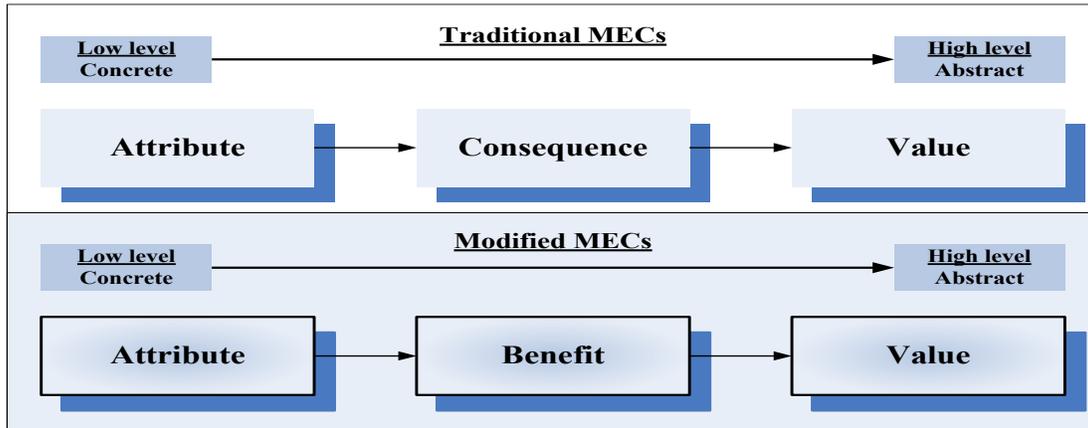


Figure 1. The concept of means-end chains

2. Laddering technique and variable assessment

To analyze the linkage contents of product attributes, consequences and values, Reynolds and Gutman (1988) developed a laddering technique. Laddering refers to an in-depth, one-on-one interview technique used to understand how consumers translate product attributes into meaningful associations with respect to themselves, following means-end theory (Reynolds & Gutman, 1988). Briefly, laddering can help marketers and researchers to reveal the higher or lower level abstractions of the concepts involved in consumer self-image.

Laddering is performed by using content analysis to identify each attribute-consequence-value (A-C-V) chain of individual customers. Based on the interview results, the data should be tabulated into a summary implication matrix (SIM) to construct a tree diagram, known as a hierarchical value map (HVM).

The linkage frequencies of each A-C-V chain can be explored using the SIM, but variable assessment should be performed using the calculation method of in-degrees and out-degrees proposed by Pieters, Baumgartner, and Allen (1995). “In-degrees” represent the number that a particular variable is the end of any hierarchical chains; therefore, in the A-C-V chains, only consequence and value variables can qualify to occur at the end of A-C-V hierarchies. Consequently, product attributes should be excluded when calculating in-degrees. Conversely, “out-degrees” represent the number that a particular variable itself is a means connecting to other variables. In A-C-V chains, only product attributes (A) and consequences (C) can become a means of linking other consequence or value variables.

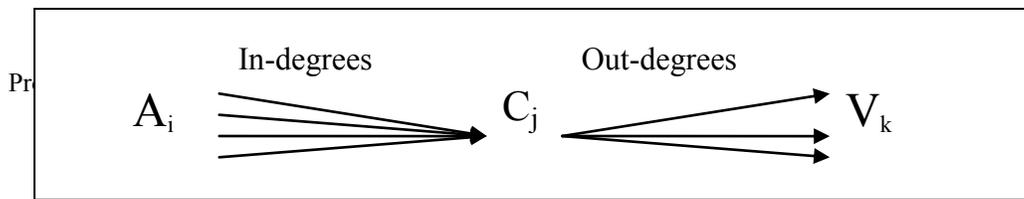


Figure 2. The concept of in-degrees and out-degrees

Ultimately, the number of in-degrees and out-degrees can be used to calculate the indices of centrality and prestige; these indices can be considered the variable assessment criteria. The centrality index equals the number of in-degrees and out-degrees divided by the total number of hierarchical value chains. The prestige index equals the number of in-degrees divided by the total number of the A-C-V hierarchical value chains. The variable assessment increases with the centrality and prestige indices.

3. Product benefit variable

In consumer purchase decision-making, choosing a particular product or service is associated with consumer expectations. If product or service performance exceeds consumer expectations, the consumer will have positive feelings. Such positive feelings are the benefits consumers perceive to be associated with product consumption. Consumers select certain products in order to seek certain associated functions or benefits (Keller, 1993). The need to obtain product benefits provides a motivation for further research. Kotler (1998) believes that the product benefits that customers are seeking are economy, quality, service and speed. Aaker (1996) classifies product benefits into three categories: 1) function benefit describes product utility; 2) emotional benefit is the positive feeling that consumers perceive upon product consumption; and 3) self-expressive benefit represents the self-image that a product can provide to a consumer. Customer satisfaction thus depends on whether the product benefits customers perceived as associated with consumption exceed their antecedent expectations (Hampel, 1977). Again, customers repurchasing a product reflect the fact that the benefits of repurchase not only meet customer expectations but also satisfy customer desires (Fourier, 1998). Clearly, the above researchers believe that the benefits associated with product consumption have important strategic implications regarding the use of product design and positioning to satisfy target customers.

Methodology

1. Variables and Questionnaires

This study adopted variables directly from the study of Valette-Florence (1998), as illustrated in Table 1. Based on the MEC methodology, the questionnaire asked customers to state which product characteristics from a given list they see as important in selecting perfume, as well as identifying the single most important characteristic. The questionnaire involves four categories: the first three categories involve product attributes, benefits and values, while the remainder of the questionnaire deals with demographics.

Table 1. Variables

Code	Variable/Character	Code	Variable/Character	Code	Variable/Character
A1	Color	B10	Hygiene	V21	Romanticism
A2	Fragrance	B11	Personal care	V22	Sense of beauty
A3	Nature of Fragrance	B12	Prestige	V23	Social deference
A4	Price	B13	Femininity	V24	Social recognition
A5	Brand	B14	Masculinity	V25	Personal development
A6	Image	B15	Fantasy	V26	Self-satisfaction
A7	Place of distribution	B16	Personal feeling	V27	Hedonism
A8	Bottle shape	B17	Sign value		
A9	Packaging	B18	Self-imagery		
		B19	Seduction		
		B20	Comfort		

Note: A, B and V represent attribute, benefit and value variables, representatively.

2. Hierarchical value map (HVM) construction

In MEC theory, all interview data should be tabulated into a summary implication matrix. Such a SIM records the frequencies of A-B and B-V linkages. Based on the linkage frequencies of SIM, the researchers should determine a cutoff value for constructing a hierarchical value map by using a laddering technique.

In the SIM, if the cutoff value is one, it represents that the linkage frequency between two variables equals to one. To objectively determine the cutoff value, Pieters *et al.* (1995) indicated that researchers should first calculate the number of active cells, and that number as a proportion of all cells. The number of active cells represents the total linkage frequencies at a given cutoff point. The number of active cells as a proportion of all cells is the number of active cells divided by the sum of active cells. If the number of active cells as a proportion of active cells at the first cutoff point is low and the number of active linkages as a proportion of all A-B-V linkages is high, then the cutoff point must be selected as a cutoff value in constructing a hierarchical value map.

3. Evaluation of benefit variable assessment

In MEC methodology, benefit variable assessment can be evaluated using the centrality and prestige indices. To calculate these two indices, researchers should use the information on the in-degrees and out-degrees from the SIM. The centrality and prestige indices can be calculated as follows:

Centrality index

$$= (\text{the sum of the number of in-degrees and out-degrees}) / \text{the total linkage frequencies}$$

Prestige index

$$= (\text{the sum of the number of in-degrees} / \text{the total linkage frequencies})$$

Results

A total of 200 valid samples were obtained. 65% of respondents were female and most of them were college educated with monthly incomes below NT\$ 40,000 (US\$: NT\$≐1:32). Table 2 lists the respondent demographics.

Table 2. Demographic description

Demographics	Item	No.	%	Demographics	Item	No.	%
Gender	Male	70	35.0	Vocation	Industry	4	2.0
	Female	130	65.0		Business	50	25.0
Age	Under 20	7	3.5		Government Employee	10	5.0
	21~30 years old	176	88.0		Students	86	43.0
	31~40 years old	16	8.0	Others	50	25.0	
	41-50 years old	1	0.5	Monthly Income	Less than \$19999	97	48.5
Education	High School or less	10	5.0		\$20000~\$39999	92	46.0
	University (college)	167	83.5		\$40000~\$79999	10	5.0
	Graduate School and Above	23	11.5		\$80000~\$119999	1	0.5

Note: US\$: NT\$ ≐ 1:30.5.

1. HVM construction

In MEC approach, the researchers should include all of the interview data in the summary implication matrix. In fact, the SIM provides the base for HVM construction. Table 3 lists the linkage frequencies between variables related to product attributes (A), benefits (B) and values (V). The number in the out-degrees column is the sum of the row frequencies of A_i-B_j or B_j-V_k linkages, while the number in the in-degrees row denotes the sum of the column frequencies of the A_i-B_j or B_j-V_k linkages.

In the MEC analysis, all of the linkage frequencies are recorded in the SIM. If all the A-B-V linkages are included in the HVM, the HVM will become too complex to read. Consequently, it is necessary to determine the cutoff value to select the important A-B-V linkages illustrated in the HVM. This study adopts the criteria of Pieters *et al.*(1995) for objectively determining the cutoff value. Table 4 shows that the number of active cells as a proportion of active cells at cutoff point 4 is just 30%, while the number of active linkages as a proportion of all linkages is 79%. Restated, 30% of active cells can yield 79% of all A-B-V linkages. Thus, the A-B-V linkages with frequencies exceeding the cutoff value 4 should be considered important and incorporated in HVM construction.

Table 3. The Summary Implication Matrix (SIM)

	B10 (V21)	B11 (V22)	B12 (V23)	B13 (V24)	B14 (V25)	B15 (V26)	B16 (V27)	B17	B18	B19	B20	Out - degrees
A1												0
A2	4	4		3	1	1	47	2	19	16	36	133
A3	1				1		10		5		13	30
A4				1			1		3	2	1	8
A5			1				3	1	2	5		12
A6		2					3		3		1	9
A7							2					2
A8							3					3
A9							2				1	3
B10			(1)			(1)	(3)					(5)
B11	(1)					(2)	(3)					(6)
B12			(1)									(1)
B13		(1)				(2)	(1)					(4)
B14						(1)	(1)					(2)
B15	(1)											(1)
B16	(4)	(3)	(3)	(2)		(35)	(24)					(71)
B17		(1)				(1)	(1)					(3)
B18	(1)	(5)			(2)	(10)	(14)					(32)
B19	(1)	(4)			(2)	(9)	(7)					(23)
B20	(3)	(3)	(1)	(1)		(20)	(24)					(52)
In - degrees	5(11)	6(17)	1(6)	4(3)	2(4)	1(81)	71(78)	3	32	23	52	200(200)

Note: Numbers in the bracket represent the linkage frequencies of benefits and values.

Table 4. The cutoff points

Cutoff Point	No. of Active Cell	No. of active cells as a proportion of all cells	No. of Active Cells as a Proportion of Active Cells at Cutoff Point 1	No. of Active Linkage	No. of active Linkages as a proportion of All Linkages	Concentration Ratio
1	71	40%	100%	400	100%	1.00
2	44	25%	62%	373	93%	1.50
3	33	19%	46%	351	88%	1.89
4	21	12%	30%	315	79%	2.66
5	17	10%	24%	299	75%	3.12

Since the cutoff value has been objectively determined to be four, the researchers can use the information from the SIM (see Table 3) for HVM construction. Figure 3 displays the contents and the frequencies of A-B-V linkages at a cutoff value of four.

Figure 3. Hierarchical value map

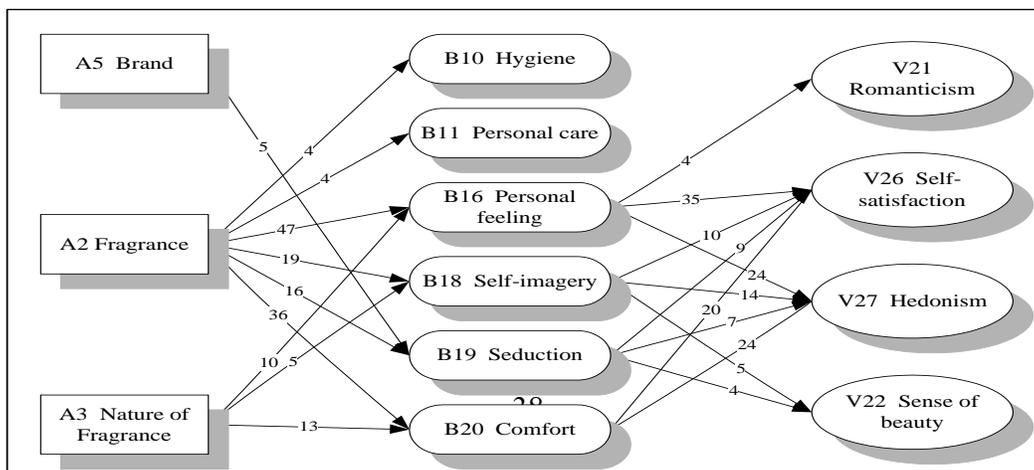


Figure 3 illustrates that “brand (A5)”, “fragrance (A2)” and “nature of fragrance (A3)” are key product attributes considered by consumers when purchasing perfume. Specifically, “fragrance (A2)” is their first priority of customers in purchasing perfume. For example, “fragrance (A2)” of perfume attributes can yield “personal feeling (B16)”, “self-imagery (B18)”, “seduction (B19)”, and “comfort (B20)” benefits, and can further lead to “romanticism (V21)”, “self-satisfaction (V26)”, “hedonism (V27)” and “sense of beauty (V22)” value satisfaction.

2. Benefit variable assessment

Although the HVM (see Figure 3) has provided marketers with information regarding the benefits of interest to customers, it cannot provide information on which of these benefits are most important. This study employed the concept of in-degrees and out-degrees to calculate the centrality and prestige indices to evaluate the variable assessment of product benefits.

Pieters *et al.* (1995) indicated that centrality is an index for measuring variable importance. The value of the centrality index lies between zero and one. Higher centrality index of a particular variable represents that the variable is more closely connected to other variables. As shown in table 5, the centralities of “personal feeling”, “comfort”, “seduction” and “self-imagery” benefits exceed those of the remaining seven variables. Restated, in consumer A-B-V hierarchies, “personal feeling”, “comfort”, “seduction” and “self-imagery” benefits have higher linkage frequencies. Researchers therefore can deduce that these benefits are the most important benefits desired by consumers from perfume consumption.

Prestige is used to measure which benefits exert the most significantly impact consumer value satisfaction. The value of the prestige index lies between zero and one. Table 5 illustrates that the prestige of “personal feeling”, “comfort”, “seduction” and “self-imagery” benefits exceeds that of the remaining seven variables. This phenomenon represents that product attributes, through the benefits of “personal feeling”, “comfort”, “seduction” and “self-imagery”, lead to consumer “romanticism”, “self-satisfaction”, “hedonism” and “sense of beauty” value satisfaction.

Table 5. Benefit variable assessment

		In-degrees	Out-degrees	Centrality	Prestige
B10	Hygiene	5	5	0.025	0.0125
B11	Personal care	6	6	0.03	0.015
B12	Prestige	1	1	0.005	0.0025
B13	Femininity	4	4	0.02	0.01
B14	Masculinity	2	2	0.01	0.005
B15	Fantasy	1	1	0.005	0.0025
B16	Personal feeling	71	71	0.355	0.1775
B17	Sign value	3	3	0.015	0.0075
B18	Self-imagery	32	32	0.16	0.08
B19	Seduction	23	23	0.115	0.0575
B20	Comfort	52	52	0.26	0.13

This study used centrality and prestige indices to assess the variable assessment of benefits. Table 5 indicates that “personal feeling”, “comfort”, “seduction” and “self-imagery” benefits rank higher than other benefits in terms of both centrality and prestige, meaning that these four benefits can be considered as criterion for consumers in purchasing perfume.

Conclusion, limitations and future research

The MEC methodology can help marketers understand which product attributes consumers prefer, which benefits consumers perceive as associated with product consumption, and which consumer value satisfaction can be achieved. Understanding consumer cognitive hierarchies towards a product can assist marketers in efficiently designing their products and formulating related marketing activities. This study used perfume as an example to demonstrate how to elicit the cognition structures that consumers use for product evaluation. HVM uses a laddering technique to reveal that “brand”, “fragrance” and “nature of fragrance” are the perfume attributes most important to consumers when purchasing perfume. “Fragrance” itself represents the essence of perfume, and thus is the main consideration in perfume purchase. Through perfume consumption, consumers desire benefits that include “hygiene”, “personal care”, “personal feeling”, “comfort”, “seduction” and “self-imagery”, in turn satisfying the “romanticism”, “self-satisfaction”, “hedonism” and “sense of beauty” values of consumers. Marketers thus can focus on “romanticism”, “self-satisfaction”, “hedonism” and “sense of beauty” value satisfaction in advertising design.

Furthermore, benefit variables are the media used to link product attributes and consumer values in the HVM. Although the HVM identifies the attributes that provide certain benefits and thus satisfy consumer value demands, the HVM cannot identify the benefits with which consumers are most concerned. This study thus combined) centrality and prestige indices to evaluate the importance of benefit variables in helping marketers understand the perfumes benefits of most interest to consumers. Assessment of benefit variables reveals that “personal feeling”, “comfort”, “seduction” and “self-imagery” are most important to consumers. These benefits, including the emotional and self-expressive benefits from the classification of Aaker (1996), represent consumer desire for self-expression through perfume consumption. For example, marketers can emphasize “personal feelings” such as coolness and elegance that are associated with perfume consumption in designing their advertising slogans, thus yielding “hedonism” and “self-satisfaction” value satisfaction.

This study evaluated the benefit variable assessment by adopting the concept of MEC theory and a combination of centrality and prestige indices. Future researches can consider investigating attribute or value variable assessment to provide marketers with a more complete method of A-B-V cognition assessment for devising effective marketing strategies.

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**COLLEGE MEN'S CASUAL WEAR SHOPPING BEHAVIORS:
AN INVESTIGATION OF THE RELATIONSHIP BETWEEN
PRODUCT INVOLVEMENT AND BRAND COMMITMENT**

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EXTENDED ABSTRACT

Unlike the past, many male people are now considering their appearance and fashion style (Woodruffe-Burton, 1998). Moreover, men's apparel markets are as big as women's market. A number of women's marketers are expanding their collections into menswear in order to capture male customers. Although young consumers, such as generation Y, have a limited budget, their purchasing power has a significant impact on the U.S. consumer market because young consumers are highly influenced by the newest fashion and fads. Hence, the younger generation is a core market segment targeted by retailers (William, 1997).

The purpose of this study is to demonstrate that product involvement and brand commitment are not highly related and may represent unique constructs. The objective of this study is to investigate the influences of casual wear involvement (high and low) and brand commitment (strong and weak) on the purchasing behavior of male students. This study adopts Cushing and Douglas-Tate's product-involvement vs. brand-commitment model (1985), as a research framework, since this model is very appealing for search-related meaningful market segmentation.

This study explored college male consumers' casual wear shopping behaviors with the use of the four-quadrant model of Cushing and Douglas-Tate (1985). The data were classified into four groups by use of the means of casual wear involvement and brand commitment. The classification results were high casual wear involvement/ strong brand commitment (HP/SB) ($n=57$, 32.4%), high casual wear involvement/ weak brand commitment (HP/WB) ($n=35$, 19.9%), low casual wear involvement/ strong brand commitment (LP/SB) ($n=30$, 17%), and low casual wear involvement/ weak brand commitment (LP/WB) ($n=54$, 30.7%). The results indicated that most male students were highly involved in casual wear. Mean and standard deviation of product involvement scores 29.7 and 6.23. Mean and standard deviation of brand commitment scores 3.71 and 0.778.

The objective of this research was to prove that two constructs- product involvement and brand commitment -are not highly related and consumers could be segmented into distinct groups in the college male consumers' market. The relationship ($r = 0.262$; $R^2 = 0.069$) between the two constructs was almost negligible indicated that two constructs should be considered distinctly different concepts.

It is surprising to find that the weaker brand commitment of LP/WB segment significantly differentiates these consumers from HP/SB on product orientations. The product orientations are not influenced to HP/ SB college male consumers when they are shopping a casual wear and making a purchasing decision. HP/ SB segment has the lowest mean sources on factors of product orientations. However, the LP/WB college male consumers are importantly considered the product orientations when they are shopping a casual wear. This results of this study is not supported the previous researches of Warrington and Shim (2000) and Cushing and Douglas-Tate (1985).

HP/ SB college male consumers' heightened interest in market source and the importance placed on image attributes. The other hand, LP/WB college male consumers tended to place less influenced by market sources and less importance on image attribute. Thus, LP/WB segment can be characterized as apathetic, a reflection of their disinterest in the product category and brand choices. LP/ SB and HP/ WB consumers to be less concerned with product orientations, product attributes, and information sources (Warrington and Shim, 2000; Cushing and Douglas-Tate, 1985).

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EXPLAINING PURCHASE INTENTIONS OF CONSUMERS
ABOUT GENETICALLY MODIFIED FOOD AND
PHARMACEUTICALS USING A COST BENEFIT
FRAMEWORK

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EXTENDED ABSTRACT

Every living organism has a unique genetic code or DNA structure that determines its character or function. Genetic engineering is the process that is used by scientists to transform these living organisms to assume new characters and or functions by changing its initial genetic code. Genetic engineering has resulted in new varieties of foods and agricultural products as well as vaccines and pharmaceuticals that have been on the market for quite sometime. Some believe innovations from genetic engineering will provide answers to many of the difficulties and problems that the world will face in the future such as shortages of energy and food, disease, and the desire for a cleaner environment. However, there are also others who believe that this technology needlessly interferes with nature and could ultimately lead to unforeseen or disastrous consequences to human health and the environment (Bredahl 2001).

When people have difficulty identifying all possible purchase outcomes and their probabilities because of a lack of knowledge about the technology used in making the product, their purchase decision will be limited to just two factors (Margolis 1996). They are: (1) the dangers or costs from this technology as either acceptable or unacceptable, and (2) the opportunities or benefits from this technology as either reaped or forgone. More specifically, these two factors can be thought of as dangers (e.g., plausible costs or threats of purchasing products that use the technology) and opportunities (e.g., plausible benefits that will be foregone by not using products from this technology) because of the new technology used in making these products. Whether people perceive these outcomes as dangers or opportunities will be based on their beliefs about the technology in question. In addition, these dangers and opportunities will be considered as either low or high (discrete) because consumers lack the knowledge to see all of the possible outcomes or consequences. Using the two variables dangers and opportunities, Margolis (1996) framework identified four groups or clusters of people that are in different states in their decision making process. These groups are: (1) "indifference," people who neither consider dangers or opportunities of the technology when making decisions, (2) "waste not, want not," people who avoid dangers but consider opportunities of the technology when making decisions, (3) "better safe than sorry," people who accept dangers but are skeptical about the opportunities of the technology when making decisions, and (4) "fungible," people who consider and weigh both the dangers and opportunities of the technology when making decisions. This study used Margolis' (1996) framework to segment consumers into four groups based on their perception of the dangers and opportunities of genetic engineering. The study also made an

attempt to determine if consumers' knowledge, beliefs, attitude, and purchase intentions about genetic engineering were similar or different across the four segments or decision making states.

The sampling frame used in collecting the data was a list of all households in the five largest cities in a southern U.S. state. Two thousand names were selected randomly from the list and 1000 surveys relating to genetically modified food and 1000 relating to genetically modified pharmaceuticals were mailed along with a cover letter on a university letterhead explaining the purpose of the study. Response rates were 11.9% for genetically modified food and 10.6% for genetically modified pharmaceuticals.

All scales (knowledge, beliefs such as costs, benefits, trust and credibility of governmental organizations, ethics and morals, attitude, and purchase intentions) demonstrated acceptable reliability coefficients as per (Nunnally 1978). Respondents were put into groups based on median splits of the two variables costs (dangers) and benefits (opportunities) for the two samples (food and pharmaceuticals) separately. Several ONEWAY analyses were conducted to determine mean differences for: (1) knowledge about genetic engineering technology (knowledge), (2) beliefs such as trust in governmental agencies such as USDA and FDA (trust) and ethics & morals of genetic engineering (ethics & morals), (3) attitude about genetic engineering (attitude), and (4) purchase intentions of genetically modified products (intentions).

Those in the group 2 state of decision making (waste not want not) who perceived high benefits and low costs of genetic engineering technology demonstrated high levels of knowledge (3.22), trust (2.8), and low concern for ethics and morals (1.85). This group also demonstrated the most favorable attitude (4.8) and the highest likelihood of purchasing food from genetic engineering (5.83). Those in the group 3 state of decision making (better safe than sorry) demonstrated exactly the opposite results. Their knowledge and trust level was lowest but they demonstrated high concern for ethics and morals involving genetic engineering. This group demonstrated the least favorable attitude and the lowest likelihood of purchasing food from genetic engineering. Groups 1 and 4 were somewhat similar in terms of their level of knowledge, attitude, and purchase intentions. However, group 4 (fungible) individuals demonstrated higher means for trust but also high concern for ethics & morals than group 1 (indifference) even though these mean differences were statistically not significant. It was interesting to see that the findings were similar for pharmaceuticals as well.

These results taken as a whole provide empirical justification for using the Margolis (1996) framework to better understand the purchase intentions of consumers as it relates to the use of food and pharmaceutical products from genetic engineering and as such has significant practical implications for those companies dealing with this technology. First, the framework can be used as a way to segment the market based on consumers "state of decision making." Second, knowing the beliefs and attitude variations in different segments can help companies better target marketing efforts to these segments. Third, companies will also know what needs to be done to move consumers from an undesirable decision state to a desirable decision state. For example, to move group 1 members from an undesirable decision state to a more desirable decision state like group 2, it is important to communicate the benefits of this technology along

with emphasizing the trust and credibility of governmental agencies such as the FDA. Also, it is important to lower their concern of ethics and morals that are involved in genetic engineering.

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**USING THE HUNT-VITELL FRAMEWORK TO CONSIDER
OVERBOOKING AND OTHER REVENUE MANAGEMENT
PRACTICES FROM AN ETHICAL PERSPECTIVE**

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EXTENDED ABSTRACT

As the primary method of securing sales, computer-based reservation systems are the main source of income generation for hotels, airlines, and other fixed-capacity service businesses. These systems play a vital role in the profitability of many businesses, and facilitate sales, cost control, scheduling, demand management, and customer service efforts. Increasingly, these computerized reservation system packages also incorporate software programs for the purposes of “yield management” or revenue management, with the goal of permitting service businesses to maximize revenue within a typical environment of fluctuating demand and heterogeneous customer groups. In the past several decades, airlines, hotels, and a myriad of other service businesses have rapidly embraced these computer software programs, allowing them to strategically establish widely varying prices for virtually identical services. These revenue management programs are increasingly viewed as indispensable management tools in the ever-increasing competitiveness of the hospitality industry, and may result in significantly improved operating margins.

Revenue management strategies generally incorporate two tactics that have the potential for giving rise to ethical concerns. First, revenue management requires charging some customers higher prices than others, often for identical services and customer experiences. Second, effective implementation of revenue management systems typically depends upon selling more capacity than will be available at the time of consumption. This “overbooking” can greatly improve revenues because some proportion of customers will typically fail to “consume” the purchased service at the scheduled date/time, and this unused capacity can be then sold to other customers. The problem is, of course, that overbooking relies upon forecasts of the probability of this “no show” occurrence, and these estimates are fallible. As a result, some customers must be denied the service (or “bumped”) whenever these forecasts exceed actual rates of non-consumption. Overbooking thus represents a vast area for substantial ethical issues to arise, especially since bumped customers have typically already paid for the service, and since they may have few desirable service alternatives available at that point.

In general, ethical issues related to revenue management have escaped the attention of all but a few authors (see McCaskey 1999, for example). While there has been much research regarding the ethicalness of numerous marketing practices, several authors (Cox 2001; Indounas 2008) have noted that there has been very little that investigates the ethical aspects of pricing practices. Some of the research investigating ethical issues related to pricing, for example, has examined the issue of charging different prices to different consumers (e.g.: Indounas 2008).

Yet apparently little work has studied the ethical implications of the non-price element of revenue management: namely, overbooking and service denial or “bumping.” One reason that the ethical issues surrounding these aspects of revenue management have been inadequately studied may be that they have not been conceptualized within a unified framework of business ethics.

One framework for understanding how parties within the context of marketing exchange judge fairness and ethicalness is the Hunt-Vitell *General Theory of Marketing Ethics* (Hunt and Vitell, 1986; 1992). This framework describes two forms of evaluation processes (derived from traditional philosophical thought) by which marketers make ethical assessments that, in turn, likely influence their behavior. One process, *teleological*, is a consideration of an action’s probable outcomes or consequences, the stakeholders impacted by these outcomes, and the likelihood, valence, and importance of these consequences. In many ways, this teleological approach is representative of the assumption of utility-maximizing actors that is implicit in much of traditional business literature. A second process, *deontological*, considers an action’s suitability or virtue as measured in reference to some external and/or independent moral code or set of values, norms, or rules.

Hunt and Vitell (1986) further suggested that an individual’s deontological and teleological evaluation processes are influenced by four factors or constructs (three of which are external or environmental). These factors are 1) an individual’s personal experiences and traits, 2) organizational norms and ethical climate, 3) industry norms and ethical climate, and 4) cultural norms and ethical climate. At its core, Hunt-Vitell’s framework suggests that a manager’s deontological evaluation and teleological evaluation both directly impact his/her ethical judgments. These ethical judgments further directly impact a subject’s behavioral intentions. Intentions are then used as the basis for action or behavior. Teleological evaluations can also affect an individual’s behavioral intentions directly, allowing one to bypass or disregard ethical judgments in order to achieve or avoid specific consequences. Thus, behavior can occur strictly due to some outcome estimation, without a deontological component. This feature of the theory explains why intentions or actual behaviors may often diverge from ethical judgments (Hunt and Vitell, 1986).

Consideration of the strategy of revenue management (and the tactic of bumping in particular) from the perspective of the Hunt-Vitell framework suggests several avenues for ethical analysis. To begin with, managers implementing this strategy are likely most influenced in their evaluation by the external factor of industry norms and ethical climate (what other companies are doing, or are likely to do, regarding revenue management tactics). These external factors are likely most influential for at least two reasons. First, if other companies are using revenue management tactics profitably, then managers will perceive that the consequences for not also adopting this technology will be competitive harm (inferior profits) or displacement (loss of market share). Second, if other companies are using revenue management tactics with market success (without causing consumer disenfranchisement or desertion), then it may be possible to infer that consumers do not generally perceive the practices to be unfair. While perceptions of fairness do not categorically imply ethically benign or positive conduct, many business people likely make this assumption. However, the issue of transparency can easily be seen as a moderating influence on these perceptions, as customers that are unaware of potential

issues (for example, price differentials) are unlikely to perceive they are being treated unfairly (relative to other customers) in these regards. Conversely, this lack of transparency then represents an area of further ethical hazard.

When examined from the perspective of the Hunt-Vitell framework of ethical marketing, revenue management tactics such as overbooking and price discrimination take on a richer gravity than merely operational enhancements that serve to fine-tune service offerings. At the very least, the framework highlights the need to consider not merely industry norms and practices in order to achieve or maintain competitive parity, but to also consider the long-term consequences created by customer perceptions of unfairness or exploitation. At a higher level, the framework may give pause to service firms that prefer to maintain reputations of superior ethics, and may in fact allow these firms to competitively differentiate themselves on this dimension. Finally, the framework brings attention to the notion that while a practice such as bumping might be associated with generally ethically-negative issues, the careful construction of customer remedies may serve to counterbalance the issues, resulting in an overall ethically-positive outcome.

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WORK-LIFE BALANCE PERSPECTIVES OF FUTURE MARKETING PROFESSIONALS

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EXTENDED ABSTRACT

The current generation appears to place greater attention on work-life balance than the prior generation. This will have important implications for employers of future marketing professionals. The term 'work-life balance' refers to people spending sufficient time at their jobs while also spending adequate time on other pursuits, such as family, hobbies, and community involvement. This study examines two research questions. The first considers the importance that future marketing professionals, i.e., students, place on work-life balance. The second regards whether gender differences are associated with work-life balance. To answer these questions, an examination is made of the perspectives of future marketing professionals. Maslow's hierarchy theory and McClelland's motivational needs theory offer some theoretical support regarding why people strive to achieve a healthy work-life balance. Gender theory and related research provide theoretical support regarding differences between male and female perspectives.

Findings of this study indicate that future marketing professionals regard work-life balance issues as very important to their future careers. Future marketing professionals indicate that a healthy work-life balance affects job satisfaction, job performance, and ethical decision-making. While gender differences were expected, there were no significant differences between male and female future marketing professionals regarding work-life balance.

To help their employees achieve a healthy work-life balance, employers should consider offering flexible work arrangements: flex-time, part-time work, job sharing, work-at-home options, summer or holiday hours, and telecommuting. Future marketing professionals are particularly concerned with the availability of flex-time, work-at-home options, special summer or holiday hours, and telecommuting. They are least concerned with the availability of part-time work and job sharing. A striking finding was that when given a choice, 21.0 percent of study participants chose a flexible workweek over any pay/vacation option.

Employers of marketing professionals should consider work-life balance issues and how they make their companies more or less attractive to younger persons who are making career choices. In the same way, marketing educators should be aware of the work-life balance concerns of their students. By discussing these issues in the classroom, educators can help prepare their students for the work-life challenges of their future careers.

This study is only a starting point for research on work-life balance issues in the marketing field. The study is limited by its sample of students from one southwest U.S. university. The survey instrument was limited to only some of the work-life balance issues, including flexible work arrangements, which could be studied. Future studies could consider larger samples, more regions of the U.S., and work-life balance issues beyond those covered in this study.

TOWARD THE DEVELOPMENT OF HEALTH BELIEFS MEASUREMENT REGARDING PAIN¹

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EXTENDED ABSTRACT

Over 40 years ago Zborowski (1969) demonstrated that cultural beliefs underlie reactions to pain in hospital settings. Despite documentation of the current prevalence of acute and chronic pain in the general population (American Pain Foundation 2007a,b, 2002, Cosby et al. 2005a,b), little is known about the relationship of health beliefs regarding pain to treatment. The objective of this exploratory study is to assess relationships of health beliefs about pain to willingness to approve pain treatment for oneself or others with potentially addictive drugs. With a social marketing perspective (Hill 2001; Andreasen 1995), the current study draws on past studies of pain prevalence in the general population and on patient and clinical studies of attitudes and beliefs that present barriers to pain management, and extends consideration to the general population. Eleven health-pain beliefs are studied that may influence willingness to approve treatment. If resistance to approved pain management treatments diminishes a patient's quality of life or leads to lower social functioning, or less efficient, more expensive treatment, both the patient and the larger society suffer. Social marketing programs to change general population beliefs that are barriers to effective treatment may benefit the patient and society by encouraging a social environment conducive to medically approved pain treatments.

Using data from the 2007 Southern Pain Prevalence Study (SPPS) carried out by the Social Science Research Center of Mississippi State University (Cosby et al. 2005a), the present study investigates the relationship of eleven attitudinal items to willingness to approve treatment of pain with potentially addictive drugs. The SPPS involved telephone interviews with 3,637 civilian, non-institutionalized persons over age 18. Survey Sampling International provided an enhanced stratified random digit dialing sampling design for selecting households in Alabama, Arkansas, Kentucky, Louisiana, Mississippi and Tennessee including those with unlisted numbers. The 3,637 respondents who completed the interviews represent a cooperation rate of 97.3% and a CASRO survey research standard overall response rate of 60.8%. The analyses presented in this report are based on 1,500 of these respondents for whom there was no missing data

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on the variables used here. These respondents represent two groups. For one group the eleven attitudinal items considered here were asked using the respondent as the referent (N=633). For the second group, a hypothetical other person was used as the referent (N=867).

Analysis proceeded through four stages. First, the scalability of the health beliefs items was assessed. These items were coded with positive values reflecting strong adherence to the statement. Second, potential differences in health beliefs, age, race and gender were considered to verify cross-group comparability. The third stage assessed scalability of items used to measure likelihood of approving treatment with potentially addictive drugs and whether the two groups produced significant differences on these items and scales. Stage four involved multiple regression analyses of the health beliefs items and the demographic factors (as controls) on likelihood of approving treatment of pain with potentially addictive medications for oneself or for others. Although the eleven health beliefs items did not produce adequate Cronbach's Alpha reliability coefficients to justify summated scales, strong face validity justified treating the items as separate variables in the analyses. These and the demographic variables produced good cross-group equivalences, although the two groups were not proportionate regarding gender and race. In Stage 3, the items related to willingness to accept treatment for self and others were assessed and found to produce acceptable Cronbach's Alphas (both above .78) and, thus, were summed to produce the TREATSELF and TREATOTHER scales. High scores indicate greater willingness to approve treatment.

Multiple regression in Stage 4 involved first generating full models forcing all variables into the model, and then generating reduced models using forward stepwise regression. The full models produced statistically significant adjusted R^2 s of 12.7% ($F=7.596$, $P<.001$) for TREATSELF and 7.04% ($F=5.682$, $P<.001$) for TREATOTHER. Statistically significant betas for prediction of TREATSELF included V1 (beta=.178), regarding the belief that pain can worsen if untreated, V2 (beta=.105), regarding the belief that pain can be treated as a medical condition separate from the conditions causing pain, V10(beta=.085), the belief that the body heals better when pain is treated properly, and V25(beta=.200), the belief that treating pain is more important than keeping people from abusing pain medications. Higher values for these attitudinal items were associated with greater willingness to approve treatment. In the full regression model for TREATOTHER V1, V2 and V25 produced statistically significant positive betas ($V1=.084$, $V2=.098$, $V25=.167$). Item V5, the belief that having pain means your pain condition, has worsened also produced a positive beta (beta=.069). Significant positive betas were produced by AGE (beta=.090) and GENDER (.069).

Because so many items in the full models did not produce statistically significant betas, reduced models were developed through stepwise multiple regression. Only five health beliefs items, V1 (beta=.187), V2 (beta=.106), V3 (beta=-.084), V10 (beta=.090) and V25 (beta=.201), produced statistically significant coefficients for the prediction of TREATSELF (adjusted R^2 of 12.8%, $F=19.521$, $P<.001$). Item V3, the belief that addiction is a side effect of pain medication, produced a negative beta (-.084) indicating that the more often the respondent felt that this might occur, the more hesitant the respondent would be to approve treatment. Stepwise multiple regression was also used with TREATOTHER (adjusted R^2 of 6.54%, $F=13.114$, $P<.001$). Only three health belief items, V1 (beta=.089), V2 (beta=.093), and V25 (beta=.166) and AGE (beta=.090) and GENDER (beta=.068) produced statistically significant beta coefficients. These analyses, therefore, have isolated five health related beliefs that may prove useful in a health beliefs model regarding pain and its treatment.

As a general population exploratory study, this study has achieved its objective of assessing potential relationships of health beliefs about pain to willingness to approve treatment of pain for oneself and others with potentially addictive medications. The results are relevant for pharmaceutical marketing (Stallings 1992), social marketing, and the efforts of physicians and other caregivers involved in pain treatment. The study has limitations. While the full SPPS sample was generated through widely accepted random digit dialing and respondent selection techniques, this sub-sample eliminated respondents with missing data on any of the items in the study, over-represented females, and the two groups had different racial distributions (based on a White-Non White dichotomy). Also, we have not considered whether the respondents suffered great pain or had been exposed to friends and loved ones who suffered great pain. Such experiences may affect willingness to approve treatment for pain with potentially addictive drugs. While much remains in the development of a health beliefs pain model, the orientations identified here can inform future research and benefit social marketing programs and pharmaceutical marketing, and may facilitate communication in clinical settings among medical professionals, caregivers, patients and family members.

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UNDERSTANDING OBESITY IN AMERICA: PERCEPTIONS OF THE PROBLEM AND POSSIBLE ACTIONS

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ABSTRACT

Many health care professionals have stated that obesity is a major problem in the United States. The rate of obesity in young people has been rising until just recently, when it was reported to have leveled off. This paper examines people's perception of how great a problem it is, along with examining their perception of the causes and possible remedies for the problem. The vast majority of individuals feel that obesity is a major problem and is growing. In addition, the vast majority feel that diet and family history are major factors. People also believe that exercise is a way to control weight. They are less sure about diet pills and Gastric Bypass surgery. Demographic variables play a role in this. The problem has become significant and demands solutions. Part of the solution is oriented to the individual and part of the solution is directed to the general public, social marketing. Possible remedies are suggested for each.

INTRODUCTION

This paper examines people's of obesity in the United States. If the individual does not feel that obesity is a problem, then solutions will be hard to implement. This is akin to smoking in the 1950s. People did not see the danger and thus solutions were not implemented. The purpose of this study is to determine individual's perception of obesity as a problem along with causes and possible remedies.

There are three major categories of questions: concerning nature of problem, concerning the possible causes, and concerning solutions. The first category asks whether the problem is real. Individuals are asked whether they believe that obesity is a major problem. Then, they are asked whether they think the problem is growing. Finally, they are asked whether they think that they have the problem. If individuals do not think that obesity is a major problem, then any marketing effort at solution, either individually or collectively, will fail. Even if individuals feel that obesity is a major problem, but do not think that they have the problem, solutions may fail.

The other section of the analysis is to determine possible reasons for obesity and possible solutions. If individuals feel that they know what the causes of obesity are, then it may be difficult to suggest other possible reasons. The reasons for obesity offered here are diet and family history. How do people feel about these possible causes? In addition, if individuals have preconceived notions of possible remedies, then it will be hard to suggest others. Diet pills, exercise, and gastric bypass surgery are offered here.

This paper is an attempt to gauge the public perception of obesity and to determine possible strategies for dealing with this. The possible strategies are on the individual level and the societal level. On the individual level, what remedies are available? On the societal level, how do you convince society of the need for change, which includes policy decisions.

LITERATURE REVIEW

Obesity is a major problem in the United States. “Increasingly the term ‘epidemic’ is being used in the media, medical journals, and health policy literature to describe the current prevalence of overweight in the United States” (Boera, 2007). In fact, 1 in 3 Americans is obese (Sloane, 2005). The number of obese Americans has risen from 15% to 33% in the past 30 years (Atkin, 2008). In addition, the obesity rates have changed dramatically by state. In 1985, no state had an obesity rate of more than 14% compared with 2006, where no state has an obesity rate less than 20% (Atkin, 2008).

The obesity problem calls for preventive care and lifestyle changes (Sloane, 2005). Obesity is causing major increases in Type II diabetes (Fradkin and Rodgers, 2008). It is also causing an increase in cardiovascular disease and cancer (Domingues et al., 2008).

Demographic characteristics are an important part in the obesity problem. Children are a major problem. Overweight children are 30% of the school-age children (Sloane, 2005). The obesity problem in children is also attributed to other demographic factors. A disproportionate number of obese children are African-American, Hispanic, or American Indian (Kretsch, 2006). In addition, the prevalence of obesity is highest among children belonging to low socioeconomic classes (Harper, 2006). Overall obesity is rising fastest among people earning more than \$60,000 a year (Sloane, 2005).

Many individuals have discussed the reasons for obesity. The reasons are varied and there is no consensus. In fact, one survey found that 9 out of 10 parents knew that childhood obesity was a problem, but 50 percent of parents with obese children failed to see that their own children were obese (Howe, 2008). The C.S. Mott Children’s Hospital National Poll shows that more than 40 percent of parents with obese children describe their children as “about the right weight (Magazine of Physical Therapy, 2008). The prevailing theory that obesity is caused by genetics is disputed. The reason for obesity is the amount of food consumption and physical activity (Mego, 2008). General practitioners believe that obesity is caused by psychological and behavioral factors, and thus are ambivalent about the effectiveness of the majority of available solutions (Ogden and Flanagan, 2008). Many individuals are critical of the consumption of fast-food, along (Sloane, 2005). Other times, physical inactivity and poor diet tend to occur simultaneously (Dutton et al., 2008). Even when physical activity was increased, the diet was still poor (Dutton et al., 2008).

There are a variety of solutions that have been suggested. One avenue is to suggest that obesity is a societal problem that raises health care costs and increases the risk of long-term chronic disease (Atkin, 2008). According to the Center for Disease Control and Prevention, obesity costs \$78.5 billion a year (Atkin, 2008). Kretsch (2006) suggests several solutions:

1. To understand the biology underlying the development of obesity.
2. Understanding the relationship of diet and physical activity on obesity.
3. Using community-wide tactics for developing healthier eating habits and more exercise.
4. Develop healthier foods that are convenient and taste good.
5. Create a toolbox of obesity prevention resources.

Health plans, employers, and doctors should recommend wellness programs to individuals who are obese (Sloane, 2005). The federal government has made some strides in schools dietary programs, but much work left to be done (Sloane, 2005).

Other possible solutions are surgery and diet pills. Bariatric surgery is now considered to be an acceptable treatment (Ryan, 2005). Bariatric surgery had some problems but is now rebounding (Benko, 2006). The U.S. Department of Health and Human Services' Agency for Healthcare Research and Quality has concluded that bariatric surgery is a reasonable option for those individuals who have tried diet and exercise programs and failed (Howe, 2005). The complication rate for bariatric surgery is 20% (Howe, 2005). The best advice is making oneself aware of the risks with this type of surgery and following all of the directives (Ryan, 2005). Big pharma is spending billions of dollar to find the next diet drug (Sloane, 2005). Many of these have now hit the market.

The problem is that there are limited resources to handle all of the health care problems. Because obesity is related to class, race and nationality, there will be a great deal of debate over what amount resources should be employed (Herndon, 2005). Another reason for a debate over resources is that obese persons are blamed for their problem. Thus, why should the system provide resources for a problem that is preventable. Healthcare professionals show more prejudice to obese people than the general public (Wallis, 2004).

Obesity is a serious problem in the United States. Many solutions have been offered from diet, exercise, pills, and surgery. Obesity has consequences for the health of the public as well as healthcare costs. This study was a survey of the general population of United States to determine whether they thought that obesity was a major problem, reasons for it, and possible solutions.

ANALYSIS OF DATA

A survey was administered to 692 individuals in the United States. There was some missing data, making the sample size smaller in most cases. A convenience sampling technique was adopted for the purpose of this study. The questionnaires were administered by students at a medium university in the mid-west. Each student was required to administer the questionnaire to a number of individuals, including relatives and friends. The rationale for adopting this type of

sample was that despite its minor drawbacks, it had content validity, since all the respondents were legitimate consumers. A drawback is that most of the individuals came from the same geographic area. The respondents were asked whether various questions about obesity, including whether they thought that it was a major health care problem in their country, growth of the problem, definition of obesity, whether diet, family history contribute, etc.

There were 322 men and 366 women in the sample. The age classification was as follows: 18- 25 260, in the age class 26-45 there were 249 people, and over 45 there were 167. There were 397 single individuals and 287 married individuals. Education level was as follows, 274 with less than college degree and 402 with college degree and above.

Analysis of the data

There were nine basic questions asked concerning obesity. There are three basic categories. The first category is the question of whether there is a problem and how it is defined. The second category is related to the potential causes of obesity. Finally, the third category deals with treatments options. Each respondent was asked in terms of a five-point scale from 1 – strongly agree, 2 – agree, 3 – Neutral, 4- Disagree, and 5- Strongly Disagree. Table 1 provides the mean responses to each question

There is a strong awareness that obesity is a major problem and that the problem is growing. The vast majority (94.4%) of respondents either strongly agreed or agreed that obesity is a major problem in this country. In addition, 95.5% of the respondents feel that the problem is growing. On the other hand, there is a wide spread in whether respondents felt that people know how obesity is defined with 33.15% agreeing that people know and 48.3% saying people don't know. Over 50% of the people do not feel that they have a problem with obesity.

Table 1
Basic Statistics

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
At present, I would consider obesity as a major health care problem in (country).	409 61.6%	218 32.8%	25 3.8%	9 1.4%	3 0.5%	664 100.0%
I believe that obesity is a growing health care problem in (country).	415 62.4%	223 33.5%	16 2.4%	7 1.1%	4 0.6%	665 100.0%
I believe that most of the people in America understand how obesity is defined.	48 7.3%	170 25.8%	123 18.7%	266 40.4%	52 7.9%	692 100.0%
I feel that I have a problem with obesity.	49 7.4%	118 17.8%	92 13.9%	183 27.6%	220 33.2%	692 100.0%
I believe that diet in (country) contributes to obesity	281 43.0%	302 46.2%	45 6.9%	22 3.4%	3 0.5%	692 100.0%
I believe that heredity/family history contributes to obesity.	137 21.1%	349 53.8%	117 18.0%	35 5.4%	11 1.7%	649 100.0%
I believe that weight-reducing medicine is an effective method of treating obesity.	24 3.8%	103 16.5%	198 31.6%	207 33.1%	94 15.0%	626 100.0%
I believe that regular exercise in an effective treatment of obesity.	372 56.1%	252 38.0%	29 4.4%	9 1.4%	1 0.2%	663 100.0%
I believe that Gastric Bypass Surgery is an effective treatment of obesity.	48 7.8%	162 26.3%	222 32.1%	114 18.5%	77 11.2%	615 100.0%

The causes of obesity were quite similar with a vast majority of respondents (89.2%) saying that diet contributes to obesity. Heredity was seen as a contributing factor in obesity by 74.9% of the respondents. In this case, 18.0% of the people were neutral.

Methods of treatment were quite interesting. Weight-reducing medicine showed a wide range of responses. 20.3% of the respondents agreed that weight-reducing medicines were an effective treatment, with 31.6% neutral, and 48.1% disagreeing. Exercise was seen by 94.1% of the respondents as an effective method of treating obesity. Bypass surgery had mixed results which 33.9% agreeing, 32.1% neutral, and 29.7% disagreeing in its effectiveness as a treatment of obesity.

Analysis with demographic variables

Several demographic variables were utilized, including gender, age, marital status, and educational level. Table 2 provides the results of these analyses. Each question was examined by utilizing cross-tabulations. The value in the table is the p-value. Small values suggest that there is a significant relationship between the demographic variable and the question responses. Because of a small number of responses in certain variables, the categories had to be collapsed. Four questions had a small number of responses in “Disagree” and “Strongly Disagree”. These two categories were collapsed into one to facilitate the use of cross-tabulations. The four questions were major health care problem, growing health care problem, exercise is a treatment, and diet is a contributing factor.

When gender is examined with the questions, there are five significant results (first column in Table 2). First, gender is related to belief that obesity is a growing problem in the United States. Females supported this idea more strongly than males. Second, females felt stronger that people knew how obesity was defined. Third, females felt stronger that they had a problem with obesity than males. Fourth, females more readily agreed that heredity and family are causes of obesity. Finally, females disagreed more than males that weight-reducing medicine is an effective method of treating obesity.

When age is examined, there were two statistically significant results (second column in Table 2). Younger individuals were more likely to indicate that they had a problem with obesity than older individuals. Also, younger individuals are more likely to agree that exercise is an effective treatment of obesity than older individuals.

Table 2
Cross Tabulation Analysis Using Demographic Variables
(the number represents the p-value)

Question	Demographic Variable			
	Gender	Age Class	Marital Status	Education
At present, I would consider obesity as a major health care problem in (country).	-	-	.090*	-
I believe that obesity is a growing health care problem in (country).	.018**	-	.013**	-
I believe that most of the people in America understand how obesity is defined.	.039**	-	-	-
I feel that I have a problem with obesity.	.056*	.000***	.027**	.029**
I believe that diet in (country) contributes to obesity	-	-	.083*	-
I believe that heredity/family history contributes to obesity.	.001***	-	.021**	-
I believe that weight-reducing medicine is an effective method of treating obesity.	.067*	-	-	.039**
I believe that regular exercise in an effective treatment of obesity.	-	.043**	-	.001***
I believe that Gastric Bypass Surgery is an effective treatment of obesity.	-	-	-	-

- * - Significant at .10 level
- ** - Significant at .05 level
- *** - Significant at .01 level

Marital status is related to five statistically significant results (third column in Table 2). Married individuals are more likely to agree that obesity is a major problem in the United States. Married individuals are more likely to see obesity as a growing problem than single individuals. Again, married individuals are more likely to see that they have a problem with obesity than single individuals. When it comes to the contribution of diet to obesity, married individuals feel less strongly that this is true. Finally, married individuals believe more strongly that family history/heredity is a contributing factor in obesity.

Education provides three statistically significant results (fourth column in Table 2). First, individuals with a college degree or above more strongly disagree that they have a problem with obesity. People with less than college degree are more likely to agree that medicine is an effective treatment for obesity. Finally, individuals with college degree or above are more likely to think that exercise is an effective treatment for obesity.

IMPLICATIONS FOR MARKETING

Marketing of diet products, exercise equipment, and pills for losing weight is a major undertaking. The perceptions of the general population should influence these expenditures. This study has shown some major finding which should be useful to the marketing of these products or services.

1. Obesity is seen as a major problem and one that is growing. Thus, any product that promotes a solution to this problem will have a growing market.
 - a. Females see this more as a growing problem than males. Marketing needs to address their concerns and males have to be convinced that this is a major problem.
 - b. Married individuals see this as a major problem and a growing problem more than singles. Again, marketing should be addressed to these individuals or convincing singles that obesity is a growing problem.
2. Many individuals do not feel that they have a problem with obesity.
 - a. Females feel more strongly that they have a problem with obesity than their male counterparts.
 - b. Younger individuals feel they have a problem with obesity.
 - c. Married people feel that they have a problem with obesity.
 - d. People with college degree or above are more likely to feel that they have a problem with obesity.
 - e. These points above suggest that a good target market would be married, young females with a college degree.
3. Obesity is seen as a problem highly related to diet. Thus, diet regimens (e.g., Weight Watchers, Jenny Craig) will probably sell well in the next years.
 - a. Married individuals felt less strong that diet is related to obesity than single individuals. This is counter to many of the other results.
 - b. The reason for this may be due to the eating habits or married versus single individuals. With singles eating more fast-food, etc.
 - c. Diet probably should be advertised to single individuals, but also to married.
4. Obesity is associated with heredity. It is impossible to market a cure for obesity related to heredity. It does mean that many people will be searching for a solution through other methods.
 - a. Females feel more strongly that heredity is a major cause of obesity. They may look for solutions but need to be convinced that other methods, such as diet, exercise will help.
 - b. Married individuals feel more strongly that heredity is a major cause of obesity. Again, they may look for other solutions but have to be convinced that it is not a “lost cause”. It is “not in the genes”.
5. A majority of people did not feel that medicine is an effective treatment of obesity. This is true in spite of the fact that we have our first FDA-approved medicine for weight loss.
 - a. Males are more likely to find medicine as an effective treatment of obesity. Yet, most of the advertisements for weight-loss pills are directed to women.
 - b. People with less than college degree are more likely to see diet pills as an effective treatment for obesity. The marketing campaign can address this.

6. Exercise is seen as an effective treatment for obesity. This means that gyms, spas, exercise equipment, etc. will probably be in high demand in the future.
 - a. Younger individuals are more likely to believe that exercise is a treatment for obesity. This implies that exercise equipment and memberships in gyms will be promoted more heavily to younger individuals.
 - b. In addition, more educated individuals are inclined to see exercise as an effective treatment. Thus, marketing campaigns will be addressed to these individuals.

7. The conclusions for weight-loss surgery, such as gastric bypass, had mixed results. It may be due to some bad publicity over adverse effects of the surgery in the past. This may need to be addressed to increase usage. In addition, for many this is seen as a last resort.

All of the above suggest that there are key components to effectively marketing weight loss treatments. While this may be good for those entities which are promoting diet plans, exercise equipment, or weight-loss medicine, etc., this may not effectively address the growing problem of obesity in the United States. The literature suggests that socio-economic status play a part. People of low socio-economic status have high rates of obesity. This may be, as some suggest, related to diet, since healthy foods such as fruit and vegetables may be more expensive. Gym memberships and exercise equipment may be outside the realm of possibility for these people. One possible solution is social marketing by making people aware of the consequences of obesity. In addition, wellness programs are stressing walking and other simple exercise as a vehicle to weight loss. Several insurance companies are stressing these programs as a way to reduce costs. It might be useful if Medicaid also provided incentives for people to adopt these measures.

CONCLUSIONS

Obesity is a major problem in the United States and is growing. Businesses will continue to offer possible remedies, whether real, innovative but unproven, or even imagined. Unfortunately, ignorance on the part of the consumers can make them preys of unethical marketing practices by some companies which primarily are interested in financial gains rather than customer wellbeing. This will be a growing industry in the United States with large marketing programs.

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WHAT SHOULD TURKEY'S MARKETING STRATEGY BE IN HEALTH TOURISM?

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ABSTRACT

Health tourism can be defined as the mobility of people who seek treatment abroad. Turkey wants to acquire a greater share of health tourism, a specific kind of tourism reaping great benefits to the economy of the country and patients, with an appreciable international demand. A research has been conducted in all public and private hospitals in nine cities that receive many tourists for health services in Turkey. The survey questionnaire was applied to total 282 managers of hospitals, one in each hospital. Primary reasons for foreign patients to choose Turkey are the lower price and the climate.

INTRODUCTION

Mobility of people aiming to receive treatment abroad has constituted a specific tourism kind, health tourism. The target group of health tourism consists of ill people and those who are concerned about protecting their health (Ministry of Tourism, 1993).

Health tourism for treatment purposes has been defined by different people in different ways. Some of these definitions are as follows (Harahsheh, 2002):

Van Sliepen has defined health tourism as excursions realized for health purposes in free times on the condition that these excursions shall be realized by residing in places away from houses.

According to Magablih, health tourism is the movement of a patients, for the purpose of getting services that help in recovering his ailment or at least in stabilizing his medical case, outside his own country for a period of time not less than 24 hours and up to 1 year each time, and the patient has no intent to work or reside permanently.

According to Suad Imram, health tourism is defined as traveling of people to another country temporarily for treatment purposes either upon a medical advice or willingly.

The health tourism sector, which may also be defined as receiving emergency health services or a preferred health service by patients in different countries, has shown continuous growth and development. People travel for treatment purposes for a variety of reasons. As the patients residing in England are aware of the fact that they are able to receive health services in other countries at half and even one tent price than in their countries, as the patients in Canada complain about long waiting periods, as the patients in several countries such as Bangladesh do not have the opportunity to receive the required treatment in their own countries, and as some patients desire to combine their holidays with treatment, they desire to receive treatment in another country (<http://www.cbc.ca/news/background/healthcare/medicaltourism.html>). According to Weihrauch (2003), patients receive health services abroad as waiting periods are longer and availability of health services are more difficult in their own countries, for rare diseases, as the quality health care services are available in neighboring countries in more convenient opportunities or as they need health care during holidays/business trips.

Coheur (2003) explains the advantages of health tourism as follows:

- Increasing health care availability by reducing waiting periods and service availability distance;
- Strengthening international integration by providing better information to patients about regional, religious and cultural differences;
- Contributing to training and experience of hospital personnel as international patient mobility and information exchange increase.

Health tourism has several advantages for countries. These include as follows (Yalcin, 2003):

- Contributing to economic welfare of countries by incomes received from foreign tourists;
- Increasing international information exchange;
- Building strategic partnerships in the country or abroad,
- Providing international know-how transfer,
- Providing an opportunity for native patients to receive better services in their countries due to improved care for foreign patients;
- Enabling countries to internationally reorganize as global health care providers;
- Improving global marketing and medical trade;
- Improving the country's image (it brings the country the image that they render health care service all around the world);
- Providing a competition advantage;
- Providing better coordination among hospital support services;
- Providing public and private partnership;
- Increasing patient satisfaction.

Inputs of the medical tourism industry providing significant economic support for countries are illustrated in Figure 1.

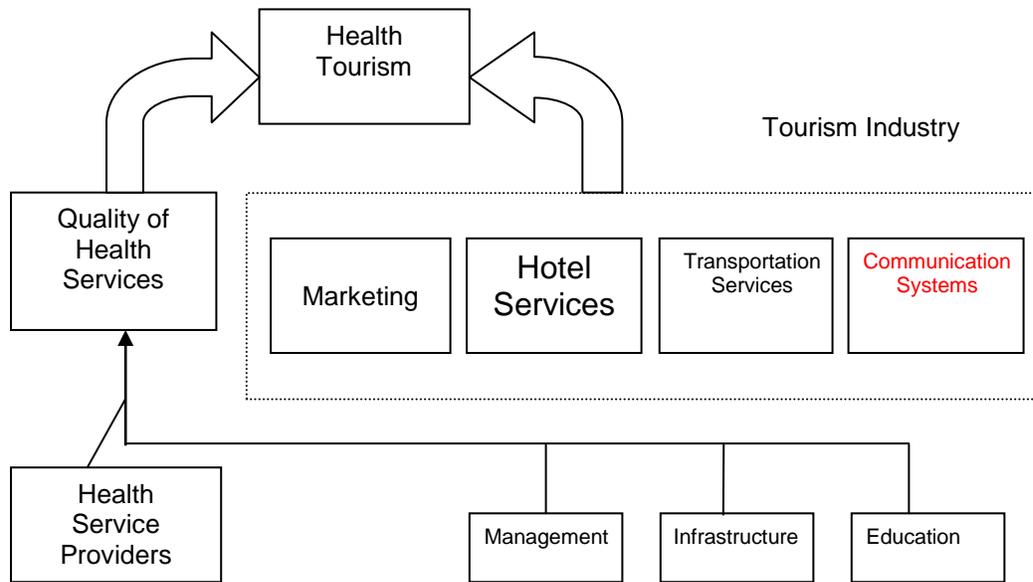


Figure-1: Inputs for Health Tourism Industry

Source: Gonzales, Brenzel, Sancho, 2001

Health Tourism combines entertainment and vacation with health and treatment. Gonzales, Brenzel and Sancho (2001) classify services rendered through health tourism into three groups:

1. Services rendered for health improvement (spas, herbal treatment, massage etc.)
2. Services rendered for treatments (plastic surgery, heart surgery, eye surgery, nephrotomy, cancer treatment etc.)
3. Rehabilitation services (dialysis, addiction programme, programme for nursing and rehabilitation for the elderly)

According to Gonzales, Brenzel and Sancho (2001), the most significant handicap with health tourism is the need of emotional confidence. Patients do not desire to receive health services in an environment where they are not used to. Rather they desire to receive treatment where they are with their family and friends. Laws and regulations may prohibit receiving treatments in other countries. Other handicaps include not possessing sufficient and reliable information regarding health policies of countries, exclusion of treatments by some insurance companies (except emergency cases), and patients preferring to receive treatment in another city in his/her country instead of another country.

HEALTH TOURISM IN TURKEY

State Planning Organization of the Prime Ministry is responsible from planning and encouragement of tourism and health in Turkey. The Ministry of Tourism (MoT) is a public institution regulating and supervising enterprises that render services such as accommodation and traveling directly to this sector. The Ministry of Health (MoH) is obliged to carry out such

duties as establishment and planning of health institutions, training and employment of health personnel and supervising various units rendering public health services. These two Ministries are supposed to work in coordination to provide effective and efficient health care for foreigners (Aksu, 2001).

According to the results of the Foreign Visitors Research conducted by the Turkish Statistical Institute (TurkStat), the share of total number of tourists visiting Turkey for health purposes in the total number of tourists has increased over time as shown in Figure 2.

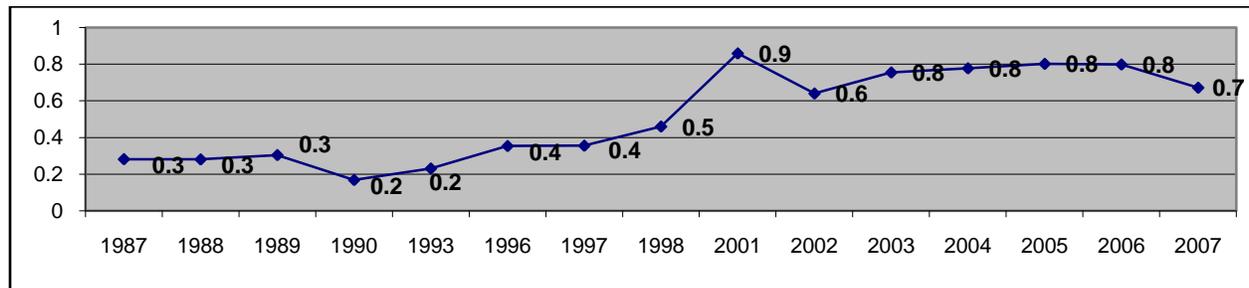


Figure-2: Share of Tourists Visiting Turkey for Health Purposes in Total Number of Tourists
Source: The Foreign Visitors Research by (TurkStat) (1987-2007)

According to a study by the MoH, during the first ten months of 2004, the number of foreign patients admitted to private hospitals for treatment purposes was 39,404, of whom 26,198 were outpatients and 13,206 were inpatients. After inclusion of foreign patients admitted to public hospitals, the total number of foreign tourists visiting Turkey for treatment purposes is estimated by approximately 50,000. According to this research, the majority of the foreign patients received treatments in Turkey are from European Union (EU) countries (Tengilimoglu, 2005).

In the event that Turkey becomes a member of the EU, recent innovations and developments in the medicine technology will be utilized by the private hospitals more easily, conditions regarding operating rooms and intensive care units of hospitals in large cities will improve and thus it is expected that the number of foreign patients visiting Turkey from Europe, Middle East and Turkish Republics will increase.

SWOT Analysis for Health Tourism in Turkey

In case the strengths and weaknesses along with the opportunities and threats in the health tourism market of Turkey are known, it is thought that it would be clearer what should be done to acquire a greater share of the health tourism market. Using SWOT analysis, the possible strengths and weaknesses, threats and opportunities regarding health tourism for Turkey may briefly be classified as follows:

Strengths of Turkey's Health Tourism:

Prices of the health services rendered in Turkey are relatively low. Especially availability of inpatient beds, physical and technological infrastructures and physician qualifications are acknowledgeable. The number of personnel who knows foreign languages in private hospitals is quite high. Turkey forms naturally a bridge between Asian and European countries. The EU's

views about Turkey have changed in a desirable way. Membership process has commenced (Tengilimoğlu, 2005). The number of quality hotels to support health tourism is excessive and the current tourism potential is high. People are quite well aware of healthy life. Private hospitals sector has developed.

Weaknesses of Turkey's Health Tourism:

Knowledge of health personnel and hospital managers regarding European health legislation and patient rights are insufficient. Promotion of Turkey is insufficient. There is an unpleasant image about Turkey. The coordination between foreign insurance companies is poor. Only a very few number of hospitals in Turkey had been accredited. Not enough attention is paid to marketing strategies and marketing research. Erroneous applications are realized in pricing. The coordination among various sectors is lacking (Tengilimoğlu, 2005). The physical and technological infrastructures of especially public hospitals are insufficient.

Environmental Opportunities of Turkey's Health Tourism:

There has been a mobilization from European Countries, Middle East, Arabic Countries, and Turkish Republics abroad for treatment purposes for various reasons. However, after the September 11th terrorist attacks, visa restrictions of especially USA and several European countries for citizens of several countries, especially the citizens of Muslim countries, may be deemed as an opportunity for Turkey. The fact that approximately 4 million Turkish citizens living in Europe will prefer the physicians and hospitals in Turkey because of their emotional confidence needs may be an opportunity as well. The citizens of the newly formed Turkish Republics after the collapse of the Soviet Union will prefer Turkey due to its convenient distance as well as citizens of other neighboring countries.

Environmental Threats of Turkey's Health Tourism:

A war possibility in the Middle East, terrorist attacks in Turkey, natural disasters, political crises, negative promotion and lobbying activities against Turkey and diseases such as bird flu may result in losing the target market in health tourism to competitor countries (Tengilimoğlu, 2005).

PURPOSE AND METHOD

The purpose of the research is twofold: 1) to examine and evaluate current applications of the hospitals in Turkey to provide health services to people visiting Turkey for treatment purposes and make Turkey a preferred country in this arena, 2) to identify its marketing strategies and determine the corresponding actions to be taken.

The hospitals covered in this study were composed of public, private and university hospitals located in nine cities (Ankara, İstanbul, İzmir, Antalya, Mugla, Bursa, Trabzon, Gaziantep, Erzurum) where they are intensively visited by foreign tourists for treatment purposes based on the Foreign Visitor Survey of TuskStat for the year 2001. A survey questionnaire was sent to the head physician offices of total 414 hospitals located in these nine cities via the official writing of MoH on February 2nd 2006. Total 282 questionnaires were replied, resulting in a correspondence rate of 68.1%.

The questionnaire applied was composed of two groups of questions. First group questions, all of which were continuous variables, were 5-point Likert type questions. Likert type questions were asked to hospital managers to obtain data on such questions as what time of year (in quarters) abroad patients are visiting the hospital, to receive what type of treatment, and from which country. For these questions, the Likert scale ranged from “No patient at all” (0) to “Many patients” (4). The Likert scale was also used to determine the reasons for preferring Turkey as a country and hospitals in Turkey, with a range of 0 (not attractive at all) and 4 (definitely attractive).

For data analysis, descriptive statistics such as frequency, arithmetic average, standard deviation, and univariate statistics such as chi square (χ^2) test, t test and one-way analysis of variance were performed.

FINDINGS AND DISCUSSION

As shown in Table 1, foreign patients visiting Turkey received health services especially in summer term (June-July-August), received care mostly for respiratory diseases and the majority of them were from Germany. It is noteworthy that the citizens of Saudi Arabia which was one of the target countries in the health tourism market accounted for the least number of people.

Table-1: Distribution of Patients from Abroad by Diseases, Months and Countries (N=282)

	Average	Standard Deviation
<i>Distribution by Month</i>		
March-April-May	0.904	1.044
June-July-August	2.082	1.641
September-October-November	1.113	1.252
December-January-February	0.635	0.903
<i>Distribution by the Type Disease/Treatment</i>		
Eye Diseases and Surgery	0.674	1.154
Heart Diseases and Surgery	0.535	1.110
Gynecological Diseases and Operations	0.723	1.084
Esthetic and Plastic Operations	0.387	0.914
Infertility (Tube Baby)	0.156	0.531
Alcohol and Narcotic Addicts	0.149	0.559
Diabetes	0.493	0.948
Cancer Treatment	0.284	0.748
Respiratory Diseases	0.911	1.230
Nervous System Diseases	0.450	0.876
Kidney Diseases and Dialysis	0.422	0.910
Rheumatism Diseases	0.465	0.940
Orthopedic Operations	0.830	1.234
Odonto-threapy	0.511	0.974
<i>Distribution by Country</i>		
Turkish Republics	0.674	1.060
Saudi Arabia	0.156	0.474

Iran	0.181	0.476
Holland	1.035	1.257
Germany	1.681	1.515
Belgium	0.699	1.029
England	0.599	1.046
Denmark	0.422	0.894
United States	0.252	0.576
France	0.521	0.905
Greece	0.291	0.626

In Table 2, the reasons for choosing Turkey as a country and hospitals in Turkey for treatment purposes were depicted. It was found that the leading motive was the price followed by the climate. Also, it was found that few number of foreign patients visited Turkey for treatment purposes as there is no legal permission (ground) in their own countries. So far as the reasons for foreign patients to choose Turkish hospitals, the majority relied on former patients' recommendations to decide on their choice.

Table-2: The Reasons for Choosing Turkey and Turkish Hospitals (N=282)

	Average	Standard Deviation
Reasons for Choosing Turkey		
Lower Price in Turkey	2.688	1.486
Better Climate in Turkey	1.943	1.484
Shorter Waiting List in Turkey	1.500	1.447
Services Not Covered By The Insurance Companies in Their Own Country	1.418	1.405
Quality of Health Services in Turkey	1.855	1.375
Confidence in Turkish Health Personnel	1.819	1.381
No Legal Permission (Ground) in Their Own Country	0.759	1.043
Reasons for Choosing Hospitals in Turkey		
Recommendation of Former Patients	1.447	1.580
Prices	1.160	1.478
Fame of the Hospital	1.106	1.479
Technological Infrastructure	1.064	1.460
Physical Infrastructure	0.961	1.395
Fame of the Physician	0.812	1.275
Promotional Activities	0.550	1.138

As shown in Table 3, it was determined via the Kolmogorov-Smirnov test (instead of the chi square test as the expected value was less than five) that there was no statistically significant difference ($p > 0.05$) between the hospital status and the hospital status of admitting foreign patients.

Table- 3: Admitting Patients from Foreign Countries by Hospital Status in 2005

<i>Hospital Status</i>	Admitting Foreign Patients					
	Yes		No		Total	
	n	%	n	%	n	%
Public	101	67.80	48	32.20	149	100.00
Private	95	78.50	26	21.50	121	100.00
University	8	66.70	4	33.30	12	100.00
Total	204	72.30	78	27.70	282	100.00

(K-S =0.904, p=0.388)

In Table 4 shows the distribution of hospitals with units orientated for health tourism by hospital status. Kolmogorov-Smirnov test was used instead of chi-square test as the expected value was less than five. A statistically significant difference in the units orientated for health tourism was found across hospitals with different ownership status ($p < 0.05$). Following the paired comparisons to determine hospitals that created the difference, statistically significant difference was found between public and private hospitals ($\chi^2 = 30.153, p = 0.000$). Hospitals with the greatest percentage of the relevant unit were university hospitals (33.3%) followed by private (52.1%) and public hospitals (20.1%).

Table-4: Possession of a Unit Orientated for Health Tourism by Hospital Status in 2005

<i>Hospital Status</i>	Possession of Unit Orientated For Health Tourism					
	Yes		No		Total	
	n	%	n	%	n	%
Public	30	20.10	119	79.90	149	100.00
Private	63	52.10	58	47.90	121	100.00
University	4	33.30	8	66.70	12	100.00
Total	97	34.40	185	65.60	282	100.00

(K-S=2.664, p=0.000)

As shown in Figure 5, it was found that there was a statistically significant difference between hospitals in terms of employment of personnel who are able to speak a foreign language in satisfactory level ($p < 0.005$). Following the paired comparisons to determine hospitals that created the difference, public hospitals were found to be statistically significantly different from private hospitals ($p = 0.000$) and training hospitals ($p = 0.017$). Public hospitals were the ones with the least percent of personnel who are able to speak foreign language in satisfactory level (35.60%) followed by private hospitals (65.30%) and university hospitals (75.00%).

Table-5: Employment of Personnel Speaking a Foreign Language in Satisfactory Level by Hospital Status in 2005

<i>Hospital Status</i>	Employment of Personnel Speaking a Foreign Language in Satisfactory Level					
	Yes		No		Total	
	n	%	n	%	n	%
Public	53	35.60	96	64.40	149	100.00
Private	79	65.30	42	34.70	121	100.00
University	9	75.00	3	25.00	12	100.00
Total	141	50.00	141	50.00	282	100.00

($\chi^2=26.723$, $p=0.000$)

Table 6 shows a statistically significant difference between hospitals in terms of offering cultural, social, recreation facilities as incentives ($p<0.05$), as a result of Kolmogorov-Smirnov test. The paired comparisons exhibited that there was a difference between public and private hospitals in terms of offering cultural, social and recreation facilities as incentives ($p=0.000$). Such facilities are offered most in private hospitals (20.7%) compared to university hospitals (8.30%) and public hospitals (3.40%).

Table-6: Offering Cultural, Social, Recreation Facilities as Incentives by Hospital Status in 2005

<i>Hospital Status</i>	Offering Cultural, Social, Recreation Facilities					
	Yes		No		Total	
	n	%	n	%	n	%
Public	5	3.40	144	96.60	149	100.00
Private	25	20.70	96	79.30	121	100.00
University	1	8.30	11	91.70	12	100.00
Total	31	11.00	251	89.00	282	100.00

(K-S=2.166, $p=0.000$)

In Table 7, the distribution of a possession of a separate floor/clinic in the hospital for foreign patients by hospital status is presented. It was found that there was a variation across hospitals with different status in that regard and the difference was statistically significant ($p<0.05$), according to Kolmogorov-Smirnov test. Among the three groups of hospitals, those that most allocated a relevant floor/clinic to foreign patients were university hospitals (25%) followed by private hospitals (14.9%) and public hospitals (0.7%). The paired comparisons exhibited public hospitals to be statistically significantly different group of hospitals when compared to private hospitals ($p=0.000$) and university hospitals ($p=0.000$).

Table-7: Possession of Separate Floors/Clinics for Foreign Patients by Hospital Status in 2005

<i>Hospital Status</i>	Possession of Separate Floors/Clinics For Foreign Patients					
	Yes		No		Total	
	N	%	n	%	n	%
Public	1	0.70	148	99.30	149	100.00
Private	18	14.90	103	85.10	121	100.00
University	3	25.00	9	75.00	12	100.00
Total	22	7.80	260	92.20	282	100.00

(K-S=2.359 p=0.000)

Table 8 illustrates the distribution of special transportation facilities offered by hospitals for foreign patients by hospitals' the admission ratio of foreign patients. The results showed a statistically significant difference across hospitals with different status in terms of accepting abroad patients, according to chi-square test. Hospitals with special transportation facilities were relatively found to have accepted more abroad patients (38.7%).

Table-8: Special Transportation Facilities for Foreign Patients by Admitting Patients from Foreign Countries in 2005

<i>Admission from Foreign Countries</i>	Special Transportation Facilities for Foreign Patients					
	Yes		No		Total	
	n	%	n	%	n	%
Yes	79	38.70	125	61.30	204	100.00
No	9	11.50	69	88.50	78	100.00
Total	88	31.20	194	68.80	282	100.00

($\chi^2=19.427$, p=0.000)

In Table 9, the distribution of possession of convenient facilities for abroad patients with different religious beliefs by hospitals' the admission ratio of foreign patients is shown. Hospitals that had convenient facilities for abroad patients with different religious beliefs were found to the ones with statistically significantly accepting more foreign patients (29.4%) (p<0.05).

Table-9: Possession of Convenient Facilities for Different Religions by Admitting Patients from Foreign Countries in 2005

<i>Admission from Foreign Countries</i>	Possession of Convenient Facilities for Different Religions					
	Yes		No		Total	
	N	%	n	%	n	%
Yes	60	29.40	144	70.60	204	100.00
No	8	10.30	70	89.70	78	100.00
Total	68	24.10	214	75.90	282	100.00

($\chi^2=11.314$, p=0.001)

In Table 10, the distribution of translator employment by hospital status is shown. There was a statistically significant difference in employment of a translator for foreign patients across hospitals, according to Kolmogorov-Smirnov test. Paired comparisons of hospitals showed that the difference was between public and private hospitals ($p=0.000$). 35.5% of private hospitals employed contractual translators for foreign patients speaking different languages whereas only 0.7% of public hospitals employed a translator.

Table-10: Translator Employment by Hospital Status in 2005

<i>Hospital Status</i>	Translator Employment					
	Yes		No		Total	
	N	%	n	%	n	%
Public	1	0.70	148	99.30	149	100.00
Private	43	35.50	78	64.50	121	100.00
University	1	8.30	11	91.70	12	100.00
Total	45	16.00	237	84.00	282	100.00

(K-S=3.704, $p=0.000$)

The distribution of having a marketing department within the hospital by hospitals' status of accepting foreign patients is shown in Table 11. Hospitals with a marketing department were found to have accepted statistically significantly more abroad patients than hospitals with no marketing department (34.3%) ($p=0.000$).

Table-11: Having a Marketing Department by Admitting Patients from Foreign Countries in 2005

<i>Admission from Foreign Countries</i>	Having a Marketing Department					
	Yes		No		Total	
	N	%	n	%	n	%
Yes	70	34.30	134	65.70	204	100.00
No	9	11.50	69	88.50	78	100.00
Total	79	28.00	203	72.00	282	100.00

($\chi^2=14.514$, $p=0.000$)

The results for accreditation-related activities of hospitals by hospitals' status of accepting foreign patients are illustrated in Table 12. A statistically significant difference was found in carrying out activities related to accreditation across hospitals (p değeri?????). As seen in Table, 53.4% of hospitals accepting abroad patients was also involved in the process of accreditation.

Table-12: Carrying Out Accreditation-Related Activities by Admitting Patients from Foreign Countries in 2005

<i>Admission from Foreign Countries</i>	Activities Related to Accreditation					
	Yes		No		Total	
	N	%	n	%	n	%
Yes	109	53.40	95	46.60	204	100.00
No	29	37.20	49	62.80	78	100.00
Total	138	48.90	144	51.10	282	100.00

($\chi^2=5.964$ $p=0.015$)

In Table 13, the results for the relationship between accepting abroad patients and promotional activities of hospitals are presented. As promotional tools, internet, magazines, newspapers and tour operators were considered. Hospitals that used any of those tools were found to be the ones accepting foreign patients ($p<0.05$). Specifically, hospitals that accepted abroad patients used internet statistically significantly more than those that did not accept abroad patients (86.30) ($p<0.05$). The group of hospitals accepting abroad patients also used magazines (90.50%), newspapers (89.7%), brochures (91.3%), and tour operators (100%) statistically significantly more than their counterparts.

Table-13: Use of Promotional Tools by Admitting Patients from Foreign Countries in 2005

Promotional Tools		Admission from Foreign Countries						χ^2	P
		Yes		No		Total			
		n	%	N	%	n	%		
Internet	Yes	88	86.30	14	13.70	102	100.00	15.506	0.000
	No	116	64.40	64	35.60	180	100.00		
Magazines	Yes	38	90.50	4	9.50	42	100.00	8.112	0.004
	No	166	69.20	74	30.80	240	100.00		
Newspapers	Yes	26	89.70	3	10.30	29	100.00	4.843	0.028
	No	178	70.40	75	29.60	253	100.00		
Brochures	Yes	42	91.30	4	8.70	46	100.00	9.879	0.002
	No	162	68.60	74	31.40	236	100.00		
Tour Operators	Yes	27	100.00	0	0.00	27	100.00	11.417	0.001
	No	177	69.40	78	30.60	255	100.00		
Total		204	72.30	78	27.70	282	100.00		

In Table 14, the results for the relationship between the physical, technological and manpower infrastructure insufficiencies of hospitals and accepting foreign patients are presented. Disproportionate percentages of hospitals that faced infrastructure insufficiency in terms of physical, technological and manpower were the ones accepting foreign patients ($p<0.05$). More specifically, the majority of hospitals that have insufficiency of physical infrastructure were involved in serving foreign patients (76.4%). It seemed that hospitals with sufficiency in terms of physical, technological and manpower were more able to accept patients from foreign countries.

Table-14: Accepting Foreign Patients by Hospital Sufficiency of Infrastructure in 2005

Infrastructure Sufficiency		Admission from Foreign Countries						χ^2	P
		Yes		No		Total			
		n	%	n	%	n	%		
Physical Infrastructure Sufficiency	Yes	178	76.40	55	23.60	233	100.00	11.016	0.001
	No	26	53.10	23	46.90	49	100.00		
Technological Infrastructure Sufficiency	Yes	178	76.40	55	23.60	233	100.00	11.016	0.001
	No	26	53.10	23	46.90	49	100.00		
Manpower Infrastructure Sufficiency	Yes	182	76.20	57	23.80	239	100.00	11.372	0.001
	No	22	51.20	21	48.80	43	100.00		
Total		204	72.30	78	27.70	282	100.00		

CONCLUSION AND RECOMMENDATIONS

This study produced several significant findings and recommendations based on those findings regarding the issue at hand. It was determined that patients residing abroad used health services in Turkey especially in June-July-August (69.5%), visited hospitals mostly for the treatment of respiratory diseases (43.3%), and the majority (64.9%) were from Germany. These results may indicate that health tourism in Turkey has not yet reached to a satisfactory level. But the results showed that Turkey has gone a long way in tourist health. It can be said that a greater attention for tourist health will be a significant step forward for health tourism.

The primary reason for foreign patients to prefer Turkey for health purposes was the lower price and the better climate. Turkey is more advantageous than many other countries for several reasons such as the lower cost of health services, lower staff expenditures and no need for malpractice insurance. It is thought that the lower price, more quality health services, shorter waiting times will put Turkey in a higher place in the health tourism sector.

The results for the infrastructure of hospitals regarding health tourism were as follows:

- The frequency of having specific units for health tourism was greater among private hospitals (52.1%) than public hospitals (20.1%).
- Public hospitals were the ones with the least frequency of employing translators for abroad patients (35.60%) compared to private hospitals (65.30%) and university hospitals (75.00%).
- 20.7% of private hospitals offered cultural, social and recreation facilities for foreign patients whereas only 3.4% of public hospitals provided such facilities.
- The frequency of having separate floors/clinics for foreign patients was found to be the least among public hospitals (0.7%) followed by private hospitals (14.9%) and university hospitals (25%).

- The majority of private hospitals (51.2%) provided transportation facilities for foreign patients whereas 15.4% of public hospitals provided the same facility.
- Private hospitals (42.1%) provided more facilities such as meal and chaplains convenient for patients with different religions than did public hospitals (10.1%).
- %35.5 of private hospitals employed contractual translators for patients speaking different languages, but only 0.7% of public hospitals did so.
- The majority of private hospitals (57%) had a marketing department in the hospital, whereas 16.7% of university hospitals and 5.4% of public hospitals were found to have had a marketing department.

Insufficient physical conditions of, low staff motivation due to working conditions, and insufficient promotional activities of public health are among the factors that can explain why private hospitals are leading hospitals. The share of public hospitals in the health tourism sector should be increased as public hospitals' greater focus on health tourism will increase the standards of health and provide price stability and confidence. For that, an effective public relations department should be established in public health institutions. In public health institutions located in tourism regions, sufficient numbers of personnel speaking foreign languages should be employed and language training of the existing personnel should be supported.

Important fairs, congresses and conferences regarding the health tourism field should be tracked and promotional activities should be carried out both by the public and private sector.

Other countries should be informed about the health system of Turkey through fairs where information about Turkey's health tourism is also incorporated.

For Turkey to be successful in health tourism, hospitals should develop their marketing plans, determine their target markets by countries and diseases and form the marketing mix which will effectively cover the health requirements of the target market. In order to improve health tourism in Turkey, it is required to determine the target market effectively including Turkish Republics (Azerbaijan, Turkmenistan, Kazakhstan, Kyrgyzstan etc) and the Middle East countries in addition to the EU countries and identify the corresponding marketing strategies. To successfully implement identified strategies, collaboration among sectors, improvement of hospitals' infrastructures, selection of hospitals which will render health tourism related services and execution of government-supported promotional activities are vital.

Differing pricing among hospitals creates a trouble between insurance companies and hospitals. To solve this problem, standards should be set for pricing health services received by foreign patients.

To attract more abroad patients, special health tourism packages should be prepared. This special package should include transportation from airport to hotel, venue, massage services, personnel who will be able to assist the patient during the entire process, and site seeings.

High quality hotels that have the capacity to work in coordination with hospitals where foreign patients are treated should be established and promoted.

Hospitals should be accredited, standards required for hospitals to work for health tourism should be identified and hospitals that do not meet those standards should be prohibited for serving abroad patients.

International communication should be improved, a common information system should be established among hospitals, and a disease treatment directive in conformity with the EU Standards must be issued (Lengyel and Ötvös. 2003).

By communicating with the patient waiting centers abroad, the names of hospitals with the capacity to render services abroad should be declared.

Collaboration among the sectors should be ensured for improvement of health tourism. In order not to cause an undesirable effect on foreign tourists' health due to noise, environment pollution and so on and to develop a good country image, collaboration among the sectors (MoT, MoH, Ministry of Environment and Forestry, Local Administrations, accommodation centers etc) should be ensured and sufficient attention should be given to environmental health.

The important issues to be realized by governments for improvement of health tourism can be listed as follows:

- MoT and the MoH should work in close collaboration with each other,
- Foreign patients should not be aggrieved due to the legal aspects of health tourism,
- Imported health devices should be standardized to eliminate the technology differences between the United States and the developing countries,
- Public-private partnerships must be formed among health institutions (http://www.ximb.ac.in/~u103121/CPProject/Tend_of_Medical_tourism).

In order to improve the health sector, global awareness should first be created among patients, hospitals, insurance companies and politicians rather than local or personal awareness. The following should be determining health care services and training of personnel providing these services.

Finally, as successful health tourism is impossible in fields where a professional management does not exist, managerial positions of health institutions should be filled with managers who are educated and trained in health management.

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Optimizing Distributor Profitability – A methodology for linking Business Processes and Shareholder Value

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ABSTRACT

Over the years, individual firms and professional researchers have compiled many “Best Practices” for distributors. These practices have been time tested and the best approach is now known for almost every imaginable distributor activity. Meanwhile, the pressure to perfect distribution operations has never been higher with customers continually demanding higher performance at lower cost. While each best practice has been analyzed in isolation and projections of its impact on the Profit & Loss (P&L) statement and balance sheet have been made, very few have successfully considered the impact of implementing improved practices (across various distributor functions) on the firm’s Return On Investment (ROI) and net profit. The objective of this consortium is to determine exactly how profitable a distributor could become by implementing best practices across all functional areas. The analysis will facilitate distributors and manufacturers optimize their operations potential and help financial firms assess the potential profitability of mergers and acquisitions. To address this need, a research consortium (Optimizing Distributor Profitability) was conducted in 2007 by the Supply Chain Systems Laboratory at Texas A&M University. The consortium was sponsored by 11 distributors from 6 different channels.

Introduction

The motivation behind the Optimizing Distributor Profitability consortium was the plethora of mergers and acquisitions that took place in the distribution community during the beginning of this millennium. The fact that companies got acquired at Earnings Before Interests, Taxes, Depreciation and Amortization (EBITDA) multiples of 10 (MDM Magazine, February 25, 2008) made us sit up and take notice of the motivation behind such acquisitions. We realized that organizations that got acquired were at a disadvantage if they did not take steps to improve their operations and position themselves better in the market place. However, the question that remained with most firms was whether such process improvement efforts would have a positive impact on the bottom line. Many a times, organizations embark on company-wide business process improvement programs only to find that the return is not immediate or that the efforts did not simply result in breakthrough bottom-line improvements. The Supply Chain Systems Laboratory (SCSL) at Texas A&M University formed a consortium of 11 industrial distributors across 6 different channels (building materials, power transmission, electrical, electronics, chemical, architectural metal and stair) to discuss the roadblocks that these organizations faced when it came to quantifying and prioritizing large-scale improvement projects. Almost all participants agreed on one fundamental problem: The lack of connectivity between a firm’s

business activities and the impact of those activities on the firm’s financial elements. Several management teams could not clearly justify investments made in day-to-day activities such as improving warehouse operations or in long-term strategic initiatives such as establishing a new distribution center in a different location. The cost of a bad investment was simply not an option, given the fierce competition and current economic conditions. This consortium specifically addressed this very need by helping distributors see the connections between business processes and financial drivers. A **5-step methodology** (Figure 1) was developed as a guideline for the distribution community to analyze their processes, identify gaps, map shareholder value, determine profitability and establish best practices roadmap.



Figure 1: 5-step methodology to identify and improve process gaps to achieve profitability

Process and Financial Assessment

As a first step, the research team at Texas A&M developed frameworks for both business processes and financials related to distribution functions. The business process framework is structured as a collection of “7S” process groups – Source, Stock, Store, Sell, Ship, Supply Chain Planning, and Support Services. The financial framework is defined based on four financial drivers – Asset Efficiency, Cash Flow, Profitability, and Revenue Growth. The process and financial frameworks are represented in Figure 2.

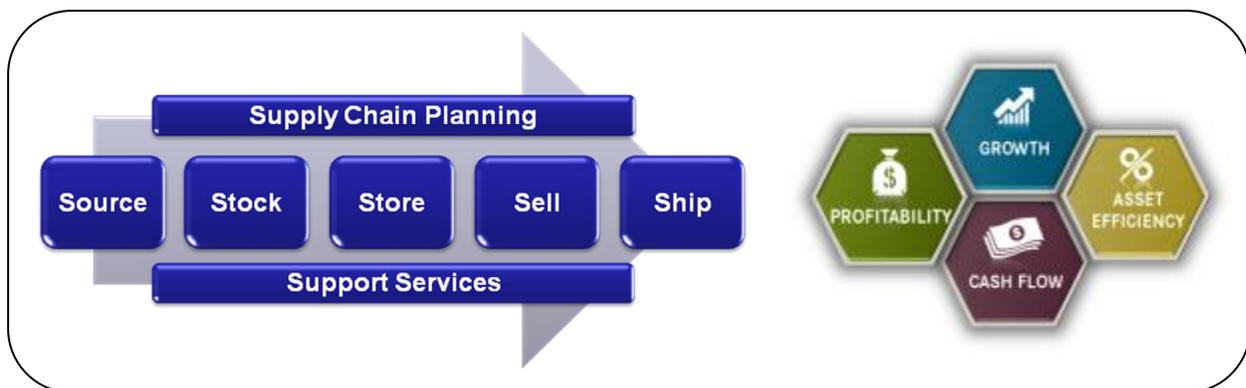
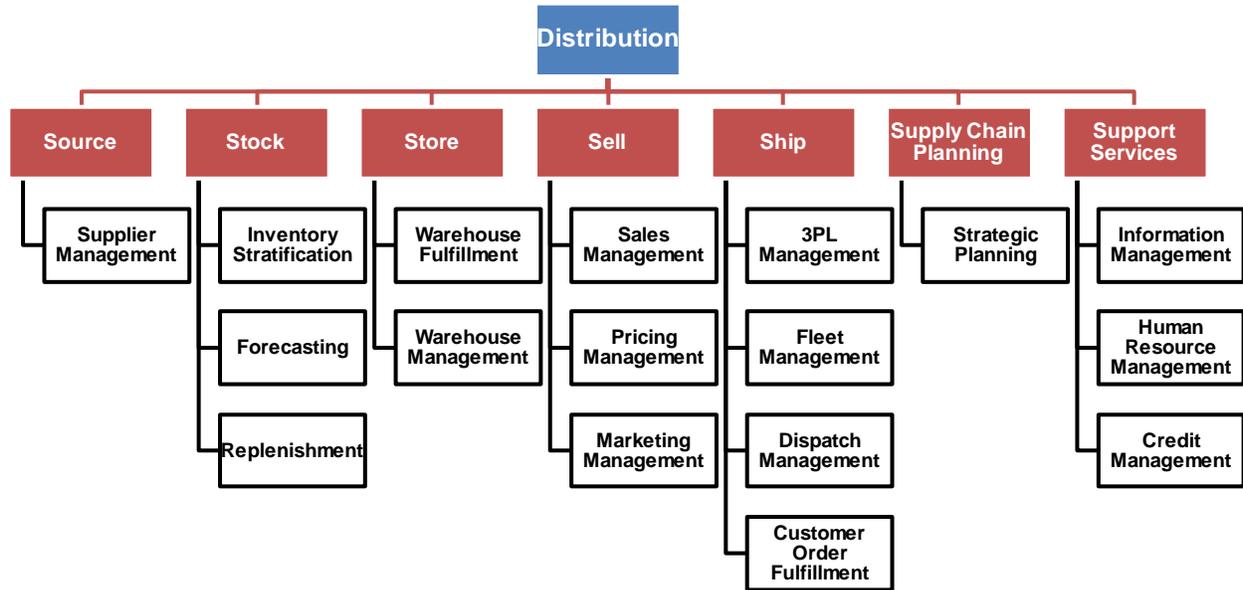


Figure 2: Process and Financial Frameworks

The “7S” process groups are further expanded to 2 more levels of sub-processes as shown in Figures 3 and 4.



S1 - SOURCE	
1.1 SUPPLIER MANAGEMENT	
1.1.1	Supplier Selection
1.1.1	Supplier Performance Assessment
1.1.3	Supplier Stratification
1.1.4	Supplier Relationship Strategy
1.1.5	Right Number of Suppliers
S2 STOCK	
2.1 INVENTORY MANAGEMENT	
2.1.1	Inventory Stratification
2.2 FORECASTING	
2.2.1	What to Forecast?
2.2.2	Demand Classification
2.2.3	Forecasting Methods
2.2.4	Forecast Accuracy
2.3 REPLENISHMENT	
2.3.1	When to Order? (Reorder Point - ROP)
2.3.2	How much to Order? (Order Quantity)
2.3.3	Replenishment Policy
S3 STORE	
3.1 WAREHOUSE FULFILLMENT (INBOUND)	
3.1.1	Receiving - Process and Policy
3.1.2	Staging/Putaway
3.2 WAREHOUSE MANAGEMNT	
3.2.1	Cycle Counting
3.2.2	Product Placement
3.2.3	Location Type
3.2.4	Location Identification

3.2.5	Storage
3.2.6	Process Improvement
S4 SELL	
4.1 SALES MANAGEMENT	
4.1.1	Cost To Serve (CTS) Assessment
4.1.2	Customer Stratification
4.1.3	New Customer Identification
4.1.4	Sales Force Stratification
4.1.5	Customer vs. Sales Force Matrix
4.1.6	Sales Compensation Techniques
4.2 PRICING MANAGEMENT	
4.2.1	Customer's Item Visibility
4.2.2	Pricing Methods
4.3 MARKETING MANAGEMENT	
4.3.1	Voice Of Customer (VOC)
4.3.2	Market Selection Strategy
4.3.3	Market Target Strategy
4.3.4	Customer Portfolio Management
S5 SHIP	
5.1 3PL MANAGEMENT	
5.1.1	3PL / Carrier Performance
5.2 FLEET MANAGEMENT	
5.2.1	Fleet Capacity Management
5.2.2	Fleet Cost Management
5.3 DISPATCH MANAGEMENT	
5.3.1	Routing
5.3.2	Cubing
5.4 CUSTOMER ORDER FULFILLMENT	
5.4.1	Picking
5.4.2	Delivery
S6 SUPPLY CHAIN PLANNING	
6.1 STRATEGIC PLANNING	
6.1.1	Supply Chain Network Optimization
S7 SUPPORT SERVICES	
7.1 HUMAN RESOURCES MANAGEMENT	
7.1.1	Recruitment
7.1.2	Retention
7.1.3	Attrition
7.1.4	Change Management
7.2 INFORMATION MANAGEMENT	
7.2.1	Data Integrity
7.3 CREDIT RISK MANAGEMENT	
7.3.1	Credit Management

Figures 3 and 4: 7S Process Groups (Levels 1, 2 and 3)

For example, the process group “Stock” contains “Inventory Management” as a level 1 sub-process and “Inventory Stratification” as a level 2 sub-process. This relationship could also be represented as: Stock → Inventory Management → Inventory Stratification. Similar expansion across all 7 process groups resulted in 47 critical distribution business processes (Figure 4). A similar approach was established for the financial framework, wherein the 4 financial drivers gave rise to 10 financial metrics such as Gross Margin Return on Inventory Investment (GMROI), Earnings Before Interests, Taxes, Depreciation and Amortization (EBITDA), Inventory Turns, Days Sales Outstanding (DSO) and so on. Having identified the business processes, the research team created a Process Assessment workbook (Figure 5) to evaluate the 47 distributor business processes. This assessment essentially serves as a guideline to identify process gaps.

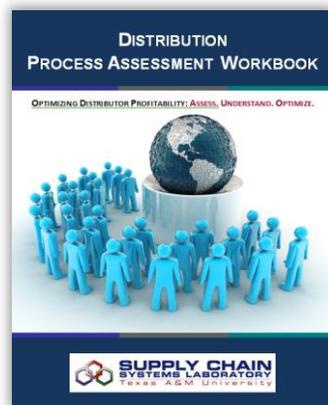


Figure 5: Process Assessment Workbook

GAP Identification (Process & Profitability)

Common, good, and best practices were defined for each of the identified business processes. These definitions served as benchmarks for participants to assess their organization’s current business process performance. The research team also presented a set of 10 financial metrics for each distribution channel to help organizations benchmark their financial performance. The business process and financial assessment exercise thus helped participants understand gaps and focus on areas with potential improvement opportunities. Figure 6 shows a typical common, good, best practice benchmark for Inventory Stratification under the “Stock” process group.

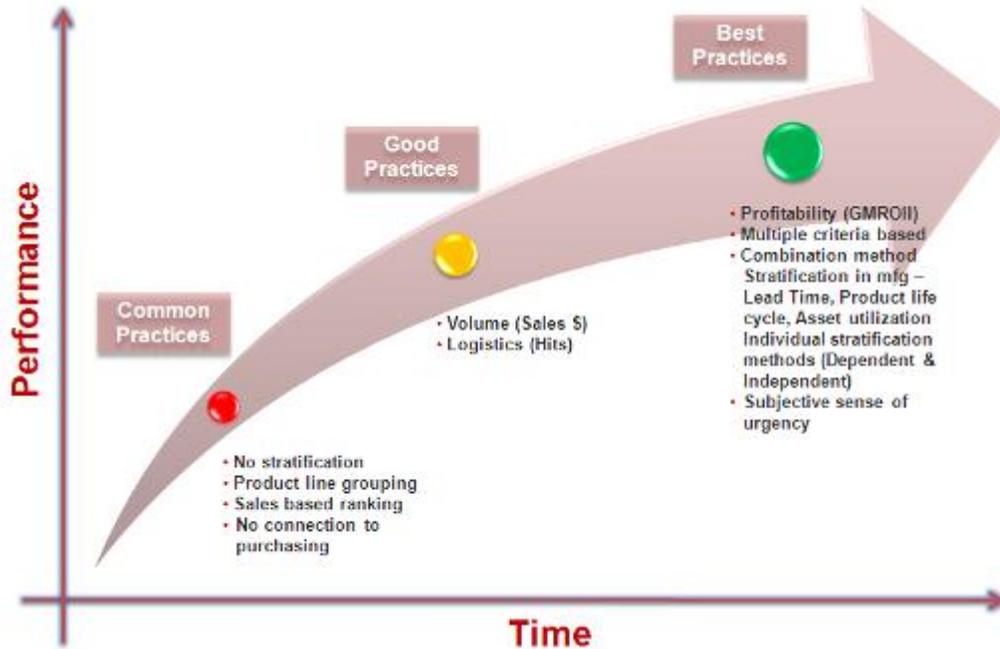


Figure 6: Common / Good / Best Practice Benchmark

The process assessment sheet will be filled in as shown in Figure 7.

S2 STOCK		Common	Good	Best
2.1 INVENTORY STRATIFICATION				
2.1.1	Inventory Stratification		●	
2.2 FORECASTING				
2.2.1	What to Forecast?			●
2.2.2	Demand Classification		●	
2.2.3	Forecasting Methods	●		
2.2.4	Forecast Accuracy	●		
2.3 REPLENISHMENT				
2.3.1	When to Order? (Reorder Point - ROP)		●	
2.3.2	How much to Order? (Order Quantity)	●		
2.3.3	Replenishment Policy		●	

Figure 7: Process Assessment Worksheet

Shareholder Value Map

Once the financial and process gaps are identified, it is imperative to understand the connectivity between a process and its related financial driver. A lack of understanding of this connection is what prevents organizations from taking the right decisions when prioritizing improvement projects. An Inventory Stratification project that results in a 5 % increase in EBITDA may be more important than a Warehouse Process Improvement project that delivers a 1% increase in EBITDA, given the current financial conditions of the organization. In order to make this evaluation, one has to understand how each business process is tied to its

corresponding financial driver(s). The Distributor Profitability Framework (Figure 8) serves this purpose. For instance, Inventory Stratification process can be connected to shareholder value in the following manner:

Inventory Stratification → Inventory Mix → Inventory → Cash-to-Cash Cycle Time → Cash Flow → Shareholder Value.

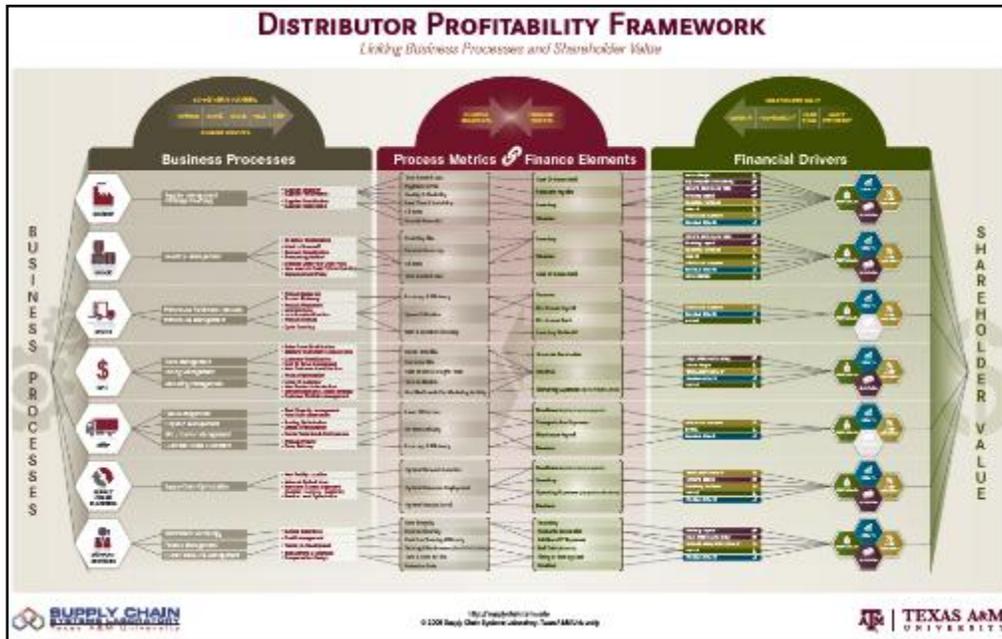


Figure 8: Distributor Profitability Framework

Once business processes are mapped to their corresponding financial drivers, it is imperative to establish the logic between process metrics and financial elements. Figure 9 shows how the logic works when connecting the process metric “Inventory Mix” and financial drivers “EBITDA”, “RONA”, “GMROI” and “Inventory Turns”.

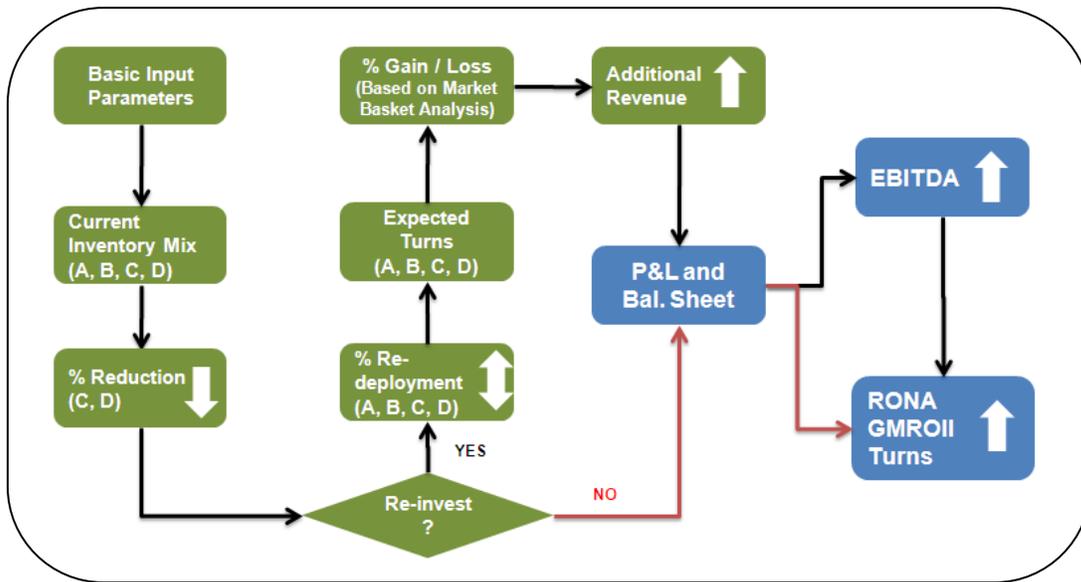


Figure 9: Process Metrics – Financial Elements Relationship Flowchart

Profitability Analyzer

The profitability analyzer is spreadsheet based tool. The tool was built to help consortium members understand the relationship between process metrics and financial elements and hence determine the potential profitability of the firm upon improving some or all areas of the business. Figure 10 illustrates the potential profitability curve for the STOCK business process.

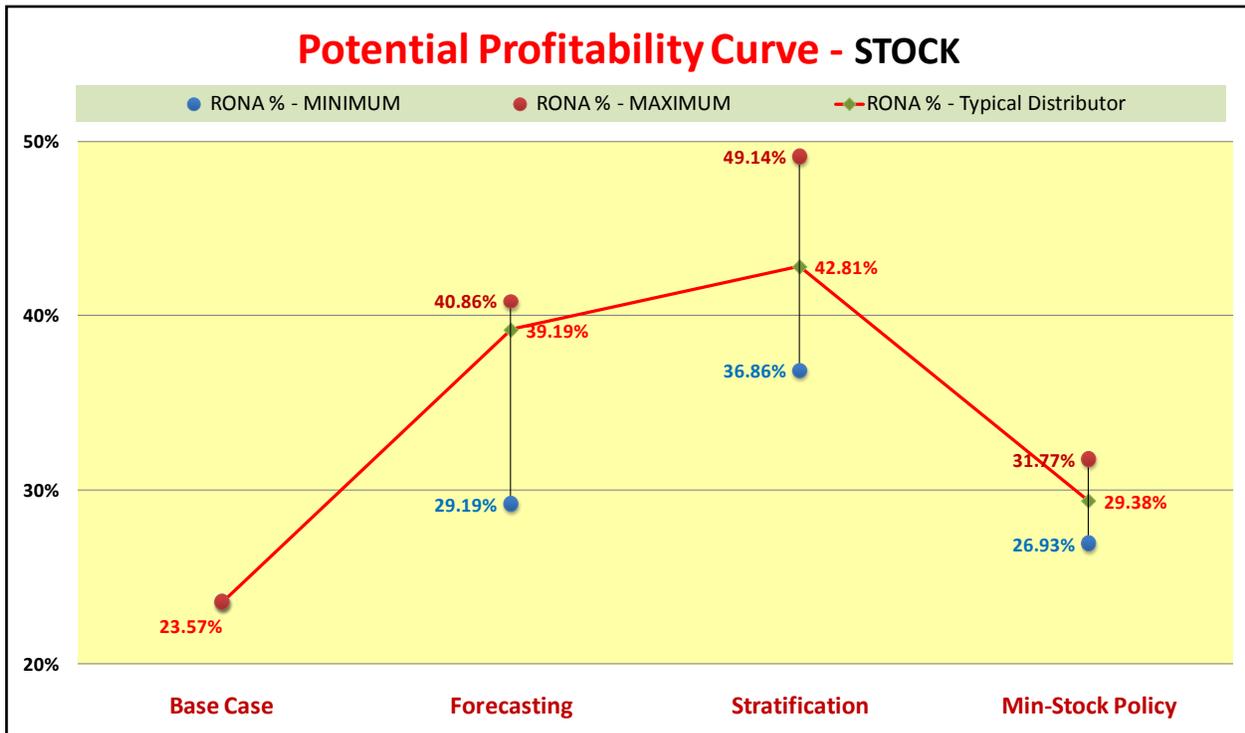


Figure 10: Potential Profitability Curve – STOCK Business Process

The analyzer takes inputs from the Income statement and Balance Sheet. For each of the best practices, the analyzer attempts to determine the appropriate financial metrics such as change in EBITDA and Return On Net Assets (RONA). The analyzer helps distributors prioritize their improvement efforts based on the potential profitability numbers for each best practice.

Best Practices Roadmap

The roadmap is a compendium of best practices under 7 process groups (Source, Stock, Store, Sell, Ship, Supply Chain Planning and Support Services). Each book explains best practices methodology, implementation challenges and solutions. This consolidated knowledgebase on best practices and their impact on key financial metrics such as EBITDA and RONA will be critical in understanding and implementing best practices across the firm. The profitability toolkit, consisting of 7 booklets (Figure 11), has already served its purpose for a couple of consortium members. They were able to implement critical best practices such as Customer Stratification and Inventory Stratification in their operations and current IT system.



Figure 11: Best Practices Road Map

Let us consider the Inventory Stratification best practice under the “Stock” process group (Figure 12). Each stock keeping unit (SKU) is assigned a final rank (A,B,C and D) based on its performance (ranks) across three key parameters: Sales, Gross Margin Return on Inventory Investment (GMROI) and Hits. An item takes an “A” rank for Sales if it falls under the top 60% of Sales \$ generated. An item takes an “A” rank for GMROI if its GMROI is more than 200% and an item takes an “A” rank for Hits if it falls under the top 60% of hits generated. Individual weights are assigned to each rank under the three parameters and the combined weighted value determines the SKU’s final rank.

Rank	Sales	GMROI	Hits
A	Top 60% of sales	GMROI > 200%	Top 60% of hits
B	Next 20% of sales	GMROI > 100% and <= 200%	Next 20% of hits
C	Next 10% of sales	GMROI > 0% and <= 100%	Next 10% of hits
D	Next 10% of sales	GMROI <= 0%	Next 10% of hits
X	-	Zero Inventory and GM > 0	-
Y	-	Zero Inventory and GM <= 0	-

Figure 12: Inventory Stratification parameters

The aforementioned Inventory Stratification best practice was implemented for a Distributor and a summary of the implementation results are highlighted in Figure 13.

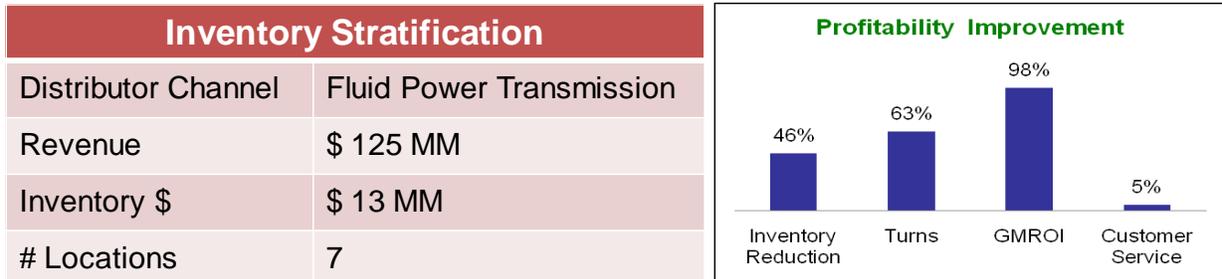


Figure 13: Inventory Stratification – Implementation Results

Conclusion

The profitability analyzer was developed to quantify the impact of implementing various best practices on the financial drivers. Figure 14 summarizes the impact of implementing several best practices on a typical distributor's EBITDA. It was determined that a typical distributor can achieve a minimum of 5-point improvement in EBITDA when implementing best practices across 7 process groups.

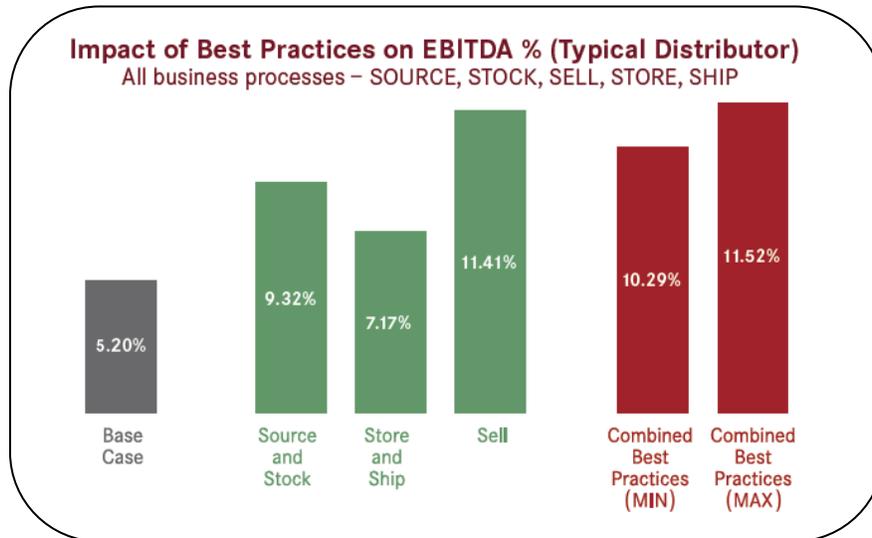


Figure 14: Impact of best practices on EBITDA % (Typical Distributor)

The consortium results and deliverables will help the distribution community reason with the acquisition activity in the industry and understand potential distributor profitability. The consortium highlights are as follows:

- a) Potential for significant profitability improvement exists (typical distributors can double their EBITDA).
- b) Business process and financial performance can be measured to assess potential profitability.
- c) A one-to-one connection can always be established between business processes & shareholder value.
- d) Best practices are realistic and achievable. The profitability connection can be quantified.
- e) Education & change management will enable distributors realize their potential profitability.

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HEALTHCARE SUPPLY CHAINS – IS IT UNIQUE?

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ABSTRACT

In 1999, the yearly spend of the US healthcare value chain in its three major product lines drugs or pharmaceuticals, Med-Surg (Medical Surgical products) and medical devices was about \$100 billion. In healthcare, the supply chain is generally viewed as a cost center and its practices are considered by several prominent researchers, government and healthcare executives as inefficient and out dated. There have been recent calls for improving the efficiency of this supply chain by both public and private sectors. To address this issue one must first understand how the US healthcare supply chain operates and this paper address that issue.

INTRODUCTION

Supply chain refers to the entire production chain from raw materials to the manufacture, delivery and sale of the final product to the customer. The integrated management of the flow of materials and products, services, cash and information from suppliers to the final customer and back again is known as the supply chain management. Porter (1985) called this chain the value chain, since each link in the chain adds value to the customer. According to Porter (1985), each firm has a primary set of activities namely inbound logistics, production/operations, outbound logistics, marketing and sales and service. These primary activities allow the firm to manufacture a product or render a service. Each firm also has a secondary set of activities called the support activities that extends across the firms like firm infrastructure (finance, account, and human resource management), technology development and procurement. Figure 1 shows the primary and secondary activities in a single firm. When we extend this concept to a supply chain which has many firms such as suppliers, manufacturer, distributor, retailer and finally the end customer we get the value chain as shown in figure 2. The activities between these firms are integrated by information, financial and logistics systems. When the decisions of the individual firms are aligned with the system objectives we achieve coordination in the value chain. Many industrial channels like electronics, computer and building materials have such value chains, but the degree of coordination varies among the channels.

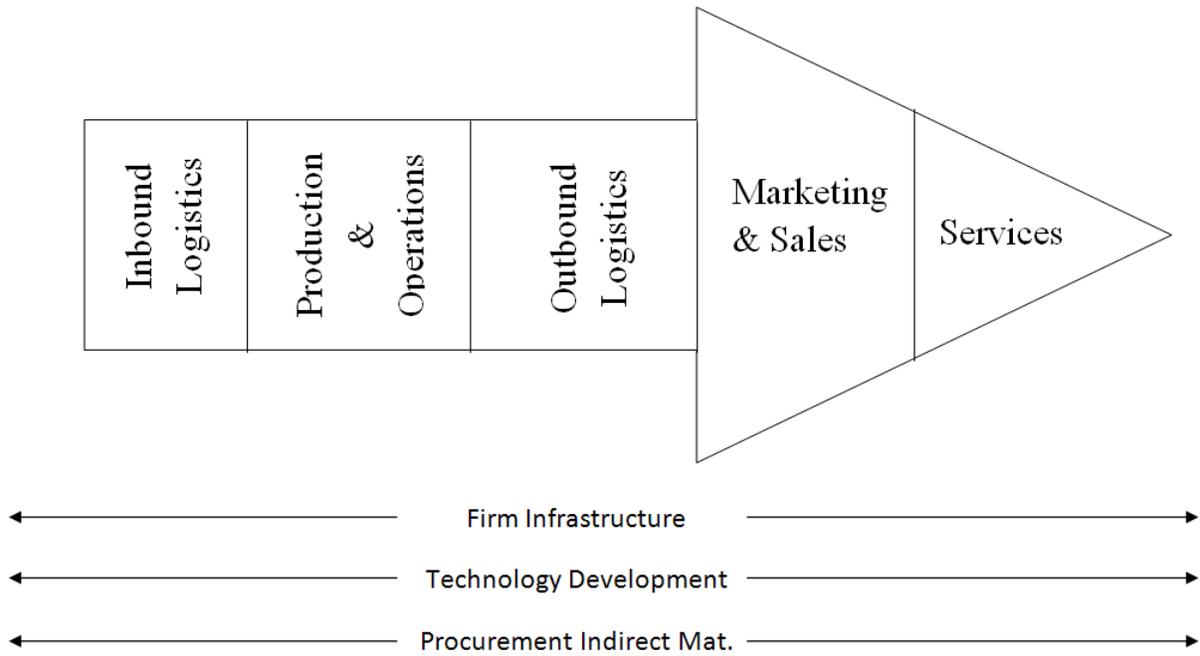


Figure 1. Value perspective of an Enterprise (company)

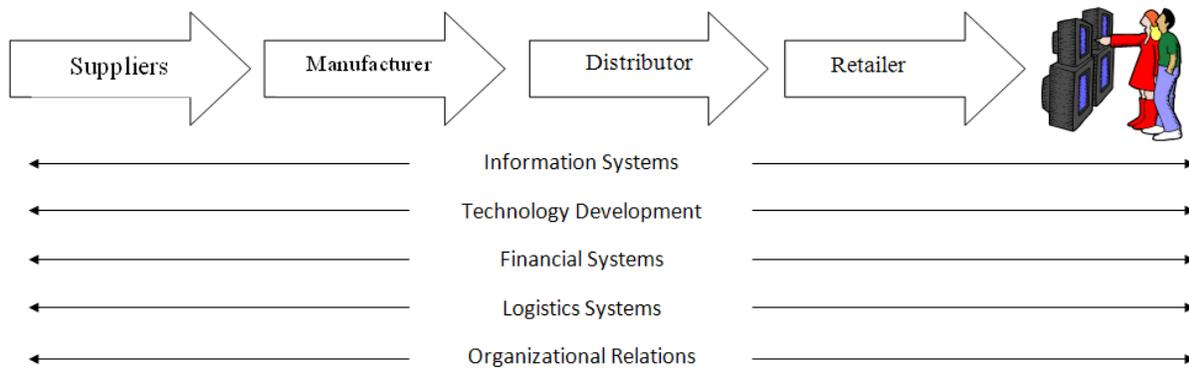


Figure 2. Value perspective of a supply chain

HEALTHCARE VALUE CHAIN

In the healthcare industry a value chain exists but it is not as clear as the other industrial channels because of the many third parties involved in the transactions. The manufacturers (producers) in the supply chain can be broadly classified into three groups namely, pharmaceutical, medical-surgical and device manufacturers. The products from these producers are then purchased by group purchasing organizations, wholesalers, distributors and in some cases independent contractors and delivered to providers like hospitals, integrated delivery networks (IDNs), physicians (individual clinics) and pharmacies. The customers (payers) in this supply chain are government (Medicare), employers and employers association and individuals. They pay the providers through fiscal intermediaries like insurers, health maintenance organizations (HMOs) and pharmacy-benefit managers. Figure 3 represents this traditional view of the healthcare value chain.

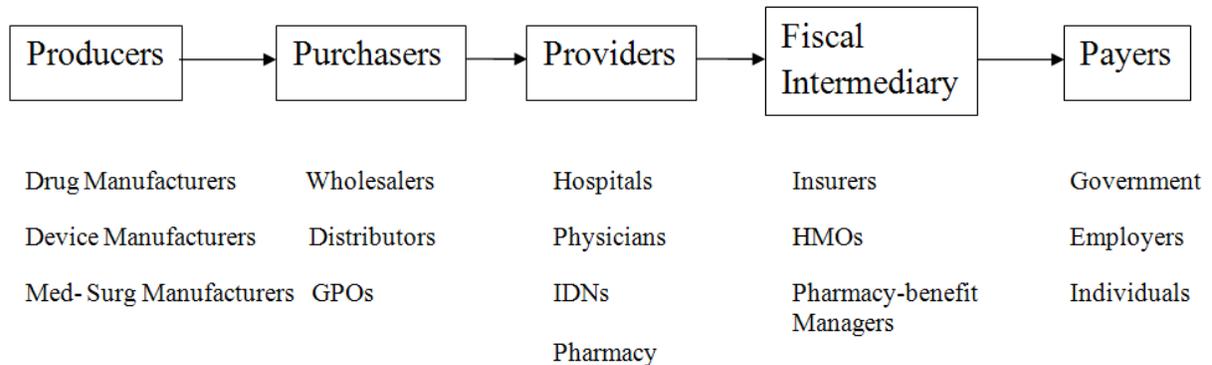


Figure 3 Healthcare value chain (Source: Burns 2002)

McCurry et al. (2005) provides a detailed view of this healthcare value chain, in which both product and information flows between the key players are clearly represented. We extend this view to include the financial flow in Figure 4. This figure clearly illustrates the heavy use of intermediaries or third-party players in the healthcare supply chain.

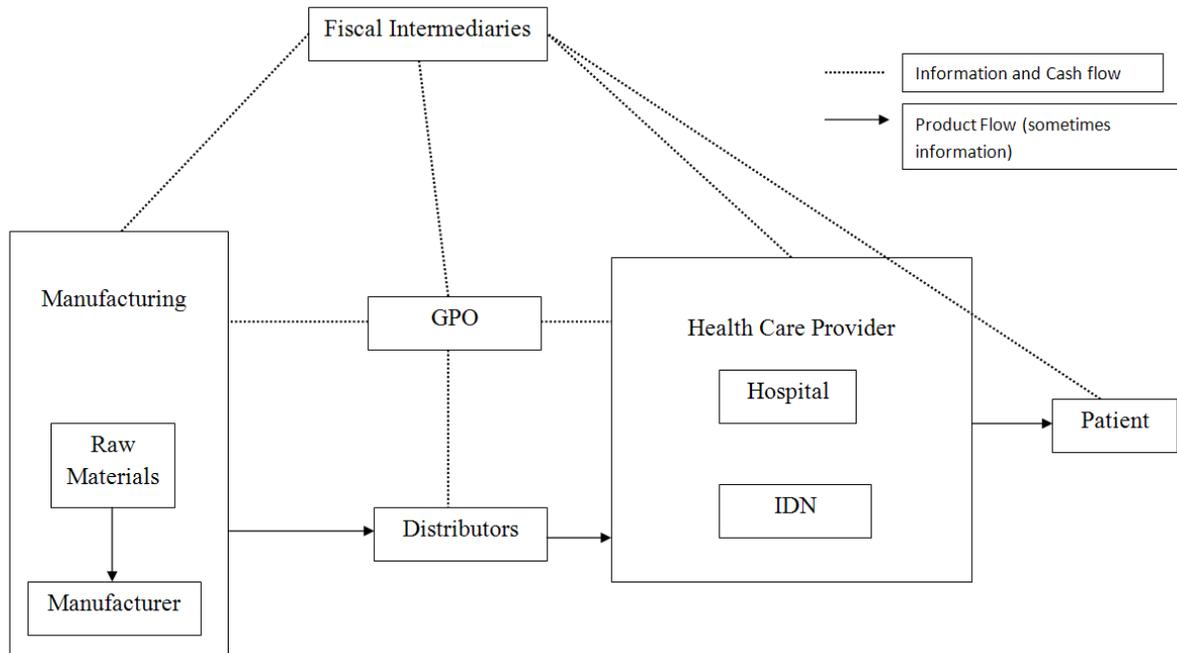


Figure 4 Detailed view of product, information and cash flows in Healthcare value chain

In terms of coordination in healthcare industry, Burns (2002) states that it is more of an aspiration than reality. There is lack of trust, knowledge sharing and widespread strategic alliance formation or the notion of competing value chains. This prompted several supply chain partners to form a consortium called the Efficient Healthcare Consumer Response (EHCR). They have identified several value chain issues for improvement like inventory carrying costs, information sharing, delivery lead times and organizational relationships (trust between participants) (EHCR 1996). In recent years some healthcare firms have moved away from the traditional healthcare supply chain model to a vertically integrated model (Ledlow et al. 2007). One such example is Sisters of Mercy Health System (McCurry et al. 2005). In their system, they directly procured the materials from the manufacturers and distributed it to their system of hospitals. This is not a popular case, because many healthcare systems do not have the capital funding to operate its own distribution operation. Moreover the healthcare industry likes doing things the way they were done in the past and the conflict with GPOs and distributors would be difficult to overcome by a small healthcare system.

APPROACH TO SUPPLY CHAIN IN HEALTHCARE INDUSTRY

Very few health administration training programs offer courses in supply chain managements and most executives of healthcare systems do not formal training in supply chain issues (Burns 2002). Table 1 shows how the view of the supply chain in the healthcare differs from other industries.

Table 1* Healthcare vs. Industry

	Healthcare	Industry
View of supply chain	Cost center to be managed	Opportunity for innovation
Management of supply chain	Through budgets	Through quality and process improvements
Organizational structure of supply chain departments	Independent functional departments	Extended enterprise with trading partners
Information system strategy	Department (process) focused (no sharing for supply chain advantage)	Oriented towards Internal and External visibility
Focus on cost	Unit cost	Generally towards supply chain cost
Planning	Reactive Planning	Demand planning
Inventory systems	Push	More towards lean or pull systems
Capital expenditures	Technological investments in patient (customer) care	Investments in IT and infrastructure to improve operational efficiency
Supply chain costs as percentage of COGS**	38%	3-6 % in grocery and 6-8% in retail

* Part of this table is adopted from Burns (2002).

**EHCR (1996) and Wagstaff and Claeson (2004)

DIFFERENTIATING CHARACTERISTICS OF HEALTHCARE SUPPLY CHAIN

The following are some of the unique characteristics of healthcare industry's supply chain that differentiates itself from other industries.

1. GPOs (Group Purchasing Organizations) :

It is the most important differentiating factor in the healthcare supply chain that separates them from other industries. In the last two decades they have developed into a powerful intermediary player, affecting both upstream and downstream firms in the supply chain (Burns 2002). Nearly 50-75% of all medical supplies purchased by hospitals are through GPOs, which equals to about \$48 billion in 1999 (Burns 2002). There are several hundred GPOs, of which seven major GPOs account for 85% of the market share (Hensley 1999).

Some of the major nonprofit GPOs are Novation, Premier and AmeriNet and major investor-owned GPOs are HCA/HealthTrust and Tenet/BuyPower.

Their main source of revenue for GPOs is the contract administration fees (CAF) which is about 2-3%; the 3% limit is because of Federal and Medicare regulations. When you look at the volume of transaction, this is a huge amount, it totals to about \$1.5 billion in 1999. In addition to that GPOs have other sources of revenue, for example, they may retain a slice of the vendor rebates, charge a fee for the e-commerce solutions they provide and nonprofit GPOs may also receive additional fees from the hospitals they serve (Burns 2002 and Hensley 1999).

GPOs are viewed by the upstream players as a cost center adding less value to the supply chain. On the other hand GPOs are viewed by the downstream members as a positive member, who negotiates lower prices and provide clinical standardization and sourcing of contracts. GPOs also played a major role in the e-commerce revolution in Healthcare industry.

2. Just in Case supplies – Cannot be Lean! :

Automotive, electronics and computer industries have moved towards a lean supply chain, many other industries are also following its foot steps. But the healthcare value chain is like the military supply chain, which follows a just-in case inventory system rather than just-in time. In just-in time value chains, the inventories of both raw materials and finished goods have been dramatically reduced making capital available for more profitable uses, but this is not very plausible in healthcare industry. Here we need to have enough inventories of medicine and surgical supplies for emergencies and epidemic outbreaks. As a result distributors in this industry play a major role in stocking these supplies. According to one executive at a major drug distribution facility in US, they have about \$1 billion of inventory at their central distribution center.

3. Transportation and Security requirement

The delivery of the products to the final customers takes place through FedEx, UPS and distributor owned trucks. The difference between this supply chain and other traditional industries in transportation is the need for security and FDA compliance requirement. Counterfeiting is a major problem in this industry; it not only erodes the profit margin of the value chain players but also leads to potential deaths and law suits. We had the opportunity to observe a delivery truck of a leading distributor in Texas, the trucks were fitted with cameras and GPS capability devices and the driver is not allowed to take a break between the deliveries and would have to follow a strict authorized route and any deviation is reported as a potential threat to the delivery.

4. Financial Flow

Intermediaries play a major role in handling of the financial transactions in healthcare industry (see figures 3 and 4). The end customer pays to the insurance companies,

government agencies, pharmacy benefit managers and in some cases directly to the healthcare provider. They then pay the appropriate parties based on accepted contract terms.

Health care industry also has a unique rebate system. The manufacturers sell the products to distributors at list prices. The distributor then sells the product to the hospitals and healthcare providers at a reduced contract prices negotiated by the GPOs. The difference in the price is then provided by the manufacturer to the distributor on a periodic basis. The distributor may also receive additional compensation for handling this transaction. This rebates system has been singled out by many supply chain players as the single biggest source of inefficiency in their value chain and the best area to achieve savings (Burns 2002)

5. Information systems

Healthcare industry has probably one of the advanced IT systems; they are one of the key players in the development and adoption of RFID in its supply chain. Automatic Identification and Data Capture (AIDC) technologies like barcodes and RFID are very common in this industry and they use it for both products and patient care. AIDC technologies are used in preventing drug counterfeiting, documentation of activities in clinical trials, patient tracking, inventory and returns management.

The use of EDI is also very common in this value chain. Burns (2002) estimated that by moving to a standardized EDI interface the total order processing cost has reduced from \$70-300 to \$14.40. In many instances these technology advances have been used for patient care and security purposes and there is very little documented savings in supply chain or logistics activities other than order processing costs. But this is changing rapidly in the last few years, several leading distributors and manufacturers are seizing this opportunity of increased visibility to manage its supply chain efficiently.

6. Distribution Industry

In healthcare industry drugs (pharmaceutical) and medical surgical supplies are shipped to the end customers through distributors, whereas devices and specialty items are directly delivered to the healthcare providers.

In contrast to other industrial channels in US, the *drug distribution industry* is highly concentrated and the top three companies (McKesson Supply Solutions, Cardinal Health Inc. and AmeriSourceBergen Drug Company) have a combined market share of 92% (HDMA, 2008). They tend to have mega warehouses and utilize a high degree of automation for picking, sorting and shipping operations. They engage in speculative buying and bulk of their profit margins comes from manufacturers in the form of cash discounts and incentives (Burns 2002).

The *medical-surgical distribution industry* is fragmented and the largest player had only 10% market share in 2001 (Risinger and Hughes 2001). Medical-Surgical supplies have four distinct market segments, namely acute hospital care, extended care and home health, imaging supplies and physician offices.

There are significant differences in the business model between these two healthcare distribution industries. Medical-surgical distributors operate on a cost-plus margin and do not

operate on speculative buying, their volumes are low, margins are high, shipment sizes are large and have more SKUs to distribute. Moreover they lag the drug distribution industry in EDI and automation capabilities.

7. FDA

The presence of US Food and Drug Administration (FDA) is a major factor in the healthcare industry. Any advances or changes in this value chain will have to comply with the requirements of FDA. While this is very important for safety and security of the individual customers, it is also been used as an excuse in not adopting better or different operational techniques.

8. Role of customer

Finally when coming to the customer, the end user ordering the products is typically not the buyer (who pays for the products). Therefore the demand for the product is highly based on the preference of the physicians' and not on any formal cost-benefit analysis or budgetary constraints (Burns 2002). This clearly differentiates this value chain from other industries where cost, quality and supplier relationships are major drivers in the selection of products and raw materials.

COMPARISON OF HEALTHCARE DISTRIBUTION TO OTHER INDUSTRIAL DISTRIBUTION CHANNELS

Our supply chain management program is part of a major southwestern university. From time to time, supplier firms and distributor firms attend professional development programs offered by our program. We also conduct several industry funded projects for the distribution channels. During the course of such projects and courses we have had the opportunity to observe their operations. Based on this experience we present the following table which compares healthcare industry against various other channels.

Table 2. Comparison of distribution channels

Channel	Examples	GPO*s	Information Sharing Capabilities	Data capture	Transportation
Electrical	<i>Sonepar, Gexpro, Kirby Risk</i>	None but presence of authorized dealerships	Low	Some by Barcode	Own Trucks, 3PL and UPS and FedEx
Electronics	<i>TTI, Avent, Arrow</i>	None but presence of authorized dealerships	High	Barcode and RFID	UPS, FedEx
Plumbing	<i>Moore Supply</i>	None	Low	None	Own Trucks and 3PL
Building Materials	<i>ISCBM. Spec</i>	Few	Low	None	Own Trucks
PVF	<i>Wilson</i>	None	Low	Some by Barcode	Own Trucks
Fluid Power	<i>Womack</i>	None but presence of authorized dealerships	Medium	Barcode	3PL, UPS and FedEx
Automotive Distributors	<i>GST, DealTire</i>	Presence of authorized dealerships based on brands	High	Barcode	3PL, UPS and FedEx
Healthcare	<i>McKesson, Cardinal Health, AmeriSource-Bergen</i>	Yes	Medium to High	Barcodes and RFID	Own Trucks, UPS and FedEx

*GPO – Group purchasing organizations

CONCLUSION

Healthcare industry is growing at a rapid pace. With the baby boomers retiring there will be more stress on Medicare and Social security systems, as a result there is been increasing pressure to reduce cost in this value chain. Health Care Advisory Board conducted a recent survey of its executive members on where they could cut cost in this industry and the top three answers were related to supply chain activities (Burns 2002). Healthcare value chain is unique, even within the healthcare industry; one chain (drug) is more advanced and efficient than the other Med-Surg. Several initiatives have been started in recent years like SCMetrix™ by Association for Healthcare Resource & Materials Management (AHRMM) to address the performance and efficiency issues of this value chain.

Many professionals in this industry do not have formal training in supply chains and they do not generally recruit from supply chain programs since they lack the required industry knowledge. Therefore there is a need for academic programs to graduate students with this unique skill set.

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"TOTAL COST OF OWNERSHIP – A PROCESS EXPLANATION"

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EXTENDED ABSTRACT

The increasing competitiveness in the distribution industry has affected the profitability and sales practices of all supply chain participants. Shifting boundaries in the channels may dramatically change factors in the channel such as distributor, manufacturer and end-user/purchaser roles, tasks, profitability, efficiency and sharing of information. One of the key effects of these changes is the increased need to understand and quantify the full costs of a business decision. Identifying the value or total cost of ownership to the customer has become a tool of distributors involved in the utility industry who are attempting to increase their business-share of product and service delivery. This project represents an initial look at the concept of Total Cost of Ownership (TOC) by documenting the perceptions at the end-user or customer level. Researchers believed that information gathered from the end-user would provide valuable insight into key cost drivers for and that this information would provide distributors with information that would give them a competitive business advantage.

This project was conducted on behalf of an industry customer with the purpose of identification and quantification of the value-added activities performed for their customer base. The research was predicated on the belief that this information is critical for distributors and manufacturers' understanding of how recent changes in the industry have altered their business relationships, and how the information will better assist their ability to draw conclusions regarding how to position themselves in the channel.

PROBLEM STATEMENT

Shifting boundaries in business has dramatically changed factors in the channel structures of industries such as distribution and manufacturing and has altered the roles, tasks, profitability, efficiency and sharing of information for the end-user/purchasing. One of the key effects of these changes is the increased need to understand and quantify the full costs of a business decision. Identifying the TOC can provide the distributor with valuable information when attempting to demonstrate their value to their potential customers. Many of the problems that the utilities products distribution industry faces revolve around the need to demonstrate their value to manufacturing and utility provider community. What can the distributor do that the utilities cannot do? How can the distributor contribute to the production process in a more cost efficient manner? How will delivery of the products and/or services improve the bottom-line for the manufacturer? This project attempted to provide a tool for use in the utilities distribution to demonstrate their worth to the utilities and manufacturing industries.

The project addressed the problem using four primary phases that are detailed in the methodology section below including: (1) Background Research and (2) Data Collection and Analysis (3) Preparation of TCO Excel Program and Pilot Testing, and (4) Management Report. There are two primary objectives of this project are to:

1. Identify the value end-users place on the channel tasks performed by supply chain members. End-users will be interviewed in the following three customer segments: Investor Owned Utilities (IOU), Municipalities, and Cooperatives.
2. Develop an Excel-based Total Cost of Ownership model for use in the Utilities industry.

METHODOLOGY

The project was conducted in four phases: (I) Background Research and Interview Development, (II) Data Collection and Analysis, (III) Development of Excel Tool, and (IV) Preparation of Management Report.

Background Research and Survey Development

The first phase of the project involved conducting in-person and telephone interviews gathering qualitative and quantitative data were gathered in order to review current practices in the utilities industry, and to gather other background information needed to develop the primary objectives for data collection and to design the model and Excel tool.

Research subjects were identified by the customer and contacted by the research team to arrange interviews. The qualitative research approach employed by the researcher was based on an inductive analysis and creative synthesis (Patton, 2002) theoretical model. This model allows researchers to gather general information related to customer perceptions and expectations. The information was then analyzed for the purpose of discovering an effective approach for understanding and applying how distributors can demonstrate their TOC business value as it relates to potential customers. Quantitative data collection was exploratory (Sekaran, 2000) in nature and is focused on assessing service provider population numbers and frequency of energy delivery. These numbers helped the researcher to conduct a descriptive study of the reaction of the organization to the end-users.

Conduct Literature Review

A review of books, trade publications, and journal publications was conducted and used to provide direction and support during the TOC development phase. This phase helped researcher to define and identify value-added activities and strategies for incorporating TOC software into the Utility industry. This includes an investigation into specific accounting practices related to the utilities industry (Unknown, 2007) and Federal Energy Regulatory Commission (FERC) guidelines. (Kelliher, J., 2006) Each of the documents was able to reinforce the researcher findings.

Develop Interview Guide Instruments

The project utilized a combination of face-to-face and telephone interviews to gather TCO value-added activities and costs data. A series of standardized open-ended question process was used as an interview guide instrument. (Patton, 2002) The questions for this research were created based on specific information desired by the customer. This information helped the research team maintain consistency in obtaining data that was used in the development of the Total Cost of Ownership Excel software. Interviews with customers were conducted throughout the fall of 2008. Upon completion of the interviews the researchers began working on the TCO instrument. The design was validated through a 'pilot' review of designated customers and revisions were made prior to delivery of the TCO tool

Data Collection and Analysis

The second phase of the project was to focus on the customer interviews with designated utility providers. Interviewees were selected by the customer based on customer segment, for example; municipalities, cooperatives and investor owned coops (IOC) and based on geographic locations with established our customer. In addition to responses related to the list of standardized questions, researchers were encouraged to record other comments that may provide unexpected or unsolicited comments that might be useful when evaluating the collected data. Survey responses were reviewed for validation. Final results were compiled and coded into subject categories.

Development of Excel Tool and TCO Model and Documentation

This phase included an interactive dialogue with personnel employed by our customer to identify ease of use, and ensure the future users of the Excel tool would be able to navigate successfully through the software. The TCO model was developed using Excel as the software tool. The last part of this phase included training sessions with a few primary personnel. The training session was conducted using model documentation, which includes any assumptions made to develop the model, navigation through the Excel tool, and basic documentation guides the user through the model. The documentation is provided electronically as a Word/Excel file and one hard copy. The original proposal did not include training all the potential customer users, but could be developed for a further project.

Develop Management Report with Conclusions and Recommendations

The final phase involved the preparation of the Management Report for the customer. This report documented results from all phases of the project. Survey results were detailed in numerical and graphical format for easy evaluation. Conclusions and recommendations for future action were developed taking into consideration information gathered from the literature reviews and the survey results. A final report was submitted to the customer including an executive summary that may be used for easy dissemination of project findings.

SUMMARY

This extended abstract identified the process of developing a total cost of ownership tool for the utilities industry. The tool was specific to the industry, but based on general total cost of ownership principles. The project is ongoing and results will be available at the time of the conference presentation.

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Implementing Six Sigma Principles in Reverse Logistics

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ABSTRACT

Using various textbooks, internet sources, and a Raytheon Six Sigma Specialist training book, this document reviews various approaches regarding the principles of Six Sigma as they apply to reverse logistics. Emphasis is placed on three of six commonly referenced areas of cost. Each category is briefly examined and evaluated on qualitative potential. A six step process utilized by Raytheon Company is briefly introduced; the application of such a process in reverse logistics is noted. Several works that were uncited here are provided as well.

INTRODUCTION

“A reverse supply chain forms a series of activities required to retrieve a used product from a final customer and either dispose of it or reuse it.” (Anderson, Coughlan, El-Ansary & Stern, 2006). This statement clearly outlines the modern role of reverse logistics. These operations are necessary because today’s empowered consumer demands high service levels at low prices. Moreover, the processing of returns and the operation of reverse logistics has even become an area of competitive advantage. Unfortunately, the associated costs of any customer service operation can quickly spiral out of control; this is especially true of reverse logistics due to the general opacity of its operation. Six Sigma principles of constant improvement can be utilized for cost savings in this setting.

STATEMENT OF PROBLEM

Industry is full of waste; its elimination usually falls into one of six general categories. These are overproduction, waiting, inventory, movement, processing, and corrections (Raytheon, 2004). Overproduction cannot be eliminated at the site level by logistics managers because returns will come at a rate out of their control. Aggregate waiting is another consumer driven cost, and is similarly difficult to eliminate. Also, inventory can be tied in with overproduction, as a spike of RMA products from consumers will inevitably stack up at the warehouse docks. However, by integrating the use of Six Sigma principles, the remaining three sources of wastes can be minimized at the site level. Movement, processing, and corrections are three areas of cost that are particularly well suited to the waste elimination practices of Six Sigma in reverse logistics.

MOVEMENT

Movement is commonly a significant source of inefficiency and waste in reverse logistics. An analysis of efficient versus inefficient methods is requisite to many Six Sigma principles and their implementation of a Six Sigma program.

It is well known that minimizing travel distance between operations is more efficient than an unplanned station-by-station arrangement. Six Sigma analysis often includes the use of a Physical Process map. Figure 1a shows efficient linear flow throughout a fictional assembly plant, while Figure 1b illustrates how process length can be significantly increased without proper planning. (Benjafer, Heragu, & Irani, 2000). Not only is Figure 1b difficult to operate, it can also cause concerns for safety, crowding, and confusion.

Figure 1a
Efficient Linear flow.

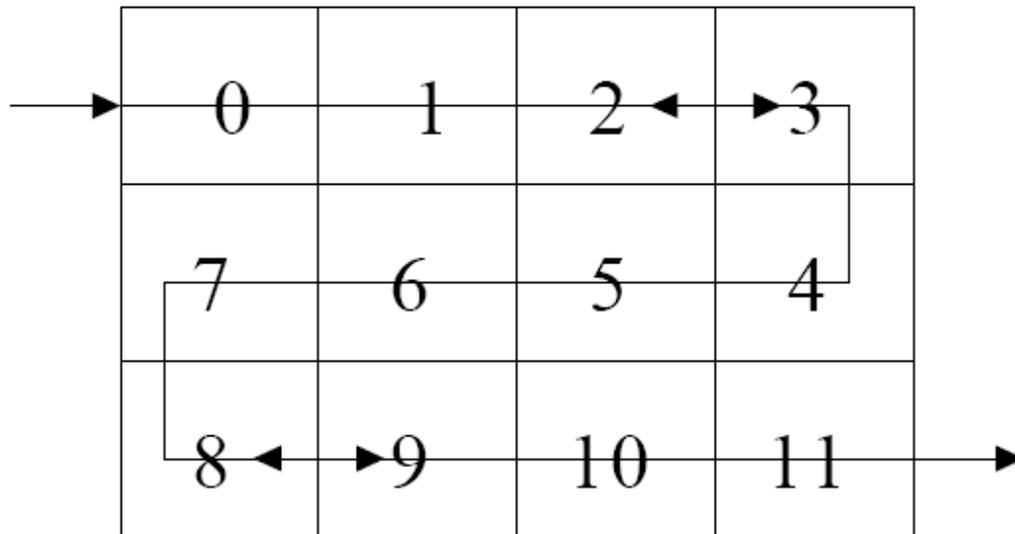


Figure 1b
Inefficient nonlinear flow.

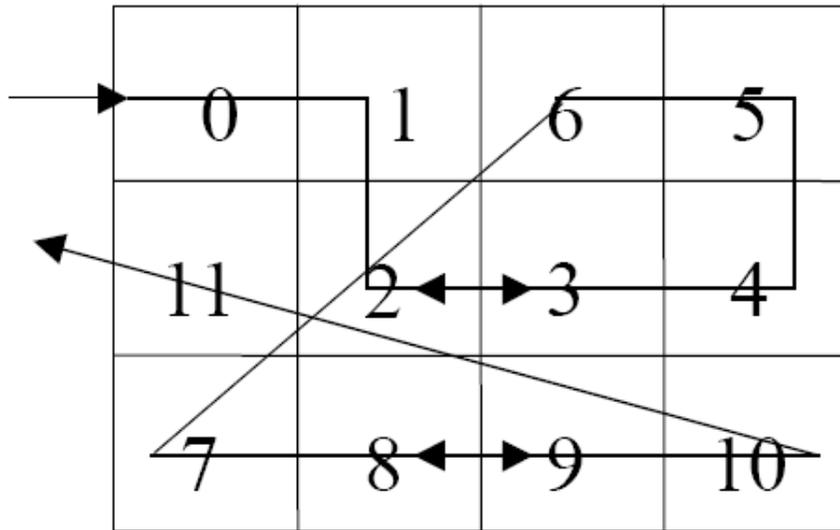
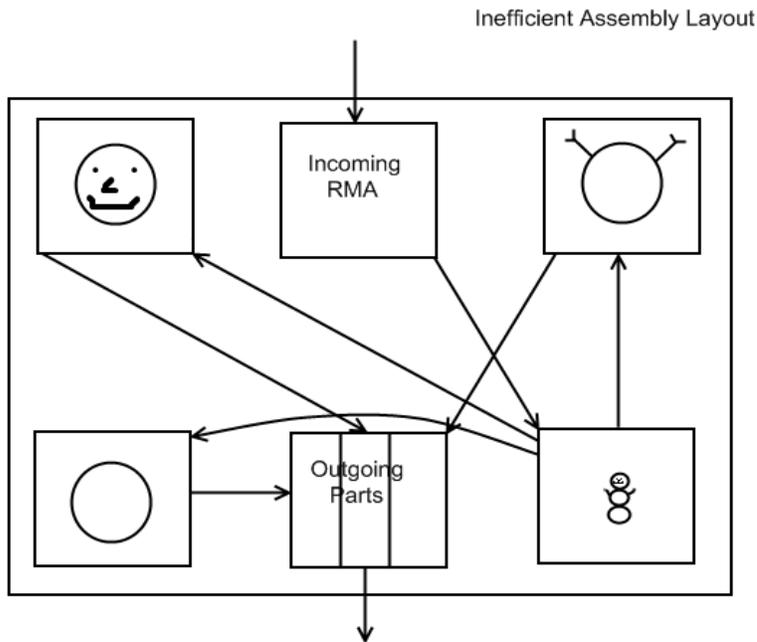


Figure 2 reveals a more specific example where a fully assembled “Snowman” is reduced to its component parts without regard to Movement. Here, the number of crisscrossing paths is unacceptable and the amount of tangential distance is far too high. These are sources of unnecessary costs related to labor, capital depreciation, and irregular production.

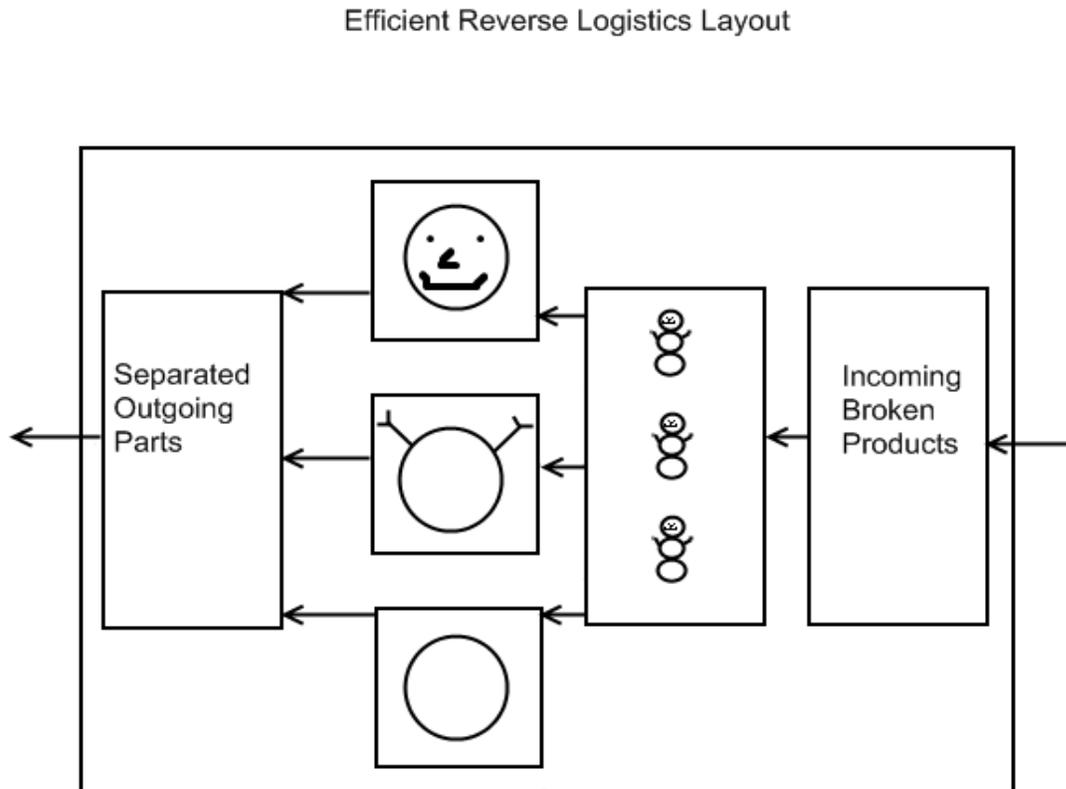
Figure 2
Breakdown of the Snowman without regard to Movement



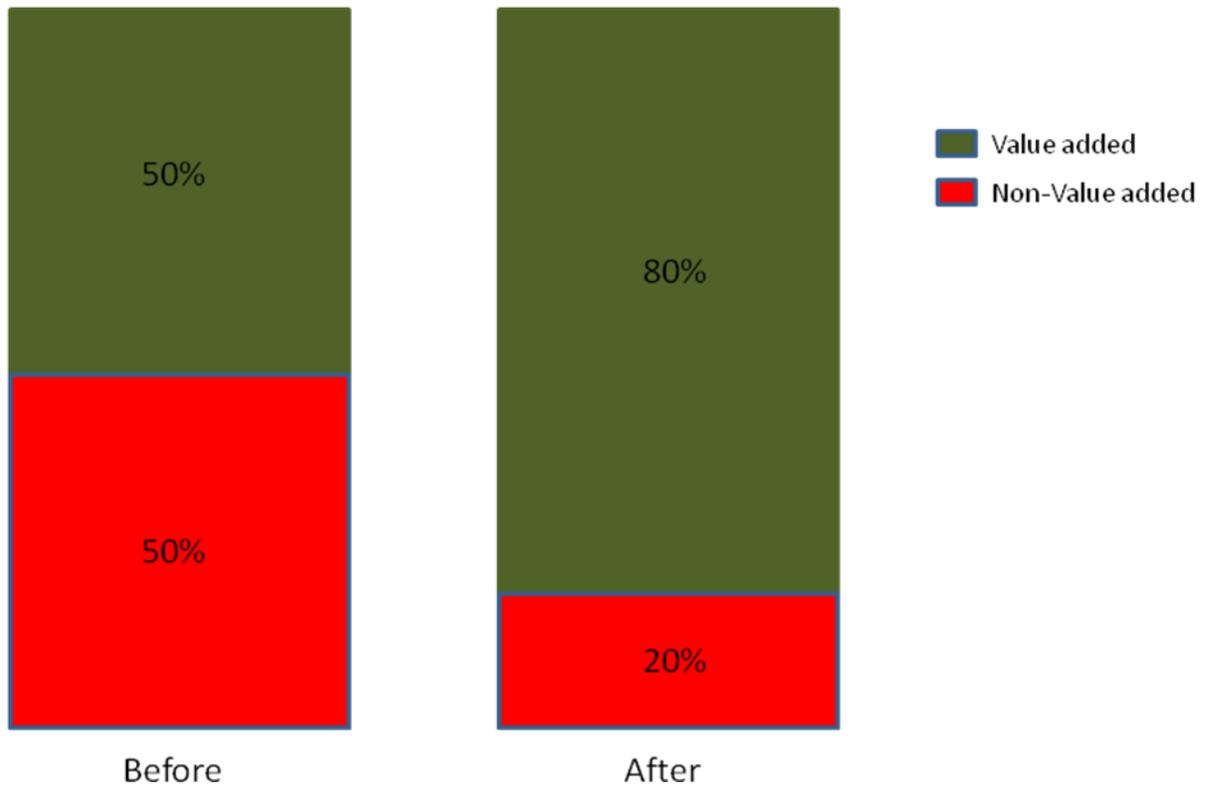
A Six Sigma approach would utilize lean product movement to achieve a scenario as shown in Figure 3. In this way, the process of sorting and breaking down the individual components of the “Snowman” is completed with minimal travel.

Figure 3

Breakdown of the Snowman; optimized to minimize movement.



Time Value Map



Physical Process and Time Value maps examine the costs related to Materials Movement and Motion in reverse logistics. These are effective analytical tools that are central to Six Sigma principles. The resultant of their integration leads to lean operation and increased cost savings.

Processing

Processing is another common source of waste within reverse logistics. Returns policy, outsourcing with 3PLs (Third Party Logistics), and the implementation of useful technology are particularly well-suited to Six Sigma integration.

A returns policy should reflect both the company's customer service record and its fiscal obligations. A strict returns policy risks customer alienation while a generous returns policy can be a source of excess traffic in reverse logistics operations. A Six Sigma approach would employ a consistent returns policy that reduces variability while maintaining acceptable service levels. Consistency within reverse logistics ensures ease of processing — product condition will be more predictable and the returns will be easier to sort. These two factors will lead to a cost savings and promote lean operation (Campanelli, 2007).

The use of 3PLs in a reverse logistics operation can be a source of lean processing and positive internal competition. Employing a 3PL to perform internal logistics operations is part of an “Everyone is a Customer” philosophy. This implies that reverse logistics can now become a competitive source of income by reducing operating costs (Shuman, 2002). By creating customers within an organization, the company can focus on its core competency instead of suffering from internal complacency. This transition utilizes Six Sigma principles in order to maximize efficiency (Moore, 2005).

While outsourcing logistics operations is a key factor, the method in which data is collected is equally crucial to reverse logistics. The utilization of advanced technological resources allows a firm to maintain adequate visibility and traceability of the products throughout the marketing channel. Barcodes and RFID (radio frequency identification) are the most widely adopted methods of automated identification techniques in use today. Generally, barcodes and RFID devices are highly efficient product identification devices which can also be produced at a low cost (Kaminsky, 2008). In addition, companies like UPS and USPS have developed their own codes which allow them to improve the reverse flow and to track products throughout their logistics operations. The realization of efficient data collection allows managers to set more precise metrics to deliver results that conform to Six Sigma principles.

Companies are able to minimize expenditures in reverse logistics by regulating return policies, implementing an intelligent outsourcing program, and investing in relevant technological systems. Six Sigma ideologies paired with appropriate processing can bring costs to their absolute minimum when utilized properly over time.

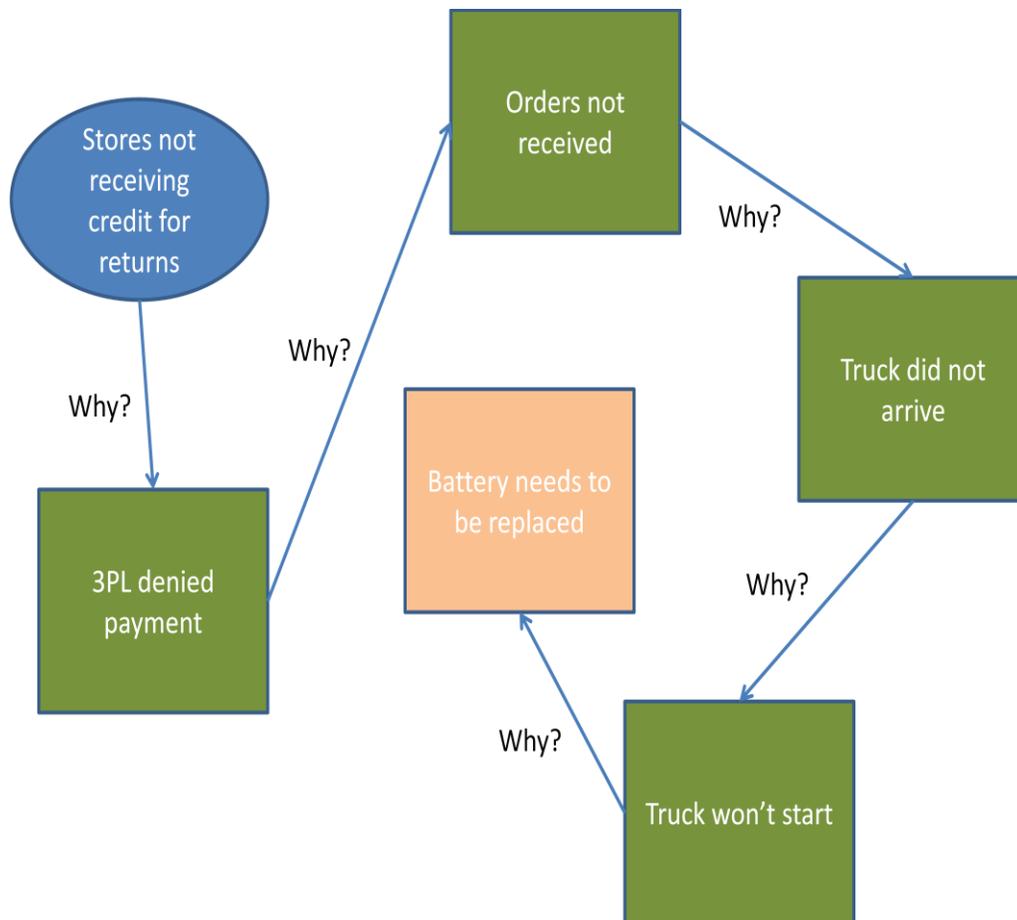
CORRECTIONS

Implementation of Six Sigma principles and related processes should be applied in conjunction with some method of correction. The efficient handling of correction methods within reverse logistics is essential to produce a consistently manageable flow of returns through the supply chain. When an error occurs within the supply chain, it is useful to employ analytical tools and a five- or six-step Six Sigma processes.

Every industry uses these diagnostic tools and metrics to measure performance and detect problems. Reverse logistics is no different than forward distribution in this sense. Provided that data is properly collected and washed, managers need only to employ one of several analyses that are often found in Six Sigma operations. These might include the 5 Whys, the Pareto Analysis, and the Ishikawa Diagram. The failure of a reverse logistics operation is included as example for each.

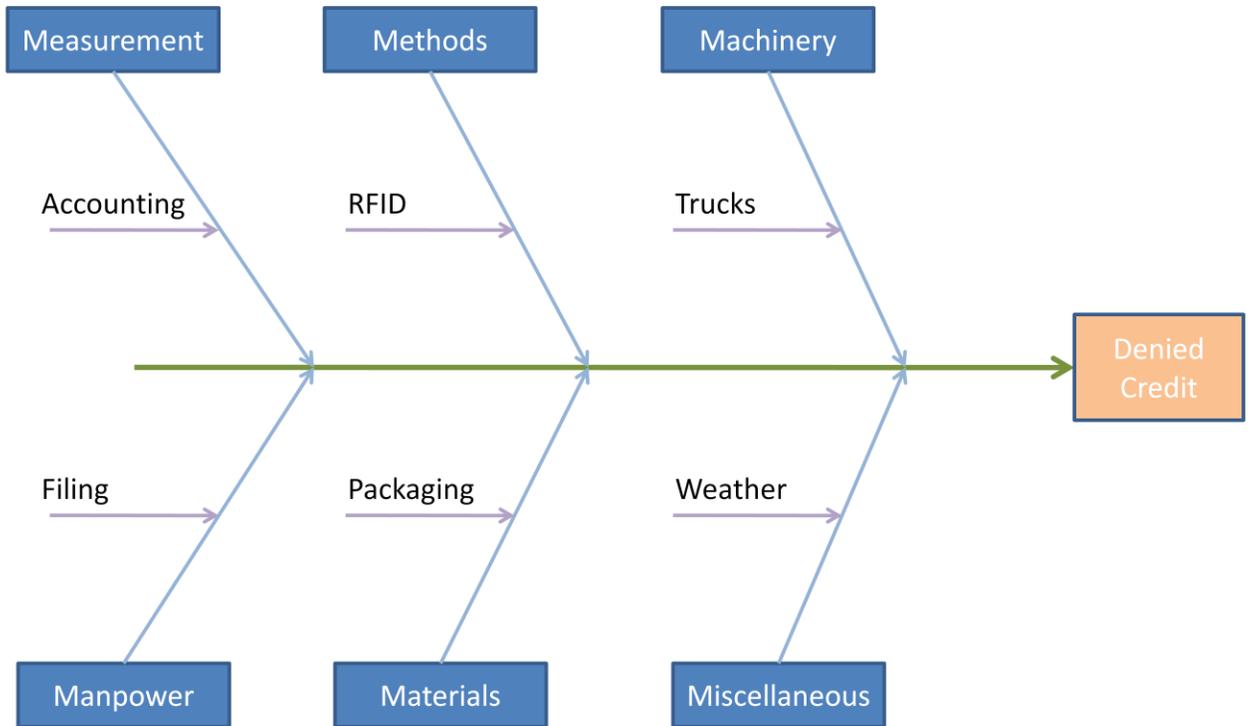
The 5 Whys are a series of non-rhetorical questions that lead to the root cause of a problem (Raytheon, 2004). Figure 5 illustrates a possible question-answer series that will lead to the root cause of the reverse logistics problem. The key to the 5 Whys is concise construction of the question and the succinct answer.

Figure 5
Possible 5 Why's analysis in reverse logistics



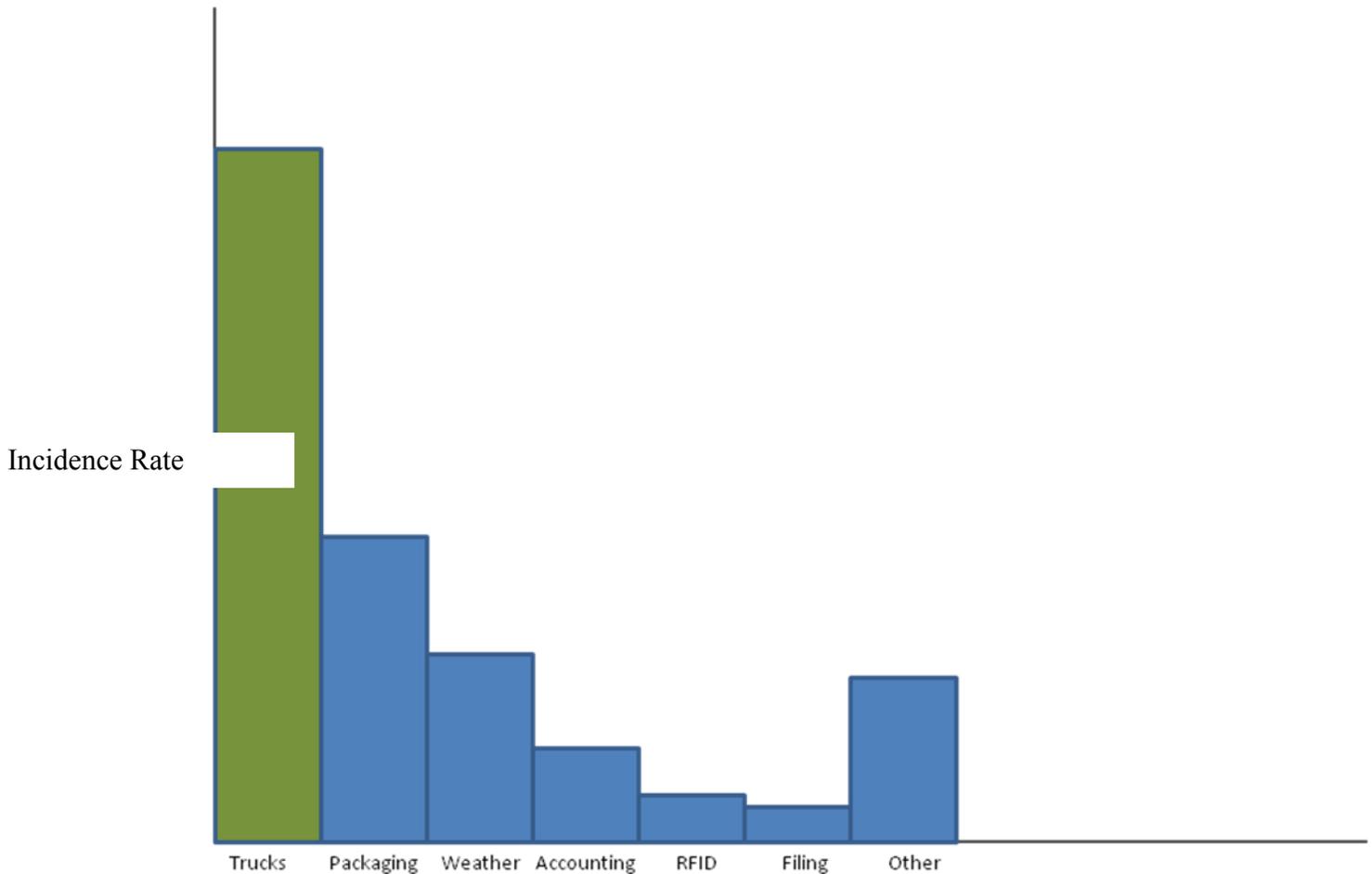
A Pareto Analysis makes use of the often-cited 80/20 rule. To find the most important cost center or source of failure, individual failure rates are displayed in a histogram with the most prominent failure first (Besterfield, 2004). The resultant deliverable from the reverse logistics example would be similar to Figure 6. The Pareto Analysis delineates the largest source of problems from the smallest or least significant.

Figure 6
Possible Ishikawa diagram for reverse logistics



An Ishikawa diagram, also known as a Fishbone or Cause-Effect diagram, is a third investigative tool often used in Six Sigma analyses. Here, as in Figure 7, meaningful relationships are established between causes and effects (Besterfield, 2004).

Figure 7
An unscaled Pareto Diagram for reverse logistics



Measurement, Methods, Machinery, Manpower, Materials, and Miscellaneous are commonly used branches of the Ishikawa diagram (Raytheon, 2004).

Using the proper investigative tools, Six Sigma allows a systematic correction of problems as they arise. In reverse logistics, these corrections can be significant sources of cost if not handled efficiently. Six Sigma also provides for a constant improvement cycle upon these corrections. This program includes a number of steps that varies according to the needs of each organization, though it is always consistent in purpose and performance.

RAYTHEON SIX SIGMA PROCESS

As defined by Raytheon Company's Six Sigma (R6 σ) initiative, the six steps of constant improvement are Visualize, Commit, Prioritize, Characterize, Improve, and Achieve. The first step includes a 30,000 foot view of the problem at hand. Visualizing the problem is usually inspired individually, but can be later refined as a team. (Buskirk, 2006) The Commit step includes the formation of a team (if necessary), and the identification of stakeholders. It is important to keep the team constituency down to essential personnel only. It is also important to

consider that stakeholders can be any person, people, place or thing. Prioritizing the team's goals and high level actions is the third operation. This is where the team's collective inspiration can refine a broad problem to a more refined issue. The Characterization step is the truest substance of work within the improvement process. Here, individuals and teams validate the problem by gathering data from reliable sources. When the team reaches the Improvement stage, they are designing and implementing their solution. Concerns for Improvement include periodic reevaluation of the team's objectives; the implementation must adequately address the issue at hand. The final stage of the R6 σ process is to Achieve results. The implementation is presented to the stakeholders and the effects are monitored. As time passes, the implementation's relevance or efficacy may come into question. For this reason, the Achieve stage constantly refers to the Improvement step for steady improvement. It is also important to note that these steps are not necessarily accomplished in linear order, and that some time may be spent reevaluating a priority after steps into characterization have already been taken (Raytheon, 2004). The R6 σ process is particularly effective because it translates to any part of any industry, including reverse logistics.

CONCLUSION

Reverse logistics is a very complex and generally inefficient process within distribution. It is well known for having deficiencies in areas such as material movement, processing and correction methods (Moore, 2005). It is essential to be able to analyze, measure, and correct any and all operations that occur within a company's reverse logistics infrastructure. Six Sigma seeks to eliminate any wastes with the utilization of five and six step processes. Methods like R6 σ allow the system continuously improve upon itself. The utilization of Six Sigma principles is an essential part of dealing these problems. It is easy to see that the implementation of Six Sigma principles within reverse logistics is the next step for companies that are facing serious deficiencies. For this reason, the utilization of Six Sigma principles is the next evolution within reverse logistics.

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FREE TRADE ZONE IN CENTRAL AMERICA: **A COMPARISON**

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ABSTRACT

As the world globalizes, existing and new products are flooding into foreign countries with an increased pace. With numerous companies competing for the market, there is a need to find efficient ways for importing goods. Central America is no exception when it comes to a business opportunity, hence free trade zones are established which allow exemption for import taxes, other tariffs and proximity to sea ports and airports. These benefits will be discussed in detail in this article.

WHY CENTRAL AMERICA?

Central America has been a trading partner of the U.S. for around 150 years. It is due to its size and proximity to the U.S. that makes Central America a good strategic place for business. The United States is currently the largest trading partner of Central America accounting for 57% of its exports and 41% of its imports. The rest of Latin America holds the second place as far as trading goes and the European Nation as well as Asia together hold the third place. The Inter American Development Bank states that U.S. Central America trading has grown 29.2% compared with 6.1% of the world and 5.2% with Latin America as a whole. Again, proximity and size are what make Central America a good strategic place to conduct business.

DR-CAFTA

DR-CAFTA is an agreement that was approved on June 30, 2005 by the U.S. Senate. Originally it was called CAFTA but then the Dominican Republic joined the negotiations and it was called DR-CAFTA. This agreement seeks to eliminate most of the import tariffs that are currently in effect in each country. It also seeks to create equality between local as well as foreign companies; protect investors from discriminatory actions from government (Jaramillo et al. undated).

Investors under this agreement are protected from 6 points which are stated below:

- Non-discriminatory treatment relative to domestic investors as well as investors of non-Parties.
- Limits on performance requirements.
- Free transfer of funds related to an investment.
- Protection from expropriation other than in conformity with customary international law.
- A “minimum standard of treatment” in conformity with customary international law.
- The ability to hire key managerial personnel without regard to nationality.

There are also environmental protection regulations, labor standards and transparency in international trade or investment to prevent bribes or corruption among many other clauses.

FREE TRADE ZONE

By definition a free trade zone is a duty free area established at one or more entry points within a country such as seaports and airports, where foreign goods may enter, be held or processed in some way to be shipped without incurring any duties.

The advantages of free trade zones can be summarized as follows:

- Imported goods may be left at the trade zone for storage, manipulation to change custom classification, assembly, exhibition, grading, cleaning, selling, mixing with foreign and domestic merchandise and then shipped out of the zone to another country without customs formalities or control
- Foreign governments pay duties on goods in the trade zone only when they enter the customer's territory of the importing country.
- Imported goods which are improperly marked for entry into market can be remarked inside the trade zone, thus avoiding fines from customs.
- Goods can be repacked into smaller or bigger quantities.
- Manufacturing conducted in the trade zone incurs duties only on the imported materials and component parts in the finished product entering into the market
- Personal property is exempt from state and local taxes
- Merchandise can stay inside the zone for an indefinite time.

Central America is composed of Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama. With the exception of Honduras every country mentioned has a Free Trade Zone or Zona Franca as it is called in Spanish. Belize has the Corozal Free Trade Zone, Guatemala has the Santo Tomas de Castillas Free Trade Zone, El Pedregal Free Trade zone is in El Salvador, Zona Franca Index is found in Nicaragua, Ultrapark Trade Zone is in Costa Rica and finally Colon Free Trade Zone is found in Panama. Each zone is unique in its own with some of them being more developed and ISO compliant to some that are still under development but that are not lacking any of the necessary commodities for companies to settle in and begin business right away.

FREE TRADE ZONES IN CENTRAL AMERICA

El Pedregal Free Trade Zone

El Pedregal Free Zone began operations in January 1993, it is located in Rosario La Paz, 10 minutes from El Salvador's International Airport and 35 minutes away from the capital of San Salvador. The distance between this free trade zone and the main seaport is 2 hours from Puerto Acajutla in the Pacific and 8 hours away from Puerto Santo Tomas de Castilla in The Atlantic. Total available area is 449,891 m² and the industrial Space is 93,000 m², information available on the website states that rent runs for US\$3.75 per meter squared. There are currently 19

companies using the zone ranging from textiles to assembly to logistics, no food distribution companies are currently using a space inside (Storz, Taylor, Fairchild 2008).

Incentives offered by the trade zone are as follows:

- 100% exemption of payment of tax over rent, which is 25% of the overall utilities used annually.
- 0% over IVA Tariff IVA (Impuesto Sobre el Valor Agregado), which is 13% in El Salvador.
- 100% exemption of tax payment after buying a warehouse and an office inside El Pedregal, that tax amounts to 3% of the total value of the warehouse and office to be bought inside the zone.
- 100% exemption from importation tax.

Belize Trade Zone

Corozal Town is the capital of Corozal District; it is located about 84 miles north of Belize City, and 9 miles from the border with Mexico. Corozal was a private estate before becoming a town in the 1840s, mostly settled by Mestizo refugees from the Caste War of Yucatán. To attract foreign investment, a Commercial Free Zone (CFZ) was established in 1994 in Corozal. The Corozal Free Trade Zone provides facilities for activities such as manufacturing, processing, warehousing, packaging and distribution of goods and services. Businesses established inside have no foreign exchange restriction; these businesses receive various other benefits that include duty exemption. Goods leaving and entering the zone are exempt from import/export duties, stamp duties, quotas and revenue replacement duties. Income tax is between 2% and 8%, however this amount can be reduced through tax cuts from employing Belizean workers (Storz, Taylor, Fairchild, 2004).

The CFZ benefits are as follows:

- No restriction on foreign exchange out or within a CFZ (the sale of foreign currency of the transfer of foreign exchange).
- No government charges and taxes on foreign currency used within the CFZ.
- Possibility to open up an account in any currency with a duly registered bank of CFZ business choice located within the CFZ.
- All goods (like building materials, equipment, furniture, supplies, etc) needed for the functioning of a CFZ business are exempt from all duties and taxes.
- NB: A “Social Fee” of 1.5% is charged on all goods and services imported into the CFZ, except for fuel, fuel fees are 10%.
- No license is required for import or export.
- Imports and exports are exempt from all custom duties, consumption taxes, excise taxes and export duties (with just some exceptions).
- During the first 5 years of its existence, a CFZ business is exempt from income tax or capital gains tax or any new corporate tax levied by the Government of Belize as well as any dividends paid by this business are exempt from tax for the first 20 years of its operation.

Colon Free Trade Zone

The Colon Trade zone is located at the entrance of the Panama Canal on the Caribbean side. With 400 hectares, it is the second largest free zone in the world and the first in the Western Hemisphere. Thanks to its great geographic position and its access to four important ports in the Caribbean and one on the Pacific it is deemed to be the most modern of Latin America. The ports are the following: Manzanillo International Terminal, Colon Ports Terminal, Colon Container Terminal, Panama Ports Company with the Cristobal terminal in the Caribbean and the Port of Balboa in the Pacific. In addition to these ports you can also find the France Field Airport and Panama Railroad Terminal. This trade zone is ISO 9001 compliant which is the quality management system. Under this ISO standard the trade zone is required to monitor processes to ensure they are effective, keeping adequate records, checking output for defects with corrective action taken if necessary, regularly reviewing the process for effectiveness and facilitating continual improvement.

The benefits offered are as follows:

- An exceptional tax free system on imports/exports, manufacture and other activities.
- Dollars as the legal tender currency; low costs for land and store space.
- Lease Back System or recognition of the investment; protection and guardianship of intellectual property rights; automated future commercial operations.
- Lease back system consists in the recognition of the user's investments on public works. Through this mechanism, the user gets back the amount of the investment in infrastructure through compensation in the monthly rent payments to the administration of up to 70% of the monthly rent.
- 0.5% of net taxable income if 30 to 100 Panamanian workers have been employed permanently.
- 1% of net taxable income if 101 to 200 Panamanian permanent workers have been employed and 1.5% if more than 200.

Santo Tomas de Castillas

Zolic, as it is called, is located in the city of Puerto de Barrios which is located 300 kilometers from the city of Guatemala and 410 kilometers from Puerto Quetzal in the Pacific Ocean. Zolic is adjacent to Puerto Santo Tomás de Castilla, a first category port with the ability to unload any kind of merchandise whether it comes in a container or conventional loading, a high percentage of imports coming into the country come through there. Zolic has 50 acres available with buildings which are properly built with the required infrastructure, in addition to having an outside the zone space available for the construction of administrative spaces.

Benefits offered by this trade zone are:

- Zolic is an excellent logistical point to receive shipments coming from either East or West of the continent.
- Direct access to Santo Tomas de Castilla Port.
- Tax exemption on leased premises for the first 10 years.
- Custom offices within the zone.
- Low operational costs.

- 100% exemption from import/export tariffs on all raw materials, goods, machinery and equipment necessary for operation.
- Current rates are U.S. \$2.00 per m² a month and are subject to change as well as there are areas out in the open where companies can build their own building and the rent can be as low as U.S. \$.60 per m² a month.

Zona Franca Index

Nicaragua is composed of private and state owned free trade zones. This research is concentrated on Zona Franca Index which is the only free trade zone that had information available online, but I have to state that Las Mercedes Free Trade Zone is the biggest in Nicaragua. Las Mercedes Industrial Free Zone is located next to the International Airport and offers 722,813 square feet of industrial space in a modern 114 acres industrial park with the lowest lease rates in Central America. Index on the other hand is located in Managua 5 miles from the international airport on the Pan-American High Way. Index is a private free trade zone having only four buildings with the total of 150,000 ft², buildings are prefabricated in Spain by Coperfil Group using European standards and yielding the highest quality metal buildings in the region.

Benefits offered by Index are as follows:

- The rental rate goes for US \$3.90 per ft² per year.
- On-site customs clearance for rapid import-export transactions.
- Assistance establishing production site quickly in Nicaragua.
- No taxes of any kind, import, export, income.
- Spaces Available Ranging from 25,000 ft² to 50,000 ft²
- High Quality Insulated Buildings
- Complete Repatriation of Profits and Investment Capital
- No Taxes and Fees on Profits
- Duty Free Import for All Equipment and Materials
- Low Inflation and Stable Currency

Ultrapark Free Trade Zone

Ultrapark is located in Heredia, Costa Rica. It is one of the most modern free trade zones in Costa Rica targeting and attracting predominantly science, information services, and technology companies. Currently 85% of the 14 acres available is the complex is developed. Due to its success Ultrapark has attracted both foreign and local companies in the field of electronics, computer software development, communication and information services, fine gold jewelry, medical and pharmaceutical industries. Ultrapark provides two kinds of spaces available for rent, Ultrapavas and Ultrahereditas.

Ultrapavas

22,000 sq ft building available for rent or sale, it is subdivided into three floors and it can be used as a distribution center, light manufacturing and/or warehousing combined with office space within.

TABLE COMPARING THE FREE TRADE ZONES

	Colon	Ultrapark	Index	Corozal	El Pedregal	S T Castillas
<i>Country</i>	Panama	Costa Rica	Nicaragua	Belize	El Salvador	Guatemala
<i>Import/Export exemption</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Necessary infrastructure</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Size</i>	988 acres	14 acres	3.4 acres	----	111 acres	50 acres
<i>Main Industries</i>	various	Technology, Pharmaceutical	Textiles	Mfg, processing, distribution	Textiles, logistics	Toys, chemical, Wine, Petroleum derived
<i>Exemption on rent taxes</i>	No, but Lease back system	Yes, for first 10 years	----	----	Yes	Yes, for first 10 years
<i>Price per m²</i>	----	----	\$3.90 U.S.	----	\$3.75 U.S.	\$2.00 U.S.
<i>Tax exemption On materials Needed for operation</i>	----	Yes	----	Yes	----	Yes

Ultraheredias

A property with 4 buildings of 66,000 sq ft each and one additional building with 19,368 sq.ft. This building can also be used for warehousing or light manufacturing and office space is available inside.

Benefits offered are:

- Exemption from payment of all consular duties and taxes on imports of merchandise and goods required for operation.

- Exemption from payment of all consular duties and taxes affecting imports of machinery and equipment, as well as their accessories and spare parts, and imports of automotive vehicles necessary for operation.
- Exemption from payment of all consular duties and taxes on the import of fuels, oils and lubricants required for operation, as long as these goods are not produced the country.
- Exemption from all taxes associated with product export or re-export.
- Exemption, for a period of 10 years from company operation start-up, from payment of taxes on capital and net assets and from payment of real estate transfer taxes.
- Exemption from sales and excise taxes on the purchase of goods and services.
- Exemption from any foreign remittance tax.
- Exemption from all taxes on capital gains, as well from any other deriving from gross or net profit, dividends paid to stockholders or income or sales.
- Exemption from all taxes on imports and exports of commercial or industrial samples, after prior authorization by PROCOMER.
- Companies operating in Free Export Zones located in the areas of “lesser relative development” shall have the right to receive a 10% discount of the amount paid in salaries during the preceding year. This benefit is granted for a period of 5 years and shall decrease by two percentage points per year.

CONCLUSION

Central America as a whole represents a huge opportunity for business due to its proximity and size as mentioned earlier. With the implementation of new trade agreements, more and more countries are trying to become like one in the aspect of trading among them, tariffs and taxes which are seen or were once seen as a barrier between making a profit or not are disappearing. Free trade zones offer an opportunity for foreign businesses to settle down in their country without the burden of importing/exporting taxes and many more existing tariffs, these zones represent a very good strategic point waiting to be exploited, in fact one good plan would be to move from zone to zone and penetrate each country's market as you go along. Panamas trade zone being the biggest and right next to the Panama Canal is a good point of entry into Central America, Costa Rica's Ultrapark which is one of the most advanced hosts many companies that concentrate on technology and pharmaceutical products, in fact Ultrapark houses the well known pharmaceutical company Pfizer. Nicaragua is composed of trade zones that are both privately and government owned, so there is a variety to choose from. Honduras currently has no trade zones, but articles available on the web state that they are on their way to creating one. From there on the trade zones in El Salvador and Guatemala house mainly textile and distribution companies, it is to be observed that the trade zones discussed in this paper are not the only ones available in each country, there are various trade zones operating currently and this research only concentrated on one from each country to use as a reference. Finally the Corozal Trade Zone in Belize represents another key point of entry into Central America like Panama does, Corozal hosts many companies from a wide variety of businesses, being what could be considered the starting point of Central America and 9 miles from the border of Mexico; this could also be a good strategic point of entry into market. Central America as it is already represents a very significant percentage of United States exports, the benefits provided by the free trade zones facilitate the importing of goods and reduce the costs of foreign companies bringing in business into the country.

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**HOMELAND SECURITY AND DISTRIBUTION/SCM –
PROVIDING FOR A SECURE & EFFICIENT SUPPLY CHAIN
STUDY**

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ABSTRACT

Distribution and supply chain management has always had to encounter obstacles when related to international imports and exports. Since 9-11, the priority of homeland security has taken national attention. With the formation of the Department of Homeland Security, there have been many problems with importing goods from foreign countries into the United States. The specific problem of efficiency and being able to receive shipments and distribute them on time has become a crucial task for supply chain managers.

The increased inspections and safety measures implemented within the last several years has increased the time it takes many vessels to be unloaded, inspected and distributed. This has caused delays nationwide for many industries. The purpose of this paper is to identify the problems associated with dealing with the increased safety measures and how supply chain managers can devise a secure and efficient supply chain.

This is extremely important with the increased flattening of the global economy and the increased pressure from upper management to have an efficiently managed supply chain to meet the time and cost demands of the consumer.

Implementing a method of making shipments easier to track and deliver in time to compensate for the increased inspection times is important. This combined with improved technology for detection of potentially dangerous contents of containers and more security personal trained to use this equipment and to detect possible threats more efficiently will help improve the flow through the supply chain.

INTRODUCTION

Since the events of September 11, 2001, the world trade market has been greatly affected. The priority of Homeland Security has been prioritized more than it ever has in this nation's history. With a heightened security level and the introduction of the Department of Homeland Security and additional security measures there are numerous obstacles for Supply Chain Management and distribution to overcome. Securities of imports have always been important, but have brought new meaning and importance with the terror threats. While the US tries to improve our Homeland Security, many other countries are doing the same and working with

their trade partners to streamline and ensure safety and security at both ends of the transportation line.

Homeland Security – Distribution/SCM Terms

The area of Homeland Security and its effects on distribution and supply chain management has several key areas: Homeland Security, Dept. of Homeland Security, Supply Chain Management, Security, Customs and Border Protection, and Container Security Initiative.

Statement of the Problem

The problem related to Homeland Security and Distribution and supply chain management is efficiency and time. With increased security measures it has become more difficult for supply chain management to distribute products quickly and efficiently from national ports.

Results

The Customs and Border Protection agency checks many containers and shipments entering our ports. The amount of illegal goods they find is staggering.

In the year 2005:

- 20 million sea, truck, and rail containers entering the United States and 29 million trade entries were processed
- \$31.4 billion in import duties were collected
- 2 million pounds of illegal drugs were seized
- 431 million passengers and pedestrians were processed as well

Findings

The Department of Homeland Security and the U.S. Customs and Border Protection have already devised a Container Security Initiative. Their initiative has 3 goals: to secure U.S. borders, build a robust CSI cargo security system, and to protect and facilitate trade. Below is the outline of the SCI's strategic goals and objectives of their goals.

CSI Strategic Goal 1 – Secure U.S. Borders

Secure U.S. borders against terrorists and terrorist weapons by evaluating all containers bound for the United States for terrorist risk before landing at CSI ports.

Objective 1.1: Enhance the process for identifying high-risk cargo by receiving and making full use of advance trade data.

Objective 1.2: Improve the process of screening and examining containers by developing and fully utilizing state-of-the-art technology.

Objective 1.3: Promote parity through increased examinations of high-risk containers prior to entering the United States.

CSI Strategic Goal 2 – Build a Robust CSI Cargo Security System

Build a robust CSI cargo security system that will withstand a terrorist incident and ensure a continuous flow of trade, or promptly resume trade through CSI ports, should a terrorist event occur.

Objective 2.1: Advance security of all world nations by promoting an international framework of standards covering data elements, host country examinations, risk management and detection technology.

Objective 2.2: Enhance cargo security and trade facilitation by strategically identifying the optimal trade lanes and ports for inclusion into CSI.

Objective 2.3: Expedite the movement of low-risk shipments through the global supply chain.

Objective 2.4: Continue to work with other agencies on maritime contingency and recovery plans and efforts.

CSI Strategic Goal 3 – Protect and Facilitate Trade

Protect and facilitate the movement of legitimate trade by maintaining effectively operating CSI ports, working with host nations to inspect all containers identified as posing a potential terrorist risk and providing benefits and incentives to international governments and organizations, as well as to our trading partners.

Objective 3.1: Increase the effectiveness of CSI by negotiating with host countries to review and request examination of all high-risk shipments identified by CBP through the Automated Targeting System (ATS).

Objective 3.2: Ensure effective coordination with host countries by conducting periodic risk evaluations of ports to assess the level of staffing and other resource needs.

Objective 3.3: Encourage interagency cooperation by developing a capacity to collect and share information and trade data gathered from CSI ports.

Objective 3.4: Present CSI standards and promote greater participation by international governments, international organizations, trade communities and other organizations engaged in maritime security.

Objective 3.5: Improve CSI operations by evaluating the feasibility of regionalizing management of CSI teams.

(US Customs and Border Protection: CSI)

Conclusions, Discussions, and Recommendations

Based on the findings of this paper, some of the problems are already being addressed. The DHS and Cargo Service Initiative they have tried to make sure the flow of legitimate trade is not slowed much. They have taken measures to ensure that cargo moves smoothly, such as making inspections while the containers wait for unloading. Even using the time that would not otherwise be used, there are still many delays for Supply Chain Management to deal with. A standard security protocol that allows for companies and countries to make an efficient move from the port of one country into the United State will allow for quick and efficient imports and distribution for the Supply Chain Managers.

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The American Terrorist Dream:
U.S. Distribution and Homeland Security

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ABSTRACT

This paper examines the critical infrastructure of the United States. Current measures of protection are examined in the sectors of agriculture, information systems, and transportation. Later reviewing the complex distribution structure the issues of such a large volume operation are exposed in regards to potential national security crises.

INTRODUCTION

In 1996 President Clinton formed the President's Commission on Critical Infrastructure Protection. A critical infrastructure was defined as any infrastructure without which debilitates the economic structure or defense capability of the United States. After the September 11th attacks President Bush drew further attention to the issues of national security and critical infrastructure. Many investigations revolved around these infrastructures in 2002. In February 2003 the National Strategy for Physical Protection of Critical Infrastructures and Key Resources examined the seventeen sectors that the United States now identifies as critical infrastructure (Office of Inspector General, 13-15). The following is a list of these sectors:

1. Agriculture and Food
2. Banking and Finance
3. Chemical
4. Commercial Facilities
5. Communications
6. Dams
7. Defense Industrial Base
8. Emergency Services
9. Energy
10. Government Facilities
11. Information Technology
12. National Monuments and Icons
13. Nuclear Reactors, Materials and Waste
14. Postal and Shipping
15. Public Health and Healthcare
16. Transportation Systems
17. Water

This paper will examine the critical infrastructures of agriculture and food, communications, information technologies, public health, and transportation systems. The United States is home to an extraordinarily complex supply chain from raw materials to the final consumer. A product can travel tens of thousands of miles throughout its life cycle in the United States. American government and business has invested billions of dollars of resources in improving the efficiency of the movements of products and people. This multifaceted network, while incredible in its daily operation, is also the source of some major American vulnerability. It is impossible to monitor every person and every product moving around the United States, this truth leaves areas of weakness possibly for those with malicious intent (“Critical Infrastructure...”).

Statement of problem:

A complex distribution of people via the flow in and out of the country as well as internal travel via air, rail and road brings endless possibilities for transporting packages for Christmas, and luggage for vacation, or perhaps a nuclear reactive ingredient. Further with annual imports reaching multi-billion dollar volumes the chance of entry of a single malevolent product, or chain of products, is high. The United States of America is vulnerable to terrorist attack due to its vast supply chain spaghetti.

Results & Findings

The Department of Homeland Security recognizes two primary categories of threats; those of dangerous people, and also those of dangerous goods entering the United States. The table below shows the budget and performance of the Department of Homeland Security in the Achievement of their first goal of protecting the nation from dangerous people (“Highlights Report...” 14). The rating column displays markers on a color line that indicate the areas fiscal performance as a percentage of its goals. Orange represents less than fifty percent of target met, green indicates achievement of fifty to seventy-four percent of goals, blue indicates performance of seventy-five percent or greater.

FY 2007 Budget and Resources for Goal 1

Goals and Objectives	FY 2007		
	Full-Time Equivalent (FTE)	Dollars in Millions	Rating
Goal 1. Protect our Nation from Dangerous People	87,394	\$19,875	
Achieve Effective Control of Our Borders	75,255	\$16,672	
Immigration Services	10,408	\$2,224	
Strengthen Screening of Travelers and Workers	1,731	\$979	

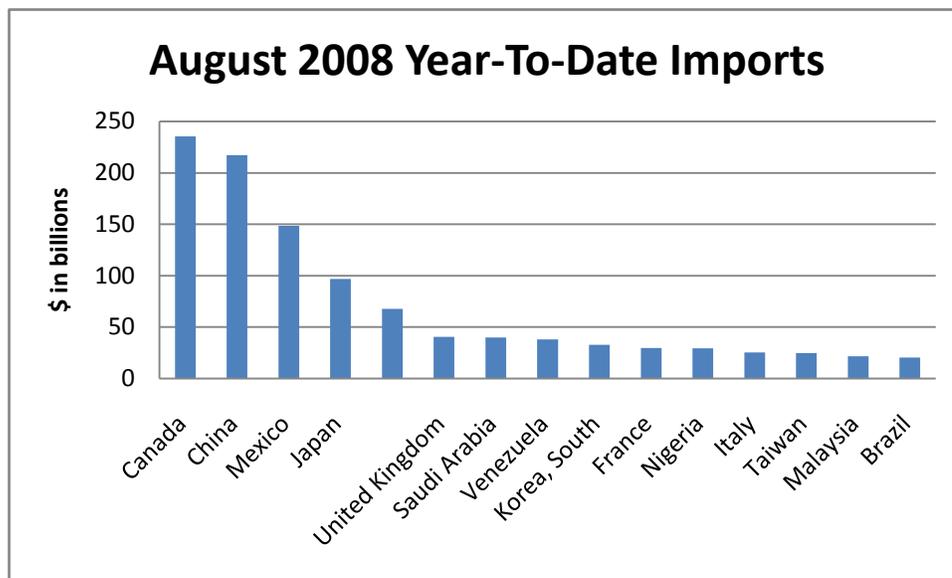
Table from: “Highlights Report Fiscal Year 2007”

Overall it appears that the U.S. DHS is doing an average job at achieving its targets in regards to protecting the nation from dangerous people. The table shows that border control

efforts are going well; however immigration services and screening of travelers and workers fall behind their goals slightly. The agency claims the success of its border control efforts are due to expansion of its resources and cooperation with other agency in the United States toward a common goal. By enforcing existing immigration laws the agency cites removal of illegal immigrants has decreased the number of dangerous criminals within the U.S. Borders are not more technologically advanced and “unknown terrorists” can be identified via the 10-fingerprint biometrics used at ports of entry. An “unknown terrorists” is a person that has not been placed on a terrorists watch list by name, but whose fingerprints maybe associated with collections at terrorists training camps and other areas of national concern (“Highlights Report...” 16).

The amount of time and effort spent on border protection in regards to the flow of people is truly notable. However, not all points of entry have these heightened levels of investigation and technological resources. A terrorist would most likely try to enter through a port without maximum scrutiny, and with only moments to make a judgment on the entering party there must be a large margin for human error. Border Patrol and the Department of Homeland Security will surely still continue to struggle with determining the amount of inconvenience that is appropriate at borders and other screening points throughout the U.S. It is impossible to thoroughly check every person; nevertheless, the United States continues to make strides toward protecting the nation from dangerous people.

The entrance of dangerous goods is the second concern of the Department of Homeland Security. The chart below expresses the volume of goods entering the country this year.



The following is the charted data above with some additional information on percentages. The U.S. had done some \$1,447.60 billion dollar worth of imports this year. Understanding this large volume is the first step to understanding the complexity of regulating and securing foreign imports. Much like people, it is impossible to inspect every good that enters the United States of America.

August 2008 Year-to-Date Imports

	Country	Imports (Year-to-Date)	Percent of Total Imports
---	Total, All Countries	1,447.60	100.00%
---	Total, Top 15 Countries	1,068.30	73.80%
1	Canada	235.4	16.30%
2	China	217.3	15.00%
3	Mexico	148.5	10.30%
4	Japan	96.8	6.70%
5	Federal Republic of Germany	67.9	4.70%
6	United Kingdom	40.5	2.80%
7	Saudi Arabia	40	2.80%
8	Venezuela	38	2.60%
9	Korea, South	32.7	2.30%
10	France	29.6	2.00%
11	Nigeria	29.3	2.00%
12	Italy	25.5	1.80%
13	Taiwan	24.6	1.70%
14	Malaysia	21.7	1.50%
15	Brazil	20.5	1.40%

Data are goods only, on a Census Basis, in billions of dollars.

Table from: U.S. Census Bureau

The governing body is particularly focused on potential nuclear/radiological and biological threats. Similar to the table of the department’s first goal the table below reviews targeted performance. Orange represents less than fifty percent of target met, green indicates achievement of fifty to seventy-four percent of goals, blue indicates performance of seventy-five percent or greater.

FY 2007 Budget and Resources for Goal 2

Goals and Objectives	FY 2007		
	Full-Time Equivalent (FTE)	Dollars in Millions	Rating
Goal 2. Protect our Nation from Dangerous Goods	146	\$972	
Nuclear/Radiological	112	\$616	
Biological	34	\$356	

“Note: Some programs contributing to achieving effective control of [U.S.] borders under Goal 1 also have resources and activities that support Goal 2: Protect [the U.S.] Nation from Dangerous Goods.”

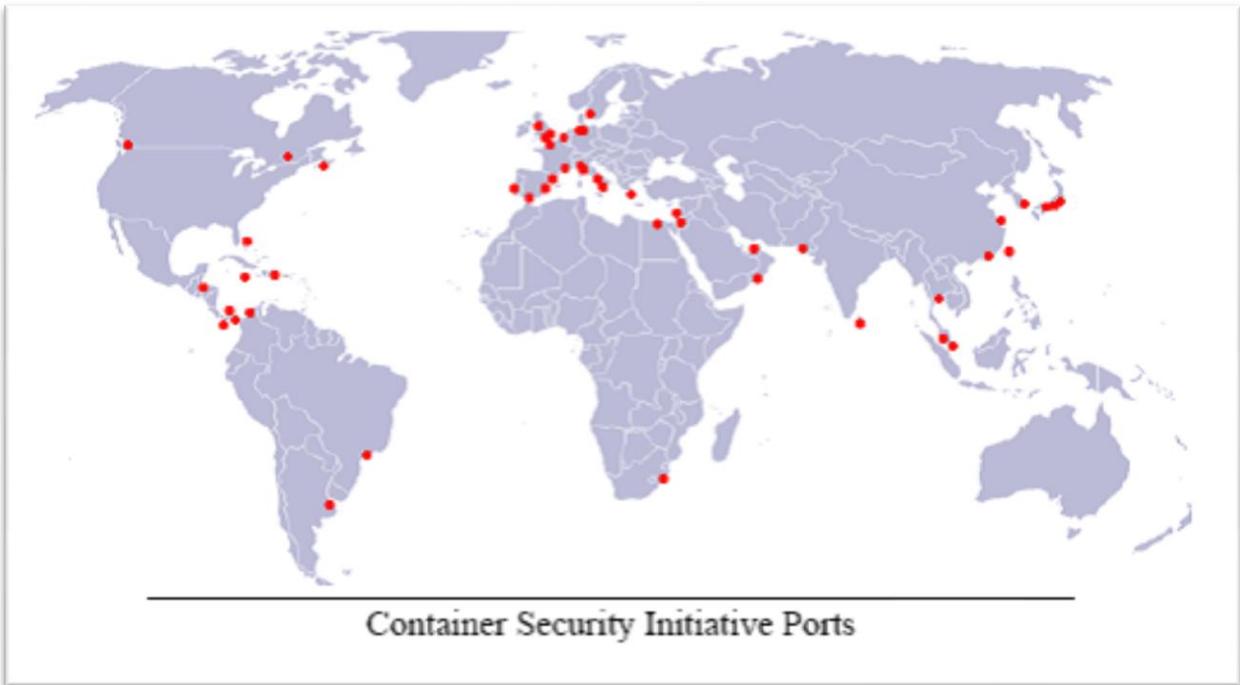
Table from: “Highlights Report Fiscal Year 2007”

Overall the achievement of the targets set in relation to the protection of our nation from dangerous goods is mediocre. Efforts in the detection and prevention of nuclear and radiological threats are going very well. The Department of Homeland Security notes its efforts with increased screening, up to ninety-four percent, training of thousands of enforcement officers, and the connection of thirty-nine ports to share analysis as merely part of its success. Below is a picture of the radiation portals that scan cargo entering the U.S., now totaling 1,019 stations (“Highlights Report...”, 22-23).



Radiation Portal Monitors at Ports of Entry

DHS has also made strides to move inspections away from U.S. shores by performing inspections at foreign ports; in 2007 eighty-six percent of efforts were completed at foreign docks. The map below displays these “Container Security Initiative Ports”. The Container Security Initiative is not active at fifty-eight ports throughout the world.

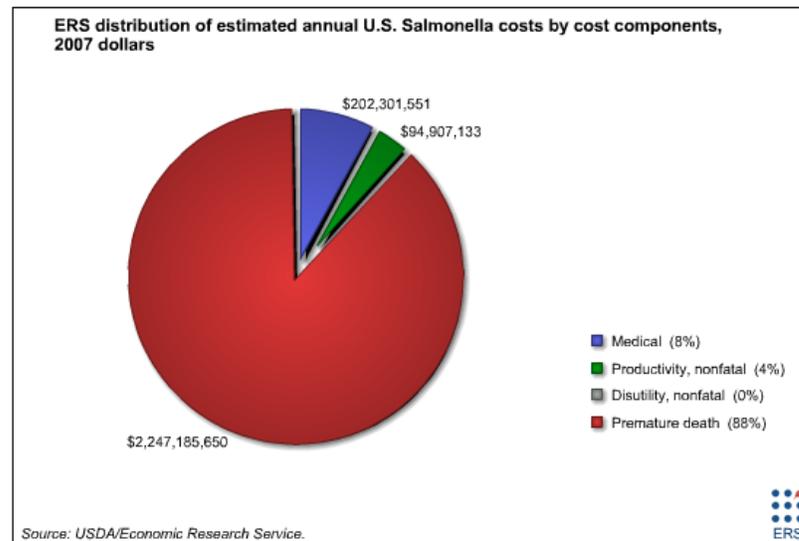


Container Security Initiative Ports

While the Department of Homeland Security is doing a better than marginal job at achieving its goals, there is no evidence to prove that these measures are both necessary and successful. Is the absence of a terrorist attack evidence of DHS success, or a merely period of non-activity?

Biological attack threats are also a concern of U.S. governing forces. The government seems to be focused on the possibility of airborne biological attacks. It has encouraged large cities to improve indoor monitoring systems and also response preparedness in the event of a biological attack. The government has investment millions in the research of the newest biological attack possibilities and has allocated numerous resources dedicated to discovering, managing, and mitigating these possibilities (“Highlights Report...”, 23). Concern of this airborne attack is not necessarily related to the entry of products into the United States; however a contaminated container opened at the borders could cause an outbreak. Another possibility of bioterrorism is discussed in the following section.

According to the Department of Homeland Security Tommy Thompson, former Secretary of Health and Human Services stated, “I, for the life of me, cannot understand why the terrorists have not attacked our food supply because it is so easy to do” (Office of Inspector General, 7). With little consideration one can easily see the possibility of a crisis related to food consumption.

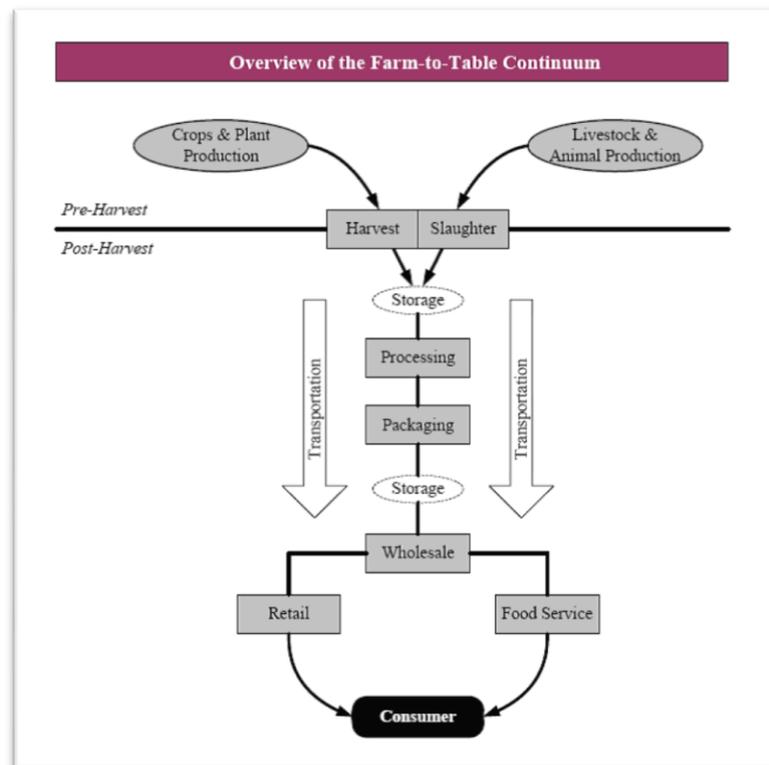


The chart depicts the economic effects of all types of Salmonella in 2007. These results occurred without mass outbreak, or intentional spread of disease. According to the Food and Drug Administration, “In the U.S., the CDC estimates that 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths occur annually due to food that has been inadvertently contaminated by pathogens...”(cfsan.fda.gov). With unintentional monetary consequences of greater than an estimated \$2 billion dollars in a single year, it is hard to imagine the impact of a mass malevolent attack on the American food supply.

Terrorists could not likely isolate and starve any given U.S. city without a large amount of effort and resource. According to the Department of Homeland Security, the average U.S. city can survive a week on its existing food supply; without major simultaneous crippling of the entire transportation and labor markets of the country an isolation and starvation attack could not

be effective (Office of Inspector General). Additionally, the risk of exposure of such planning would be high. Alternatively, the Department of Homeland Security explores the possibility of sustained disruptions. The department uses the example of communicable diseases which may discourage workers from reporting to jobs for significant periods of time. Long-term electrical loss and its potential effect on perishables was also briefly discussed (Office of the Inspector General).

Astoundingly enough one toxin of choice for a terrorist may be Botulism, and no, not the kind that “youthful” women of their fifties all over America are injecting into their faces. The aging American woman’s wonder drug could be the exact chemical used to harm her and her family. One study, however questioned, evaluated the possibility of infecting over 100,000 people with a single Botulism filled dairy truck delivered to a school (Wein). This shows how fragile America can be in regards to its food supply. A small effort of a disgruntled milk delivery driver could result in an outbreak in an entire city.



The above chart demonstrates a high-level process of the food supply chain, referred to as the “farm to table continuum” according to the Department of Homeland Security (Office of Inspector General, 127). Each of these areas is susceptible to attack. Other possibilities of contamination of food could be executed in livestock and animal production via feed. Tampering with pesticides or insecticides that are commonly used by farmers could cause a massive, long-term outbreak. Interfering with a large packaging facility for food-stuffs could deliver poisonous goods to the American consumer, and depending upon its distribution, more

likely than not would be a widespread problem. Corruption in the transportation and warehousing of these food stuffs is an easy outlet for an attack.

The Department of Homeland security cited U.S. food exportation to be a \$60 billion operation with “a positive net balance of trade”. As shown by the mad-cow outbreak in the 90s, such an epidemic could have a similar long lasting psychological effect on the markets supplied by American food sources (Office of Inspector General, 12). This short and long term loss in business could be devastating to American trade and its internal economy; an event that could certainly not be weathered by the country’s current economic state.

A group of terrorists would merely need to understand the inspection points in food distribution and avoid such areas. Teams could then interfere, post inspection, in order to wreak havoc on the American food supply, health, and ultimately economy. America is clearly susceptible to a food borne terrorist attack. Perhaps the most discerning aspect is the lack of prevention that can be realistically executed. The National Academy of Sciences quoted, “at least a dozen federal agencies implementing more than 35 statutes make up the federal part of the food safety system”. Furthermore, the Department of Homeland Security notes the frustrations of a fragmented structure of regulation. Some responsibility for food safety falls within the United States Department of Agriculture (USDA), the Food and Drug Administration (FDA), states, locally, etc. Even further complicating the issue, much of the food supply is privately owned business that is out of the jurisdiction of many, if not all of these governing agencies (Office of Inspector General). It would be quite simple for a terrorist to find the gaps in the current system and use the complex and vast distribution channels to poison millions of American perhaps without even a trace.

Another area of considerable concern is the information technology infrastructure of America. Filled with classified archives and privileged communications between the country’s top officers, the computers of America are in need of serious protection. The security of interlinked computers is considerably more complicated than the locked down filing cabinets of yesterday. Prior national security for the sensitive material of the U.S. could be protected with sophisticated locks and armored guards in American soil. Today the threat of entry to America’s precious secrets can come from virtually anywhere on the globe.

Not only does the government itself need top notch information system security, its suppliers need the same level of protection. Those developing the newest and best defense technologies must protect this information; it is an issue on national security. The idea seems simple enough; the country is full of computer gurus to test encryption codes to ensure that all things classified stay just that way.

Two Texan brothers caused quite a scene in the past year with their computer chip operation. Michael and Robert Edman are facing “federal charges of selling counterfeit computer equipment to, among others, the Air Force, Marine Corps, Federal Aviation Administration, Department of Energy, and numerous universities and defense contractors such as Lockheed Martin”. A Chinese supplier sold the two brothers cheap network cards; the pair used boxes labeled Cisco Systems. The FBI was made aware of the operation from a Chinese source; no prior discovery of the faux chips had been made (Derene).

The issue at hand, besides the obvious copyright infringement of Cisco Systems, is the hole in security. This case reveals the weakness of the United States government supply chain even in a critical resource such as computer hardware. With a malevolent computer chip one may be able to easily conduct a large identity-theft operation by allowing hackers into critical bank encryption links. According to the Popular Mechanics article, “In a disturbing national-security scenario, overseas agents might be able to hard-wire instructions to bring down a Department of Defense system on a predetermined date or in response to an external trigger. In the time it took to bring the systems back online, a military assault could be underway.”

As cyber security has been identified as a critical portion of the nation’s infrastructure one may wonder what the government is doing to protect such a critical asset. The Department of Homeland Security cited responding to 37,213 “cyber security incidents” in 2007; citing a fifty percent increase from the previous year aware that this heightened number is due to increased attacks as well as awareness levels and reporting rates. It is hard to determine if any actual progress is being achieved with this figure (“Highlights Report...”).

The agency has initiated the “Einstein Program” over 12 federal agencies. This program “is a collection of hardware and software that support an automated process to collect, correlate, analyze, and share cyber security information in defense of Federal Government networks” (“Highlights Report...”). In the 2009 Department of Homeland Security Budget Request, “A total of \$293.5 million for the National Cyber Security Division to further deploy our EINSTEIN system on Federal networks to protect against cyber threats and intrusions. This includes additional funding for enhancing the United States Computer Emergency Readiness Team’s ability to analyze and reduce cyber threats and vulnerabilities, to disseminate warning information, and to coordinate incident response” (“Highlights Report...”).

All of the cyber security efforts currently taking place are important measures to aid in the nation’s security of information. Unfortunately these cyber security measures cannot ensure responsible supplier’s in the supply chain organizations. While these systems may help detect when hacking has occurred, it also may not aid in detection depending on the type of hardware misused.

Conclusion

The United States is more vulnerable to terrorist attack than most Americans realize. While the Department of Homeland Security is making large strides toward a safer America, terrorists have many gaps in the distribution system itself in which they could effectively infiltrate and cause mass chaos. It is most important to track who is allowed into America and its facilities, of all types. It is also important to consider the lapse in security that often occurs during the internal transportation of products.

One huge potential for terror is that of the food supply chain in America. Even if imports are free and clear of contamination, internal sources have been able to effectively cause outbreaks. These outbreaks could range from small scale illness to epidemic proportions, with a relatively small amount of effort. Ideally every piece of food entering the American mouth could be guaranteed safe, but is not realistic. Even if it is just large scale illness and not death, a food

borne attack could cause huge economic impact. Lost work wages, raised health costs, and lost business in exports are all possible negative impacts of a food borne attack. This should be an especially large concern in today's economy.

Another potential terrorist infiltration is that of the product supply chain. This vulnerability was best exemplified by the Edman brothers when they were able to fake U.S. governing agencies into buying cheaper imported computer chips from China. Luckily their intent was not malicious; however, it shows how careless the supply chain of important governing bodies. Continuing efforts in the U.S. cyber security are crucial. In addition to these efforts American consumers, companies, and governing bodies need to take more care in understanding exactly where the product they purchase was originated.

In this increasingly global economy it is important that not only governing bodies, but consumers themselves either stay within a tight local market, or carefully explore the benefits of global distribution. It is ultimately the job of the consumer to protect themselves. With the massive volumes of imports it is unrealistic to assume that the government is able to inspect each and every product. Each person and family unit should be prepared for an emergency with plans and supplies in order to best ensure a lively American future, and remember that odds are higher that their product is safe.

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GROWING SMEs THE COSTA RICAN WAY

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ABSTRACT

Costa Rica has undertaken a novel approach to entrepreneurship and business development. As a small country, they understand that most of their businesses will, at least initially, be small. They have determined to develop and strengthen firms who serve as specialist providers in international supply chains for large firms. This paper reports on in depth interviews with initial participants in this program reporting on its advantages and utility for small firms.

INTRODUCTION

In the past few decades, attention has turned to the importance of new business and the necessity of exporting as sources of economic growth. Export-led development, based on the Asian Tigers model, received much governmental and academic attention. After nearly three decades, research generally supports government policies which:

1. promote more uniform regulations for trade
2. develop policies which are segmented:
 - a. The greatest results occur from assistance to already exporting SMEs. Subsidies and trade shows are of limited permanent value in assisting newer non-exporters. These are largely effective for already exporting firms.
 - b. Network approaches to developing export capacity work best for non-regular or non-intensive exporters. Export success seems to be related most strongly to three factors: product fit, adoption of world class process standards, and acquisition of the right type of managerial experience.

Concurrently, emphasis on the importance of new business creation as an engine of growth (see Autio, Kronlund and Kovalainen 2007 for a good summary of recent research) also generated numerous programs in various countries, all designed to spur the formation and growth of these enterprises. Quite apart from government efforts, the rise of “born globals” (or INVs) indicated that a merger of both efforts was important. While most of the research on these firms shows the advantages enjoyed by advanced economies (Moen and Servais 2002; Rialp, Rialp, Urbano, Vaillant 2005; Zahra 2005), there are also such firms emerging from medium level countries such as India, Turkey and Malaysia (Yamakawa, Peng, Deeds 2008). Whether similar successes could be enjoyed with government assistance in smaller countries with fewer existing MNC advantages is a question (Wilkinson, Mattsson, Easton 2000; Autio et al 2007; Ruzzier, Hisrich, Antoncic 2006; Sriram and Mersha 2006).

This paper examines the approach taken by a small market country, Costa Rica, which has created a public/private partnership program designed to assist in the development of new businesses, improve the quality and export capacity of older small firms, and create value chain networks as a method for growing and improving all businesses in an export oriented policy. The CINDE/PROCOMER/CADEXCO program is heavily based on research results and designed to support government FDI priorities as well.

POLICY BACKGROUND

Costa Rica was one of the most active participants in working with USAID to create an export oriented economy. Bankers, industrialists, and top economists in Costa Rica joined to form CINDE (Coalición Costarricense de Iniciativas para el Desarrollo) in the 1980s, which actively promoted legal and regulatory changes to provide incentives for both foreign investment and local export efforts. Along with the policy changes, a system of technical assistance and training to create non-traditional agricultural exports and upgrade managerial expertise. At the time, the targeted industry sector for growth was textiles with very successful results. Within 10 years, export value went from \$90 million to \$781, 146 new foreign investment projects resulted and 18000 new jobs from FDI, 55% in textiles (Clark 1995). It was unclear, however, whether this growth would continue, given three changes of major import: the end of US AID to underwrite the training and technical assistance programs, a change in CINDE away from lobbying and political reform, and the tsunami of Chinese textile exports which eliminated much of the developing world's textile export regimes.

The coalition developed during this growth period, however, demonstrated that the SME/FDI/export oriented program could be sustainable. Together, they created a new set of initiatives which were based on the model of the 1980s and early 1990s but went in some new directions. First, the FDI program was re-oriented to attract leading, high research oriented firms. Specifically target industries were computer related, pharmaceuticals, and specialty chemicals. PROCOMER (Promotora de Comercio Exterior de Costa Rica) recognized the need to first, continue the development and expansion of programs that could encourage partnerships and, second, to provide a variety of products and services beyond the ones already in place. Thus, PROCOMER was designed to link existing and new firms in Costa Rica to these investing firms while also encouraging the improvement of existing firms in other industry sectors. With this idea of expansion in mind, PROCOMER consulted with large and small firms to develop key business development partnerships in various areas in the industrial sector. CADEXCO (Cámara de Exportadores de Costa Rica) then became the promotion and training arm for Costa Rican firms already engaged in export activities.

The studies that PROCOMER included in its agenda included an analysis of the economy in different parts of the world and how Costa Rica was placed in the context of economic development both in the Americas and around the world. Studies were also conducted into exports with reference to its products according to level of production including agricultural, textiles, cattle and fishing sectors, the level of exports per product, the regions best suited for export to, number and size of companies, and mode of transportation. Currently, PROCOMER is an organization that promotes diversity in exports, advises members on productivity and quality, and encourages integration through the exchange of products among industries and

people. It also helps to negotiate supply chain contracts as a neutral third party and monitors the Costa Rican firms for three years, providing counsel and mediation as needed (www.procomer.com; personal interviews with the Director).

THEORY AND RESEARCH BASE

The heart of PROCOMER is the use of supply chain as a basis for incorporating Costa Rican firms into the larger global economy. Recognizing the strengths of Costa Rica—relatively good educational levels, advantageous and stable investment climate, transportation and location advantages—as well its weaknesses—small internal market, low experience in servicing MNCs, economically based in agriculture and low tech products, the private/government supported program determined to use existing exporters as mentors, promote them into suppliers to MNCs, and then use their satisfactory performance to train and promote newer firms. At the same time, these firms were also encouraged to expand in the more traditional markets in the Latin American and North American regions.

We conducted in-depth interviews with six Costa Rican firms involved in these efforts. The firms were chosen to provide insight into different levels of experience, different industry sectors, and different relationships with both other Costa Rican firms and MNCs. We had developed a fairly simple model based on research into SME, not Born Global, results in export development and used that as a basis for the interviews. (We avoided interviews with software firms, although a successful sector for Costa Rica, as they were largely not involved in the government project and more likely to be directly connected with MNCs. These firms would be interesting as a separate project.). We were also interested in exploring the extent to which these new public/private initiatives were perceived as helpful; the interviews all confirmed the importance of the new initiatives and the improvement in their products and the service components of their firms. In addition, the firms were chosen to represent a mixture of mentoring firms, emerging firms, and new firms.

ROLE	INDUSTRY	TYPE
Participant	Containers-metal	Expanding
Mentor	Containers-glass	Established
Mentor, networker	Printing	Established/Expanding
Participant, networker	Containers--paper	Expanding
Participant	Specialty electronics	Early growth
Participant	Stone, ceramics	Expanding

The model identifies factors relating to product, services, and management in SMEs that are identified as critical for successful expansion and profitability in export markets. Based on this model, we were particularly interested in these possibilities: whether these firms:

1. Were more likely to focus on value-added services and product adaptability rather than high technology per se.

All the firms emphasized the importance of creating value-added services and trying to create unique or customized products for the international firms. Those who were expanding their businesses related that such efforts for new customers were yielding better customers and better profits. Only one firm, in the printing industry, had found that technology advances required new and updated equipment and software investments on a fairly continuous basis. The engineering company is a wholly custom design firm, while all the packaging related firms emphatically supported the importance of joint product development and anticipation of major customer needs as the key to getting and retaining clients with international standards.

The firms contrasted their increased sales and work forces to the focus on value added, contrasting themselves with other Costa Rican firms who were seeing steady profitability declines and increasing competition from international companies. They also emphasized the importance of the output rather than the input: technology as necessary to produce more desirable products.

2. Were likely to adopt newer technologies in the production and improvement of existing products.

With the exception of the printing company, the others tended to be more reactive than proactive with respect to new technologies. They acquired them as needed or as other competitors started to adopt them. As small firms with low capitalization, they are more conscious of the need to justify large new investments and were quite frank in saying so. The technologies adopted tended to be those which either increased productivity or which resulted in improved quality control.

3. Were making efforts to reduce cultural distance, defined as both country cultural and managerially (e.g. global standard vs. regional standards).

Firms varied far more on this than expected. Although all had contracts with large multinationals, some were regional suppliers only and content to remain so, finding other contracts in the Caribbean and Central American area. The other firms had had to make huge efforts to move from regional to international providers; two firms have done so quite successfully, one is in transition and needing quite a bit of assistance from other firms in the PROCOMER program.

Major difficulties seem to lie in two areas for the regional firms: quality control and contract negotiation. Currently, three firms have systematic quality improvement processes and the others are establishing such as even the regionally focused firms see this as a necessity even for purely local business in an era of global competition. Of the six firms, two had ISO certifications and two were in the midst of obtaining them.

Other areas where the firms saw the need for improved performance include: new process adoption in both manufacturing and marketing; faster response times; ability to change markets in response to changing conditions; ease of international communication—faster computer networks and improved national mail service were both concerns.

4. Were more likely to form value chain networks with other Costa Rican firms in attempting to integrate into larger supply chains or direct export.

Two of the six firms worked directly with and for international clients with very little formal Costa Rican supply. As a fairly small country, of course, all these owners knew each other, but these two firms did not cooperate in a business network with the others. The other four firms did work with other Costa Rican firms in formal supply networks, two of them actively collaborating in new product develop efforts. There seemed to be no particular reason for the different choice other than owner's preferred strategy and ability to carry it out.

5. Would differ on their ability to leverage experience with MNCs into additional supply relationships.

From the previous discussion, you can infer that this is true. However, each firm has successfully gained new clients because of the involvement they have with an international firm. For those firms seeking regional clients, the international client is viewed as a strategic asset as regional firms see the international firm as a quality guarantor. One of the most interesting stories involved one supplier and Gerber: the company started out as a purely local supplier and is now their exclusive supplier in 80 countries. That client has since led to many other international clients. These represent the extremes for the firms interviewed. However, it is also true that the firms vary in age—from 100 years old to 4 and in the density of competition in their product areas. While they do differ in leveraging results, all have used the international firm connections to grow their businesses.

6. Were more likely to find business networks important in the development of their firms and their export capabilities than personal networks.

The difference between personal and business networks in the region of San Juan is fairly small. The business community tends to be closely knit, partly because of its size and partly because of the strenuous development efforts of the 1990s. It is precisely that personal network that PROCOMER sought to use to turn it into solid business network use. As a result, these business/personal networks exist as supplier/joint venture groups and as advice groups. PROCOMER actively assigns more successful and experienced firms to newer or developing firms as mentors. This in turn solidifies the complex personal/business relationships within the San Juan industrial community. The creation of several large industrial parks and Free Trade Zones has also geographically concentrated firms which also lead to greater network density. The result has been a general rise in the level of Costa Rican firms' ability to compete as suppliers to large multinationals. It has also encouraged the formation of new enterprises directly targeting international firms/markets based on experience and connections from existing successful firms.

This reports on the experiences of just a few firms in Costa Rica, all connected directly or indirectly to PROCOMER. Nevertheless, the lengthy interviews and talks with others in the San Jose business community not directly interviewed, does support the initial success of this public/private partnership for developing quality, competitive businesses. Several other mid-level countries are examining PROCOMER as a model for the next stage of entrepreneurship/small business development. On the basis of what we heard and what we saw, the program does seem to be working well, and in particular, has had these effects:

1. Increased consciousness of business leaders as to the importance of quality, process change, and the creation of value added products.
2. Created a more supportive cultural climate for the value of small business in growing national wealth and jobs.
3. Provided an additional inducement for international companies to locate in Costa Rica.

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CHALLENGES FACING SUPPLY CHAINS THROUGH PORTS OF LOS ANGELES/ LONG BEACH

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ABSTRACT

With the increase in U.S. trade with Asian countries, ports in the western United States are becoming busier. The ports of Los Angeles/Long Beach, major port in California, handle the majority of the imports and exports of the United States. This research looks at the current situation of the Ports of Los Angeles/Long Beach. We look at port capabilities and list some challenges to efficient port operations due to the rapid growth. Some of the major challenges are port congestion, labor and capacity restriction. We also look at alternate options of bringing Asian goods into the United States.

INTRODUCTION

Increased importance and demand of importing goods from Asia are posing challenges to the resource capabilities in the Ports of Los Angeles/Long Beach. These ports have been the major ports of entry for imported goods into the U.S. from around the world. With the increased imports, these ports are almost operating at capacity. This is causing inefficiencies in terms of congestion, long lead times etc. This situation needs to be analyzed now when the imports into the U.S. are increasing at a fast pace.

To analyze the current challenges being faced by the ports of Los Angeles and Long Beach, information on various factors such as distance and time involved in bringing the goods from the origin to the U.S. port of entry, various steps in the transloading process, estimates on waiting time, transloading time and customs clearance time, intermodal transportation capabilities, distance and time in shipping goods to their destinations, processing of unfinished products are required. The complex interaction between these factors makes this an intricate and interesting study.

Los Angeles/Long Beach ports are facing problems relating to overburdened capacity in terms of equipment and labor, which leads to increased waiting times, road traffic, rail congestion, etc. The focus of our research is to evaluate the present situation, identify main factors contributing to the issues and suggest alternate methods of bringing in goods into the United States. These, when deployed, will improve overall operating efficiency and also provide enormous benefits to industries that are using ports of Los Angeles/Long Beach to bring in their cargo.

Information for this study is collected through personal interviews with Port personnel. Additional statistical information is obtained from books and other internet sources. The effect of these challenges on the overall trade and logistics efficiency of companies will be discussed. This research will help in identifying the opportunities for ports of Los Angeles/Long Beach. Additionally, it also provides a list of capabilities that can be obtained through alternative configurations of supply chains. With the magnitude of overseas trade these days, a marginal improvement that can result from analyzing the Ports of Los Angeles/Long Beach can provide huge benefits.

INCREASED IMPORTANCE FOR IMPORTS

Imports are increasing from the last 35 years, especially from the countries like China. The total increase in imports from 1994 to 2007 is 193.1% and from the year 2006 to 2007 is 5.3%, from China in particular is 12.2%. 2008 statistics of goods imported is \$177.7 billion. US imports in TEUs is more than 11 million. And it mainly constitutes Petroleum products, Food and beverages and electronics. Apart from China, EU and Mexico are some of the fast growing import partners.

According to the U.S. Census Bureau, the change in imports of goods from October 2007 to October 2008 reflected increases in industrial supplies and materials (\$10.0 billion); consumer goods (\$0.7 billion); foods, feeds, and beverages (\$0.8 billion); and other goods (\$0.2 billion). A decrease occurred in automotive vehicles, parts, and engines (\$4.6 billion). The growth rate has slowed somewhat, but it's still significant. According to data from PIERS Global Intelligence Solutions, the port of Los Angeles, for example, saw 18 percent growth in containerized traffic through November 2006 (Quinn 2007). The future imports will be more demanding and because of this growing importance of imports it is worthwhile to study the present scenario.

CURRENT SITUATION

The Ports of Los Angeles and Long Beach are first and second in the nation, respectively in container volumes, and together they handle more than one third of all full international container traffic in the United States. Full international container traffic at the ports was 9.2 million Twenty-Foot Equivalent Units (TEUs) in 2005, including 2.0 million TEU of export traffic and 7.2 million of import traffic. The ports accounted for 24.2% of all U.S. export container traffic and 40.6% of import container traffic in 2005. China is the most important trading partner and the major products in import are Petroleum, Electronics and Plastics. Though trading in US includes both imports and exports, the effect of imports is so high that it sometimes makes the effect of exports less pronounced. The TEU statistics (imports and exports) of containerized traffic in LA port has increased 12.42% from 1980 to 2006. The present statistics of 2007 is about 8.4 million TEUs.

The time taken for the loading and unloading operations is lead time, which is an important factor to be considered. The stages of operations after the ship reaches the port briefly are the off-loading/loading process : the ships typically “hotel” or stay at the terminal for approximately 36 hours, or 1.5 days, but the largest ships may stay as long as three days. Cargo is received and delivered through the truck gates and the on-dock rail yard. Wharf gantry cranes are used to move containers on and off ships.

A single container ship may unload 6500 TEUs in an average, where one 20-foot container is equivalent to 1 TEU, a 40-foot container is equivalent to 2 TEU's. Typically, cranes can transfer 25 to 40 containers per hour. The number of cranes operating simultaneously on one ship can vary from one to ten, depending upon the size of the ship, the number of vessels at berth, crane gauge (distance between crane legs), and the availability of cranes. Based on this information a medium sized ship takes above 20 hours to completely unload the ship.

Containers that are stored in terminal backlands are either stacked upon one another or stored on a trailer and then parked. These containers are then delivered outside the Port boundaries by various combinations of truck or rail transit. Prior to July 2005 the ports of Los Angeles and Long Beach tariffs provide five free days for import containers on the terminals but now it is four days for imports.

After this, the goods are to be transferred to their destination centers. This is done by intermodal transportation. Rail and road transport are the major constituents of intermodal transportation and their effective utilization is important. Any cargo that is moved by train from the Port benefits the overall transportation system by reducing the truck trips and total truck mileage with the associated impacts. In average each on-dock train can eliminate 750 truck trips and are at least twice as fuel efficient and clean as trucks on a ton-mile basis. A single container ship may unload 5,000 twenty-foot equivalent units (TEU) to be delivered outside the Port boundaries by a fleet of trucks. On-dock rail can potentially eliminate 3,750 truck trips for every vessel call. The Railways present in the port terminal are Intermodal container traffic facility (ICTF): a near dock rail road, On dock rail yards: APL rail yard, Maersk, Evergreen/NYK, Yang Ming/China Shipping Rail yard and Alameda Corridor.

CURRENT CHALLENGES

The challenges that the ports of LA/LB are facing are categorized broadly and each one of it addressed below.

Capacity constraints of the port

Capacity constraints threaten to act as bottlenecks to trade growth. Increased imports are to be met by the port facilities like, material handling equipments, storage and ware housing facilities. Material handling equipment like cranes, etc has great effect on the lead times. Lead times though are reduced since the past years; it is possible that this gets saturated, thereby increasing the time taken to load and unload the ships.

Port expansion is the major challenge the LA/LB ports are working at. The ports' long-term development program began in the mid-1980s and extends to the year 2020. Since 1991, however, the two ports have pursued different expansion strategies. Long Beach is redeveloping existing properties, such as the Navy station and former Wilmington oil field (Erie, Brackman, and Rauch 1996).

The volume of trade flowing through these ports has surged in recent years and is expected to at least triple over the next twenty years, but only if the port have adequate trade

infrastructure capacity. However, Southern California is rapidly running out of trade infrastructure capacity (Kyser, undated). Intermodal rail yards are close to capacity already; and freight railways will see significant goods movement delays within five years. Highway congestion, already legendary, will only worsen.

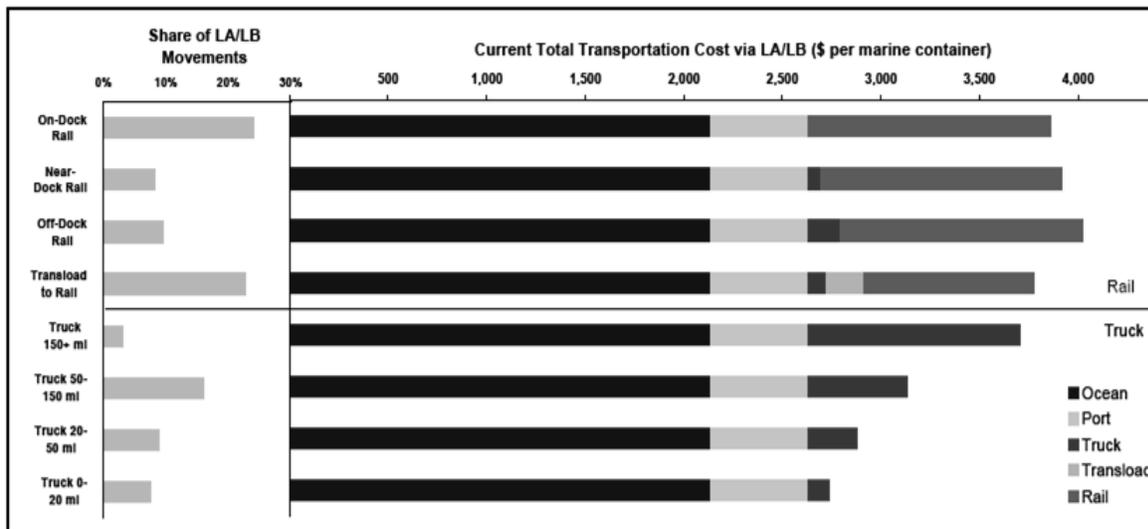
Traffic congestion at the port

As tariffs and other political barriers to trade continue to shrink or disappear, the ability to transport goods efficiently has become an increasingly important consideration in international trade. Firms rely on fast, flexible, and reliable shipping to link far-flung plants, and transportation breakdowns and congestion can idle entire global production networks. As a result, the capacity and efficiency of seaports, airports, and multimodal linkages have become critical factors in global trade.

Congestion caused before unloading is due to insufficient on-dock capacities at the port. Increased container traffic leads to waiting time before the ship reaches the dock thereby increasing the lead times. This also increases the total transportation costs.

Intermodal Transportation

Congestion during Intermodal Transportation is the major challenge faced by cities like Los Angeles. After the goods are unloaded then the process of intermodal transportation starts. The increase in the importance of co-operation between different modes of transport like, air, water, rail, road, is required (Siggerud 2006).



The figure above (BST Associated 2007) shows the relative costs constituting intermodal transportation in LA/LB ports.

In Los Angeles, there is an active movement to encourage the delivery of cargo from the ports to inland distribution centers at all hours of the day rather than concentrating them in the highly congested daylight hours (Henton et al. 2006). In spite of these measures Intermodal Transportation still remains as a challenge to the smooth operations of the port.

There is some evidence that California's global gateways, airports in particular, are not keeping pace with the growing demand for shipping services. Although these ports have seen a growth in the value of trade in the latter half of the 1990s, their share of the total trade in US reduced from 38 percent to 21 percent between 1995 and 2002(Haveman, Hummels 2004). The report by the Mercator Transport group shows that over half of this decline was due to shippers' preferences for other gateways.

Environmental factors

Increasing the traffic increases the pollution and finding cleaner and most efficient transportation is necessary. Rail transport is better than road transport in this aspect as it causes relatively less pollution and lower traffic problems, but it lacks flexibility of road transportation. Though the port of LA is developing strategies to control pollution like Clean Truck Program, etc, this still remains as a problem. Recent fees imposed on every container moving through the ports of LA/LB by the lawmakers in California, with the sayings "California children shouldn't breathe soot so people across the country can buy cheap televisions" show the severity of the problem.

Labor costs

Another important part of the overall cost of transportation is the labor costs. US have a comparatively higher labor costs. Labor costs arises not only in the operations in the port, but also the finishing operations which may be required for certain imported goods like petroleum, plastics, electronics, etc. Also the labor unions pose a great challenge to the port, the execution of clean truck program for example faced friction with the labor unions.

Destination Centers

The places of destination are the main consideration of supply chain logistics. The port of Los Angeles suffers the drawback of not so optimal distributor in terms of distances from the port to destination in different part of US. Much of the trade passing through California's global gateways either originates in or is destined for use in other states. In 2000, for example, California serviced \$297 billion in trade for other states.

CONCLUSION

The continuous increase of port congestion in the San Pedro Bay is pushing every day more importers to relocate the port of entry of their goods. The solutions for these problems include new development projects, and the mundane but effective approach of making more productive use of existing space and capabilities. Making the most of what they already have has allowed a number of ports to increase existing container capacity and to cut back the amount of time containers remain at dockside. Key to augmenting container-stacking density is more powerful loading equipment.

Ports near the Destination Centers can improve the efficiency of transportation; also the economy prevailing at these ports can be utilized. Also that, imports from Asia are expected to

continue to grow at a significant rate and since areas of extension are rare in the San Pedro Bay, a relocation decision seems to be inevitable.

The possible alternate ports can be identified according to the following requirements:

1. Sea transportation, taking into account the effects of the shipping lines available at the port.
2. Port and area infrastructure, which assess the facilities and services required.
3. Lead-time, from China (major importer for these ports) to terminal dispatch.
4. Labor costs etc.

Three different areas where the imports can enter the continent are the Northwest Coast, the secondary ports of California, and Mexico. In California, being fairly close to Los Angeles-Long Beach ports, Oakland and San Diego are natural alternatives to be considered. The switching costs may be smaller than relocating to the Northwest, and the move relatively easy. But, Mexican ports are increasingly being considered as real alternatives to Los Angeles port congestion. Still a relatively small port, Ensenada is expected to grow significantly, being “at the door” of the United States. The largest Mexican Pacific port, Manzanillo, although being further provides good equipment and services. Mexican ports have many potential advantages like, lower transportation costs, lower labor costs, efficient intermodal transportation, etc.

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**NEW PRODUCT CAPABILITIES AND ORGANIZATIONAL
PERFORMANCE: THE MODERATING ROLE OF
MANUFACTURING AND DISTRIBUTION CAPABILITIES**

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EXTENDED ABSTRACT

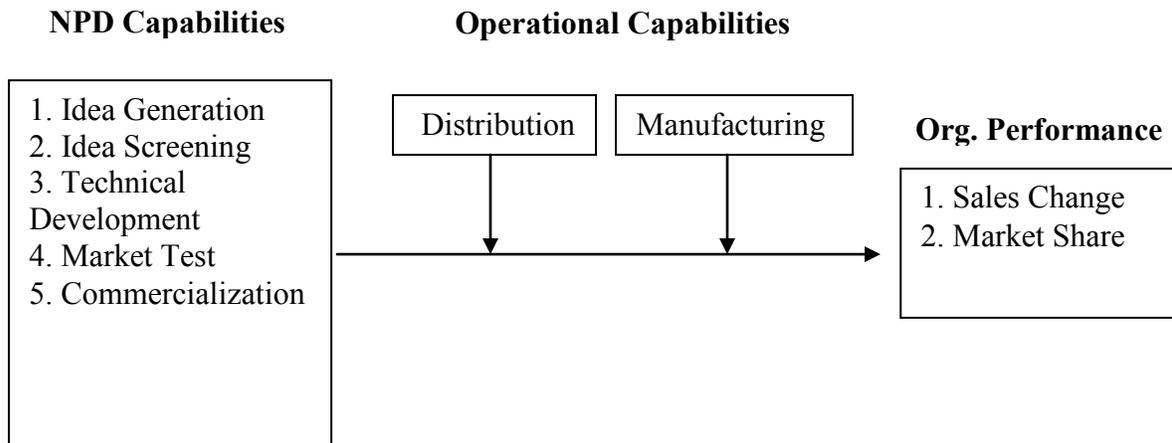
Innovation is essential for the development of new products and services. Successful new product development (NPD) projects depend on firm's resources, skills, and capabilities needed for the development of products (Clark and Wheelwright 1992; Day and Wensley 1988). Song and Perry (1997) indicate that NPD capabilities include: idea development and screening, business and market analysis, product testing, and product commercialization. In addition to the NPD capabilities, firms need some operational capabilities that support the development and commercialization of new products. Among these operational capabilities are the manufacturing and distribution capabilities. The goal of this paper is to investigate the role of operational capabilities (e.g. distribution and manufacturing) on the relationship between NPD capabilities and organizational performance.

Capabilities are viewed as complex bundles of skills and knowledge embedded in the organizational system (Helfat and Peteraf 2003). They are valuable sources of competitive advantage (Collis 1994). Many scholars have stated that capabilities such organizational learning and rapid product development are considered among the best sources of competitive advantages (Stalk, Evans, and Shulman 1992; Treacy and Wiersema 1993). The mechanism by which capabilities lead to higher organizational performance is described as leveraging firm's assets to achieve a sustainable competitive advantage (Krasnikov and Jayachandran 2008). In a similar manner Day (1994) refers to them as the "glue" that binds the resources of the firm together in order to maximize their contribution to firm's competitive advantage.

The resource based view (RBV) of the firm (Barney 1991) links firm resources to performance outcomes. According to RBV, firm resources (human, physical, and organizational) leads to a sustainable competitive advantage if the resource has four characteristics: rareness, valuable, imperfectly imitable, and the unavailability of strategic substitutes for that resource. According to this perspective, any skill or capability (NPD, distribution, or manufacturing) could be viewed as a resource that leads to a competitive advantage. In this paper we draw from the RBV perspective to state that the resources of the firm (NPD and Operational Capabilities) will create a competitive advantage that will lead to higher organizational performance (market share and sales change).

Our sample was drawn from a set of companies listed in the High-Technology Marketplace Directory. For the purpose of this research companies that do not engage in product development and commercialization were excluded from the mailing list developed by the researchers. After mailing the surveys to the rest of the companies we ended up with 84 filled

surveys from US companies ready for analysis. A project manager of one of the most recently developed products served as key informant. The sample covers many industries such as plastic or rubber, office furniture, agricultural equipment, food, construction equipment, garden equipment, measuring equipment, and electronic hardware. The number of full time employees participating in NPD teams for all projects ranged from 1 to 1300 with an average of 146 employees per project. The number of new products introduced during the last five years ranged from 0 to 1000 with an average of 25 products per company. The model below depicts the hypothesized relationships in the study



The results showed that NPD capabilities have a positive effect on market share, however, no effect was found for NPD capabilities on sales change. This result might be explained by the condition of the economy at the time of our study. In general, the economy was in a down turn and sales were declining in many markets. Thus, companies that maintain sales at previous levels gained market share relative to competitors. This rationale also supports the notion that NPD capabilities have a general positive effect on organizational performance.

As for the moderating effects, the results showed that a strong manufacturing capability enhance the relationship between NPD capabilities and organizational performance in terms of sales change and market share. This could be explained by a variety of reasons such as having additional manufacturing capacity, improved manufacturing technology, or generally any manufacturing capability that enhances product quality. However, despite the positive main effect of NPD capabilities on market share, the moderating effect of distribution capability on this relationship is not significant. The strong main effect may be overwhelming the effect of distribution. The t-values for some NPD capabilities (e.g. market test and commercialization) indicate that a larger sample size might result in significant results.

Surprisingly, despite the lack of significance of main effects on NPD capabilities on sales change, there is a strong moderating interaction effect of distribution and manufacturing capabilities on this relationship. Our results provide more insight to this finding by showing that the relationship between NPD capabilities and sales change becomes significant only in combination with distribution and manufacturing capabilities. In other words, firms that have

better distribution and manufacturing capabilities showed higher performance in terms of sales change.

One limitation of this research is the cross-sectional nature of the survey design. Generally, survey design research examines firms at a point in time rather than over a firm's evolution. Second, from a methodological perspective, due to the low response rate, the sample size is smaller than what is recommended for such research designs. Future research might replicate our study by examining it with a larger sample. Finally, the study is limited by the use of a single respondent and the fact that the analysis is based quite heavily on perceptual data. This was unavoidable because data collection is very complex task and due to the confidentiality assurance given to respondents.

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INTEGRATED STOCK REPLENISHMENT AND SHIPMENT CONSOLIDATION WITH SERVICE LEVEL CONSTRAINT

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ABSTRACT

This paper focuses on joint stock replenishment and shipment consolidation of a single item in a two-stage supply chain environment with a single distribution center and retailer. It is assumed that the retailer faces Poisson demand and adopts a continuous review inventory policy to replenish the inventory from the distribution center. The distribution center follows a periodic review inventory policy to replenish its inventory and dispatches consolidated shipments to the retailer in order to achieve economies of scale in transportation. Objectives of this research are to find near-optimal inventory control parameters and order consolidation time at a/the distribution center to minimize the total cost of the supply chain.

INTRODUCTION

A challenge facing many distribution centers (DCs) of consumer goods is the task of distributing their products to many small retailers in different locations. However, these challenges can be successfully resolved by synchronizing inventory and transportation decisions of the supplier in context. Thus, much of the focus gathered around integrated stock replenishment and shipment consolidation with the introduction of the continuous replenishment policy (CRP) and vendor managed inventory (VMI) during the 1980s in order to solve the above-mentioned problem. Wal-Mart, Movex, Home Depot and many apparel industries, just to name a few, have successfully implemented VMI. VMI allows the supplier to create purchase orders based on the information exchanged with the retailer/customer. Some of the benefits of VMI are reduced forecasting and purchasing activities, reduced stock-outs, reduced inventory, increased sales, and solid customer-vendor relationships (Dong and Zu 2006; Sari 2007).

During stock replenishment, shipment of orders and inventory holding incur a cost to both the DC and the retailer. The DC has to make the right quantities of shipments at the right time so that the customer demand is not lost at the retailer's end. If the DC fails to replenish the retailer's inventory on time, the retailer may try to reduce its lost sales by buying items/products from another supplier or distribution center. Naturally, a DC incurs a loss when a retailer buys goods from other suppliers; hence it is the onus of the DC to satisfy the demand of the retailer while keeping all the costs as low as possible. Completing this task successfully depends on the inventory policy of the retailer and DC as well as shipment quantities and shipment time from the DC. However, this is only possible when the DC has the flexibility of dispatching items after holding the demands for a small amount of time or a specific economical amount of demand has accumulated. Complementarily, the retailer should be willing to wait for shipments, and there should be trust between the retailer and DC. If a shipment consolidation program is managed

appropriately by carefully choosing an inventory policy and shipment strategy, the savings will be substantial (Cheung and Lee 2002; Qu et al. 1999). Shipment consolidation can be time-based, quantity-based or a hybrid of the two. A time-based consolidation involves dispatching periodic shipments depending on a pre-determined time frame, and a quantity-based consolidation involves sending shipments after a certain quantity of demand has accumulated. A mix of the two may be when whichever occurs the earliest is followed. In this paper, a time-based consolidation policy is considered.

This study examines the relative effect of various policies, including the inventory and transportation parameters on the performance of a single distribution center and retailer system. The objective is to identify the key areas that affect performance and derive a near-optimum policy. This is an important issue because most distribution centers and retailers have limited resources, and it is important that the available resources are utilized efficiently.

This paper is organized into six sections including the introduction. The second section gives an insight into the work carried out in the field of joint stock replenishment and shipment consolidation, section 3 discusses the problem characteristics, and section 4 explains the model formulation and solution algorithm. In section 5, the model application and results are explained, and section 6 provides future research directions and concluding remarks.

LITERATURE REVIEW

Abundant literature is available on various inventory and transportation policies. Although initially inventory and transportation research areas were investigated individually, researchers have realized that by considering these problems together, additional savings and improvements can be achieved (Siajadi et al. 2006). Bell et al. (1983) were among the first researchers to include both transportation and inventory policies together as they worked on a computerized routing and scheduling optimizer for an energy company.

The models reviewed in this section consider transportation and inventory as joint policy variables. Various methodologies have been used on the general joint transportation and inventory policies, among them integer programming, stochastic programming, and Markov-decision analysis. Regardless of the numerous methods proposed, optimal joint transportation-inventory policies are very difficult to find. Hence, heuristics are proposed in all these models. Viswanathan and Mathur (1997) examined a multi-product model that proposed a heuristic algorithm that generated stationary joint transportation-inventory policies for the cases with both capacitated and un-capacitated vehicles. In their M-product, N-retailer problem, they defined an item as a product at a specific retailer, so there were NM items in total. By determining the reorder interval and quantity for each item, the original problem turned into a single-product, MN-retailer problem. Axsater and Zhang (1999) considered a continuous review, two-level inventory system with N retailers facing Poisson demand. The authors assumed that the product had a low demand rate, lead times were constant, and the retailers ordered in batches. Due to the above assumptions, the results cannot be applied to all problems in general. Also, the model gives best results if transshipment between retailers is encouraged in case of stock-outs at retailers.

Gaur and Fisher (2004) examined a periodic-review model of a supermarket chain. The objective was to determine a weekly delivery schedule that specified the times when each store

should be replenished and the routes for the capacitated vehicles that visited these stores at a minimum transportation cost. The original problem was decomposed into a set-partitioning problem on the stores and a shortest-path problem for each set. They showed that the optimal policy had at most two deliveries per route and was a polynomial. Then the authors solved the problem using a generalized minimum weight-matching approach. Kleywegt et al. (2002) showed that if each subset had at most two retailers, then it could be solved in polynomial time by solving a maximum-weight perfect matching problem. They extended both the formulation and the approach to handle multiple deliveries per trip. In their solution methodology, the retailers were grouped into regions to form sub problems, which allowed them to decompose the problem into sub problems. Kleywegt et al. (2004) formulated with direct deliveries as a Markov-decision process and proposed a dynamic-programming approach to solve it.

Cetinkaya and Lee (2000) analyzed a single-product stochastic process where the demand was considered as independent and identically distributed (i.i.d.) across the retailers for an infinite time horizon with vendor following a (S, s) inventory policy. Axsater (2001) reviewed the formulation of Cetinkaya and Lee (2000) and showed that the results do not provide exact optimum solution for certain specific problems. Based on the shortcomings of Cetinkaya and Lee's (2000) work, Axsater (2001) proposed a new solution procedure. Cetinkaya et al. (2008) considered a vendor with random order arrivals of random sizes who had the flexibility to consolidate the shipments based on a predetermined quantity. They proposed an easy-to-compute numerical solution for this complex stochastic model.

Chen et al. (2005) considered two models for joint stock replenishment and shipment consolidation in the context of vendor-managed inventory. The authors specifically compared time-based and quantity-based shipment consolidation and proved that quantity-based consolidation can outperform time-based consolidation, but it is never the same vice-versa. Thangam and Uthayakumar (2008) looked at a similar problem with lost sales, and they provided an exact solution for the problem with Poisson demand and gamma-distributed lead times for a two-stage continuous review (Q, r) inventory policy.

Although a significant amount of research has gone into joint stock replenishment and shipment consolidation, to the best of our knowledge there is no literature that deals with optimization of a two-stage supply chain in this context. With this in mind, in this paper a two-stage supply chain model with a single distribution center and retailer is considered, and the model aims to find near-optimal inventory control parameters and shipment consolidation time by using the heuristic proposed in section 4.

PROBLEM CHARACTERISTICS

Before proceeding to the model formulation, a brief introduction to the problem characteristics is presented. Figure 1 represents the structure of the supply chain with a manufacturer, a distribution center and a retailer. The model also considers a single product.

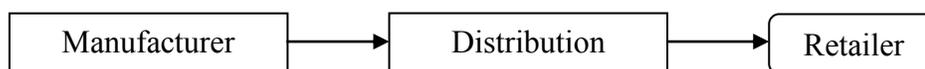


Figure 1 Supply Chain Structure

Demand variability at stores is probably the most important factor that can interact with other factors and policies. A high level of uncertain demand, for example, may increase the importance of a shorter lead time, which allows faster response to uncertain demand but at the same time increases the transportation cost considerably. The distribution center consolidates the shipments based on time elapsed and dispatches them periodically. The inventory decisions of the DC depend on the retailer inventory policy because of the shipment consolidation process. We assume that continuous and periodic review inventory policies are utilized at the retailer and DC respectively. Under a continuous review inventory policy, the inventory position (i.e., on-hand inventory plus outstanding orders minus backlogs) at each location is continually monitored. When the inventory position falls below the reorder point, R , an order of fixed quantity, Q , is placed. In comparison, under a periodic review inventory policy, the inventory position is checked at fixed intervals. At each review, an order size equal to a target inventory minus the current inventory position is ordered. In this particular article the DC follows a periodic review (S, s) and the retailer follow a continuous review (Q, R).

In this model the following cost components are considered for the DC: setup (ordering cost), inventory holding, backlog, and shipment dispatching costs. The lead time between the DC and the manufacturer is considered negligible. Hence, there will not be any backlog cost for the DC (assuming s is not a negative number). On the other hand, the retailer incurs setup, inventory holding, backorder, and transportation costs. The retailer does not have lost sales because it always has the option of buying the item from another supplier.

PROBLEM FORMULATION AND SOLUTION APPROACH

The following parameters are accounted for in the model for the retailer locations:

- K_r Setup cost for the retailer
- Q_r Economic order quantity of the retailer
- D_r Expected demand for the retailer
- λ Demand rate at the retailer
- B_v Backorder cost per unit
- B_f Backorder cost per unit per unit time

The following parameters are defined for the DC:

- K_d Setup cost for the DC
- L Lost sales per unit for the DC

Common parameters for both DC and retailer are given below:

- T_d Truck capacity
- C Fixed cost of the truck
- h_r Inventory holding cost of the retailer
- h_d Inventory holding cost of the DC
- t Time period

Since a single-product replenishment model with the assumption that there is no discount rate for different retailers is considered, the unit cost of the product will not affect the inventory control parameters and shipment consolidation time.

Formulation and Algorithm:

Step 1: Calculate the mean demand for the retailer.

Step 2: Obtain all input variables that are required for calculating the total cost of the supply chain network.

Step 3: Calculate the economic order quantity for the retailer with a service constraint of β . The value of Q should be formulated so that the cost function involved in the lost sales is minimized, so calculate the value of Q by taking the first derivative of the cost function and assigning it to zero.

The value of Q for the retailer is iterated for a large number of data points of expected lost sales to find the optimum order quantity Q^* .

- (i) Initialize $n_r = 0$.
- (ii) Calculate the expected demand using the equation:

$$D_r = \lambda t.$$

- (iii) $Q = \sqrt{\frac{2D_r(K_r + Ln_r)}{h_r}}$.

- (iv) $n_r = F(R)$ where $F(R) = 1 - \beta Q$. Here $F(R)$ is the fill rate.

- (v) Calculate the reorder point R by using the equation:

$$R = -\{\log(Qh_r/LD_r)\}L.$$

- (vi) Iterate this procedure from *step (ii) to (v)* to find the optimum value of Q .

Step 4: Calculate the average economic order quantity for the retailer in order to calculate the cost involved for the DC. The lost sales value is considered in the previous iteration, so the cost function is given by

$$C_d = K_d + \frac{Q_r C}{T_d} + \frac{h_d Q_r}{2}$$

Step 5: Calculate the number of backorders at the retailer using the formulation below. This formulation is obtained by using the cost function of the retailer and finding the stationary points as in *step 4*.

$$S = -\frac{B_v D_r}{B_f + h_r} + \sqrt{\frac{2h_r K_r D_r \left(1 + \frac{h_r}{B_f}\right) - \left(\frac{h_r B_v^2 D_r}{B_f}\right)}{B_f + h_r}}$$

Step 6: Calculate the cost of the retailer by taking the backorder cost into consideration. The formulation is given by

$$C_r = \frac{K_r D_r}{Q} + \frac{h_r(Q - S^2)}{2Q} + \frac{B_f S^2}{2Q} + \frac{B_v D_r S}{Q}$$

Step 7: The total cost in the supply chain network can be calculated by $Total\ Cost = C_r + C_d$.

Step 8: Knowing the order quantity, Q^* , the shipment consolidation time can be found as

$$T^* = Q^*/D_r.$$

MODEL APPLICATION AND RESULTS

The application of the model is demonstrated by computation of (Q^*, T^*) values. The model is programmed using MATLAB software. The above described heuristic is utilized to compute (Q^*, T^*) . We create the base case given below and then generate 25 experiments by changing the following parameters: B_v , and $L \in \{1, 2, 3, 4, 5\}$; K_r and $C \in \{1, 1.1, 1.2, 1.3, 1.4\}$.

λ	β	K_r	h_r	T_d	C	K_d	h_d	L	l_r	B_v	B_f
0.1	0.9	150	4	20	240	175	2	10	2	20	10

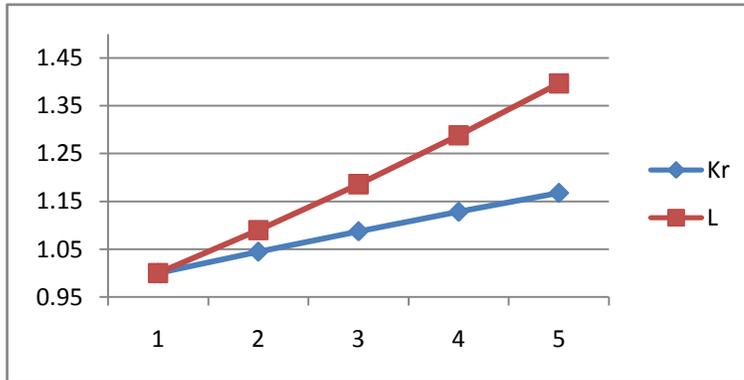


Figure 2. Changes in T^* with Respect to Parameters.

To draw Figures 2 and 3, we normalized T^* and total cost by using the results from the base case. Figure 2 shows the effect of the setup cost of the retailer, K_r , and cost of lost sale, L , on T^* values. Based on results, it seems there is a positive correlation between K_r , L , and T^* . Thus, as K_r and L increase consolidation time, T^* , also increases. We expect to gain more benefits by consolidating the shipments for a longer time period to decrease K_r per unit time in the long run. Although the relationship between K_r and T^* is obvious, the relationship between L and T^* is not clear. Under normal circumstances, we would expect that as lost sale cost, L , increases, DC would consolidate for a shorter period of time to avoid lost sales. We also observed that as L increases, Q^* increases as well. Higher Q^* may be the reason for longer consolidation time, T^* . Further analysis is needed to identify the reasons for this relationship. Though it is not given in Figure 2, experiment results show that there is no relationship between T^* and trucking cost, C , and backorder cost, B_v , parameters.

We present the relationship between the parameters and the total cost in Figure 3. It is clear that as we increase the parameters, the total cost increases as well. The results are well aligned with the expectations since we would expect to have higher total cost value as the cost-related parameters increase. Figure 3 also shows that setup cost is affecting the total cost more than the other two cost components considering the selected experiment set. Additional experiments are needed to generalize the results.

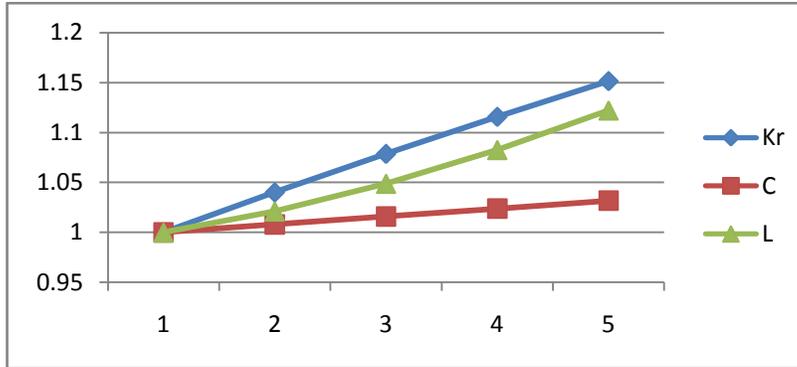


Figure 3. Changes in Total Cost with Respect to Parameters.

We also observed that Q^* follows a similar trend to T^* when K_r , C , B_v , and L are modified. One reason for this similar trend could be the relationship between setup cost and shipment cost. For example, if K_r is increased, the consolidation time gets larger to reduce the amount of replenishments (cost of truck dispatching); in the same way, Q^* increases as well to reduce the amount of setup costs in the system. Both of these will help to reduce total cost of the system.

CONCLUSION

In this paper a new model dealing with a two-stage supply chain stock replenishment and shipment consolidation problem is demonstrated. The results show that by carefully determining the inventory control parameters and shipment consolidation time, the effect of increasing cost parameters can be reduced. Although different sets of parameters were generated to test different conditions, the numerical study shows that more experimental analysis is needed in order to draw more general conclusions.

There are many possible future research directions related to this study. First of all, in this study we considered a single retailer case; however, in reality DCs will dispatch a vehicle that will visit more than one customer during its trip. Another extension would be considering multiple products rather than a single product. The fundamental difficulty posed by multiple products involves allocation of vehicle capacity to different products. In addition, multiple products will also increase the problem size, which may be difficult to solve.

Another important future research topic would be development of upper and lower bounds to measure the quality of the solutions. In this research, because of the lack of bounds, we were not able to comment on the results. By having bounds, it would be easy to evaluate how good the proposed heuristics are performing.

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RFID APPLICATIONS – STRATEGIES FOR APPLIED RESEARCH

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EXTENDED ABSTRACT

Due to the benefits that radio frequency identification (RFID) presents, the popularity with which it is growing is phenomenal. There is an increasing need to investigate the possibility of using of RFID within smaller scaled operational businesses. Literature states that RFID is poised to become one of the “sensory organs” of our computing networks and it is important that there be clarity in this emerging technology is a must (Juels, 2007). To fully comprehend its power it is necessary to apply the technology in an investigative setting in order to assess its possibilities in a variety of environments from information/inventory authentication to ensuring compliance with laws and regulations.

The Industrial Technology Department at Purdue University has the opportunity to be a leader in investigating the functionality of RFID in a variety of facets. As in an article published by a leading journal publication dealing specifically with RFID technology, Mark Roberti stated, “There is simply an enormous amount of applied research that needs to be done to move RFID forward...” (Roberti, 2006). This clear evidence of the need for research to be carried out, gives credence to the work that could be done at Purdue University.

APPLIED RESEARCH

RFID like many emerging technologies lends itself to multiple interpretations, but its overall benefits are easily understood from ensuring the highest security and privacy settings, improving inventory management methods to better asset tracking. Tuttle (1997) describes RFID as a technology that uses electromagnetic energy as an avenue for transmitting information. Sullivan (2005) states that the technology is a mean to acquiring more comprehensive, accurate, and time-sensitive data particularly when the characteristics to be measured include location changes, duration, temperature, pressure and humidity changes, and the like with some limitations

At a basic level, the technology can be thought of as being composed of readers and tags. The tags can further be broken down into two categories: passive and active. Passive tags are tags without batteries, with power being derived from a radio frequency energy transmitted from a reader. Passive tags can be read from and written to through two methods of communication: “inductive coupling” as well as backscatter. Passive tags have a varying reading range from inches to several feet determined in part by frequency. Passive tags used at warehouse docking doors function at 900 MHz and have a reading distance of approximately 20 feet (Pappu & Johnson, 2008). Battery powered tags on the other hand are known as active tags that are usually larger, longer range capability, and are able to be read from and written to, similar to passive

tags. Think of passive tags as being “excited” or transmit energy when in the range of a reader while active tags continually send out signals and wait for the appropriate reader to pick up the signal.

Both of terms “active” and “passive” can also refer to the type of transmitters. Active transmitters send data back to the reader with radio power generated from the tag (Tuttle, 1997). The passive transmitter utilizes modulated backscatter (MBS) transmissions to reflect energy. MBS is functionally at its best when it is in a lane application where you don’t wake up (activate) any tags beyond a certain distance where there are few obstructions in the energy path (Tuttle). An active transmitter can be used without significant obstructions because of they do not depend on energy from the reader.

WHY PURDUE

RFID is not unlike any other technology that is making its way to the market. For successful integration into the supply chain, it is important that all aspects of manufacturing, testing, and use of the technology are implemented and kept abreast. Engineering the aspects of the technology to fit the customer demands is a valuable aspect of constructing this technology. The actual physical construction of the technology will depend heavily on qualified technologists. Finally in order to make it to market it will take an operational/managerial skill set.

Purdue University, West Lafayette, IN is an ideal location to start and sustain applicable research in the field of RFID. Technology, management, and engineering are components at Purdue University that could advance the research in RFID technology (**Figure 1**). US News & World Report ranked Purdue University’s Krannert School of Business 3rd for seven straight years. The same publication ranks Purdue’s Engineering program 9th. Purdue University has proven to contain the right combination of intellectual strengths to carry out research pertaining to RFID. Small solutions initially provide sound credibility. Pooling the strengths of the departments as well as industry connections is a primary reason why Purdue is a prime location to conduct research of this manner. It is important that Purdue University rely on State agencies such as Technical Assistance Program (TAP) for structural and financial support. TAP is a program that provides businesses that reside in Indiana technical assistance for a discounted charge. The assistance comes from Purdue University departmental experts in a particular area. TAP has consistently been contacted by businesses seeking information surrounding RFID from feasibility to signal receptivity.

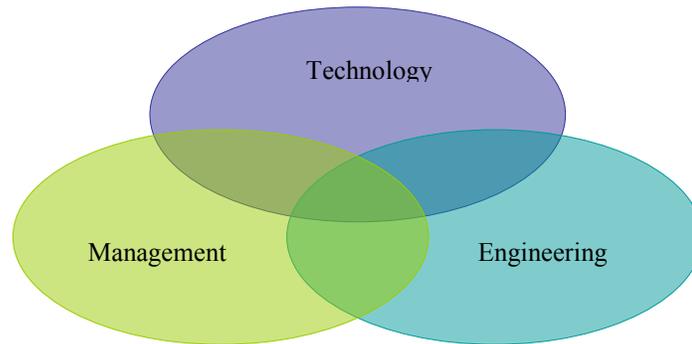


Figure 1: Three Strengths of Purdue University

PROBLEM STATEMENT

Until now, the Industrial Technology Department at Purdue University has not conducted investigations surrounding the RFID technology housed within the Supply Chain Management Lab. In order to properly investigate the possibilities of this technology, experiments and trials will have to be undertaken. There are many ways in which a company can invest in RFID and reap the benefits, but identifying the best avenue to harvest these benefits can create a dilemma. The problem is determining how Purdue University, West Lafayette, IN campus can leverage areas of expertise to create intellectual property.

SUMMARY

Many companies lack the knowledge of how helpful RFID can be in functions such as operations management, inventory management, as well as asset tracking. The benefits of asset visibility alone are enough for companies to at least begin to probe potential applications of RFIID within their organizations. It is for these reasons, that the research possibilities that are presented to companies are inclusive in nature of all facets of their business operations. The purpose of such investigations should be to explore, reveal, and provide the benefits that RFID can present, which can be achieved by leveraging the exceptional skill sets and knowledge base available at Purdue University.

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RFID UTILIZATION AND INFORMATION SHARING IMPACT ON SUPPLY CHAIN PERFORMANCE

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EXTENDED ABSTRACT

Previous research describes ERP systems as critical to strategic fit within organizations (Morton and Hu, 2008). Data collection and automatic tracking systems such as Radio Frequency Identification (RFID), when utilized with ERP systems, facilitate information sharing throughout the supply chain which has the potential to enhanced supply chain performance. Generally, we propose that RFID technology utilization supports supply chain information sharing (SCIS) which in turn improves the overall performance of the entire supply chain.

The question becomes, does the seamless, real-time information (SCIS) emanating from RFID technology utilization improve supply chain performance as expected? We theorize a SCIS performance model that incorporates: 1) RFID utilization as related to SCIS and supply chain performance and 2) SCIS as related to supply chain performance. This model allows for the assessment of both the direct and indirect impact (through SCIS) of RFID technology utilization on supply chain performance (Figure 1).

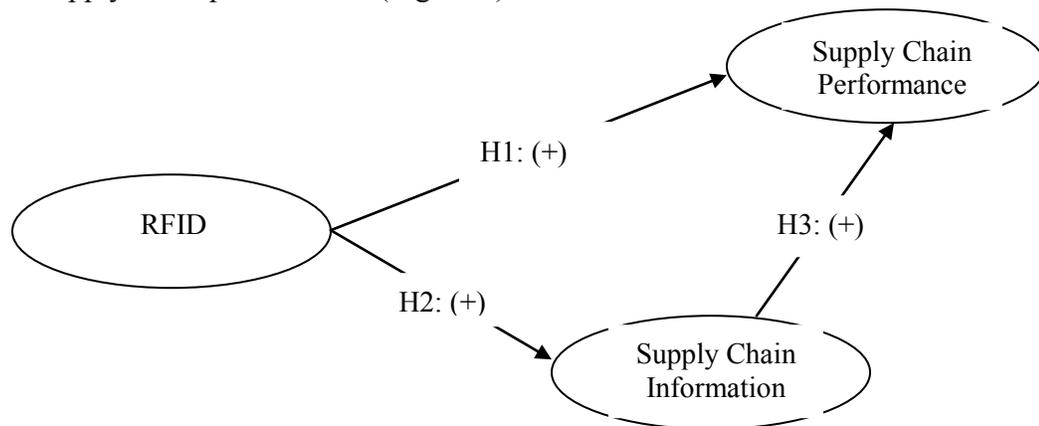


Figure 1
RFID-SCIS Performance Model

Effective supply chain management has been identified as a key determinant of an organization's competitive advantage (White, Johnson, and Wilson, 2008; Dos Santos and Smith, 2008). Highly interdependent organizations benefit substantially from the integration that SCIS allows (Gattiker and Goodhue, 2005). According to Kent and Mentzer (2003) the adoption of technologies that enhance information sharing can positively influence the relationships between supply chain members. SCIS is enhanced by the adoption of RFID technologies and should provide a method of balancing and improving supply chain performance.

RFID technology utilization reflects the degree to which manufacturers have adopted RFID technology to track all types of inventory through organizational and supply chain processes (Green, Whitten and Inman 2008). According to White, Johnson and Wilson (2008) companies integrating RFID into ERP systems are likely to experience improved supply chain performance.

SCIS requires that organizations within supply chains mutually and openly share information with both suppliers and customers (Mentzer, DeWitt, Keebler, Soonhong, Nix, Smith, and Zacharia, 2001; Vokurka and Lummus, 2000; Morash and Clinton, 1997). RFID facilitates the information sharing infrastructure's ability to capture real-time information across the entire supply chain thus allowing for improved supply chain performance.

The adoption of technologies, such as information sharing enhanced by RFID utilization, enhances supply chain members' abilities to respond to changes in the environment (Kincaide, Vass, and Cassill, 2001). Chopra and Meindl (2004) argue that supply chain performance is optimized only when an 'inter-organizational, inter-functional' strategic approach is adopted by all partners operating within the supply chain.

This study indicates that RFID technology utilization does not directly impact supply chain performance. RFID technology utilization impacts supply chain information sharing which impacts supply chain performance. RFID technology utilization, therefore, indirectly impacts supply chain performance through supply chain information sharing.

Information sharing enhanced by RFID utilization allows for better response to changes in the needs of the ultimate customers of the supply chain. To affect such responsiveness, timely information must be made available to all supply chain partners that support the linking and alignment of the manufacturing, purchasing, marketing, and logistics processes throughout the supply chain.

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THE MODERATING INFLUENCE OF CULTURE VALUES ON THE RELATIONSHIP BETWEEN DRESS AND CUSTOMER AFFECT

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ABSTRACT

This study investigates how service-contact-personnel dress influences customer feelings of being dominated. A lab experiment with a full factorial design is utilized with the independent variables of dress and involvement, and the dependent variables, customer feelings of being dominated and purchase intent. Results show that appropriately dressed service-contact-personnel resulted in higher customer feelings of being dominated and greater intent to purchase than do inappropriately dressed service-contact-personnel. In addition, results supported a mediating effect of customer feelings of being dominated on the relationship between dress and purchase intent. Finally, implications of the findings are discussed.

INTRODUCTION

The influence and importance of the appropriateness of service-contact-personnel dress (hereafter refer to as dress) have been examined and discussed from different perspectives and within various contexts. For example, while Shao, Baker, and Wagner (2004) examined the influence of dress from a cognitive perspective (i.e., cognition in the form of customer expectations of service quality in general), Shao and Ramser (2004) studied the effects of dress from an overall attitude perspective (i.e., attitude in the form of affect, behavior, and cognition). More recently and following the cognitive perspective, Shao, Ramser, and Wilson (2006) looked into the effects of dress on dimensions (i.e., reliability, responsiveness, assurance, and empathy) of customer expectations of service quality. In terms of the context, dress has been studied in the areas of accounting (e.g., Khan, Chawla, & Devine 1996-1997), advertising (e.g., O'Neal & Lapitsky 1991), education (e.g., Behling 1994), hospitals (e.g., Marino et al. 1991), personal selling (e.g., Baker, Grewal, & Parasuraman 1994), and retailing (e.g., Michael Baker, Levy, Grewal 1992).

However, there is little research (e.g., Petrovich, Bennett, & Jackson 1968; Hubble & Gelso 1978; Gjerdingen, Simpson, & Titus 1987; Marino et al. 1991) that adopts the affective perspective to the examination of dress (Soloman 1998). While the previously cited studies indicate general support for the effects of dress, they did not examine the effects of dress in a commercial context. Furthermore, there is no research investigating dress effects from the view point of cultural values. Thus, the study reported here empirically examines the influence of dress from an affective perspective and within the context of differences in cultural values.

CONCEPTUAL MODEL AND HYPOTHESES

This study is grounded in the Mehrabian and Russell model (1974), which postulates that physical and/or social stimuli in an environment directly influence an individual's affective states. All affective states can be represented by three dimensions. The pleasure-displeasure dimension concerns the degree to which one feels happy, contented, pleased, or satisfied in the situation. The dimension of arousal-nonarousal relates to the degree to which one feels stimulated, excited, frenzied, or active in the situation. The dominance-submissiveness dimension involves the degree to which one feels influential in, in control of, unrestricted from, or free to act in, the situation. Even though there have been a number of empirical studies applying the Mehrabian and Russell model in investigating the environmental elements, these studies either utilized the dimensions of pleasure and arousal only (e.g., Baker, Levy, & Grewal 1992) or failed to support the significance of the dominance dimension (e.g., Bellizzi & Hite 1992), except (Yalch & Spangenberg 1988). This study, therefore, employed only the dimension of dominance-submissiveness. It is proposed that a customer's feelings of being dominated (hereafter refer to as being dominated) will be influenced by dress. In addition, cultural value (i.e., power distance) is proposed to moderate the relationships between dress and being dominated.

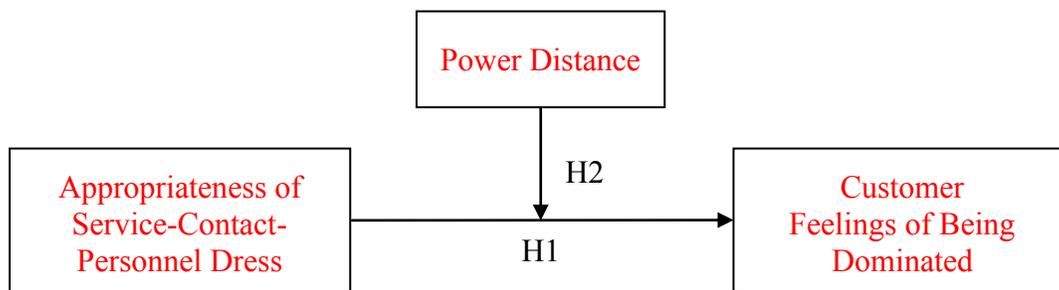


Figure 1. The Conceptual Model

Dress, as one of the social stimuli in an environment, is defined as the total arrangement of material supplements to the body and detectable modifications of the body (Roach-Higgins & Eicher 1992). Appropriate dress denotes “displaying particular modes of dress within the professional context” (Fiore & DeLong 1990, p. 219). In other words, whether employee dress is appropriate or inappropriate depends entirely upon the type of work to be performed. Customer affect can be defined as “the emotional states an individual experiences within the environment” (Donovan & Rossiter 1982, p. 34). The relationship between environmental elements and customer affective states has been established by marketing scholars. Conceptually, for example, Gardner (1985) proposed that interactions with service providers influence consumers’ affective states. Likewise, Bitner’s servicescape (1992) model, which is similar to the Mehrabian-Russell model, suggested that customers’ emotional responses (e.g., mood) can be elicited by “the place.”

Effect of Dress

Intense, ordered, and powerful stimuli are associated with a submissive feeling within the person encountering them (Mehrabian & Russell 1974). Furthermore, Rafaeli (1993) suggested that style of dress can elicit attributions of dominance, power, and status. Shao and Ramser (2004) found support for the hypothesis that appropriately dressed service-contact-personnel positively influenced customer affect in general. People dressed appropriately have repeatedly been noted as more powerful and of higher status than people who are inappropriately dressed (e.g., Bickman 1974). Doctors, nurses, and medical students utilize the dress of their profession to reinforce their power and authority (Burgoon & Saine 1978). Though highly dominant, however, the traditional medical profession attire has been deemed appropriate for physicians by patients (e.g., Gjerdingen, Simpson & Titus 1987). All in all, dress functions to establish the wearer's right to a given status and authority without his or her need to prove himself or herself. It is likely that, when dressed appropriately for a service, service-contact-personnel can create a feeling of dominance over customers. Thus, it is hypothesized that:

H1: Appropriate dress for service-contact-personnel will result in greater customer feelings-of-being-dominated than will inappropriate dress.

Moderating Effect of Power Distance

Social perception theory, which examines the process through which an individual "seeks to know and understand other persons" (Baron & Byrne 1994, p. 80), suggests that perceiver characteristics may moderate the effects of dress on being dominated. Perceiver characteristics refer to the aspects of the perceiver which are likely to affect how the social world is perceived, such as physical traits or personal traits. A perceiver characteristic that is likely to influence the effect of dress is the difference of cultural value.

One of the most relevant studies of cultural values has been conducted by Hofstede (1983). Hofstede suggested that differences in cultural values can be explained by four dimensions: individualism vs. collectivism, uncertainty avoidance, masculinity, and power distance. Individualism describes the degree to which human beings in a society prefer to act as individuals rather than as members of a social group. In highly individualistic societies, people are concerned about their personal interests and the well-being of the members of their immediate family and friends, and want to be perceived as independent and unique persons separate from others. Personal goals and achievement, freedom of choice and decision-making are, therefore, important characteristics of individualistic societies. Contrarily, collectivistic societies emphasize the needs and interests of the group rather than the individual. All human beings are perceived as equal and have to conform to the norms of the group. In collectivistic societies, people see themselves as a part of a group and it is, thus, very important for them to build relationships.

Uncertainty avoidance is the extent to which people feel uncomfortable in the presence of vagueness and ambiguity. Low uncertainty avoidance cultures accept the fact that the future is uncertain and take every day as it comes. They are more willing to take risks and try new things. High uncertainty avoidance cultures try to cover themselves against unwanted changes in the

future and would rather rely on established behaviors, rules, and procedures than experiment with new ideas. Masculinity refers to the importance a culture places on perceived masculine traits such as recognition, achievement, assertiveness, challenge, and the acquisition of wealth in contrast to perceived feminine traits such as nurturance, care-giving and co-operation. Power distance is the “extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally” (Hofstede 2001, p.98). In low power distance cultures, equality is desired and status symbols are avoided. Contrarily, in high power distance cultures, the powerful are entitled to privileges and try to emphasize their status through visible signs.

Hofstede assigned the indices of cultural dimensions to countries and assumed that nationality is a proxy of culture. This assumption is supported by Dawar and Parker (1994), who argue that nationality reflects culture, because all members of a nation tend to share similar language, history, and religion. Therefore, it is common to study countries instead of cultural regions beyond national borders when conducting cultural studies (Pothukuchi et al. 2002; Hofstede et al. 2002; Thomas & Au 2002; Grinblatt & Keloharju 2001; Li et al. 2001; Gibson & Zellmer-Bruhn 2001). Though Hofstede emphasized that the indices are valid on a group basis only, Brockner et al. (2001) indicated that power distance is significant on the group level as well as on the individual level.

Though power distance has been examined in various marketing areas, such as advertising (e.g., Albers-Miller & Gelb 1996; Jung & Kellaris 2006; Tai & Chan 2001), brand management (e.g., Roth 1995), internal marketing (e.g., Blodgett et al. 2001), new product development (e.g., Singh 2006; Yenyurt & Townsend 2003; Dwyer, Mesak, & Hsu 2005), and relationship marketing (e.g., Hewett, Money, & Sharma 2006; Ndubisi 2004), no direct empirical evidence regarding the effect of dress on being dominated has been found. Therefore, only basic exploratory hypotheses are offered.

People who grew up in a high power distance culture are highly aware of the difference between people of high status and people of low status. Appropriately dressed people will be perceived as of high status, whereas inappropriately dressed people will be perceived as of low status. Depending on the perceived status of the service-contact-personnel, the customer will find himself/herself in a more or less powerful position. Professional services are characterized by a provider-client asymmetry and naturally put the customer in a dependent position (Shaffer & O’Hara 1995). Customers with a high power distance background will experience this situation as more intense because of high awareness of status differences. Therefore, these customers are assumed to feel more dominated than customers with low power distance backgrounds. The study of Swanson, Frankel, and Sagan (2005) indicates that people experience different feelings in the same situation; or people may experience the same feelings, but they experience them with different intensities depending on their nationality and cultural background. Thus, it is hypothesized that:

H2A: Customers from high power distance cultures will experience greater feelings-of-being-dominated than those from low power distance cultures, if the dress of service-contact-personnel is appropriate.

H2B: Customers from high power distance cultures will experience less feelings-of-being-dominated than those from low power distance cultures, if the dress of service-contact-personnel is inappropriate.

RESEARCH METHODOLOGY

This research utilizes the cognitive psychological perspective to studying cross-cultural differences. According to Malhotra, Agarwal, and Peterson (1996), the perspective is appropriate because this study is dealing with the issue of “understanding basic processes of” how dress influences customer emotion (i.e. feelings-of-being-dominated) (p. 12). In addition, this study investigates the research questions from an etic perspective which examines the influences of dress as a “phenomenon from a position outside the system” (Malhotra, Agarwal, & Peterson 1996, p. 12).

The study was a 2 (appropriate/inappropriate dress) x 2 (high/low power distance) between-subjects, full factorial design. Dress was manipulated by presenting colored photographs showing models (service-contact-personnel) in either appropriate (i.e., in the form of business professional dress) or inappropriate dress (in the form of very casual sports attire). It was manipulated at two extreme values, with the intention being to create a strong enough stimulus (Kerlinger 1986). No manipulation was needed for power distance. Nevertheless, about half of the subjects in the experiment were from a high power distance culture (i.e. Mexico), and the other half were from a low power distance culture (i.e. the U.S.). The context for this study was banking, because it allowed for the appropriate manipulation of dress and was not considered extreme with regard to dimensions used in service classification schemes (e.g., Chase 1978).

Customer feelings-of-being-dominated were measured by the dominance section of the Mehrabian and Russel (1974) Measures of Emotional State scale (PAD Scales). The scales have been used frequently in research investigating affective reactions to environmental elements (e.g., Baker, Levy, & Grewal 1992; Donovan & Rossiter 1982). The mean of responses was used as the participant’s affective state of being dominated.

Furthermore, back-translation procedures (Malhotra, Agarwal, & Peterson 1996) were utilized for all materials in the experimental booklet to ensure the equivalence of translation. The experimental booklet was first translated from English to Spanish by a bilingual speaker whose native language is Spanish. The translated experimental booklet, then, was re-translated back to English from Spanish by another bilingual speaker whose native language is English.

ANALYSIS AND RESULT

The Sample

A total of 189 students participated in the study. Almost half of them (92 students or 48.7%) were from a university located in Mexico and 97 (51.3%) students were from a university located in the United States. Both genders were distributed almost equally with 96

(50.8%) male and 93 (49.2%) female participants. The age ranged from 18 to 44 years with an average of 22.87. Thirty-six (19.0%) students were not employed, 118 (62.4%) were employed half-time, and 35 (18.5%) worked full-time. Of the 189 students, 96 were randomly assigned to the appropriate dress condition and the remaining 93 to the inappropriate dress condition. Based on the research design, four individual treatment options resulted by combining the following conditions: appropriate versus inappropriate dress and high versus low power distance. Each of the four individual treatment options had individual samples that ranged from 44 to 49.

Manipulation Check

The independent variable service-contact-personnel dress has been manipulated by showing participants two photographs of the same situation with the only difference being whether the investment banker is dressed appropriately or inappropriately. Participants were asked to answer two questions about the investment banker's dress. The first question was the 7-item professional dress assessment instrument (Roach 1997). The second question was, "In your opinion, the investment banker dresses _____ for her job," and was answered on a 7-point scale between the given responses "Very unsuitably" or "Very suitably". The number 1 was assigned to subject's response "Very unsuitably" and the number 7 was assigned to "Very suitably". One-way ANOVA supports that the dress manipulation was successful. Subjects in the inappropriate-dress condition show a mean of 2.39, while subjects in the appropriate-dress condition show a mean of 6.24. The two means are significantly different ($F_{1, 188} = 837.27, p < .0001$) (Table 1). Cronbach's Alpha reliability coefficient indicated a very high reliability ($\alpha = .968$).

The difference between cultures in terms of power distance was checked using Hofstede's Value Survey Module Questionnaire (Hofstede et. al 2002). Participants were asked to express their agreement or disagreement with the following statements: (1) I have a good working relationship with my direct superior, (2) I am often consulted by my direct superior in his/her decisions, (3) Subordinates are often afraid to express disagreement with their superiors, (4) One can be a good manager without having precise answers to most questions that subordinates may raise about their work, and (5) A company's or organization's rules should not be broken, not even when the employee thinks it's in the organization's best interest.

Table 1. Manipulation Checks

	n	Mean	F	p
Inappropriate Dress	93	2.39	837.27	.000
Appropriate Dress	96	6.24		
Low Power Distance	97	4.36	66.99	.000
High Power Distance	92	5.50		

Cronbach's Alpha reliability coefficient indicated that the reliability of these scales were high ($\alpha = 0.844$). A one-way ANOVA showed that Mexican subjects had a mean response of 4.36 indicating high power distance, whereas U.S. subjects had a mean response of 5.50 indicating low power distance. The two means differed significantly ($F_{1, 188} = 66.99, p < .0001$) (Table 1).

Table 2. Means

	Low Power Distance	High Power Distance
Inappropriate dress	$\bar{X} = 3.63$ n = 49	$\bar{X} = 3.93$ n = 48
Appropriate Dress	$\bar{X} = 3.42$ n = 44	$\bar{X} = 4.16$ n = 48

Results

An ANOVA was run to test Hypotheses 1 and 2. The results (Table 3) indicated a main effect of dress on feelings-of-being-dominated ($F_{1, 185} = 22.42, p < .001$). In the inappropriate-dress condition the mean response was 3.53; in the appropriate-dress condition the mean response was 4.04. Thus, a significant difference in feelings-of-being-dominated due to dress could be found and Hypothesis 1 was confirmed. Customer feelings-of-being-dominated are stronger in the appropriate-dress condition than in the inappropriate-dress condition.

The significant interaction effect of Dress x Power Distance support the predicted moderating influences of power distance on the relationships between dress and customer feelings-of-being-dominated (H2A and H2B). As predicted by H2A, the influence of the service-contact-personnel dress on customers feelings-of-being-dominated was significantly stronger ($F_{1,185} = 4.155, p < .05$) within high power distance culture ($\bar{X}_{Appropriate} = 4.16, \bar{X}_{Inappropriate} = 3.42$) than within low power distance culture ($\bar{X}_{Appropriate} = 3.93, \bar{X}_{Inappropriate} = 3.63$).

Table 3. ANOVA for Customer Feelings of Being Dominated

Source	Customer Feelings of Being Dominated		
	<i>d.f.</i>	<i>F</i>	<i>P</i>
Intercept	1	4801.514	.000
Dress	1	22.418	.000
Power Distance	1	.004	.952
Dress*Power Distance	1	4,155	.043
Corrected Model	188	8.705	

DISCUSSION

Service-contact-personnel dress has been proposed conceptually and tested empirically to be a critical component in consumers' affective responses in general to different businesses (e.g., Shao & Ramser 2004). This study, however, provides the first empirical evidence supporting the importance of appropriateness of service employee dress on customer feelings of being dominated only. It was found that appropriately dressed service-contact-personnel lead to higher customer feelings of being dominated than do inappropriately dressed service-contact-personnel. Further, this research identified an important moderator to the dress/being dominated relationship, demonstrating that the influence of dress differed depending on the perceiver characteristics. The effect of service-contact-personnel dress was stronger for people with high power distance than for people with low power distance.

The results of this study emphasize the importance of creating an image of authority, expertise, and power for service contact employees by providing them with appropriate dress. With the image of authority, expertise, and power, service contact employees can manage their customers effectively and efficiently. In addition, it is critical that service managers recognize the level of power distance in the country in which their business is operating, because the influence of dress varied with the level of power distance.

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MEXICAN STUDENTS' ATTITUDES TOWARD PERSONAL SELLING: AN EXPLORATORY INVESTIGATION

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ABSTRACT

The purpose of this exploratory study was to measure Mexican students' attitudes toward personal selling as a career. A survey developed by Kavas (2003) was used in this study at a large Mexican university. Results evidenced attitudinal differences toward personal selling, stemming from gender and having a business major. Significant differences toward preference for a selling job were observed based on students' level, having a business major, and having a family member in the sales profession. Limitations and directions for future research are also discussed.

INTRODUCTION

Mexico has "a free market economy in the trillion dollar class," one of the largest in the world, with a domestic product ranked twelfth globally, growing at a real annual rate of 3.7 per cent. (CIA, The World Factbook 2007). Membership of the North America Free Trade Agreement (NAFTA) has fueled Mexico's export orientation, to make it a major middle-income nation with an advanced economy. Among Latin American countries, Mexico stands out, with the highest per capita income, the highest purchasing power parity of its currency, and the sole member of the Organization for Economic Development (OECD). A recent study projected that by 2050, Mexico will be a global economic leader, along with China, Japan, U.S., Brazil, and India. (Economy Watch 2007). This growth would call for a substantial increase in the Mexican population involved generally with promoting products and services, and particularly with personal selling.

The sales field offers an entry to the workforce for many students in the U.S. As a result, much research has been directed toward evaluating the perceptions of personal selling as a career among students. Although personal selling is associated with attractive rewards, it is also perceived by many in a negative light. Recent decades have witnessed a paradigm shift in the field, with the advent of concepts such as partnering and relationship selling (Futrell 2006, p. 21), customer-oriented thinking (Futrell 2006, p. 27), and team selling (Futrell 2006, p. 57). However, the *caveat emptor* or "buyer, beware" idea associated with the sales field of yesteryears, seems to have remained ensconced in public memory. A few studies have evidenced more positive attitudes (Dubinsky 1980; Fossum and Moore 1975; Kavas 2003); however, some students might not consider a career in sales due to negative connotations reinforced by word of

mouth and various media. It is of note that, whereas many studies have been conducted in the U.S., there is scant research attention on Mexican students' perceptions. The specific purpose of this study is to evaluate Mexican student's attitudes toward personal selling as a career, and to examine the impact of some demographic characteristics on these perceptions.

LITERATURE REVIEW

Overall attitudes towards personal selling

Research on student attitudes toward personal selling as a career can be traced back to the advent of marketing in the 1950s. Numerous early studies address negative images, due in large part to salesperson stereotypes in media (such as *The American Salesman* 1958; Ditz 1967; Jolson 1972; Paul and Worthing 1970; *Sales Management* 1962; Thompson 1972). Subsequent research indicated generally more positive attitudes (DeVecchio and Honeycutt 2002; Dubinsky 1980; Dubinsky 1981; Dubinsky and O'Connor 1983; Lagace and Longfellow 1989; Swenson, et al. 1993; Swinyard 1981; Weeks and Muehling 1987). Whilst few studies are available on countries outside the U.S., Honeycutt et al. (1999) found negative attitudes to industrial selling among business students in New Zealand and Philippines.

Gender

Studies in the U.S. have shown mixed results regarding the impact of gender on attitudes toward personal selling. Dubinsky's (1980) study evidenced a marginally more positive perception personal selling among males. O'Connor and Dubinsky (1983) found no significant differences in attitudes toward personal selling, based on gender. Muehling and Weeks (1988) indicated that females hold more positive perceptions of sales than do males. In another study, Cook and Hartman (1986) found a similarity on 21 out of 26 attributes of personal selling; however, females were found to be less likely to take up a sales career. More recently, Stevens and Macintosh (2002-2003) found a relationship between gender and attractiveness of sales activities.

Student level

Research results relating to the effect of students' academic level in the program, are equivocal. For example, Bellinger, Bernhart and Wayman (1974) found no significant differences among perceptions of personal selling among upperclassmen (sophomores, juniors, and graduating seniors). Swenson et al. (1993) conducted a time-series replication of an earlier study (Swinyard 1981) through a survey of 1203 undergraduate business students from 13 universities. The preference for personal selling as a career was found to be inversely related to students' academic level (progressing to upper level course work comprising sophomores, juniors and senior students).

Business versus non-business students

A few studies have examined the differences between the business and non-business students in relation to personal selling. One might expect that business majors would be exposed

to the contribution of personal selling to the marketing function, the firm, and the economy as a whole. Further, based on the classroom experience, they might appreciate the role of selling in implementing customer orientation, as compared to non-business majors.

According to a survey by Paul and Worthing (1970), contrary to hypothesis, students across different majors have negative attitudes toward personal selling. However, more recent studies, such as Kavas (2003) indicate that business majors showed a higher interest in getting a selling job after graduation, compared to non-business majors.

Having a family member in a sales career

Prior research calls for an investigation of the impact of having a family member with a career in personal selling. For example, Kavas (2003) suggested that future studies “might also examine the differences in attitudes toward personal selling based on.... whether they have a family member in a sales career.”

Our research questions thus follow. What are the attitudes of Mexican students toward personal selling? Does attitude differ with gender, being a business major, or having a family member in the sales field? What is the level of interest among Mexican students in pursuing a sales job? Is the level of interest in a sales job impacted by gender, student’s academic level, major field of study, or having a family member employed in personal selling?

METHODOLOGY

Instrument

We used a modified survey based on Kavas (2003). In the first part, students were asked to rate personal selling on a scale of 16 attitudinal statements. The statements captured negative characteristics, for example, “I associate personal selling with.... insincerity and deceit; low status/low prestige.” Respondents’ level of agreement was measured on a five-point Likert type scale ranging from “strongly agree” (1) to “strongly disagree” (5). Thus, agreement with a scale item would evidence that the respondent has a negative attitude towards that characteristic of personal selling. The second part of the survey measured the respondent’s interest in taking up personal selling as a career. The final part dealt with respondents’ socio-demographic characteristics.

Sample

The sample comprised 500 undergraduate students at a large urban university in Mexico. Of these, 250 were business students, and 250 were non-business students. The sampling frame comprised classes randomly selected to administer the survey.

About 56 percent of the respondents were male; 59 percent were juniors and seniors, and 49 percent had a family member with a career in personal selling.

Data collection

The surveys were completed and collected in class, in the absence of the instructor. Care was taken to ensure that respondents were not in the researcher's class while completing the survey. Very few students declined to participate.

Data Analysis

In the analysis, we found the mean values for the various attitudinal items on the surveys. Further, we used t-tests to compare the mean values, based on major and gender. Finally, we calculated the mean values for interest in personal selling as a career, based on gender, student level, major, and having a relative with a career in personal selling, and used t-tests for comparisons between groups.

RESULTS AND DISCUSSION

Overall attitudes toward personal selling

In Table 1, we present the mean value for each attitudinal statement. Some items, like "personality is crucial" (mean=4.05), "high pressure/forces people to buy unwanted goods" (mean=3.46), "low job security" (mean=3.24), "much traveling" (mean=3.22), "just a job, not a career" (mean= 3.21), "interferes with home life" (mean=3.08), and "salespeople being money-hungry", were rated higher than the other items by students, showing their higher levels of agreement with these negative statements. Thus, overall, students indicated a strong negative attitude toward these seven connotations of personal selling. These results generally support findings in U.S. studies (such as Kavas 2003).

Table 1
Attitudes of Mexican students toward personal selling as a career: Descriptive Statistics

I associate a selling job with....	N	Mean[@]	Std. Deviation
Frustration	498	2.83	1.054
Insincerity and deceit	496	2.71	1.122
Low status and low prestige	489	2.69	1.034
Much traveling	495	3.22	1.034
Salespeople being “money-hungry”	493	3.01	1.075
Low job security	495	3.24	1.076
High pressure/forces people to buy unwanted goods	492	3.46	1.092
“Just a job” not a “career”	492	3.21	1.115
Uninteresting/no challenge	491	2.47	1.071
No need for creativity	494	2.11	1.096
Personality is crucial	486	4.05	1.098
Too little monetary reward	493	2.96	1.022
Interferes with home life	491	3.08	.976
“Easy to get” job	494	2.93	.988
Inappropriate career option	498	2.98	1.018
Difficult to advance into upper management positions	499	2.69	1.087

[@] Where 1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree. The higher the score, the more negative the opinion towards the item

Attitudinal differences based on gender

On six of the 16 items, females were found to have higher negative attitudes than males; however, the difference was significant only in the case of two items: “much pressure/force the sale of unwanted goods ($t = -1.977, p \leq .05$), “too little monetary reward” ($t = -1.967, p \leq .05$) (Table 2). This confirms earlier U.S. findings of Dubinsky (1980).

Table 2
Attitudes of Mexican students toward personal selling as a career: Comparison of male and female students

I associate a selling job with....	Male			Female			t-value
	Mean [@]	SD	n	Mean [@]	SD	n	
Frustration	2.79	1.101	275	2.89	.983	219	-1.151
Insincerity and deceit	2.69	1.162	276	2.73	1.075	216	.422
Low status and low prestige	2.65	1.095	269	2.74	.960	216	-.942
Much traveling	3.28	1.070	275	3.15	.993	216	1.350
Salespeople being “money-hungry”	3.03	1.097	274	3.00	1.043	215	.214
Low job security	3.21	1.079	275	3.28	1.068	216	-.722
High pressure/forces people to buy unwanted goods	3.37	1.152	240	3.57	1.004	214	-1.977*
“Just a job” not a “career”	3.22	1.136	274	3.21	1.095	214	.050
Uninteresting/no challenge	2.46	1.099	272	2.47	1.031	215	-.152
No need for creativity	2.06	1.084	274	2.18	1.112	216	-1.224
Personality is crucial	4.01	1.109	271	4.09	1.092	211	-.772
Too little monetary reward	2.88	1.060	274	3.06	.967	215	-1.967*
Interferes with home life	3.11	.987	272	3.04	.971	215	.776
“Easy to get” job	2.99	1.034	275	2.88	.914	215	1.229
Inappropriate career option	2.93	1.063	276	3.04	.964	218	-1.102
Difficult to advance into upper management positions	2.68	1.161	277	2.70	.992	218	-.198

[@] Where 1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly agree. The higher the score, the more negative the opinion towards the item.

* significant at $\leq .05$ (two-tailed test).

** significant at $\leq .01$ (two-tailed test).

*** significant at $\leq .001$ (two-tailed test).

+ significant at $\leq .10$ (two-tailed test).

Attitudinal differences between business and non-business majors

In order to evaluate the differences between business and non-business majors, we carried out t-tests for differences between group means (Table 3). Attitudinal items for which statistical differences exist between business and non-business majors are also shown.

Our results from Mexico evidenced differences in attitudes between the two groups. Business students had a significantly more positive attitude compared to non-business majors in the case of six items. The largest difference was seen in “inappropriate career option” ($t=3.741$, $p\leq .001$), and “difficult to advance into upper management positions” ($t=3.283$, $p\leq .001$). Other

items included “no need for creativity” ($t=2.937, p \leq .05$), “uninteresting/no challenge” ($t=2.892, p \leq .05$), “just a job, not a career” ($t=2.891, p \leq .05$), and “low status and low prestige” ($t=2.250, p \leq .05$). Only on one item, “personality is crucial”, business majors had a stronger negative attitude toward personal selling ($t=-2.506, p \leq .05$). This is in line with results of Kavas (2003).

Table 3
Attitudes of Mexican students toward personal selling as a career: Comparison of business and non-business majors

I associate a selling job with....	Business majors			Non-business majors			t-value
	Mean [@]	SD	n	Mean [@]	SD	n	
Frustration	2.81	1.042	241	2.85	1.071	242	.395
Insincerity and deceit	2.66	1.071	242	2.79	1.173	239	1.266
Low status and low prestige	2.58	.977	235	2.79	1.072	239	2.250*
Much traveling	3.29	1.053	240	3.15	1.032	240	-1.444
Salespeople being “money-hungry”	2.98	1.067	239	3.06	1.089	239	.849
Low job security	3.22	1.130	240	3.25	1.026	240	.338
High pressure/forces people to buy unwanted goods	3.44	1.081	240	3.48	1.118	237	.390
“Just a job” not a “career”	3.05	1.152	238	3.35	1.058	239	2.891*
Uninteresting/no challenge	2.33	1.067	237	2.62	1.058	239	2.892*
No need for creativity	1.97	1.034	249	2.26	1.145	239	2.937*
Personality is crucial	4.16	1.086	239	3.91	1.111	232	-2.506*
Too little monetary reward	2.94	1.110	239	2.99	.930	239	.536
Interferes with home life	3.07	1.002	236	3.08	.971	240	.079
“Easy to get” job	2.88	.993	238	3.00	.981	242	1.353
Inappropriate career option	2.81	1.012	240	3.16	1.008	243	3.741***
Difficult to advance into upper management positions	2.52	1.041	241	2.84	1.107	243	3.283***

@Where 1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly agree. The higher the score, the more negative the opinion towards the item.

* significant at $\leq .05$ (two-tailed test).

** significant at $\leq .01$ (two-tailed test).

*** significant at $\leq .001$ (two-tailed test).

+ significant at $\leq .10$ (two-tailed test).

Attitudinal differences based on having a family member in sales

On six of the 16 items, those with a family member in sales had significantly more positive attitudes in the case of seven items. These included “insincerity and deceit” ($t=2.758,$

$p \leq .001$), “low status and low prestige” ($t = -3.866$, $p \leq .001$), “uninteresting/no challenge” ($t = -3.961$, $p \leq .001$), “no need for creativity” ($t = -4.176$, $p \leq .001$), “too little monetary reward” ($t = -3.529$, $p \leq .001$), “inappropriate career option” ($t = -5.286$, $p \leq .001$), and “difficult to advance into upper management positions” ($t = -4.515$, $p \leq .001$). However, those with no family member in sales had more positive attitudes on three items. These items included “much traveling” ($t = -2.758$, $p \leq .10$), “personality is crucial” ($t = 2.312$, $p \leq .05$), “interferes with home life” ($t = 1.768$, $p \leq .10$) (Table 4). As discussed above, Kavas (2003) gave a call to investigate whether having a family member in sales affects attitudes towards the selling field. Our findings seem to indicate that the highest polarization in attitudes is caused by this factor.

Table 4
Attitudes of Mexican students toward personal selling as a career: Comparison based on having a family member in sales

I associate a selling job with....	Family member in sales			No family member in sales			t-value
	Mean [@]	SD	n	Mean [@]	SD	n	
Frustration	2.83	1.072	243	2.85	1.042	240	-.151
Insincerity and deceit	2.56	1.117	243	2.84	1.116	238	-.2758*
Low status and low prestige	2.50	1.043	243	2.86	1.001	234	-3.866***
Much traveling	3.32	1.044	242	3.14	1.017	238	1.907 ⁺
Salespeople being “money-hungry”	3.01	1.115	239	3.03	1.018	239	.214
Low job security	3.14	1.115	243	3.34	1.018	237	-2.068*
High pressure/forces people to buy unwanted goods	3.41	1.162	243	3.50	1.014	235	-.907
“Just a job” not a “career”	3.03	1.181	243	3.39	1.027	234	-3.507***
Uninteresting/no challenge	2.26	1.085	243	2.64	1.004	235	-3.961***
No need for creativity	2.64	1.056	243	1.89	1.076	237	-4.176***
Personality is crucial	4.18	1.101	239	3.94	1.074	232	2.312*
Too little monetary reward	2.80	1.010	241	3.12	1.007	237	-3.529***
Interferes with home life	3.17	.982	241	3.01	.961	235	1.768 ⁺
“Easy to get” job	2.87	.988	242	2.99	.983	237	-1.329
Inappropriate career option	2.73	1.046	242	3.21	.930	241	-5.286***
Difficult to advance into upper management positions	2.45	1.114	243	2.89	1.004	241	-4.515***

[@] Where 1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly agree. The higher the score, the more negative the opinion towards the item.

* significant at $\leq .05$ (two-tailed test).

** significant at $\leq .01$ (two-tailed test).

*** significant at $\leq .001$ (two-tailed test).

⁺ significant at $\leq .10$ (two-tailed test).

Interest in a personal selling job after graduation

Role of gender: Gender did not significantly affect interest in a selling job (mean 2.63, SD 1.268) (Table 5a). Of the males in the sample, 30.4 per cent reported they would definitely /probably like a selling job after graduation, compared to only 24.6 per cent of females. In addition, 57.9 per cent of females stated they would definitely/probably not like a selling job, compared to 47.6 percent of males. (Table 5b). Our findings appear to support the U.S. study of O'Connor and Dubinsky (1983).

Table 5a
Comparing means- Interest in getting a sales job after graduation- student level, business major, and having a relative in the selling profession

Demographic	Mean [@]	SD	n	t-value
Male	2.63	1.268	273	1.514
Female	2.47	1.120	216	
Freshmen	2.82	1.192	67	1.921 ⁺
Upper level	2.82	1.205	420	
Business major	2.68	1.215	138	2.051*
Non-business major	2.45	1.199	240	
Relative in selling profession	2.71	1.235	235	2.870*
No relative in selling profession	2.39	1.147	240	

[@] Where 1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly agree. The higher the score, the more negative the opinion towards the item.

* significant at $\leq .05$ (two-tailed test).

** significant at $\leq .01$ (two-tailed test).

*** significant at $\leq .001$ (two-tailed test).

+ significant at $\leq .10$ (two- tailed test).

Table 5b
Interest in selling job after graduation- male and female students

Student interest in a selling job after graduation	Male n=273	Female n=216
	%	%
Definitely would like a selling job	6.2	1.9
Probably would like a selling job	24.2	22.7
Don't know	22.0	17.6
Probably wouldn't like a selling job	22.0	36.1
Definitely wouldn't like a selling job	25.6	21.8
Total	100.0	100.0

Role of student level: Being a freshman increased interest in a selling job after graduation compared to upper level students (mean=2.82, SD=1.192, t=1921, $p \leq .10$) (Table 5a). Of the freshmen, 37.3 percent definitely/probably wanted to get a sales job after graduation; for upperclassmen, only 26.2 percent did. Only 36.8 percent of freshmen definitely/ probably did not like a selling job, compared to 54.3 percent of upper level students (Table 5c). This is contrary to literature based on US samples. Upperclassmen might feel “overqualified” for a selling job as they approach graduation; cultural and other factors may also be at play in this context. This finding is in line with some earlier U.S. studies (such as Bellinger, Bernhart, and Wayman 1974, Swenson et al. 1993, and Swinyard 1981).

Table 5c
Interest in a selling job after graduation- freshman and upper-level students

Student interest in a selling job after graduation	Freshmen n=67	Upper-level N=420
	%	%
Definitely would like a selling job	3.0	4.5
Probably would like a selling job	34.3	21.7
Don't know	23.9	19.5
Probably wouldn't like a selling job	19.4	29.5
Definitely wouldn't like a selling job	19.4	24.8

Role of major: The mean interest level in a sales job after graduation was higher for business majors (2.68), compared to non-business majors with (2.45), and the difference was significant ($t = 2.051$, $df = 476$, $p \leq .05$) (Table 5a). Overall, there was a low interest in getting a personal selling job after graduation (mean = 2.57, S.D. = 1.210, $n = 493$), with over half of the respondents (51.9 per cent) stating they would probably/definitely not like a selling job after graduation (see Table 5d). Almost 56 percent of non-business students reported they would probably/ definitely not like a selling job after graduation, compared to 48.3 percent of business majors. On the other hand, only 23.8 percent of non-business students stated they would “probably/definitely like a selling job”, compared to 32.3 percent of business students. The above evidence indicates low levels of interest in personal selling as a career among Mexican

students. The reasons might include inadequate knowledge about personal selling, information about opportunities in the sale field, successful role models, and family support. Further, this finding confirms that of Kavas (2003).

Table 5d
Interest in a selling job after graduation- business and non-business students

Student interest in a selling job after graduation	Business n=238	Non-business N=240
	%	%
Definitely would like a selling job	4.6	4.2
Probably would like a selling job	27.7	19.6
Don't know	19.3	20.4
Probably wouldn't like a selling job	27.3	28.8
Definitely wouldn't like a selling job	21.0	27.1

Role of salesperson in the family: Kavas (2003) had given a call to investigate this factor in preference for sales as a career. Having a salesperson in the family contributed to interest in the sales field (mean=2.71, SD=1.235, t=2.870, p≤.05) (See Table 5a). Of the respondents with a family member in the selling profession, 33.4 percent definitely/probably would like a selling job, compared to only 21.5 percent among those with no family member in sales. In addition, of the respondents with a family member in the selling profession, 48.5 definitely/probably did not like a selling job, compared to 56.5 per cent of respondents having no member in sales (Table 5e). Perhaps the “bonding” with sales professionals could be achieved by undergraduates’ interaction through student associations, and campus chapters of bodies such as the American Marketing Association.

Table 5e
Interest in getting a selling job after graduation- having a relative in the selling profession

Student interest in a selling job after graduation	Relative in sales n=241	No relative in sales n=237
	%	%
Definitely would like a selling job	5.8	2.1
Probably would like a selling job	27.8	19.4
Don't know	17.8	21.9
Probably wouldn't like a selling job	28.2	28.7
Definitely wouldn't like a selling job	20.3	27.8

Conclusion

It must be kept in mind that this study has some limitations. The sample comprised students of a single university in Mexico. It may not be representative of Mexican students, restricting the generalizability of results. We need to have follow-up studies to cover a more diverse set of universities. Further, this is an exploratory study, and does not delve into deeper issues that might impact attitudes of Mexican students toward personal selling.

There is a need to alter Mexican students' attitudes toward personal selling, through concerted efforts by industry, academia, and sales professionals and institutions. Their focus should be on 360 degrees coverage of students and other stakeholders, such as advisors, counselors, and guardians, through an integrated communications program. Industry should intensify campus communication and recruitment efforts, for co-operative opportunities, internships, and employment. High-profile sales personnel should maintain a high level of "face time" in community and university events. Efforts should be made to "bond" undergraduates with sales professionals, through interaction via student associations, and student chapters of collegiate bodies such as the American Marketing Association. University faculty and administrators need to encourage experiential and service-learning to bring the ground realities of the sales field into the classroom. Finally, there is a need for further research into cultural and other factors that may be responsible for overall low levels of interest in personal selling among undergraduate students in Mexico.

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EMPIRICAL STUDY OF BRAND ATTRIBUTES VIA HIGHER-ORDER CONFIRMATORY FACTOR ANALYSIS

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ABSTRACT

This study examined the model of brand attributes using Keller's (1993) brand knowledge. Higher-order confirmatory factor analysis (HCFA) was utilized to confirm each dimension of brand attributes and examine measurement properties. A survey was conducted using a paper-based and online questionnaire. Levi jeans and Nokia cell phones are the two product categories. Reliability and factor analyses show that brand attributes can be differentiated based on intrinsic attributes and extrinsic attributes. Additionally, extrinsic attributes can be divided into the following four hierarchical measurement indexes: price, user imagery, usage imagery, and brand personality.

INTRODUCTION

In the current knowledge-based economy, industry in Taiwan must reform and promote to a higher grade. Thus, brand construction is a major task enterprises now take seriously. Since 2006, Taiwan's Ministry of Economic Affairs has been promoting "The Taiwan Brand Development Plan." The aim of this plan is to promote brand development and improve the competitiveness of enterprises and the nation. Branding has become an intangible asset for enterprises. This study attempts to determine which brand characteristics trigger consumer purchase intention. Is purchase intention induced by brand function, product price, or user characteristics? This study primarily focuses on product brand attributes. This study examined brand attribute literature published since 1993. After the reorganization process, this study proposes a revised brand attribute model. This study conducts an empirical analysis using higher-order confirmation factor analysis (HCFA) to examine the relationship between observed variables and latent variables. In this research model, first-order factors are price, user imagery, use image, brand personality and intrinsic brand attributes; the second-order factors are external brand attributes; the third-order factors are brand attributes.

This research principally focuses on the clothing and cell phone industries. Based on the brand attribute theory developed by Keller (1993, 1998), the research goals are as follows.

1. Discuss brand attribute development
2. Confirm the applicability of Keller's brand attribute model via empirical research
3. Compare the brand attributes of Levi jeans and Nokia cell phones.

CONCEPTUAL FRAMEWORK

The conceptual framework in this study is based on the brand attribute models developed by Keller (1993, 1998) and Li (2004). First, this study divides brand attributes into intrinsic and external brand attributes. Intrinsic brand attributes are product or service attributes, which are directly related to product physicality. Sweeney and Soutar (2001) measured intrinsic brand attributes by assessing products in terms of their quality—whether they were well made and show good workmanship. Thus, no scale exists for measuring product quality. Extrinsic brand attributes are external characteristics derived for a product or service. This study uses four constructs—price, user imagery, use image, and brand personality—to measure external brand attributes. Figure 1 shows this study's conceptual framework.

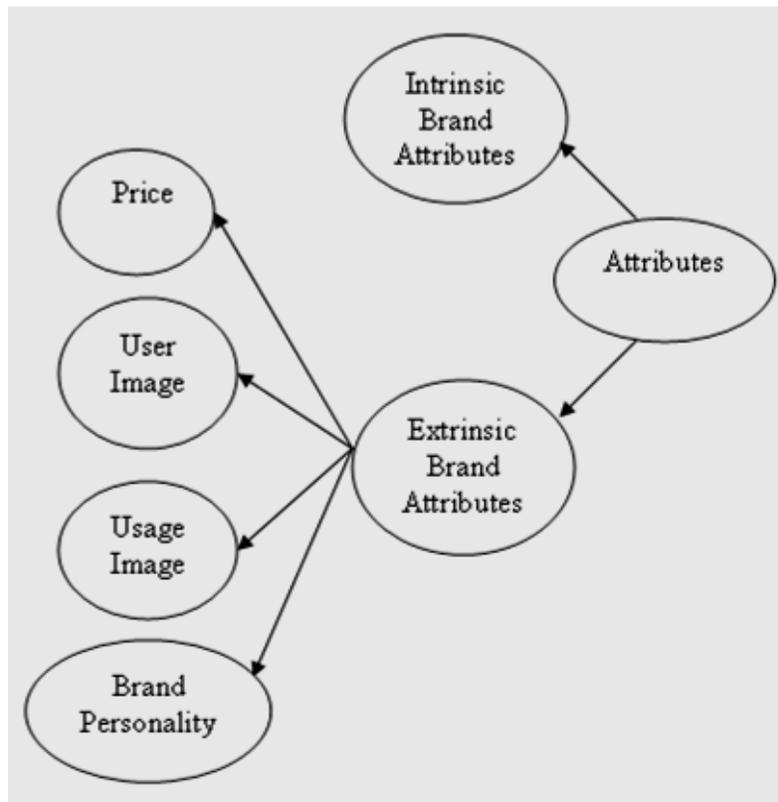


Figure 1. Conceptual Framework of this Study

Definition and Development of Brand Attributes

According to Keller (1993, 1998), brand association is a set of functions that are composed of attributes, benefits, and attitudes. Attributes are descriptive characteristics that characterize a product or service—what a consumer thinks about a product or service is or has and what is involved in its purchase or consumption (Keller, 1993). Attributes can be categorized in various ways (Myers and Shocker 1981). In Keller's study (1993 ; 1998), attributes comprise both intrinsic and extrinsic brand attributes, they are differentiated based on how directly they relate to product or service performance.

Intrinsic brand attribute

Intrinsic brand attributes are product-related attributes. They are related to a product's physical composition and service request. For consumers, intrinsic brand attributes are requisite, they vary by product or service category (Keller 1993). These attributes are distinguished by branded product's essential ingredients and features, which determine the nature and level of product performance (Keller, 1998).

Intrinsic brand attributes refer to measurable and verifiable superiority on some predetermined ideal standard or standards, thus serving as a measure of quality. Intrinsic brand attributes simplify the consumer choice process (Zeithaml, 1988). It echoes the view of Chang and Wildt (1994), intrinsic brand attributes may be adopted by sales personnel, to influence potential consumers' product measurement and purchase behavior.

Extrinsic brand attribute

Extrinsic brand attributes, namely non-product related attributes, are defined as external aspects of the product or service that related to its purchase or consumption (Keller, 1993). They are related to brand's symbolic attributes and may also serve as a measure of product quality. Extrinsic brand attributes satisfy consumers' underlying needs for social approval or self-esteem. They allow consumers to experience positive emotions and to help them communicate to others their values and personal features (Li, 2004).

In the classification of, Keller (1993) distinguished them to price information, packaging or product appearance information, user imagery, and usage imagery. Although package is considered part of the purchase and consumption process, it does not directly relate to the necessary ingredients for product performance in most cases. Later, Keller (1998) renamed non-product related attributes to extrinsic brand attributes, and replaced the package factor with brand personality and feeling experience factors. However, feeling experience was not considered a part of brand attributes but a part of brand attitude by Li (2004). The classification of extrinsic brand attributes is based on Li (2004). Four main types of extrinsic brand attributes (price, user imagery, usage imagery, and personality) are introduced as follows.

Price

The price of the product or service is considered a non-product-related attribute because it represents a necessary step in the purchase process but typically does not relate directly to the product performance or service function. Price is a particularly important attribute association because consumers often have strong beliefs about the price and value of a brand and may organize their product category knowledge in terms of the price tiers of different brands (Keller, 1998 ; Blattberg and Wisniewski, 1989).

In many product categories, consumers may perceive the quality of a product on basis of its price. Consumers may also combine their inference of the quality of the product with the price of the product to form perceptions of its value (Keller 1998). The perception of a brand's price

helps determine whether or not a brand is included in a consumer's consideration set (Dyson, Farr & Hollis, 1996). Dodds, Monroe & Grewal (1991) explained the link between consumer's perceived value and brand choice in part by the acceptable price range concept. Buyers generally have a set of prices that are acceptable to pay for a purchase in their consideration set, rather than a single price (Monroe, 1979; Monroe & Petroschius, 1981). Therefore, consumers place a value on the unique aspects of a brand that justifies a higher price in their minds, and are willing to pay a premium for that brand (Keller, 1998).

User imagery and Usage imagery

User and usage imagery can be formed directly from a consumer's own experiences and contact with brand users. It can also be formed indirectly through brand advertising or by some other source of information, such as word of mouth (Keller, 1993, 1998).

User imagery is the brand imagery associations related to the type of person who uses the brand. Perceptions of a brand's users may be based on demographic factors (e.g., sex, age, race, and income), or psychographic factors (e.g., attitudes toward career, possessions, and social issues) (Keller, 1993, 1998). Associations of a typical usage situation may be based on time of day, week, or type of activity (formal or informal), among other aspects. User imagery may result in a profile or mental image by consumers of actual users or more aspirational, idealized users (Keller, 2003). Research has found that consumers often prefer brands with images consistent with or closest to their own self-image (Sirgy, 1982, 1985). Consumers' self-image can be inferred from the brands they use, their attitudes toward different brands and the meanings brands have for them. The perceptions consumers have of themselves influences their brand decisions. Consumers form favorable attitudes toward those products which possess images most similar to the images they either prefer or wish of themselves. Consequently, they buy those products which match their desired self-image, because those products help consumers express themselves (Zinkham & Hong 1991). Solomon and Douglas (1987) also noted that consumers often purchase products that maintain and enhance their self-image. Consumers make purchase decisions based on a product's symbolic meanings and images, which can be used to create and enhance self-image. Brands' associated images let consumers express who they are, what they are, where they are and how they want to be viewed (Graeff, 1997).

A person expects positive reactions from his significant referents, and brand image becomes a symbolic tool for goal accomplishment (Grubb & Hupp, 1968; Grubb & Stern, 1971). A person attempts to communicate to his significant references certain things about himself by using symbolic products. Consumers' purchase decisions are significantly influenced by social value in that consumers perceive various brand images as either congruent or incongruent with the norms of the reference groups to which they belong or aspire (Grubb & Stern, 1971; Solomon, 1983).

Usage imagery relates to the brand imagery associations that indicate under what conditions or situations the brand could or should be used (Keller, 2003). Usage imagery may be based on the time of the day, week, or year, the location (inside or outside the home), or type of activity (formal or informal) (Keller, 1998). For example, Miller High Life has been advertised

in terms of “Miller Time,” a relaxing, rewarding pan of the day (Keller, 1998). Usage imagery attributes of Timberland is conveyed through “casual versatility for everyday outdoor living,” “traveling” and “adventure.”

Brand Personality

Plummer (1985) asserts that one component of brand image is the personality or character of the brand itself. In Aaker’s (1997) research, brand personality is defined as “the set of human characteristics or traits that consumers attribute to a brand”. It includes associations with particular characters, symbols, life-styles, and types of users. In contrast to a product’s intrinsic attributes, which serve as utilitarian functions for consumers, brand personality tends to serve a symbolic or self-expressive function (Keller, 1993) and taps the emotional aspects of a brand, and augments the personal meaning of a brand to the consumer (Crask & Laskey, 1990). Besides, brand personality enables a consumer to express his or her own self or ideal self (Belk, 1988; Malhotra, 1988). These meanings are constructed by a consumer based on behaviors exhibited by personified brands or brand characters (Aaker and Fournier, 1995)

Five dimensions of brand personality have been identified as sincerity, excitement, competence, sophistication, and ruggedness (Aaker, 1992; Aaker, 1997). A brand with the right personality can result in a consumer feeling that the brand is relevant and the consumer may be more willing to invest in a relationship or even develop a “friendship” with the brand (Aaker & Fournier, 1995; Keller 1998). For example, the single-brand clothing retailer Abercrombie & Fitch has developed a personality that is fun-loving and independent, winning popularity among teenagers and college students. Therefore, personality characteristics associated with a brand tend to be relatively enduring and distinct (Aaker, 1997).

Brand personality also creates an association of that brand with certain important life values, such as the pursuit of an exciting life, the search for self-respect, the need to be intellectual, and the desire for self-expression (Aaker, 1992). Brands convey human-type personalities that allow consumers to express themselves through the purchase of particular products (Keller, 1998). Brand personality is used to provide self-expressive and emotional benefits for consumers (Aaker, 1998). Consumers prefer brands associated with a set of personality traits congruent with their own (Kassarjian, 1971; Sirgy, 1982). Therefore, brand preference increases when a consumer’s personality is congruent with that of a brand (Aaker, 1998). The brands with strong personalities are associated with high levels of usage and preference. The correlations between self-concept and brands used are higher than those between self- concept and brands not used (Aaker, 1997).

METHODOLOGY

Sample Description

To obtain appropriate measurable variables, this study first collected questions for each construct from brand literature, and then eliminated repeat questions and questions that do not fit the brand survey. Finally, this study extracted 3 to 4 questions for each construct, except for use image.

Statistical Analysis

The sample/subject of this research questionnaire is a random population. This study collected 331 Levi questionnaires (62% on-line and 38% on paper) and 396 Nokia questionnaires (48% on-line and 52% on paper) between Jun. and Jul. 2008. After eliminating invalid questionnaires that have missing data, the total number of valid questionnaires for the Levi brand was 325 and that for Nokia was 389. The response rate was 98%.

Table 1
Sample Descriptive Statistics

Customer characteristics	Classification	Levi jeans		Nokia cell phone	
		Number	%	Number	%
Gender	Male	161	49.5	174	44.7
	Female	164	50.5	215	55.3
Age	≤20	38	11.7	37	9.5
	21-30	212	65.2	219	56.3
	31-40	50	15.4	69	17.7
	41-50	20	6.2	47	12.1
	≥51	5	1.5	17	4.4
Occupation	Specialist	25	7.7	35	9.0
	Service or sales personnel	82	25.2	98	25.2
	Technique or operation personnel	38	11.7	63	16.2
	Administration or business personnel	20	6.2	28	7.2
	Student	140	43.1	22	31.4
	Others	20	6.2	43	11.1
Education	Junior high school	4	1.2	2	0.5
	Senior high school	36	11.1	60	15.4
	University	229	70.5	278	71.5
	Graduate school	56	17.2	49	12.6
Disposable income per month (NT\$)	≤10,000	165	50.8	185	47.6
	10,000-30,000	111	34.2	137	35.2
	30,000-50,000	40	12.3	55	14.1
	50,000-10,000	7	2.2	12	3.1
	≥100,000	2	0.6	0	0

Table 2
Brand Product Involvement

Use experience	Levi jeans		Nokia cell phone	
	Classification	%	Classification	%
Quantity of jeans/cell phone you own now	0	2.8	0	0.8
	1-3	39.1	1	69.9
	4-6	40.0	2	25.2
	7-10	12.6	3	2.6
	≥10	5.5	≥4	1.5
The price you usually spend on the brand (\$NT)	≤1000	33.8	0 or 1 dollar	6.7
	1000-3000	56.9	≤3000	21.6
	3000-5000	8.9	3000-8000	44.4
	5000-8000	0.3	8000-15000	20.4
	≥8000	--	≥15000	6.7
How long do you purchase a new one	Within 3 months	8.9	Within half a year	2.1
	Half a year	43.4	1 year	18.8
	1 year	28.9	2 years	44.5
	2 years	13.2	3 years	21.3
	Over 3 years	3.1	Over 4 years	7.7
	Never renew	2.5	Never renew	5.4
Have you ever use this brand	Yes	67.4	Yes	84.8
	No	32.6	No	14.9
Monthly expenditure you spend on jeans (\$NT) (Levi brand only)	≤500	20.0		
	500-2000	51.7		
	2000-5000	21.8		
	5000-8000	4.6		
	≥8000	1.8		
The place you often purchase jeans (Levi brand only)	Department store	33.5		
	Jeans store	30.2		
	General clothing store	27.4		
	Vendor	4.3		
	Internet	2.8		
	Others	1.8		
Quantity of cell phone you have owned (Nokia brand only)			1-2	23.4
			3-4	42.7
			≥ 5	33.7
			Never own	0.3

Table 2 (continued)
Brand Product Involvement

Use experience	Levi jeans			Nokia cell phone		
	Classification	Number	%	Classification	Number	%
Reasons you purchases this brand (Multiple answer question)	Brand	183	56.3	Brand	199	51.2
	Type	172	52.9	Type	180	46.3
	Popularity	120	36.9	Volume	67	17.2
	Price	75	23.1	Price	161	41.4
	Durable	122	37.5	Function	214	55.0
	Comfortable	151	46.5	Durable	170	43.7
	Routine purchase	25	7.7	Others	18	4.6

Measures Development

Table 3 shows the items for all variables. Most measures represent a combination and synthesis of existing items that have acceptable reliability scores. The exogenous latent variables in this study are attributes, endogenous latent variables are intrinsic brand attributes, extrinsic brand attributes and items of extrinsic brand attributes (price, user imagery, usage imagery, and brand personality); (Figure 1). A five-point Likert-type scale was used for all measures.

Table 3
Measurement Model and Confirmatory Factor Analysis

Item	Levi brand				Nokia brand			
	Estimated Coefficient	t-value	Cronbach's Alpha	Average variation extract	Estimated Coefficient	t-value	Cronbach's Alpha	Average variation extract
First order								
Intrinsic Brand Attributes			0.950	0.92			0.775	0.56
1. This branded product has consistent quality.	0.56	--			0.55	--		
2. This branded product is well made.	0.64	39.63			0.57	13.52		
3. This branded product has good workmanship.	0.72	35.33			0.51	11.79		
Price			0.704	0.73			0.756	0.41
1. This branded product is reasonably priced.	0.24	--			0.43	--		
2. This branded product is a good product for its price.	1.00	3.82			0.63	7.93		
3. This branded product would be economical.	0.23	11.87			0.53	10.43		
User imagery			0.757	0.56			0.793	0.48
1. This user of this brand possesses the characteristics that I would like to have.	0.77	14.69			0.52	--		
2. It would be nice to be like this person which advertisements show using this brand.	0.44	12.07			0.70	10.96		
3. The people who purchase this brand are admired or respected by others.	0.53	--						
4. People who use this brand portray status and style that I admire.					0.58	9.43		
Usage imagery			--	--			--	--
1. I have a clear image of the specific situation where people are most likely to wear this branded product.	0.86	--			0.79	--		

Table 3 (continued)
Measurement Model and Confirmatory Factor Analysis

Item	Levi brand				Nokia brand			
	Estimated Coefficient	t-value	Cronbach's Alpha	Average variation extract	Estimated Coefficient	t-value	Cronbach's Alpha	Average variation extract
<i>First order</i>								
Brand Personality			0.744	0.57			0.773	0.48
1. This brand has a personality.	0.60	--			0.50	--		
2. This brand is interesting.	0.67	18.48			0.67	12.46		
3. I have a clear image of the type of person who would use the brand.	0.40	10.25			0.60	11.11		
<i>Second order</i>								
Extrinsic Brand Attributes								
Price	0.59	3.28			0.78	7.47		
User imagery	0.91	7.61			0.86	10.26		
Use image	0.64	7.45			0.70	12.77		
Brand personality	0.98	8.27			1.00	11.69		
<i>Third order</i>								
Attributes								
Intrinsic brand attributes	1.00	21.97			1.00	15.00		
Extrinsic brand attributes	0.97	7.82			0.71	9.52		

Overall Model Evaluation

Table 4 shows the fit statistics. The chi square values are significant ($p < 0.05$) for the two brands (Bollen, 1989), a typical finding for large samples (Doney and Cannon, 1997). A comparison of the overall models for Levi, and Nokia indicates that Nokia has superior goodness-of-fit (GFI), but the two values of GFI are above 0.80, corresponding to Bagozzi and Yi's (1988) minimum values of 0.80. The chi square values of the two brands are significant ($p < 0.05$); (Bollen, 1989), a finding not unusual for large samples (Doney and Cannon, 1997). For the Levi brand, the values for CFI and NNFI are acceptable; however, the root mean square error of approximation (RMSEA), and standardized root mean residual (SRMR) do not meet the standards suggested by Hu and Bentler (1995, 1999). For the Nokia brand, the values for CFI, NNFI, and SRMR are good, the RMSEA is acceptable (< 0.1); (Bollen 1986, Bentler 1990). Thus, this study can proceed to evaluating measurement and structural models.

Measurement Model Evaluation

This study assessed the quality and adequacy of the proposed measurement models by examining unidimensionality, convergent validity, reliability, discriminant validity, and metric equivalence. First, unidimensionality was assessed based on the performance of principal component analyses on all items. As all items were given a loading of 0.5 for the hypothesized factor and a maximum loading of 0.30 for the other factors, and thus it can be concluded that unidimensionality was obtained for each construct. Second, convergent validity was supported owing to the overall model fit being good, and all loadings being highly statistically significant ($p < 0.05$) (Hildebrandt, 1987; Steenkamp and Van Trijp, 1991). Third, since all Cronbach's alpha values exceeded 0.70, indicating acceptable reliability (Nunnally, 1978). Furthermore, as shown in Table 3, most of the composite reliability measures above 0.60, corresponding to the minimum identified by Bagozzi and Yi (1988). Consequently, it can be concluded that all constructs yield satisfactory reliability.

Finally, CFAs were used to test the adequacy of the measurement model. This study used separate CFAs to indicate intrinsic brand attributes and extrinsic brand attributes (price, user imagery, usage imagery, and brand personality). The proposed measurement model was estimated using LISREL 8.52 (Joreskog and Sorborn, 1989, 1993). The estimation results indicate reasonable overall fit between the model and the observed data. From Table 4, two brand models have GFI exceeding 0.8 (Bagozzi and Yi, 1988). Additionally, NNFI and CFI considerably exceeded the recommended .90 threshold level (Bollen, 1989; Hoyle and Panter, 1995; Hu and Bentler, 1995), demonstrating reasonable data fit to the model.

Table 4
Goodness-of-Fit Statistics

Model	X ² /df	GFI	RMSEA	NNFI	SRMR	AGFI	CFI
Levi							
brand (N=325) overall model	8.06	0.83	0.15	0.93	0.09	0.71	0.95
Nokia							
brand (N=389) overall model	4.14	0.91	0.09	0.95	0.06	0.86	0.95

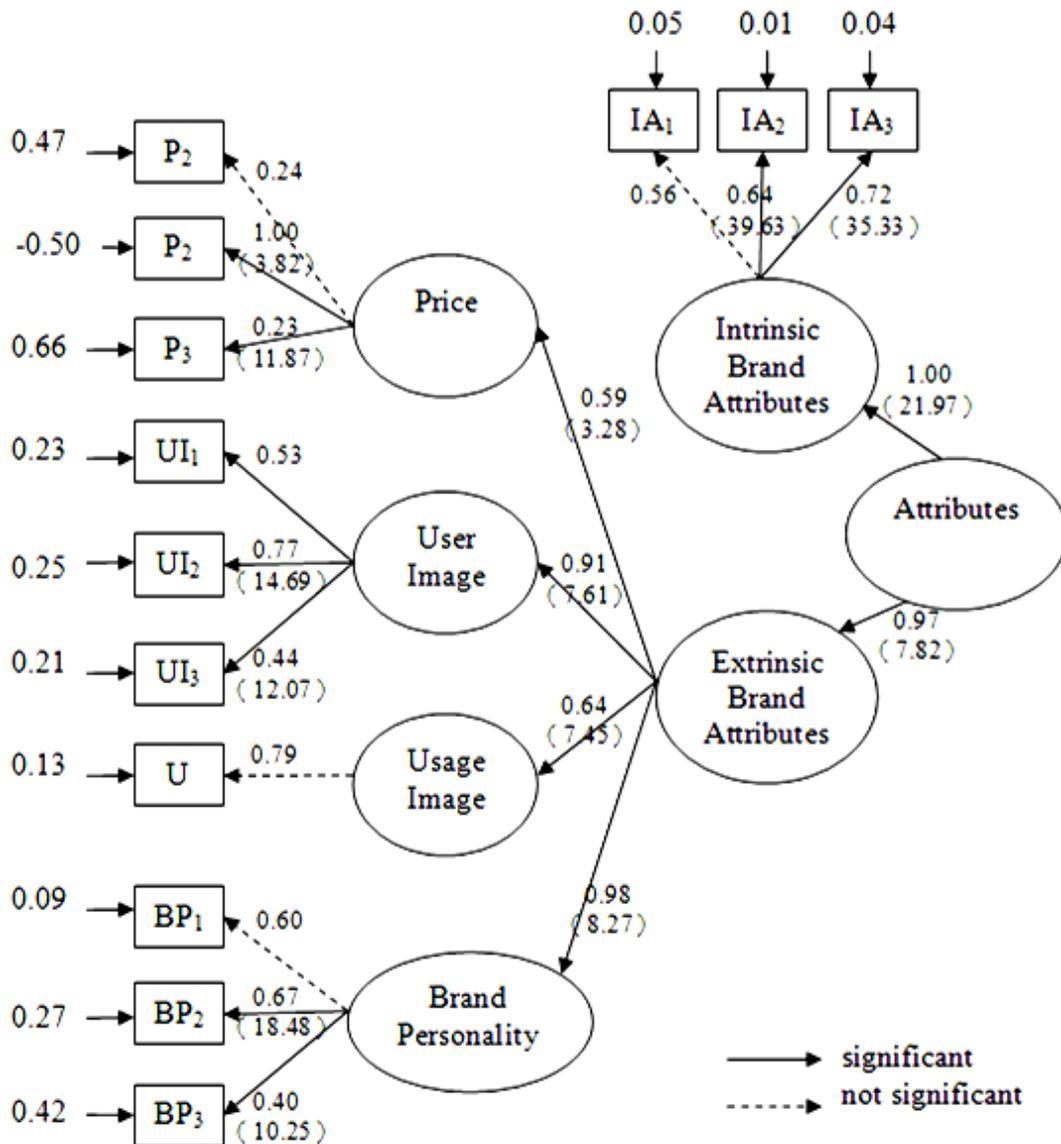


Figure 2. Higher-Order Confirmatory Factor Analysis Model - Levi Brand

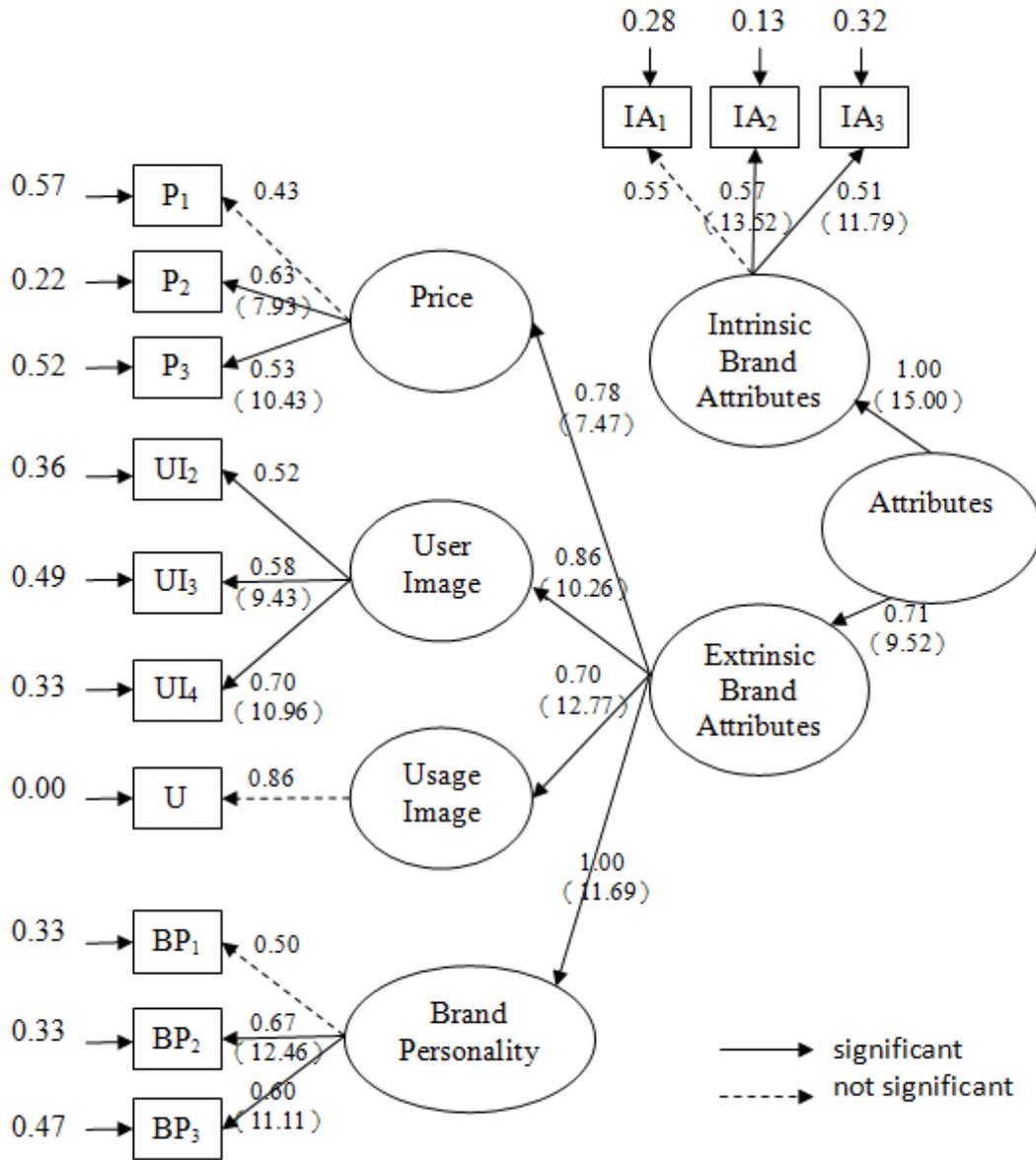


Figure 3. Higher-Order Confirmatory Factor Analysis Model - Nokia Brand

Table 5
Covariance Matrix

Levi brand / Nokia brand

	Extrinsic Brand Attributes		Intrinsic Brand Attributes		Price		User imagery		Brand Personality		Usage imagery		Attributes	
Extrinsic Brand Attributes	1.00	1.00												
Intrinsic Brand Attributes	0.97	0.71	1.00	1.00										
Price	0.59	0.78	0.57	0.55	1.00	1.00								
User imagery	0.91	0.86	0.87	0.61	0.54	0.67	1.00	1.00						
Brand Personality	0.98	1.00	0.95	0.71	0.58	0.78	0.89	0.86	1.00	1.00				
Usage imagery	0.64	0.70	0.62	0.49	0.38	0.54	0.58	0.60	0.63	0.70	1.00	1.00		
Attributes	0.97	0.71	1.00	1.00	0.57	0.55	0.87	0.61	0.95	0.71	0.62	0.49	1.00	1.00

Levi brand: N=325, $\alpha = 0.05$

Nokia brand: N=389, $\alpha = 0.05$

DISCUSSIONS AND CONCLUSIONS

Summary of main results and contributes

The study is based on a conceptual framework for brand attributes. Via higher-order confirmatory factor analysis, this study proposed a three-order confirmatory factor analysis model for brand attributes. Discoveries and major conclusions are as follows.

The HCFA result is consistent with the proposed model.

Higher-order confirmatory factor analysis by LISREL indicates good model fitness. The product brand attributes can be divided into intrinsic and extrinsic brand attributes. Thus, the features that characterize a product are differentiated into features associated with product usage and external characteristics. Conversely, extrinsic brand attributes can be differentiated into price, user imagery, use image, and brand personality after factor analysis. Moreover, each set of items in the questionnaire has an appropriate explanatory ability. Therefore, the HCFA result is consistent with the proposed model.

The two brand analyses are significant/suitable.

The study discusses common product-brand characteristics that increase consumer purchase intention. Therefore, this study chose two common brands in Taiwan for analysis. Analytical results can explain the proposed model. Analytical results demonstrate that brand-product attributes positively affect intrinsic brand attributes and extrinsic brand attributes. Extrinsic brand attributes positively affect price, user imagery, use image, and brand personality. This suggests that brand-product characteristics and out of product (price, user imagery, use image, and brand personality) impact consumer purchase intention. This analytical result met Keller's conceptual framework

Managerial implication

In path analysis, the influence of both brand intrinsic attributes ($\gamma_L=1.00$; $\gamma_N=1.00$) is higher than that of their extrinsic brand attributes ($\gamma_L=0.97$; $\gamma_N=0.71$), meaning that consumers respect product function more than a brand's abstract meaning. Unlike extrinsic brand attributes, intrinsic brand attributes generally have no indexes. This is because intrinsic attributes are distinguished by a branded product's essential ingredients and features (Keller, 1998). This study merely compares the three variables' factor loadings belonging to intrinsic brand attributes.

Comparison of the influences of each intrinsic brand attribute index.

As for the three variables of Levi's intrinsic brand attributes, the highest factor loading is "good workmanship" ($\lambda_L=0.72$), followed by "well made" ($\lambda_L=0.64$) and "consistent quality" ($\lambda_L=0.56$). This finding may be attributed to consumer's appreciation of Levi's tough sewing, particular trimming, and fashionable wrinkle wash. Therefore, the "good workmanship" attribute has the best explanation ability. However, the loading of Nokia's "good workmanship" is the lowest attribute ($\lambda_N=0.51$) even if other two factor loadings are about 0.5 ($\lambda_N=0.55$ for "consistent quality" and $\lambda_N=0.57$ for "well made"). This result implies that Nokia's intrinsic brand attributes consist of not only the product's external manufacture, but also built-in communication functions and other additional features such as

photos, games, MP3s, and others. These cell-phone related functions affect Nokia consumers' subjective quality cognition, and make the loading of the "well made" highest.

Comparison of the representatives of each extrinsic brand attribute index.

In terms of the four extrinsic brand attributes, the most influential attributes are brand personality ($\beta_L=0.98$; $\beta_N=1.00$), user imagery ($\beta_L=0.91$; $\beta_N=0.86$), and symbolic functions beyond a brand (such as mental desire). However, the path coefficient of price for the Levi brand is extremely low ($\beta_L=0.59$), the lowest of the four factors. This finding may be attributed to elevated status Levi jeans in Taiwan. Due to their quality and style, people purchasing Levi jeans may not focus on price. Conversely, the path coefficient of price for the Nokia brand ($\beta_L=0.78$) is higher than use image ($\beta_L=0.70$). This is expected as the popularity of Nokia cell phones render price an unimportant consideration.

Limitations and suggestions for further research

The goodness of fit results for the Levi brand is not as good as expected. This may be for the following two reasons. First, in the process of distributing questionnaires, we found that Taiwanese familiarity with the Levi brand is somewhat limited. Many workers and students never wear Levi jeans, which prevents them from forming strong opinions on Levi jeans. Compared to apparel products, communication products such as cell phone are quite popular in Taiwan. For example, Nokia's market share in Taiwan is about 32.6%. This means that more people can become familiar with Nokia through exchanging and testing it although they may never own a Nokia cell phone. Therefore, the different levels of involvement between the two brands made it easy to answer Nokia questionnaire but difficult to answer the Levi questionnaire. Besides, the reception ratio for repeated filling two brand questionnaires is about half of the total survey respondents. This situation made survey respondents diminish their marginal utility. If respondents also have little brand cognition as mentioned above, items improperly answered or missing answered would frequently emerge. This is another reason for Levi's unexpected goodness of fit results.

In current brand classification methods, features and characteristics in different brand classifications may not be the same. This research only focused on product and brand attributes. We suggest that future brand research address other brand categories such as store brand, retailer brand, and channel brand to respond the quickly developing market.

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THE ACCOMMODATION NEEDS OF LEISURE WESTERN AND ASIAN TRAVELERS VISITING CAMBODIA

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ABSTRACT

Tourism has now become an integral component of lifestyle. With the reduced workweek, people have greater opportunities to travel the world. The purposes of this paper were to study the differences of accommodation needs of Western and Asian travelers. Results show there are significant differences between Western and Asian travelers' needs of accommodation, with clear indication that Western travelers required more service quality and rated most hotel attributes more importantly than Asian travelers did. The results also suggest that lodging operators concentrate their efforts on providing and marketing luxury hotel attributes and security features to attract and satisfy Western travelers.

INTRODUCTION

Tourism is defined by Kandampully (2000) as a unique product as it is composite in nature, an amalgam of the tangible and intangible that includes everything that tourists experience. Tourism has become an integral component of lifestyle (Poon and Low, 2005). More importantly, tourism is now one of the world's fastest growing economic sectors and one of the world's largest industries, accounting for over one-tenth of worldwide economic activity. According to the World Travel and Tourism Council, tourism accounts for 10.7 percent of the world's gross domestic product, 11.9 percent of global capital investment, and 11.3 percent of worldwide consumer spending (WTTC 2005). However, it is important to note that a major contributor to the tourism industry is leisure travel, which includes both domestic and international travel (Duman 2002). Leisure and recreation now accounts for 62% of international tourism, with business tourism accounting for 18%, and the remaining 20% include other motives such as visiting friends and relatives, religious purposes/pilgrimages, health treatment and others (Business sector roundtable 2001).

The reduced workweek has given people greater opportunities to travel (Gray & Liguori 1980). Over the past decade, leisure trips have grown as nearly twice the rate of business trips (2.9 versus 1.6 percent) (Powers & Barrows 1999). Knowles (1996) stated that there has been a growth in leisure rather than business-related travel, particularly, independent travel rather than escorted tours. Nevertheless, pleasure travel already accounts for about half of trips to hotels (Powers 1995). Moreover, Chon and Sparrowe (2000) stated that personal and leisure travel accounts for 56 percent of all hotel stays.

The Angkor Wat of Cambodia, after its inclusion into the UNESCO's list of World Heritage Sites in late 1992, has become one of the world's most famous tourist destination and Asia's top tourist destination (Brooke 2004; Rooney 1999). Indeed, in the 1960s Cambodia was one of the most popular tourist destinations in south-east Asia (Lam 1998). However, Cambodia has been isolated from the world for more than two decades because of strife and turmoil until the country opened its door to outside world again in 1991 (Sloan

2004), and since then the number of tourists has increased dramatically from 25,012 in 1991 to 1 million for the first time in 2004 and reached 1.7 million in 2006 and the international tourist arrivals in Cambodia are estimated to be 3.12 million by 2010 (WTO in Asia and the Pacific 2004; Tourism Statistical Report 2006). Without any intervention, the number of visitors to Angkor Wat could rise to more than 4.3 million by 2020 (Anan & Piore 2006). However, it is important to note that the majority of international tourists visiting Cambodia is leisure travelers and those leisure travelers come from every corner of the world.

With the tourism boom, the hotel industry in Siem Reap Angkor has increased at a similar rate. In 1995, there were just only 8 hotels with 315 rooms and several guesthouses (Soubert & Hay 1995). However, the number of hotels in Siem Reap increased to 32 and guesthouses to 54 with a capacity of 1400 rooms in 2000 (Siphan 2000). Now there are more than 100 hotels and hundreds other establishments in Siem Reap Angkor serving tourists of all budgets, ranging from a few dollars to thousand dollars ("Why is everyone going to Cambodia?" 2006). Furthermore, more hotels and other establishments are now in planning stages (Wood & Leray 2005). Therefore, understanding what Western and Asian travelers want from hotels is extremely important not only for hoteliers in Siem Reap Angkor and in Cambodia as a whole, but also for general hoteliers targeting different market segments from around the worlds, especially the Western and Asian ones.

LITERATURE REVIEW

Consumer Behavior Theory

Like other consumer decisions, the selection of hospitality facilities and services is influenced by a variety of factors. Engel, Blackwell and Miniard (1990) and Williams (1982) stated that consumer behavior theory indicates that consumers' purchasing decisions and level of satisfaction are influenced by consumer characteristics and outside stimuli. The characteristics of consumers like age, gender, background and outside stimuli such as products and services offered by hotels, most likely influence consumer behavior and satisfaction level of travelers. In addition, cultural, social, personal and psychological characteristics are also factors which influence consumer decisions (Kotler, Bowen, & Makens 1999). More than that, search qualities, experience qualities, and credence qualities are attributes that influence consumer decisions (Reid and Bojanic 2001). As consumer satisfaction is directly influenced by the availability of customer services, the provision of quality customer service has become an increasingly important concern of businesses (Berry 1988; Berry & Parasuraman 1991).

Customer Satisfaction

Customer satisfaction defined by Vavra (1997) is the leading criteria for determining the quality delivered to customers through the product or service and the accompanying services. Therefore, the most challenge facing businesses in the 1990s is the offering of high quality service and thereby improving customer satisfaction (Barsky and Labagh, 1992). Customer satisfaction in a traditional definition follows the paradigm that consumer satisfaction or dissatisfaction is the result of interaction between the consumer's pre-purchase expectations and post-purchase evaluation (Engel et al., 1990; and Handy, 1977). That's why, it is extremely necessary to know what customers really require from hotels, so that hoteliers can better satisfy their customers. Kandampully (2000) also supports that services are essentially an intangible experience and it is difficult for customers to evaluate the product prior to experience. Failure to pay attention to influential attributes in choice intention may result in a

customer's negative evaluation and may lead to unfavorable word-of-mouth (Chon, et al., 1995).

Leisure Travelers' Desires for Hospitality Services (change)

The perceptions of hotel attributes as defined by Wuest *et al.* (1996) as the degree to which travelers find various services and facilities important in promoting their satisfaction with hotel stays. A number of studies have been done on hotel attributes that are considered when making a hotel choice decision. Among intangible components of hotel service are cleanliness (Atkinson, 1988; Knutson, 1988; and Poon and Low, 2005), comfort, spacious and well-maintained rooms (Knutson, 198; Cadotte and Turgeon, 1988), convenient location and accessibility (Rivers, *et al.* 1991; Ananth *et al.*, 1992), safety and security (Atkinson, 1988; Knutson, 1988; and Ananth *et al.*, 1992), room facilities such as better lighting, safety features in the bathrooms, easy to handle door knobs, supporting mattresses and chair (Ruys and Wei, 1998).

Besides those important hotel features, prompt and courteous service quality, food value of a restaurant, convenient parking, as well as interior décor and exterior aesthetics are major contributors (Knutson, 1988; Cadotte and Turgeon, 1988, Atkinson, 1988; Saleh and Ryan, 1992). More importantly, value of money is another factor that is strongly associated with high customer loyalty and hotel revenue (Atkinson, 1988; Shifflet and Bhatia, 1997). Similarly, personal services, physical attractiveness, opportunities for relaxation, standard of services and appealing image are factors that travelers considered when they evaluate value for money (Wilensky and Buttle, 1988).

Accordingly, the ability to meet the needs of hospitality customers is crucial in today's competitive environment, so hotels must keep abreast of consumers' changing preferences (especially those of their target markets) and the latest demographic trends (Abbey 1998). As the leisure market is a large and complex segment, hotel managers need to know what their targets are seeking for. Leisure travelers desire a comfortable room regarding air quality and living environment maintained by the latest technology (Olsen, Tse, & West 1998). Moreover, most people when they are paying for a hotel room expect cleanliness (Atkinson 1988; Weissinger 2000). Leisure travelers in mid-price and luxury hotels name recreational facilities as an important consideration (Knutson 1988). Furthermore, a swimming pool is the overwhelming amenity of preference for leisure guests (Watkins 2003).

The leisure baby boomer market, who have both the discretionary income and the time to enjoy travel and dining out, prefer hotels that emphasize safety and security to those that lack these features (Abbey 1998). Moreover, efficient and friendly service is another important hotel attribute which senior travelers want (Withiam 1994). Moreover, two-income families, who have time pressures, though sensitive to price/value comparisons, generally seek value for their money rather than low-cost recreational experience (Powers & Barrows 1999). More importantly, leisure travelers look for ease and convenience in travel and find special packages (Abbey 1998).

Research Purpose and Questions

Cultural differences play an important role in understanding the differences between Western and Asian travelers, in terms of their evaluation on hotel services and facilities. Understanding hotel attributes are important criterion for hotel industry to better satisfy their

guests. Therefore, the purpose of this study was to investigate leisure travelers' perceptions of the importance of hotel products and services. More specifically, the intent of this study was to examine the different needs of hotel attributes between leisure Western and Asian travelers. Therefore, a research question has been raised for this study. Do leisure Western and Asian travelers have different accommodation needs when they are living in hotels on holiday? To answer this question, this study was designed to achieve the following research purposes:

1. To identify specific hotel products and services valued highly important by international leisure travelers; and
2. To determine the differences and similarities of hotel products and services sought by Western travelers and Asian travelers

METHODS

Leisure travelers in this study were defined as people traveling for non-work purposes and paying for their own rooms; in some cases these are 'off-duty' corporate travelers sometimes accompanied by a spouse (Go & Pine 1995). Perceptions of hotel customer services were defined as the degree to which leisure travelers place importance on various customer services and hotels products in promoting their level of satisfaction when staying in a hotel.

The questionnaire's instructions asked respondents to rate the importance of 58 hotel attributes that might be taken into account when deciding to stay, using a 5-point itemized rating scale ranging from 1 = not very important to 5 = very important. Those 58 attributes, shown in table 5, represents a cross-section of hotel attributes from the *Ananth, et al., (1992)* scale. Since the scale was already shown to be valid and reliable, only few minor changes in the instrument have been made. Modifications were intended only for the ease of reading and responding to the questions, and were not substantive in nature. The questionnaire was originally designed in English and translated by Dongguan Hengtong Translation Co., Ltd., China and by Pyramid Translation Company, Cambodia, into Japanese, traditional Chinese (Taiwan), simplified Chinese (Mainland China), Korean, French, and Spanish as the tourists from these countries are all among the top ten in terms of the number of tourists visiting Angkor Wat, where the study was conducted.

Random and convenient samplings were used to collect the data from international leisure travelers in front of the Angkor Wat of Cambodia, the top 9 World Heritage Sites in South East Asia and fast becoming one of Asia's top tourist destinations (Hall and Ringer, 2000). Every three international tourists who left Angkor Wat in the morning from 6-9 a.m. was asked to fill in the questionnaire. Also, every tourist who took a rest on the causeway in the afternoon from 3-6 p.m. was asked to fill in the questionnaire. The total 500 self-administered surveys were distributed to different travelers and groups of travelers from February 2-17, 2007.

Additionally, to entice travelers to fill in the questionnaires, a postcard of Angkor temples with a Thank You Note at the back page was given to any respondent who filled out the questionnaire at the survey site. In an attempt to randomize an otherwise self-selected sample, every selected visitor was approached and asked if s/he would participate in the study. If s/he agreed, the researcher then pre-screened the travelers by asking if s/he stayed in hotel in Siem Reap Angkor over night. If s/he did, the researcher then handed the respondent a clip board with the questionnaire attached to it. If s/he did not, then the researcher thanked him/her and declined the participation, explaining that the respondents must stay over night in a paid hotel

to fill out the questionnaires. After the cessation of data collection, reliability measures, descriptive statistics, analysis of variance, and factor analysis results were obtained to address the purposes of this study.

RESULTS

Out of the 500 questionnaires administered to the international leisure travelers, 493 were returned. Forty three questionnaires were removed due to inaccurate rating by the respondents and lack of compliance with the sample criteria. A total of 450 questionnaires out of 493 were usable, yielding a response rate of 91.27%.

Survey Result

In this study, Asian travelers are tourists from East Asia, South Asia and South-East Asia and Central Asia, while tourists from other regions are considered as Western travelers. Table 1 contains a summary of the age, gender, marital status and some other demographic characteristics of the respondents. A review of the demographic data showed that 49 percent of the respondents was Western travelers, while 51 percent was Asian travelers. The result of the study also indicated that 50.9 percent was males and 49.1 percent was females and the number of males and females in both groups was almost the same. Analysis of the income and education indicated that the majority of Western travelers had an income and education higher than did the Asian travelers.

Table 2 contains a summary of the traveler behavior of the respondents. The study showed that nearly all of the respondents (95%) came to visit Cambodia only one time during the past five years and 43 percent of them stayed in Cambodia between 1 to 3 nights and 42 percent between 4 to 6 nights and 7 percent each between 7-9 nights and more than 9 nights respectively. An analysis of the hotel type also indicated that the majority of Western travelers stayed in luxury (up-scale) and mid-price (standard) hotels, while more than 50 percent of Asian travelers stayed in mid-price (standard) and 37 percent stayed in low-priced and just 5 percent stayed in luxury (up-scale) hotels respectively.

Reliability of the Instrument and Data Analyses

The modified version of the questionnaire from Ananth, et al. (1992) was determined to be useful for measuring the importance of hotel products and services for a different sample. The data were entered and statistically analyzed using SPSS Version 12.0. With a Cronbach's α of 0.95, the 58-item scale was considered reliable for measuring the importance of hotel products and services as perceived by leisure travelers visiting Angkor Wat, Siem Reap. Moreover, a variety of other tests were performed to determine significant differences in the two different groupings and relative importance of the attributes. Frequencies and cross-tabulations were performed on the descriptive data. Those techniques helped in establishing the percentages and mean of the respondents for each demographic variable or the questions asked. The mean of the attributes were used to determine the order of importance, with 1.0 indicating not important at all and 5.0 indicating very important. Any significant difference in the attributes between the two age groups was also observed. A probability level of 0.05 was used. A summary of the results of the test of significance with a mean greater than 3.5 is illustrated in Table 3. The data were further analyzed using factor analysis and analysis of variance because significant differences existed.

Factor analysis was used as a transition to a more-simplified analysis of variance. Principle Component Factor Analysis with VARIMAX rotation on the scale items provides insight into data sets by reducing them to fewer factors. The current array of data yielded five factors from the original 58 attributes; and each of the factors had an Eigenvalue greater than 1.5 and the average loading factor of four categories is greater than 0.50, while the average loading factor of one factor is just a bit lower than 0.50. The five new categories are: (1) room amenities, (2) general amenities, (3) services and conveniences, (4) specialty services, and (5) price and security. Table 5 shows Eigenvalues (EV), variance, and cumulative variance and summarizes the loadings for each item of those five factors.

**TABLE 1:
Summary of Survey Sample by Age, Gender, and Other Demographic Characteristics**

Attributes	Western Travelers		Asian Travelers		Total	
	Number	Percent	Number	Percent	Number	Percent
Gender						
Male	114	51.8	115	50.0	229	50.9
Female	106	48.2	115	50.0	221	49.1
Total	220	100	230	100	450	100
Employment						
Employed full-time	113	51.1	194	84.3	307	68.2
Employed part-time	16	7.3	7	3.0	23	5.1
Retired	76	34.5	4	1.7	80	17.8
Unemployed	3	1.4	2	0.9	5	1.1
Others	12	5.5	23	10.0	35	7.8
Income						
<\$ 5,000	9	4.1	25	10.9	34	7.6
\$5,000-10,000	12	5.5	58	25.2	70	15.6
\$10,001-30,000	34	15.5	55	23.9	89	19.8
\$30,001-50,000	38	17.3	53	23.0	91	20.2
\$50,001-70,000	40	18.2	29	12.6	69	15.3
\$70,001-90,000	35	15.9	5	2.2	40	8.9
>\$90,000	52	23.6	5	2.2	57	12.7
Marital Status						
Single	74	33.6	96	41.7	170	37.8
Married	112	50.9	130	56.5	242	53.8
Separated (divorce)	16	7.3	2	0.9	18	4.0
Widowed	18	8.2	2	0.9	20	4.4
Education						
<high school	3	1.4	2	0.9	5	1.1
High school	35	15.9	17	7.4	52	11.6
Associate degree	10	4.5	9	3.9	19	4.2
Bachelor	73	33.2	134	58.3	207	46.0
Master	63	28.6	59	25.7	122	27.1
Doctor (Ph.D)	36	16.4	9	3.9	45	10.0
Age						
Less than 55	119	54.1	172	74.8	291	64.7
55 or Older	101	45.9	58	25.2	159	35.3

**TABLE 2:
Summary of Travel Behavior of Respondents**

Attributes	Western Travelers		Asian Travelers		Total	
	Number	Percent	Number	Percent	Number	Percent
Number of trips in Cambodia in the last five years						
1 time	212	96.4	216	93.9	428	95.1
2-3 times	5	2.3	13	5.7	18	4.0
6-7 times	2	0.4	0	0	2	0.4
Over 7 times	1	0.5	1	0.4	2	0.4
Duration of the trip						
1-3 days	102	46.4	93	40.4	195	43.3
4-6 days	64	29.1	127	55.2	191	42.2
7-9 days	28	12.7	6	2.6	34	7.6
Over 9 days	26	11.8	4	1.7	30	6.7
Cost of room per night						
<\$50	75	34.1	68	29.6	143	31.8
\$50-75	49	22.3	47	20.4	96	21.3
\$76-100	35	15.9	51	22.2	86	19.1
\$101-125	1	0.5	14	6.1	15	3.3
\$126-150	6	2.7	46	20.0	52	11.6
>\$150	54	24.5	4	1.7	58	12.9
Types of Hotel						
Economy	79	35.9	86	37.4	165	36.7
Mid-price (standard)	87	39.5	133	57.8	220	48.9
Luxury (Up-scale)	54	24.5	11	4.8	65	14.4
Means of Travel						
On my own	116	52.7	89	38.7	205	45.6
By package tour	104	47.3	141	61.3	245	54.4
Traveling Companions						
Alone	18	8.2	19	8.3	37	8.2
With Spouse	86	39.1	71	30.9	157	34.9
With spouse and kid(s)	4	1.8	25	10.9	29	6.4
With friends	92	41.8	74	32.2	166	36.9
With colleagues	1	0.5	8	3.5	9	2.0
Other	19	8.6	33	14.3	52	11.6

The Results

The Importance of Accommodation Needs for Leisure Travelers

The research analysis suggests the respondents’ rating showed a moderate-to-high level of importance for the majority of the hotel products and services which are included in the scale. Means for the 58 items in the scale ranged from 1.70 to 4.81 out of the scale 1.0 to 5.0, with 1.0 indicating not important at all and 5.0 very important. Rank order, means and significance difference of each item rated greater than 3.5 by both groups of travelers are illustrated in table 3. Of the specific items, Western travelers rated 31 hotel attributes greater than 3.5, while Asian travelers rated 24 attributes greater than 3.5. The analysis also showed that 11 attributes were rated greater than 4.0 by both groups of travelers. Those include cleanliness of

accommodation and property, friendliness and politeness of staff, convenient location of hotel, soundproof room, firmness of mattress, express checkout, airport transportation, nonsmoking rooms, in-room temperature control, well-lit public areas and hallways, and good value for money spent.

The Different Accommodation Needs of Western Travelers and Asian Travelers

The result from the research analysis shows that Western travelers and Asian travelers rated 19 hotel attributes similarly. In contrast, they rated 39 hotel products and services differently; Western travelers rated those 39 hotel attributes more or less importantly than Asian travelers did (see table 4). Hotel attributes rated similarly by both groups with a means greater than 3.5 include cleanliness of accommodation and property; friendliness and politeness of staff; convenient location of hotel; non-smoking room, in-room temperature controls; well-lit public areas, restaurants and garages; good value for money spent; large-size bed; price of accommodation; cable TV; laundry services; extra blankets; and room's visual decoration.

However, Western travelers rated two factors of hotel attributes namely room amenities and specialty services much more important than did the Asian travelers. Items in room amenities factor that Western rated more important than Asian travelers include soundproof room, firmness of mattress, remote control for TV, bathroom amenities such as shampoo and soap, bedside controls, all-suit rooms, room's visual decoration, easily maneuvered door handles, medical facilities, larger than normal bath, and 24-hour room services. Items in specialty services factor Western travelers rated more important than did the Asian travelers consist of express check out, airport transportation, full-service restaurants, and easily maneuvered door handles. Western travelers are also more concerned with their health and safety than Asian travelers did; they rated some hotel attributes with related to health and safety more importantly than Asian travelers did. Those attributes include loud fire alarm; legible, visible sign in public areas, hallways, and restaurants; medical facilities; dietary menu; and recreation and health facilities.

Some attributes such as concierge services, valet parking and services, special restaurants, free complementary newspapers, in-house library, secretarial services, kid playgrounds, meeting room, free parking, and sauna are relatively low importance across both categories. However, some other attributes including tie-in with airline frequent program, larger than normal bath, car-rental and airline reservation, quiet lounge and bar, 24-hour room services, luxury-size room, free handicapped environment, 24-hour coffee shop, smaller portion of food, and entertainment in lounge and bar are in high importance with a mean of more than 3.0 for Western traveler and in low importance for Asian travelers.

Table 3:
List of Hotel Attributes and Ranking with a Means Greater than 3.50

Attributes	Western Traveler	Asian Traveler	Probability	Significant difference between groups
	Mean ¹	Mean		
1. Cleanliness of accommodation & property	4.81	4.76	0.265	
2. Friendliness & politeness of staff	4.76	4.70	0.173	
3. Convenient location of hotel	4.53	4.48	0.402	
4. Soundproof rooms	4.46	4.24	0.002	**
5. Firmness of mattress	4.45	4.31	0.036	*
6. Express checkout	4.45	4.03	0.000	***
7. Airport transportation	4.41	4.10	0.001	**
8. Non-smoking rooms	4.38	4.34	0.665	
9. In-room temperature controls	4.37	4.29	0.328	
10. Well-lit hallways, public areas, restaurants, garages	4.33	4.28	0.421	
11. Good value for money spent	4.20	4.17	0.662	
12. Loud fire alarm	4.13	3.91	0.006	**
13. Full-service restaurants	4.04	3.66	0.000	***
14. Large-size beds	3.97	3.98	0.902	
15. Legible, visible sign in public areas, hallways, restaurants	3.97	3.38	0.000	***
16. Elevators	3.96	3.69	0.019	*
17. Price of accommodation	3.93	3.88	0.554	
18. 24-hour video security	3.91	3.51	0.000	***
19. Remote control for TV	3.83	3.43	0.000	***
20. Cable TV	3.81	3.70	0.324	
21. Bathroom amenities: shampoo	3.75	3.45	0.002	**
22. Laundry services	3.68	3.53	0.100	
23. Extra blankets	3.64	3.56	0.485	
24. Room's visual decoration	3.57	3.55	0.750	

¹ The scale use is: 1 = not very important to 5 = very important
 * = significance at 0.05 ("Different")
 ** = significance at 0.001 ("More Different")
 *** = significance at 0.000 ("Most different")

Table 4: List of Hotel Attributes Rated Differently by Western and Asian Travelers

Attributes	Western Traveler	Asian Traveler	Probability	Significant difference between groups
	Mean ¹	Mean		
1. Soundproof rooms	4.46	4.24	0.002	**
2. Firmness of mattress	4.45	4.31	0.036	*
3. Express checkout	4.45	4.03	0.000	***
4. Airport transportation	4.41	4.10	0.001	**
5. Loud fire alarm	4.13	3.91	0.006	**
6. Full-service restaurants	4.04	3.66	0.000	***
7. Legible, visible sign in public areas, hallways, restaurants	3.97	3.38	0.000	***
8. Elevators	3.96	3.69	0.019	*
9. 24-hour video security	3.91	3.51	0.000	***
10. Remote control for TV	3.83	3.43	0.000	***
11. Bathroom amenities: shampoo	3.75	3.45	0.002	**
12. Security personnel on floor	3.68	3.39	0.009	**
13. Free internet connection in room	3.67	2.99	0.000	***
14. Early dining hours	3.65	3.20	0.000	***
15. Bedside controls	3.62	3.18	0.000	***
16. All-suit rooms	3.62	3.25	0.000	***
17. Easily maneuvered door handles	3.50	3.07	0.000	***
18. Medical facilities	3.44	2.96	0.000	***
19. Tie-in with airline traveler program	3.43	2.68	0.000	***
20. Dietary menus	3.39	2.68	0.000	***
21. Larger than normal bath	3.36	2.98	0.000	***
22. Car-rental and airline reservation	3.33	2.64	0.000	***
23. Quiet lounge, bar	3.27	2.80	0.000	***
24. 24-hour room services	3.24	2.88	0.000	***
25. Luxury-size room	3.23	2.94	0.005	**
26. Free handicapped environment	3.23	2.80	0.000	***
27. Recreation facilities	3.14	2.92	0.015	*
28. 24-hour coffee shop	3.12	2.88	0.018	*
29. Smaller portion of food	3.12	2.81	0.001	**
30. Entertainment in lounge, bar	3.09	2.53	0.000	***
31. Concierge services	2.83	2.49	0.002	**
32. Valet parking and services	2.83	2.35	0.000	***
33. Special restaurants	2.62	2.36	0.014	*
34. Sauna	2.62	2.09	0.000	***
35. Free complementary newspapers	2.57	2.21	0.001	**
36. In-house library	2.50	1.88	0.000	***
37. Secretarial services	2.26	1.98	0.007	**
38. Kid playgrounds	2.18	1.57	0.000	***
39. Meeting rooms	2.08	1.64	0.000	***

¹ The scale use is: 1 = not very important to 5 = very important
 * = significance at 0.05 (“Different”); ** = significance at 0.001 (“More Different”);
 *** = significance at 0.000 (“Most different”)

Table 5:
Factor-Analysis Summary

Factors	EV	Variance	Cumulative	Components	Loadings
Room amenities	15.07	25.99	25.99	Cable TV	0.705
				Health facilities	0.657
				Large-size beds	0.651
				Remote control for TV	0.634
				Luxury-size room	0.584
				Soundproof rooms	0.577
				Bathroom amenities: shampoo, soap...	0.565
				Non-smoking rooms	0.517
				In-room temperature controls	0.501
				All-suits rooms	0.477
				Room’s visual decoration	0.470
				Larger than normal bath	0.465
				Firmness of mattress	0.460
				Sauna	0.671
General Amenities	3.94	6.79	32.79	Swimming pool	0.641
				Secretarial services	0.582
				Quiet lounge, bar	0.578
				In-house library	0.563
				24-hour room services	0.562
				Elevators	0.562
				Concierge services	0.543
				Free parking	0.537
				Meeting rooms	0.534
				Free complementary newspapers	0.529
				Kid playground	0.519
				Entertainment in lounge, bar...	0.519
				Car rental and airline reservation	0.500
				Special restaurants	0.487
Tie-in with airline frequent traveler program	0.482				
Recreation facilities	0.472				
Bedside controls	0.455				
24-hour coffee shop	0.450				
Free internet connection in room	0.390				
Services & Convenience	2.77	4.77	37.56	Dietary menus	0.761
				Medical Facilities	0.745
				Free Handicapped Environment	0.636
				Early dining hours	0.590
				Extra blankets	0.558

				Laundry services	0.537
				Legible, visible sign in public areas...	0.503
Specialty services	2.16	3.73	41.30	Smaller portions of good	0.492
				Convenient location of hotel	0.517
				Airport transportation	0.456
				Express checkout	0.444
				Easily maneuvered door handles	0.444
				Good value for money spent	0.432
				Night light in bathroom	0.425
				Valet parking and services	0.419
				Full services restaurants	0.407
				Cleanliness of accommodation and property	0.388
				Friendliness and politeness of staff	0.385
Price and Security	1.97	3.39	44.70	Loud fire alarm	0.667
				Special discount available	0.624
				24-hour video security	0.508
				Security personnel on floor	0.487
				Well-lit hallways, public areas, restaurants,	0.476
				Price of accommodation	0.427
				Free breakfast	0.346

CONCLUSIONS AND IMPLICATIONS

Conclusions

Understanding the key factors in determining customer satisfaction can bring success to hotel business (Poon & Low 2005). Hence, the purpose of this research was to explore the important attributes of hotel products and services sought by international leisure travelers when they were on holiday visiting Angkor Wat with two different categories: Western travelers and Asian travelers.

Both Western and Asian travelers similarly perceive almost a dozen of attributes such as cleanliness of accommodation and property; friendliness and politeness of staff; convenient location of hotel; non-smoking rooms; in-room temperature controls; well-lit hallways, public areas, restaurants and garages; and good value for money spent to be highly important. Therefore, hoteliers should know that no matter where their guests are from, these hotel attributes are extremely important to both groups of travelers. Therefore, hoteliers should offer the best of these attributes to their guests.

In comparison, Western travelers require more luxury and comfortable hotel products and services and prefer some certain amenities related to security & safety, services & convenience, and specialty services over those preferred by Asian travelers; those attributes include soundproof room, firmness of mattress, express check out, airport transportation, loud fire alarm, large-size bed, elevators, full-service restaurants, elevators, 24-hour video security, remote

control for TV, bathroom amenities such as shampoo and soap, security personnel on floor, free internet connection in room, bedside controls, all-suit rooms, room's visual decoration easily maneuvered door handles, and medical facilities. The reason Western travelers require more better service quality is because they have higher income level and maybe better living style. Also, the reason that required more hotel attributes related to security and safety features is because Western travelers have been living in safe and security places for decades, while many Asian countries have just recently ended the civil wars and fictional fighting has been and is still happening in some parts of Asia such as in Indonesia, the Philippines, Thailand, India and so on. Therefore, Asia travelers may be less concerned with safety and security than Western travelers are.

Some of the respondents also repeated some special attributes in our open-ended question. Those attributes are tea/coffee facilities in room, pillow quality, professional map, and connection with professional tourist guides for Angkor. Since many travelers come to visit Angkor on their own, they may need professional map and/or professional tourist guides on their arrival. Hence, hotel managers should take these attributes into consideration as they are the result of the open-ended question, which means that the respondents volunteered the information without being prompted; the homogeneous response certainly should have great meaning for marketing and operational decisions.

Implications

From the findings of this research, we can see that the significant differences exist among the hotel attributes sought by Western travelers and those sought by Asian travelers. The analysis of the demographic characteristics of both groups of travelers shows that Western travelers are a group of people who is an excellent target for lodging industry; they have more saving, more free and leisure time, and more desire to travel and stay longer in a particular tourist spot. Therefore, they require more specific and luxury hotel attributes than do the Asian travelers. Western travelers are also frequent users of in-house restaurants, and can be extremely loyal, generating both repeat business and word-of-mouth referrals (Abbey 1999).

In comparison, 37 percent and 57 percent Asian travelers stayed in mid-price and economy respectively, and they spent less on other services such as in-house restaurants or coffee shops. The reasons Asian travelers spent less money on hotel rooms and other services offered by hotel are because Asian travelers have annual incomes and savings less than Western travelers do. However, to improve financial performance, hotel companies often target multiple customer segments by expanding their hotels' product features and services (Enz et al. 1999). Likewise, commercial lodging managers representing both chain and/or independent properties should recognize the important attributes Western and Asian travelers place. With this knowledge in mind, hoteliers should make every single effort to provide products and services deemed important by their segments. Fortunately, most hotels have already offered the highly valued products and services required by a variety of segments. Also, it is important to note that most attributes valued highly important by Western travelers are somewhat important to Asian travelers as well. Consequently, offering a few more products and services for Western travelers and Asian travelers can also attract other travelers such as business travelers and business travelers on extended business or leisure trips.

Since the majority of both Western and Asian travelers come to Cambodia by package tour, attributes related to price such as price of accommodation and/or special discount available are not in high importance to them as they have already paid for package tour which covers hotel rooms, meals in restaurants, tourist guides and the some other necessary products and services during the whole trip. However, many of Western and Asian travelers also come to Cambodia on their own; therefore, they are more price-sensitive. Hence, hoteliers should consider some attributes with regard to price such as price of accommodation, special discount available, good value for money spent, and 24-hour room service highly important for those groups of travelers. Then, if hotels launch some pricing strategies such as promotional pricing, giving consumers discounts during low season or giving consumer discounts if the guests come after 10 p.m. or 12 p.m.; penetration pricing, setting price lower compared to the competitors; psychological pricing, the retail prices are often expressed as “odd price” and a little less than a round number, for example US\$49.99; value pricing, charging a fairly low price for a high-quality offering; and/or going-rate pricing (Kotler 2000), hotels may be able to attract both groups of travelers traveling on their own. Especially, hotels may attract more guests during the low season.

Security and safety is a major factor for both categories of travelers as Cambodia has just emerged from the decades of civil war. Hence, hoteliers, especially domestic hotels, should take every effort to make sure that their guests feel extremely safe and secure by offering security personnel on floor, 24-hour hotel guard, loud fire alarm, 24-hour video security, well-lit hallways, public areas, and restaurants and garage. Similarly, room amenities is also valued highly important by both groups even if Western travelers rated more importantly than did the Asian travelers; hoteliers should also offer specific room amenities such as firmness of mattress, pillow quality, remote control for TV, soundproof room, non-smoking rooms, bath room amenities, in-room temperature control, large-size bed, and room visual decoration necessary for their guests to make sure that guests have a comfortable night sleep and satisfied stay with hotels.

Most importantly, having a strong connection with tour companies both local and overseas is a very good strategy to attract hotel guests. Because most travelers come to Cambodia by package tour, they don't need to choose hotels by themselves. By the way, the package tours arrange the hotels for them. Therefore, hotel managers should make a good deal with both local and overseas package tours and inform them that the hotels offer a good package of hotel products and services which their guests want. More importantly, since most travelers value cleanliness of accommodation and property, friendliness of staff, convenient location of hotels, firmness of mattress, soundproof room, non-smoking room, well-lit public areas and hallways, express checkout and good value for money spent, hotels need to ensure that the qualities of these hotel attributes are maintained at an acceptable level by constantly reviewing customers' feedback. The hotel management and the entire hotel staff should have a total commitment to keeping every element of the property spotless and make the guests feel special at any time after they arrive at the hotels.

LIMITATIONS AND FUTURE RESEARCH

There are two major limitations associated with this study that need to be highlighted. The first limitation is the instrument of the study. Although the questionnaire of this study was

designed in English and translated into other six languages, the questionnaire was not translated into the native language of each respondent. Therefore, problems may have occurred when those respondents, whose questionnaire was not translated into their mother-tongue, filled in the English questionnaires. Secondly, different ranking of hotels normally provides different service quality to the travelers. Those staying in 4-star or 5-star hotels, no matter Western or Asian travelers, may require similar hotel attributes, while those staying in two- or three-star hotels may require less hotel attributes and service quality.

Therefore, additional research needs to be done to continue to extend and generalize these findings. The future research is needed to study the importance of hotel products and services perceived by travelers from different countries in Asia since tourists from rich developed countries in Asia such as Japan, South Korea, Singapore, Hong Kong, or Taiwan may have different needs of hotel products and services from tourists from developing countries, mainly from the other members of ASEAN countries, China or India. It is also important to study the difference of accommodation needs for those staying in four- or five-star hotels and those staying in two- or three-star hotels and those coming to Cambodia by tour company and those coming on their own.

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**RELATIONSHIP OF STUDENT PERCEPTIONS OF
INSTRUCTOR'S REFERENT AND EXPERT POWER WITH
THEIR LEARNING/COURSE EXPERIENCE: A COMPARISON
OF ONLINE AND TRADITIONAL CLASSROOM LEARNING
ENVIRONMENTS**

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EXTENDED ABSTRACT

For centuries, institutions of higher education have been places where learning and not just the transfer of knowledge takes place. Teachers who are not only knowledgeable but who have made a difference in students' lives have always played an important role in higher education. Today, teachers are more important than ever before because some college students lack the basic academic preparation, focus, motivation, or maturity to succeed in college and the available data supports this. For example, American College Testing (2008) reports a dropout rate of 27.1% for all four year public colleges and almost 50% for all two year public colleges between the freshmen and sophomore years. The same report also showed that students were taking longer to graduate. Based on available data, between 38% and 64% of students pursuing an undergraduate education were taking longer than 5 years to complete their college education (American College Testing 2003). As a result, an effective instructor should be someone who not only understands the students but is also approachable so that students can relate to and want to identify with them, in addition to being perceived as an expert in his or her own field. While this has been true about a college instructor for generations, it is even more important for today's college student.

Influencing student behavior is never easy and requires important leadership skills such as expertise, understanding, commitment, and dedication. It is a challenging undertaking for even the best college instructors when the teacher meets the students face to face in the classroom. But this can be an extremely daunting task for those teachers who interact with their students in cyberspace without ever meeting them face to face. Is it possible for these instructors who are teaching in online environments to have the same influence on their students as those teaching in traditional classrooms? What impact will an instructor's likeability (referent power) and expertise (expert power) have on his or her ability to inspire students? What impact will an instructor's power have on students being able to trust their teacher sufficiently enough to change their thinking and/or their behaviors? Surprisingly to date, these issues have not been investigated. The purpose of this study is to find answers to the following two questions: (1) Is the student's perception of their instructor's personal power the same or different in traditional

and online classroom environments, and (2) What relationship if any does the student's perception of instructor's power have with outcomes such as satisfaction with course experience, the instructor as a source of inspiration, how much they trust the instructor, and will these relationships be the same or different in traditional classroom learning experiences compared to the online classroom. These research questions lead to the following hypotheses:

- H1:** Student perceptions of instructor's referent and expert power will have a positive relationship with student outcomes such as satisfaction, trust of the instructor, and the instructor as a source of inspiration in an online classroom learning environment.
- H2:** Student perceptions of instructor's referent and expert power will be higher in a traditional classroom learning environment compared to an online classroom learning environment.
- H3:** Important student and course outcomes such as satisfaction, trust of the instructor, and the instructor as a source of inspiration will be higher in a traditional classroom learning environment compared to an online learning environment.

Data for the study were collected from students enrolled in junior or senior level business students in a medium size (10,000 plus students) AACSB accredited university in the mid-south. The sample for the study consisted of 116 undergraduate students where 63.5% of them (73 students) responded to a course they were taking online and 36.5% of the students (42 students) responded to a course they were taking face to face. The survey consisted of items that measured student perception of instructor's referent and expert power (Rahim 1989), satisfaction with the classroom experience (McFarland and Hamilton 2006), two dimensions of trust integrity and benevolence (Kumar et al. 1995), and inspiration (Elliot and Thrash 2003). In addition, academic self-efficacy (Chemers, Hu, and Garcia 2001) and age were measured as control variables.

Results from the partial correlation coefficients controlling for self-efficacy and age supported H1. As expected, all correlations were strong (between 0.52 and 0.89) and significant supporting the hypothesis that student perception of instructor's referent and expert power have positive relationships with student outcomes such as satisfaction with course experience, trust, and inspiration in an online classroom learning environment. Results from the MANCOVA test that evaluated hypothesis H2 showed that student perception of instructor's referent and expert power were significantly different between face to face and online classroom environments (Wilk's lambda = 0.86; $F=8.86$, $p=0.00$). Univariate F-tests and mean comparisons show these perceptions to be significantly higher for face to face learning environments compared to online learning environments (for referent power, the mean for face to face courses = 4.13 compared to the mean for online courses = 3.82; for expert power, the mean for face to face courses = 4.25 compared to the mean for online courses = 3.93). The MANCOVA analysis that tested hypothesis H3 also showed significant differences between face to face and online classroom environments (Wilk's lambda=0.94, $p=0.04$). Univariate F-tests show mean differences between satisfaction with course experience ($F=6.11$, $p=0.01$), benevolence dimension of trust ($F=4.29$, $p=0.04$), and inspiration ($F=11.76$, $p=0.00$) were significantly different for the two delivery methods. However, mean differences for the integrity dimension of trust between the two learning environments were not statistically significant but in the expected direction ($F=1.40$, $p=0.24$).

Results from this study suggest that student perceptions of both referent and expert power are significantly lower in online classroom environments. The development of this power is important as it was shown to have a positive relationship with student outcomes satisfaction, trust of the instructor, and student inspiration. The different perceptions of power highlight the challenges facing online instructors. Instructors who are able to develop referent and expert power appear more likely to generate the type of student outcomes that are sought by administrators across departments and academic programs. In terms of implications, instructors who exhibit a more personal approach or highlight their academic or managerial experience may be able to increase the student's perception of power and ultimately improve these important outcome variables. Clarity and organization, tone and proper use of language, making available to students other pertinent information as the instructor is comfortable with (i.e., even in face to face delivery mediums most of us give a little personal background to students on the first day of class) are all likely to increase the student perception of instructor's power bases.

As more universities offer increasing numbers of online courses, instructors will have to focus on new and creative ways to impact their student's perceptions of power. Simply putting information and basic content online may not impact student performance in the course, but it does appear to produce lower levels of satisfaction in the course experience, trust in the instructor, and inspiration. Since these other variables are critical to retention, positive word of mouth, and turning the students into productive alumni, administrators must focus the attention of their instructors on developing these power bases. Instructors who can use online technology to relate to their students, demonstrate their personal knowledge, and serve as a mentor or role model from a distance may see an increase in student perceptions and ultimately outcomes beyond simply the grade in the course.

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The Candidacy of Barack Obama **A Teaching Tool for Integrated Marketing Communications**

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ABSTRACT

The purpose of this paper is to help create a teaching instrument by analyzing every element of an IMC program and to display how each ingredient became part of the Obama candidacy. Implications for actual classroom activities are then drawn.

INTRODUCTION

One of the great challenges of teaching in today's world is find ways to engage students. The use of current events, when relevant, offers one venue to reach this goal. An event that is especially compelling to traditional-age students, for whatever reason, increases the ability to use that event to connect with them.

In 2007 and 2008, Barack Obama entered the contest for President of the United States. The nearly two-year campaign generated a substantial amount of interest in the general population and on many college campuses. Evidence of the level of involvement is easy to identify: The number of votes cast in the primaries was exceptionally high, viewership of the acceptance speeches of Obama and of Sarah Palin reached nearly 40 million, and the Presidential and Vice-Presidential debates had audiences of nearly 70 million people.

Many college-age students were highly engaged in the process. As of this writing, voting totals cannot be compiled, because the election has not yet been held. Estimates are, however, that first-time voter rates will set new records.

Regardless of the outcome, this election offers a unique teaching opportunity. A case can be made that the Obama campaign included every single element of an integrated marketing communications (IMC) program. Consequently, the campaign may be used for item-by-item discussions of the elements of an IMC program, or even as a semester-long illustration of how such a program can be implemented.

The purpose of this paper is to help create such a teaching instrument by analyzing every element of an IMC program and to display how each ingredient became part of the Obama candidacy. The specific topics are taken from a standard IMC textbook, and are as follows:

- Image and Brand Management
- Buyer Behaviors
- Promotions Opportunity Analysis
- Advertising Design: Theoretical Frameworks and Types of Appeals
- Advertising Design: Message Strategies and Executional Frameworks
- Traditional Media Channels
- Internet Activities
- Alternative Marketing Programs
- Database and Direct Response Marketing
- Sales Promotions
- Public Relations and Sponsorships
- Regulations
- Evaluation

Of note, these topics can be taught and discussed with students, or they could be assigned to individuals and groups--asking them to provide evidence of how each component played out during the election.

In this paper, all of the phrases in *italics* are key terms used in an integrated marketing communications textbook. They serve as a guide for the primary topics in each section.

Image and Brand Management

Image is based on perceptions consumers hold about a given company or organization. In this case, the two major images would be those regarding the Democratic Party and those toward the Republican Party. Image has both *tangible* and *intangible* elements. In this election, image would be related to overall perceptions of the party as well as individual members and leaders, most notably leaders in Congress and party leaders, such as Howard Dean and Nancy Pelosi for Democrats, plus President George Bush and Senate Minority Leader Mitch McConnell.

The Democratic Party held a major advantage in the area of image. As evidence, approval rating numbers for President Bush reached record lows during 2008. McConnell found his Senate seat in great jeopardy just days before the election. Conversely, Democratic vote totals in the primaries reached record highs.

One of the newest and most popular terms bandied about by pundits during the course of the election was the word *brand*. It was often pointed out that the Republican "brand" had severe damage. The carry-over and connection between the Bush "brand" and the McCain "brand" was routinely noted.

Conversely, the Obama *brand, image, and position* were all based on one constant theme: Change. The Obama *logo* was viewed by many as an effective tool that inspired recall and positive emotions. In many ways the Obama logo was more noticeable than the standard Democratic logo, the donkey. Since any effective IMC program begins with a strong brand that is easy to promote, the Obama campaign started with a major advantage in the area of image.

Buyer Behaviors

The standard steps for make a buying decision include (1) problem recognition, (2) information search, (3) evaluation of alternatives, (4) the purchase decision, and (5) postpurchase evaluations. Of these, the first four are germane to an analysis of the Presidential campaign.

In essence, the *problem recognition* stage involves two aspects. The first is that the President must be, by statute, replaced. The second is that each party first engages in a nomination process to find the candidate to compete against the opposing party in the general election.

In terms of an *information search*, a consumer typically will first consider any *internal* thoughts. This, in many ways, explains why many believed Senator Hillary Clinton held an early advantage in the primaries. She was, by far, the most well-known brand.

Following an early upset in Iowa, Obama's campaign gained traction. Across the United States, citizens may have begun utilizing more of an *external information search* approach. Three factors typically emerge in an external search: (1) ability to search, (2) motivation to search, and (3) costs versus benefits. Many citizens were highly motivated to make the best choice and were willing to take the time to watch the debates and consider other materials before making a decision.

Attitudes and *values* may have played major roles in the information search process. The campaign was especially complicated by attitudes and values related to gender, race, and age, along with all of the contentious political and governmental topics, mostly notably those regarding the conflict in Iraq.

In terms of evaluation, an *evoked set* rather quickly emerged in the Democratic Party. Many candidates were quickly eliminated. Those remaining included Clinton, Obama, and former Senator John Edwards. It is possible that a multi-attribute model may have been used to consider these candidates, with key factors including policies, perceptions of electability, personality characteristics, and other factors such as the influence of former President Bill Clinton. Some voters considered the Iraq war the most important factor; others viewed the economy as the driving force. Some heavily valued experience; others were more excited about the prospects for a new, fresh face at the top of the ticket. Senator Clinton may have enjoyed the greatest degree of *affect referral*, by which some voters felt strong emotional connections with her that had been built over the years.

Promotions Opportunity Analysis

A promotions opportunity analysis involves two activities: (1) *determining which promotional opportunities* exist and (2) *identifying target audience characteristics*. Regarding the available promotional opportunities, the voters to be assessed include those who are currently loyal Democrats, Republicans (the competition), and potential new voters, consisting of independents and new voters. Both the Clinton and Obama campaigns believed that loyal Democrats would remain loyal, that some Republicans were persuadable due to the national

conditions that were present, and that the third group, independents, represented a major marketing opportunity. The Obama campaign engaged both longstanding independents but also focused a great deal on potential new voters, especially younger people. The Clinton campaign seemed to spend more energy on longstanding independents; however it also attracted women who had not voted before.

Target markets play a major role in every Presidential election. Voters are identified by a wide variety of *demographic* characteristics, including age, family status (single; married, divorced, with or without children) gender, income, level of education, race or ethnicity, and religious affiliation. *Geographic* targeting includes suburbs, rural versus urban, and size of a city or town. Geographic information is then combined with demographics for even greater micro-targeting of potential voters. In this election, many of the voters who supported Senator Clinton also seemed to be viable targets for Senator McCain. It was left to Obama to "win over" females disenchanted by the primary loss of Clinton and those in rural areas. Also in the general election, target markets, by state, include Latinos in Western States, Jewish voters in Florida, and other groups. Educated males with higher levels income tended to favor Obama; white males with lower incomes first seemed to favor Clinton in the primaries and some gravitated to McCain in the general election.

Psychographics also play a key role in targeting audiences. The standard terms "liberal" and "conservative" are often applied; however, other attitudes toward gay marriage or partnership, abortion, and gun ownership were also factors. Many pundits believed that in this election cycle, these psychological "wedge" issues played a lesser role due to the presence of major economic problems.

Advertising Design: Theoretical Frameworks and Types of Appeals

The advertising programs for both the Obama and the McCain campaigns employed specialized professionals. Undoubtedly advertising planning and research guided their efforts, including assessments of the product (the candidate), the major selling idea (change versus experience-maverick), and other approaches.

One clear challenge for the Obama campaign was *building brand image*. At first this simply included *recognition* and *recall*, especially in the primaries. Over time, however, the goal shifted to portraying him as being "Presidential" and fending off the many rumors and mistruths that could have damaged his candidacy, including those regarding his religious affiliation and nation of origin, as well as competitor assertions that he had strong relationships with former terrorists. Toward the end of the campaign, the goal naturally shifted to *persuasion* and leading voters to *take action*.

The standard *hierarchy of effects* model explains the promotional efforts regarding Senator Obama. The voter began with *awareness*, and then moved through stages of *knowledge*, *liking*, *preference*, *conviction*, and the *actual purchase* (voting). This all had to be accomplished in a relatively short period of time. In essence the process was completed twice, first convincing Democratic voters in the primaries and second reaching all voters in the general election.

The primary *leverage point* for Obama was moving voters from certain conceptions (opposition to the war; economic fears; worries about Constitutional issues) to the realization that desired ends could be reached. The message theme constantly revolved around the term "change," which was modified into various forms and as the campaign wore on.

The three major *advertising appeals* used throughout the Obama campaign were *emotionality*, *rationality*, and *fear*. Many of the early messages were inspirational and emotional. Later, as the campaign became more specific, rational arguments about health care and plans to renew the economy were presented. And, of course, the negative ads played on fear.

Of note, possibly the most memorable advertisement of the entire cycle was not created for Obama or McCain. It was the "3:00 in the morning phone call," created for Senator Clinton that generated the most buzz and was retained by the most voters. The fear appeal was reported to have helped influence undecided voters in some of the state primaries that immediately followed.

Traditional Media Channels

This campaign, like most others, centered on many of the *traditional media channels*--most notably *television*, *radio*, *newspaper*, and *direct mail*. The advantage gained by the Obama campaign was in total dollars spent and time slots purchased. This created additional *reach*, *frequency*, *opportunities to see*, *effective reach*, and *effective frequency*. The additional resources also made it possible to advertise in more states than McCain, especially during the closing weeks.

Further, if *recency theory*, which suggests that people "tune in" more right at the time of a decision, holds, then the Obama campaign was reaching people at the optimal time when the intrusion value of the ads would be at the highest point. If the *three-exposure hypothesis* holds, the campaign benefited from increased odds that the majority of voters saw the ads three times or more. Further, the funding allowed the campaign to combine positive, image-building ads on one front with negative ads targeting McCain at the same time.

Internet Activities

One new edition of an integrated marketing communications textbook features a chapter entitled "E-active Marketing." E-active marketing incorporates the more standard ideas about e-commerce with some of the newer forms of Internet activity, including *social networks*, *blogs*, *consumer reviews*, and *consumer-generated advertising*. It is possible that this feature of the Obama campaign created some of the strongest connections with newer, younger voters.

In terms of standard *e-commerce operations*, the Obama.com web site was up and running at a very early date. News stories regarding the number of new campaign contributors along with the amounts raised dominated the entire election cycle. The web site provided answers to questions, policy statements, a gift shop, and eventually links to former Hillary Clinton supporters. Two additional features were entitled "Fight the Smears" and "Under the

Radar," which included statements designed to debunk the false rumors that were circulated about Obama.

Beyond a link for contributions, the site offered links to numerous social network pages, including Facebook, MySpace, YouTube, Flickr, Digg, Twitter, Eventful, LinkedIn, BlackPlanet, Faithbase, Eons, Glee, MiGente, MyBatanga, AsianAvenue, and DNC Partybuilder. Many social network events took place both online and in-person. Entire social communities grew around the campaign. The Obama campaign sought to turn a simple electoral process into something more, including social aspects.

E-active marketing offered some customer-generated advertising. Early in the campaign, the most notable example was the "Yes We Can" song and video created by musician will.i.am, which featured numerous celebrities, along with Obama's victory speech that followed the Iowa caucuses, as part of the video.

The Obama.com web site also offered space for comments by voters. While not complete blogs, there was some consumer generated discussion and interaction. Many of the participants seemed to enjoy commenting on news stories that had been posted each day.

Several observers commented that the Obama Internet presence was a driving force, especially early in the campaign. The number of small donors that contributed represented a major shift the fund-raising tactics that allowed individuals to feel that they had a stake in the outcome of the election.

Alternative Marketing Programs

Alternative marketing includes *buzz marketing*, *guerilla marketing*, *lifestyle marketing*, *product placements and branded entertainment*, and *brand communities*. The Obama campaign featured many elements of these programs.

Buzz marketing takes many forms. The campaign often used buzz in the form of anticipated and then delivered endorsements, which were carefully timed and targeted. Among the more notable early endorsements were those by Senator Ted Kennedy and Gov. Richardson. Later, endorsements by former Vice-President Al Gore, the Clintons, and Colon Powell captured the news cycle.

Buzz was also present in the development of the Democratic National Convention. Of note, the decision to hold the acceptance speech in an outdoor stadium generated considerable amounts of interest. Of interest, perhaps the best response to the buzz was the timing by the McCain campaign to introduce Gov. Sarah Palin the morning following that speech. It immediately changed the limelight and news cycle in favor of Sen. McCain.

Buzz continued late into the campaign, especially the anticipation of the half-hour Obama infomercial that ran on most prime time networks six days before the election. In essence, the campaign was able to generate waves of buzz over a 21 month period.

Guerilla and lifestyle marketing are common elements in politics. Finding unique ways to reach voters in their lifestyles leads politicians to state fairs in Iowa, the taverns in New Hampshire (including the famous Clinton "shot" at one bar), and to numerous other venues in which potential voters would feel most comfortable. Of note, the McCain campaign tended to feature country and western singers and concerts of support, while Obama had many rock and roll endorsers.

The Obama campaign even ventured into the product placement arena. Messages were added to a video game, the Xbox 360 racing game Burnout Paradise. Obama messages were found at the web site VoteForChange.com, where people could go for information about how to register.

Brand communities were organized by cities and by states. Supporters routinely met to maintain enthusiasm and develop tactics for making phone calls, door-to-door stops, and to drive people to the polls on Election Day. Once again, this added to the social aspects of being a supporter.

Database and Direct Response Marketing

The Obama campaign, the Democratic Party, and state-wide elements of the party all collected and maintained databases of followers. On the eve of the Obama nomination, those in the audience were encouraged to send text messages via blackberry to help capture new names and addresses for the general election. The Obama campaign also gained access to potential supporters when Al Gore, Hillary Clinton, and Ted Kennedy all offered their databases to be added. The net result was a massive network of volunteers and participants.

Direct response marketing includes *trawling*, *permission marketing*, *frequency programs*, and others such as *customer relationship management* systems. The Obama campaign emphasized permission marketing and frequency programs. Donors were encouraged to set up monthly schedules, so long as they did not exceed the \$2,300 per candidate limit. E-mails and other tactics were used to personalize messages to those who had made contributions. Each included the option to be deleted from the mailings. If a person gave a second contribution after being taken off the mailing list, the name was re-added to the list.

Sales Promotions

Sales promotions include those targeted at individual customers (*consumer promotions*) and those aimed at other businesses or organizations (*trade promotions*). A variety of consumer promotions were included in the Obama effort. On several occasions, donors were notified that any additional gift would be accompanied by a prize, such as a t-shirt, door sign, or some other piece of campaign material. During the primary season, the campaign held several *contests and sweepstakes*. One involved registering to vote in Indiana, which was accompanied by the chance to participate in a 3-on-3 basketball game with the Senator (a sweepstakes). As the convention drew near, 10 contributors were chosen to receive backstage passes for the acceptance speech. Each winner had written a small essay about why he or she deserved to be given the pass (a contest).

At more major events, larger donors were placed into levels. At one level, a donor would be given the opportunity to be photographed with the Senator. These events led to much more substantial contributions.

Corporate parties are always a part of political conventions. These represent the trade promotions aspect of the plan. Special gifts and access were provided to major donors and bundlers of contributions.

Public Relations

Public relations involves defending against *image-damaging events* as well as highlighting *image-enhancing events*. Both played major roles as the campaign season moved forward.

The most dramatic early image-damaging publicity revolved around the well-documented sermons by Rev. Jeremiah Wright. Connections were quickly drawn to Obama by both Republicans and Democrats. This publicity demanded the strongest response, which was Senator Obama's well received speech on race, entitled "A More Perfect Union," delivered on March 18, 2008, in Philadelphia. Even then, the negative swirl did not subside, as Rev. Wright began to make public appearances and offered new commentary. Eventually Obama was forced to return and more strongly reject Rev. Wright's statements and his relationship with the Pastor, to the point of leaving the congregation.

At the height of the primaries, a public relations episode that affected both *internal and external publics* emerged. The issue was whether the votes from Michigan and Florida should be included in the selection of delegates. Both states had held primaries at times that were earlier than those designated by the Democratic Party. The meeting which ended with each delegate receive one-half vote was intense and inspired a great deal of internal controversy.

At the end of the campaign, the McCain team sought to generate publicity regarding a tenuous relationship between Obama and former terrorist William Ayers. While this attack did not seem to stick, it still required a response. The use of the Internet by those who believed a connection existed continued this story for many weeks.

On October 29, 2008, CNN once again ran an image-damaging story that Obama had "broken a promise" to only work with public campaign financing. It is of little consequence that the story was poorly researched and in many ways not factual. The campaign was once again pressed to react. The defense offered mostly revolved around the need to have funding to respond to 527 attack ads, created by groups outside the Republican party, such as the infamous "Swift Boat" ads that dominated the previous election cycle.

The Obama campaign engaged in some image-enhancing *sponsorships* and connections to charities. A web site link was establish for those who wished to donate money to those hurt by Hurricane Ike and the floods that occurred in early 2008. Obama appeared at one site to symbolically help fill sand bags as the rivers rose in Missouri and other places.

Regulations

Numerous *regulations* affect the nature of a Presidential election. Laws regarding campaign finance, electioneering, and voter fraud are some of the most prominent. The Obama campaign was legally justified to not release the names of donors who contributed less than \$200.00; however, many critics complained that this decision made the campaign appear in a more suspicious light.

Electioneering includes wearing political attire while voting. Consequently, some publicity appeared notifying individuals to dress in neutral clothes in order to avoid any confrontation at the polling place.

The Obama camp had to fight off claims that the group ACORN was somehow working to illegally register people to vote. Obama had a connection with the group. He pointed out that since employees were being paid commissions to register people, the simple shortcut was to forge them. This led to some abuses. He also pointed out that the incidents were minor and that the fraudulent applications had been identified and rejected. The opposition cried foul loudly. At one point, Senator McCain proclaimed the actions of ACORN, as being "on the verge of maybe perpetrating one of the greatest frauds in voter history." Some suspected that the goal was to suppress registrations, particularly in the state of Ohio, to enhance the Republican's chances in the state. The incident did provide some fodder for campaign stops for over one week.

Evaluation

Evaluation takes two forms, *attitudinal* and *behavioral*. Polling reflects attitudes and *intentions*. Polls conducted on a national basis are of lesser value when predicting the outcome of an election. State-wide polls may be less valid and more biased. The confusing factors include the margin of error, whether the polling institution contacts newly registered voters, and whether persons who only use cell phones are being contacted. Also, the "Bradley effect" drew some interest. In essence, questions were raised about the viability of Obama's poll number due to issues of race. A voter may respond one way when being polled and vote another within the privacy of the booth, due to subtle racial bias.

Both campaigns tried to overcome these obstacles with their own internal polls. Of note, during the final week of the campaign Obama constantly warned his constituents about overconfidence and complacency. The fear was that many would believe he had the race won and would decide not to vote due to issues of convenience or complacency.

At the end of the day, the most important evaluation tools would be behavioral: (1) the Electoral College vote, (2) state-by-state votes, and (3) down-the-ballot elections. The term "coat-tails" applies to the winning candidate. Either person has some influence on elections for both the Senate and House of Representatives. In the final week, speculation abounded about whether the Democrats would not only win the President Election, but also secure 60 seats in the Senate and a greater majority in the House of Representatives. McCain was encouraged by some Republican leaders to limit the damage, should he not be elected, by helping these down-the-ballot candidates.

SUMMARY AND CONCLUSIONS

This preliminary analysis provides ample support for the concept that, among other things, the Barack Obama Presidential campaign was a well-organized integrated marketing communications effort. This would be viable regardless of one's political affiliation or belief.

As a teaching tool, such an analysis provides ample opportunity to engage in the following:

1. Encourage students to go online or to the library to look up news articles that support and contradict the assertions made in this paper. For example, is there evidence or opinion that contradicts the idea that Obama responded correctly to the Rev. Wright crisis?
2. Expand the discussion. For instance, what role did the Clinton campaign in affecting the Obama brand, both in the primaries and in the general election? How might have Sen. Clinton impacted image-damaging publicity, especially with her supporters that simply refused to join the ranks of the Obama campaign.
3. Investigate all of these topics from the perspective of the McCain campaign. What did he do well? In what areas was his campaign deficient?
4. Construct a debate in which the primary question is: "Was it the skill of the Obama campaign, or outside forces such as economic conditions, that determined the fates of both candidates in this election?" In essence, does integrate marketing communications matter in politics? Why or why not?

The natural worry is the any discussion will simple degenerate to assertions and complaints about both candidates based on political views rather than applying the marketing concepts that are clearly present. At the same time, the opportunity does exist to help make the topics contained in a standard integrated marketing communications textbook come alive, in a complete and viable format.

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WANT TO REACH YOUR COLLEGE STUDENTS? YOU NEED TO CHANGE YOUR TEACHING STYLE

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ABSTRACT

The traditional methods of teaching are proving ineffective in teaching both Generation X and Y, those currently in the majority on college campuses. These students prefer to be active participants, with teachers acting as a facilitator. Generation X prefers self-directed learning and real world application; while Generation Y prefers teamwork activities. Despite their differences, both generations do agree that the Internet and technology should be a pivotal role in their learning experience. Better preparing students in college to work in teams, communicate, know necessary material, and analyze situations and information will make everyone succeed as these individuals enter the workforce.

INTRODUCTION

In order to accurately predict the needs of the upcoming generation in both education and the workforce, an analysis must occur of the previous generations to determine the effectiveness of teaching strategies, the changing needs of each generation, and the merging of these generations into the workforce. Current research focuses primarily on Generation X and Generation Y, with little attention on the Baby Boomers, the Veterans, or those born after Generation Y. The extensive research of both Generation X and Generation Y is primarily the result of educators and employers attempting to learn how best to deal with the current and upcoming generations of students and employees. Despite the decreasing presence of the Veterans and Baby Boomers in the workforce, as they continue to retire, their values and ideas have shaped and affected both Generation X and Generation Y's attitudes and values, warranting discussion.

THE GENERATIONS

The workforce currently consists of four generations: the Veterans, Baby Boomers, Generation X, and Generation Y. The first generation, the Veterans, have primarily exited the workforce. Yet, their presence, both perceived and actual, has affected each generation that has followed them through their work ethic, mentoring, dedication to their employers, and their hard work. The following generation, the Baby Boomers, continued to improve the workplace through their highly achievement-oriented and competitive personalities. Since they entered the workforce, this generation has remained committed to their careers and their presence at work. This dedication has led them to be labeled hierarchy worshipping and resentful. Despite their

dedication to their careers, they radically changed their working environment to include flexible schedules, the ability to work from home, and casual atmospheres. Neither Generation X, nor Generation Y have remained in the workforce long enough to create an impact. However, their presence is continuing to change the interaction of employees and the implementation of more teamwork within offices. Although Generation X has been labeled “slackers” and “lazy” by the media, their actions and passion directly negate this theory. This generation currently values their home life more important than their careers. Yet, they remain highly entrepreneurial, hardworking, task-oriented, and technologically savvy. Like Generation X, Generation Y looks to immediate gratification both in education and in their careers. However, they too exhibit many positive traits and continue to add value to the workforce. Generation Y tends to gravitate towards group activity, value optimism and morality, exhibit confidence with themselves and the ability to use technology. Despite the additions to the workforce, the micromanaging experienced by Generation Y in their childhood has resulted in an increased need of supervision in the workplace.

The learning styles of both Generation X and Generation Y vary dramatically from generations preceding them. Neither responds positively to the traditional lecture approach used by so many teachers in both secondary and post-secondary education. Generation X prefers self-directed learning, role playing, and the direct application to life. Generation Y; however, prefers collaborative learning that includes an extensive use of teamwork and the ability to use the Internet. Modifying classroom time to parallel expectations of these generations will result in a greater retention of knowledge and a more pleasant experience for all participants.

GENERATION REVIEW

Rather than begin with the Veteran Generation, we find it more important to begin with Generation Y, the generation that will have the most affect on the future. Although one individual within the Y Generation defines them as the distracted generation (O'Reilly 2000), researchers and parents tend to disagree. Research has shown that this generation “gravitates toward group activity” (Oblinger 2003), has a positive self-image, and are less materialistic than previous generations (McLaughlin 1999). Their values include optimism, civic duty, confidence, achievement, sociability, morality, street smarts and diversity, and exhibit assets that include collective action, optimism, tenacity, a heroic spirit, multitasking abilities, and are technologically savvy (Denham and Gadbow 2002). Generation Y tends to not only establish their own goals, but also achieves them. Of course, the achievement may not occur immediately despite their desire for immediate gratification. Some negative attributes that have been assigned to this generation include unenthusiastic, apathetic, jaded, having no fear, and showing no sense of urgency (Simplicio 2004), all resulting in an increased need for supervision and structure within the workplace. Because this generation has been told how to perform in school, what activities to participate in, when to miss school, and have had their schedules compiled for them, they not only need the structure in their classrooms and future jobs, but also need to learn how to deal with difficult situations and conflicts with people (Denham and Gadbow 2002). The micromanaging experienced throughout their childhood and adolescence has primarily been from their parents as they have essentially organized their children’s lives and sheltered them from conflict. For example, parents have been quick to contact their child’s supervisor to inform him/her that their child will be out of work for a week in order to have a family vacation.

Table 1
Generational Comparisons.

Generation	Work Values	General Characteristics
Veterans	<ul style="list-style-type: none"> • Loyal to employer • Believe in “paying one’s dues” 	<ul style="list-style-type: none"> • Confident • Rational problem solvers • Hardworking • Dependable
Baby Boomers	<ul style="list-style-type: none"> • Optimistic workaholics • Highly achievement oriented • Fair 	<ul style="list-style-type: none"> • Competitive • Self-directed • Strong desire to succeed
Generation X	<ul style="list-style-type: none"> • Desire flexibility • Hardworking • Self-starters • Goal-driven • Task-oriented 	<ul style="list-style-type: none"> • Independent • Uncanny ability to learn new things • Desire short-term rewards • Impatient
Generation Y	<ul style="list-style-type: none"> • Desire flexibility • Inexperienced • Technologically savvy • Desire structure 	<ul style="list-style-type: none"> • Optimistic • Confident • Value collective action • Desire short-term rewards

With only several years separating Generation X and Y, opposition between the generations runs rampant. Unlike Generation Y, Generation X obtained a more negative view of the economy and world after viewing company downsizing (Brown, Bettina 1997) that resulted in lay offs of their parents and family members. Due to these negative experiences, they haven’t been able to retain the optimistic opinion of the world that Generation Y has obtained throughout their adolescence and young adulthood. As a result, many have labeled members of this generation as “slackers” and lazy. A perception that could be a result of Hatfield’s research that found one main desire of this generation was increased flexibility in their job (2002). However, an abundance of research has revealed information quite contrary to the perception that this generation is lazy, an opinion that had become rampant in the headlines. Brown concluded that members of this generation are independent problem solvers and self starters that consistently desire feedback (1997). Additionally, members of this generation exhibit an internal locus of control (Jurkiewicz 2000), are hardworking, socially engaged optimists that are goal-driven and have obtained a “just do it” attitude throughout their lives (Haworth 1997). Unlike their counterparts, the Y Generation, they are task-oriented with a determination to get the job done quickly (Pekala 2001) and often look to short-term rewards. Their most important values are independence, pragmatism, flexibility (Kovary 2005), obtaining a sense of belonging, autonomy and entrepreneurship, security, and feedback that will satisfy their need for short-term rewards (Jurkiewicz 2000). In addition, their assets include having an uncanny ability to learn new things, being adaptable, (Jurkiewicz 2000) technoliterate, creative, independent and un-intimidated (Denham and Gadbow 2002). In conjunction with these positive attributes, this generation exhibits liabilities, similar to the Y Generation, which include “being impatient, inexperienced, cynical, and having poor people skills” (Denham and Gadbow 2002).

The Baby Boomer generation, mostly parents of the Y Generation, are characterized as indulgent, hedonistic, and self-absorbed (Strauss & Howe 1991 Zemke 2001) optimistic workaholics (Hatfield 2002) that are highly distrustful of authority figures (Zemke 2001). They are also depicted as highly achievement-oriented and competitive and hold a strong desire to succeed in their careers (Zemke 2001). This has been seen through their perceived necessity to be visible as they work long hours by coming to work early and being the last one to leave (Hatfield 2002). As such, the pursuit of pleasure and self-realization are achieved through education, meditation or self-help and is a key aspect of their lifestyles (Pekala 2001). As a result, Schwartz & Howard (1996) suggests that Boomers value youthfulness, independence, freedom and self-expression. Despite the perception that this generation is primarily concerned with achieving the American dream and making a name for themselves in the office, they have also changed the way a job is performed and the structure of the workplace. Many of the recent changes in the workplace are a result of the actions of the Boomers, such as casual work environments, flexible schedules and the opportunity to work from home (Pekala 2001). Interestingly, this generation tends to mold and structure their children's lives, members of Generation Y, while being overly critical of Generation X. Due to their place within the generational structures, this generation became the first to experience opposition and criticism from other generations. The Boomers are viewed by the Matures as lacking experience and structure while Generation X views Boomers as over-cautious, hierarchy worshipping, and resentful about being in charge without officially being considered an authority figure (Jurkiewicz 2000). However, the Veterans and Generation Xers can agree on one trait of the Boomers. A result of Boomers valuing friendly, warm relationships with co-workers by using consensus building and mentoring efforts has led both generations to believe that Boomers tend to be fair and good at managing and motivating teams (Pekala 2001).

The Veteran generation, also labeled the Matures, is characterized as the generation that survived the great depression and WWII. Contrary to later generations, this group believes in loyalty to their employer, retaining employment with their employer, and "paying one's dues in order to gain respect and corporate seniority (Hatfield 2002). In addition, the members of this generation are confident and rational problem solvers (Strauss and Howe 1991) that have faith in the status quo, loyalty to their employer, and exhibit a sense of duty and honor to their company and to their country (Pekala 2001). Their values include hard work, dependability, respect for authority and the position they hold, as well as praise and recognition (Pekala 2001).

LEARNING STYLES OF X & Y

Students within a traditional learning environment must be passive listeners with long attention spans, retention skills, and excellent memories with the sole purpose of passing an examination (Rassuli and Manzer 2005). Due to neither Generation X nor Generation Y adequately having these characteristics, the traditional teaching methods have become an outdated and ineffective way of teaching these students. Rather than learn the material for future use, members of these generations tend to remain passive, retain the information solely for the purpose of the examination, and ultimately dump the information from memory once the exam is complete. Smith and Gregor (1992) found that higher levels of learning are achieved with a collaborative effort of students with other students and with teachers, (Rassuli and Manzer 2005) a teaching style that is receiving an abundance of support. Due to this research as well as others, an emphasis on collaborative learning has been made throughout different levels of education in

an effort to enhance learning skills by involving students in the learning process (Gusky 1990) with the teacher acting as a facilitator (Rassuli and Manzer 2005) rather than an instructor.

Generation Y tends to respond best through collaborative learning rather than other learning styles as a result of their gravitation towards group activity (Oblinger 2003). In addition to preferring teamwork, Millennials also prefer experiential activities and the use of technology. Their upbringing, which includes micro-managing and guidance, has resulted in a preference for a trial and error approach, where success is the result of failure (Oblinger 2003) and although extremely confident, expect a more structured environment that focuses on them (Zemke 2001). Generation Y also tends to believe that “doing” is more important than “knowing” and that knowing how and where to find the answer is of more importance than having the correct answer (Aggerholm 2006). According to Zemke, mentoring is a very effective way of teaching and communicating with this generation (2001) and is highly suggested in the workplace.

Similar to Generation Y, Generation X has been conditioned to expect immediate gratification and, as a result, are more responsive, crave stimulation, and expect immediate answers and feedback (Brown 1997). They prefer self-directed learning, the use of role-playing and visual stimulation (Zemke, Raines and Filipczak 1999). Due to their conditioning, Generation Xers view large quantities of homework as a waste of time and would rather produce a lesser quantity of work that is meaningful and know why they must perform the task or learn the information before action (Caudron 1997). Despite the filtering of information before it is retained, Generation Xers are lifelong learners (Hornblower 1997) that prefer learning in context, cooperative learning, and the application of information to the world (Brown 1997).

Table 2
Learning Styles.

Generation Y	<ul style="list-style-type: none"> • Prefers collaborative teaching style • Prefer group activity • “Doing” more important than “knowing” • Mentoring very effective • Desires immediate gratification
Generation X	<ul style="list-style-type: none"> • Prefer self-directed learning, role playing and visual stimulation • Prefers to produce quality rather than quantity work • Desire to know the whys of actions • Lifelong learners • Desire application based learning

WORK EXPERIENCE

Neither Generation X, nor Generation Y exhibits the same loyalty to a company as the Veterans or dedication to the office like the Boomers. However, their effect and influence on the

workplace will forever change the perception and values of future generations, just as the prior generations have impacted them. Therefore, it is imperative to understand the motives and expectations of these generations to better prepare the workforce for their entrance and their continual success.

Claire Raines defines members of the Y generation as “good kids” with unrealistic expectations of the work environment (Zemke 2001). Because this generation has been micromanaged throughout their lives by parents and teachers, they expect the workplace to mirror these experiences from their college and pre-college environment. In addition to these false expectations, research by Pekala found that “fewer than half [...] describe themselves as confident, while only 4 in 10 consider themselves “prepared” to enter the workforce” (2001). Although members of this generation exhibit self-confidence and certainty, these characteristics may be masks that they have learned throughout their lives. Equally important to their expectations of the workplace is their approach to their current and future employment positions. Similar to Generation X, they view life and work as a learning experience. If at any time, work fails to live up to this expectation, it will be viewed as a dead end, useless to their future, and something to be avoided (Zemke 2001).

Contrary to perceptions by the media and Boomers, Generation Xers possess positive work values and continually work toward achieving their goals. 87% believe they have “a strong sense of loyalty to their employer, 69% believe people get ahead by their own hard work, and 80% claim that they would continue to work if they could live comfortably without a job” (Haworth 1997). Haworth continues to report that members of this generation are hard-working, socially engaged, and “hold attitudes [...] similar to other cohorts” (1997). As previously stated, this generation tends to be more loyal to direct managers than organizations as a whole. Yet, they still view their jobs as places to learn and grow and will continue to seek opportunities to fulfill these needs, whether with their current employer or elsewhere (Hornblower 1997). Other working values within organizations that are desired by Generation X include flexible work environments and accountability for their own work (Jurkiewicz 2000). Individual values that members of this generation possess include natural competitiveness, a tendency to take risks, and a hunger for success (Hornblower 1997). Rather than seek opportunities to work in teams, like Generation Y, Generation Xers tend to use teamwork for their own success, ultimately valuing individualism over collectivism (Leuenberger and Kluver 2005), despite the tendency of educational environments stressing the importance of teamwork. Despite their strong work ethic and loyalty to employers and managers, Generation X will continually work towards their own goals that are congruent with the organization. (Zemke 2001) However, employers must remember that Generation X uses work for their own happiness. This happiness is not necessarily driven by success at a company, but rather is measured by their time spent away from work. It is based on “money, fun, and leisure” (Denham and Gadbow 2002). Both Generation X and Generation Y have realized very early that there is more to life than a job and strictly adhere to their belief that family, friends and entertainment is what life is about. Their job is only a means to enjoy their true passions in life.

IMPACT ON FUTURE GENERATIONS

Competition

Historically, children, both at home and at school, have been raised with competition. Despite its previous acceptance, the concept of competition has undergone serious debate over the past several years, resulting in changes within the classroom and sport settings. Henry and Gordon (2006) found that competition has methodological limitations and could play an important role in being nonproductive and ineffective at encouraging students. A separate study viewed competition as an attempt to separate the “winners” and “the losers,” ultimately creating short-term and long-term harm to individuals (Roth and Constantine 1995). Because Roth and Constantine found that forcing competition among children who are not yet sure of themselves does not add value (1995) to the sport or to confidence in them, they suggest refraining from traditional forms of competition in sports. Rather than continue with traditional competition, they suggest success be tied to each individual’s ability to improve his or her own fitness level, allowing each person to set attainable goals that cater to each person’s abilities and interests. Both Roth and Constantine feel that programs should be created to “focus on the psychological benefits of school recreation, such as higher self-esteem and developing good exercise habits” (1995). Although research has shown that competition in sports can be counterproductive, Henry and Gordon found that a higher level of competition within academics significantly increased test scores in language arts and math (2006).

Education

Due to the changing nature of students and advancement in technology, many changes have occurred in classrooms in an effort to reach out to current students and keep learning interesting. Because teaching students no longer includes only dealing with children and young adults in the classroom, educators and teachers must prepare themselves for conversations and situations outside of the classroom. Just as parents have remained involved, sometimes overly involved, in Generation Y’s activities during their adolescence, these parents have become increasingly meddlesome in relation to their children’s lives with education, homework and grades. Universities may need to create a separate office to handle the increased communications by parents. This would alleviate some of the pressure from teachers that are constantly being faced with argumentative conversations that the results or actions were not the responsibility of “their kid” as well as to avoid possible lawsuits by parents due to our litigious society. (Simplicio 2004).

Educators and teachers should not only focus on the meddlesome interruptions from parents of the Y Generation and beyond, but also revise teaching methods in a way that will speak to students and enhance their ability to learn. Since the “aging infrastructure and the lecture tradition of college and universities may not meet the expectations of students raised on the Internet and interactive games,” (Oblinger 2003) teachers must learn technology (e.g. software) (Aggerholm 2006) to retain the interest of the students and keep their respect. Additional teaching methods should include working in teams with the teacher taking on the role as a facilitator, rather than an instructor. This will require students to “think inclusively and collaboratively” (Zemke 2001), better preparing them for the workplace. Aggerholm suggests that teachers are “clear about boundaries and expectations [...], help students develop

concentration and focus in their learning,” develop students into active producers, and encourage students to learn the material in a way that they can retain it beyond the exam and their education experiences (2006).

Teaching Model

Gone are the days of students blindly choosing a class because it is required in their curriculum. Today’s students are consulting friends and Internet sites such as Pick-a-Prof to determine their class schedules. Students feel compelled to know an ample amount of information about their potential teacher that includes personality, attitude, grading system, class requirements, and likeability. If students approach education and teachers differently than before, then teachers must also approach teaching differently. Not only are traditional methods of lectures, quizzes, and homework not appealing to current college students, but are ineffective at teaching the material and retaining students’ interest. The mid-20th century emphasized individualism and competition, teaching in the 1960s-1980s emphasized individual recognition, and as of late, elementary education has focused on accountability and cooperation (Hillmann 2004). Just as education focus has changed previously, it must again be transformed to be effective on current and future students within the college classroom.

As research suggests, the first step in modernizing the classrooms to educate students, primarily the Y Generation, is to implement collaborative learning. Because this generation has adopted the “leave no one behind” mentality, it is best to foster teaching to their learning styles. Rather than issue homework that must be done individually, potentially inviting students to “cheat,” teachers should establish groups within the classroom and encourage students to learn from each other. Most resistance to this approach will be from Generation Xers, the generation has been raised in a culture of independence and will openly admit their preference to work alone. However, as more work environments move towards team projects and emphasize collective advancement, members of Generation X will recall their encounters of teamwork through college and embrace these experiences as they are applied to their lives. Although members of this generation prefer to work within teams, the importance of individual assessment and accountability still remains throughout different levels of education. Due to this reason, teachers should continue to provide examinations or other projects on an individual basis. This will provide the teacher with the ability to assess each individual by the knowledge that they have retained, while also providing accountability for the material assigned.

Class assignments and homework is not the only area that students tend to prefer the collaborative environment, and is possibly not the most important factor. Neither Generation X nor Generation Y are learning material presented within the traditional classroom setting. The passive approach that they have exhibited throughout their educational career results in “cramming” for the test and little retention of the information learned. Collaborative teaching moves from the traditional lectures of the classroom and towards interactive learning, which involves students in the discussion and requires a basic understanding of the material at the beginning of class. In order to promote a deeper understanding of material and information, teachers must refrain from lecturing the text to students. Instead, the text should be discussed and elaborated, allowing students to question each other, the material and the teacher. Due to the Y Generation’s use of computers and the Internet, additional reading assignments on the topic may be suggested to spur conversations. A lecture on managing employees will be ineffective.

However, a discussion of management techniques using real world problems within the management profession will not only require students to analyze the situations, but will provide students with application of existing situations that will be retained and utilized outside of the classroom.

An additional teaching method suggested for teachers is an interdisciplinary approach, especially for required undergraduate classes. Many students complain about the requirements of education, primarily classes outside of their desired curriculum. Chemistry and Business students don't understand why they must take Introduction to Psychology and Psychology students express disdain that they must take American History. Rather than the education system explaining the necessity of these classes, students are told "they are required" and the discussion ends there. Not only students, but teachers would also benefit from interdisciplinary studies. Just as psychology can be applied to business, business practices can be applied to the psychology profession. Without understanding the importance and relevance of these classes on education and within their lives, students put forth less interest and effort and lose valuable knowledge that may one day be required.

CONCLUSION

Although little qualitative research has been done on the long-term effects of competition in the area of academics, ample research has been performed in reference to Generation X and Generation Y. The research, if used correctly, could enhance cooperation and success in the workplace; however, it does little to guide educators on the best teaching practices of upcoming generations. Due to these vacancies, extensive research in the areas of competition beyond athletics and characteristics of generations beyond Y Generation would provide educators with knowledge and direction for future students. It will not only provide teachers with the foresight on how to best teach students, but will also aid educators with information on technological requirements and staffing requirements, both of which seem substandard.

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Entrepreneurs' Storytelling: Preliminary Evidence of Entrepreneurs' Use of Oral Narrative

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EXTENDED ABSTRACT

This study reports the analysis of oral histories of self-identified entrepreneurs and describes new understanding of the way in which entrepreneurs use storytelling to exchange information. The specific research question of this study is: "Do entrepreneurs use storytelling to exchange important information?"

Storytelling or, more formally, oral narrative is defined as the verbal presentation of a series of events meaningfully connected in a temporal and causal way (Onega Jaén and García Landa 1996, p.3). The collection and analysis of the stories that entrepreneurs tell allows researchers to view the phenomenon of entrepreneurship through the subject's eyes (emic point of view), rather than from the more limited viewpoint of an outsider (etic point of view) (Hansen and Kahnweiler 1993, p.1401).

Approximately 22 hours of interviews with 25 self-identified entrepreneurs were recorded in the course of this research project. Each interview consisted of an entrepreneur recounting his or her life story. The interviews were collected in 2002 throughout the southwest of Canada and the northwest of the United States, an area chosen because it provided a relatively homogenous cultural heritage. The entrepreneurs who agreed to be a part of this study were from a wide variety of industries: clothing, communications, consulting, health care, hospitality, manufacturing, retail, software development, trading and yachting. They ranged in age from 27 years to 76 years. Thirteen of the entrepreneurs were American, eight were Canadian and four were immigrants to Canada from other countries.

Data quality is usually measured in terms of validity and reliability. Validity is defined as measurement of the accuracy of information and its generalizability (Creswell 1994, p.158). In qualitative research, the construct of validity is generalized to truthfulness of investigation (Kvale 1995, p.25). Reliability has been defined as a measurement of the likelihood of similar conditions giving rise to similar observations (Aunger 1995, p.99). In qualitative research, the construct of reliability is generalized to craftsmanship on the part of the researcher (Mays and Pope 1995, p.110).

Validity can be broken down into two constructs: internal validity, which concerns the accuracy of information and external validity, which concerns the generalizability of findings. The construct of internal validity in positivist science corresponds to veracity or the degree of correspondence with objective (Kvale 1995, p.23). Postmodern philosophy of science disputes the notion of objective reality (Feyerabend 1975, pp.81-92) and substitutes "spirit of truth"

(Ricoeur 1965, pp.189-190) as the measurement of veracity. In this study, veracity has been tested by comparing the events described in the actuality for conformity with printed records (Allen and Montell 1981, p.85). The construct of external validity in positivist science corresponds to generalizability and is generally treated as a sampling issue in interpretive inquiry (Zikmund 1994, p.259).

This study utilized a process of theoretical sampling (Glaser and Strauss 1967, p.45) in the determination of the number and types of candidates to be interviewed. Simply stated, theoretical sampling means that the ethnographer chooses the next people to interview when he or she feels the need for data to compare to the data already collected (Agar 1980, p.124). Barney Glaser and Anselm Strauss refer to this point as theoretical saturation (1967, p.61). Overall theoretical saturation was tested by comparing the data collected to a typology of eight entrepreneurial archetypes described by William Gartner (1982).

The study found evidence that entrepreneurs use storytelling to exchange important information. The ways that entrepreneurs used storytelling within their oral histories were classified and found to fit within a typology that included: organizing, opportunity identification, sales and financing. A summary of these findings are shown in Table 1.

Table 1
Classification of Entrepreneurs' Use of Storytelling

Use of Storytelling	Frequency	Male	Female
Organizing	19	29%	40%
Opportunity Identification	16	32%	20%
Sales	12	18%	25%
Financing	8	13%	15%
Other	3	8%	0%

It is interesting to note that the female entrepreneurs of this study reported using storytelling as a tool for organizing and as a sales tool more frequently than male entrepreneurs. However, the male entrepreneurs reported using storytelling as a tool for opportunity identification more frequently than the female entrepreneurs.

Entrepreneurs in this study used storytelling in organizing in a wide variety of ways: to share best practices amongst organization members, as a way of documenting organizational structure, to learn business practices in a family setting, as a way of articulating the entrepreneur's vision to organization members, to describe a business model and as a way of explaining complex relationships within the organization.

The entrepreneurs in this study demonstrated the use of storytelling for opportunity identification. Throughout the interviews of this study, it was common for entrepreneurs to place their visions of opportunities into the context of a performance narrative. The life stories collected in this study also made reference to storytelling being used as a tool to exchange information in the process of sales or marketing and as a tool used for financing their ventures. The evidence of entrepreneurs using storytelling to exchange important information presented in this study is preliminary in nature. Entrepreneurs may find that development of specific skills

for the use of storytelling could lead to improved performance in each of the functional areas of organizing, opportunity identification, sales and financing. Entrepreneurship scholars may find the ability of entrepreneurs to tell stories provides a means for differentiating between entrepreneurs and non-entrepreneurs.

This evidence suggests an important role for future study of the stories that entrepreneurs tell. Further empirical investigation of the use of storytelling by entrepreneurs could provide evidence, useful both to entrepreneurs and to entrepreneurship scholars. Entrepreneurs are likely to gain confidence from the realization that their storytelling ability is vital to their profession. The development of specific skills for the use of storytelling for organizing, opportunity identification, sales and financing could lead to improved performance in each of these functional areas. Entrepreneurship educators could integrate storytelling into their curriculum both as a way of passing along the heuristics of entrepreneurial expertise and as an entrepreneurial skill. Entrepreneurship scholars may find the ability of entrepreneurs to tell stories provides a means for differentiating between entrepreneurs and non-entrepreneurs. Media scholars such as Marshall McLuhan (1964) and Walter Ong (1977) have differentiated between oral cultures and literate cultures. It is possible that an individual's ability to communicate using storytelling is related to his or her ability to identify opportunities, to create organizations and to make sales; all key entrepreneurial activities.

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**A TYPOLOGY OF PRIVATE BRAND STRATEGIES AND
A PRILIMINARY STUDY OF THE EFFECTS ON CONSUMER
PERCEPTION OF PRIVATE BRAND QUALITY**

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EXTENDED ABSTRACT

Private brands have grown phenomenally and become a competitive force against national brands (e.g. Ailawadi and Keller 2004). The competitiveness of private brands is mainly rooted in their lower prices and less promotional expenses in comparison with national brands (e.g. Hoch and Banerji 1993). However, the quality of private brands is generally perceived to be lower than national brands (Richardson, Dick, and Jain 1994; Sprott and Shimp 2004). Prior studies have indicate that the quality perception is so important that it predominantly determines the market share of a private brand (Hoch and Banerji 1993) and the consumer proneness to buy a private brand (Richardson *et al* 1994).

This study aims at developing a set of private brand strategies to help retailers create a favorable consumer perception of private brand quality. The typology of private brand strategies is based on two retailer decisions for a private brand: brand labeling and entry into a product category. In labeling a brand, a retailer can adopt either its own store name or a name different from their store identity. In entering a product category, a retailer can choose to make entry into a signature category (i.e. products strongly associated with a store) or a non-signature category.

Brand labeling and product entry strategies affect consumer perception of private brand quality in different ways. Labeling a private brand with a name different from the store name would decouple consumer perception of the store from the brand. In contrast, entry into a signature category would facilitate the transfer of established consumer perception of the store to the brand. The effects of these strategies are moderated by retailer image. Retailer image refers to the consummate impression of consumers about a retail store (e.g. Zimmer and Golden 1988). It is an important ingredient of retail branding and gives rise to a retailer's brand equity and influences consumer patronage of the retail store (Ailawadi and Keller 2004).

Based on cue utilization (Cox 1967) and categorization theories (Meyers-Levy and Tybout 1989), we propose the following effects of these marketing strategies on perceived quality of a private brand: 1) a different brand name generates a higher perceived quality than a store name, 2) the perceived quality is higher with entry into a signature product category of a store than a non-signature category, 3) the difference in perceived quality between a different name and a store name is lower for a high-image retailer than for a low-image one, 4) the difference in perceived quality between a signature product category and a non-signature category is higher for a high-image retailer than for a low-image one, 5) the difference in perceived quality between a different brand name and a store name is lower for a signature product category than for a non-signature category, and 6) the interaction effect between brand

labeling and product category signature-ness is reduced at a low-image retailer vis-à-vis a high-image retailer.

The research study is in progress. We first conducted a pretest on the manipulation of independent variables and the relationships as shown in the hypotheses. A 2 (brand labeling decision) \times 2 (product category signature-ness) \times 2 (retailer image) between-subjects factorial design was employed in the pretest. 200 student subjects at a Canadian university participated in the pretest. The dependent variable is consumer quality perception of a private brand. Multiple-item scales were developed for the independent variables and the dependent measure. All scales exhibit high reliability (Cronbach's alphas range between 0.81 and 0.95).

Although not all hypotheses are supported at significant levels, the directions of the pretest results are all consistent with the hypotheses. In particular, we find that the different brand name strategy generates a higher perceived quality than the store name strategy only for the high-image retailer, whereas the low-image retailer is better off with the store-name strategy ($F[1, 195] = 9.98, p < 0.01$). This result is counter-intuitive because a different name would make a private brand look like a national brand and consumers generally perceive national brands to carry a higher quality than private brands. We postulate that the reason might be that consumers can't reconcile the low image of a retailer with its credibility to boost the perceived quality of its private brand by using a different name. The major limitation of the pretest is that we chose different types of retailers (a drug store and a department store) and used different signature and non-signature products for these two stores. This may explain why some of the results are insignificant. We plan to conduct a new experiment to address this weakness.

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“Salespeople Behaving Badly!” An Exploratory Study Investigating the Relationship Between the Work-Family Interface and Salesperson Deviant Behavior

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INTRODUCTION

Much research in industrial and organizational psychology and management has recognized the continued erosion of the boundaries between work and family. In their review of 190 work-family studies, published in IO/OB, Eby et al. (2005) note that, “while there is a growing body of research to suggest that work and family can positively influence one another, there is far more that points to a negative spillover in terms of work-family conflict (p. 180).” Demographic changes in the make-up of the family, a diversified workforce, and increased competition in the workplace have necessitated employers to recognize the importance of work conflicting with family (WFC), family conflicting with work (FWC) and its impact on job outcomes.

Salespeople are particularly vulnerable to work conflicting with family and vice versa because of their unique role in the organization. They are often described as occupying a “boundary spanning” position within the organization. Conflicting demands of both customers and the company they represent may lead to a variety of role stresses (Boles, Johnston, and Hair 1997; Goolsby 1992; Netemeyer, Brashear-Alejandro, and Boles 2004). An increased emphasis on relationship selling and the importance of salesperson customer orientation has added additional strain on work and family boundaries. Encouraged to form long-term personal relationships with their customers, salespeople experience increased time-demands and a need to be available to the customer at all times (Beverland 2001; Gruen, Summers, and Acito 2000). Retail salespeople in particular are asked to work during periods when other professionals enjoy the company of family and loved ones, such as the Thanksgiving and Christmas holidays. These additional psychological strains and increasingly demanding characteristics of the sales function may lead to greater conflicts between family and work responsibilities (Carlson and Perrewé 1999).

To date, a number of studies have been presented regarding the direct and indirect relationships between WFC, FWC, salesperson emotional exhaustion, salesperson job satisfaction, and salesperson propensity to leave, both in an industrial and retail setting (Boles, Johnston, and Hair, Jr. 1997; Boles, Wood, and Johnson 2003, Netemeyer et al 2004). Unfortunately, very few studies have investigated the empirical link between either WFC or FWC and salesperson work behaviors (Bhuiyan, Menguc, and Borsboom 2005; Netemeyer et al. 1996). Clearly this shortcoming is significant as salespeople interact with both members of their own organization as well as with customers, and “salesperson’s behavior or misbehavior affects not only how well their sales organization operates internally but how well their organization operates externally with respect to developing customer relationships and effectively cross-

selling and up-selling products and service over time” (Jelinek and Ahearne 2006, p. 1). In addition, traditional models view the effects of WFC and FWC on performance as likely being mediated by job stress (Frone, Russell, and Cooper 1992; Thoits 1991). However, a study published in the April 2005 issue of the *Journal of Marketing* has suggested this is not the case in high stress customer service jobs and that future research investigating the direct relationship between the work-family interface and important behavioral outcomes is needed (Netemeyer, Maxham, and Pullig 2005). As such, the purpose of the current study is to respond to this call for additional research and extend the sales literature by examining the direct relationship between WFC, FWC, and salesperson deviant work behaviors.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

Work-Family Conflict and Family-Work Conflict

Work-Family conflict has been a widely researched topic in areas other than marketing. Growing out of research on inter-role conflict, Kahn and his colleagues (1964) were some of the first academicians to touch on work-family conflict when they discussed the pressures fathers experience when participating in multiple, competing roles. They defined role conflict as the “simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make compliance more difficult with the other” (Kahn et al. 1964). The conflict between work and family was provided as a specific example of inter-role conflict. Their later work, however, primarily limited itself to focusing on conflict within the work role.

Greenhaus and Beutell (1985) integrated the research on WFC conflict up to that point in time, and expressed the need to include items that reflect work conflicting with family, and family conflicting with work as two separate dimensions in scale development. WFC and FWC have been defined as “a form of interrole conflict in which the general demands of, time devoted to, and strain created by the job (family) interfere with performing family (job)-related responsibilities” (Netemeyer et al. 1996).

WFC and FWC in Sales Settings

While any job and family membership inherently implies some conflict, it appears that the unique role of salespeople and the nature of relationship selling often obscures the boundaries between the work and family domain and makes salespeople particularly vulnerable to WFC and FWC. All salespeople have the potential to experience WFC and FWC and should not be excluded because they are unmarried, do not have children living at home, or their spouse does not work. Conflicts between work-related requirements and family concerns are not limited to married individuals. Single parents and other single people also face the challenges of balancing work with children, friends, parents and/or other commitments outside the workplace. Thoits (1991) even suggested that single people might be more vulnerable to experiencing chronic role identity strains because of a relative lack of coping resources. For the remainder of this paper, and in analogous with Boyar et al. (2003), we define family as anyone who is either formally or informally a sanctioned family member. This could include, for example, a spouse or significant other, parents, children, grandchildren, siblings, and children of siblings.

Limited research has examined the consequences of WFC and FWC in a sales environment. Netemeyer et al. (1996) reported that both WFC and FWC were negatively related to salesperson job satisfaction, life satisfaction, relationship satisfaction, and self efficacy. Both WFC and FWC were positively related to salesperson job stress, intention to leave an organization, and searching for another job. In addition, FWC was detrimental to sales performance. A number of later studies confirmed the negative relationship between salesperson WFC, job satisfaction, and performance as well as the positive relationship between WFC and job stress in both an industrial and retail setting (Boles et al. 1997; Boles et al. 2003; Netemeyer et al. 2004).

Deviant Salesperson Behavior

The boundary-spanning nature of the salesperson makes understanding both positive and negative salesperson behaviors very important. Nonattendance behaviors such as absenteeism, leaving work early, and coming to work late in addition to other negative behaviors directed at the organization can contribute to dysfunctional norms, cause disruption to staffing, and cost money (Boyar et al. 2005). However, because of the salesperson's boundary spanning position it is important for organizations to understand that negative salesperson behavior may not only be directed to the organization, but also towards co-workers and customers. Jelinek and Ahearne (2006) introduced a classification of deviant salesperson behavior which distinguishes between deviant behavior directed at their organization (deviant organizational behavior), deviant behavior directed at members within their organization or co-workers (deviant interpersonal behavior), and deviant behavior targeted at customers and outside partners (deviant frontline behavior). This classification of salesperson deviance is listed in Table 1.

Proposed Model and Hypotheses

In their research, Behrman and Perreault, Jr. (1986) proposed an integrative model of the antecedents and consequences of sales force role stress. As part of the model, they posited that in an effort to cope with increased role conflict and role ambiguity, salespeople will sacrifice job satisfaction and performance. While most sales research focuses on the role expectations for salespeople demanded by sales managers versus those that are expected by customers (intersender conflict), Behrman and Perreault (1986) expanded the definition of salesperson role conflict to include other typical conflicts experienced by salespeople such as intra-sender conflict, work-overload, and person-role conflict. The performance and satisfaction measure used by Behrman and Perreault (1986) measured such items as controlling expenses, satisfaction with fellow workers, satisfaction with supervision, satisfaction with company policies and support, satisfaction with available opportunities, etc...

Table 1: Classification and Measure of Salesperson Deviance

Deviant Organizational Behavior	Deviant Interpersonal Behavior	Deviant Frontline Behavior
<p>“Fudged” an expense report.</p> <p>“Worked” from home but really did not do much work at all.</p> <p>Put off work-related duties to attend to personal things.</p> <p>Ran personal errands when should have been doing work.</p> <p>Used company resources (paper, supplies, fax, copier) for personal purposes.</p> <p>Ignored input from sales manager on how to do the job.</p>	<p>Cursed at other co-workers and colleagues.</p> <p>Criticized other co-workers and colleagues.</p> <p>Blamed other co-workers and colleagues when things went wrong at work.</p> <p>Accepted credit for work of other people.</p> <p>Said hurtful things to other co-workers and colleagues.</p>	<p>Made the sales organization look bad to people who do not work at the organization.</p> <p>Told customers some of the things that are bothersome about the sales organization.</p> <p>Complained to family/friends about the sales organization.</p> <p>Said rude things about the sales organization or manager.</p> <p>Used deceptive selling tactics when selling to prospects or customers.</p> <p>Acted out work-related frustrations in front of a customer.</p> <p>Did not follow specific customer rules or etiquette.</p>

WFC, FWC, and Salesperson Deviant Behavior

WFC and FWC have been defined as a form of inter-role conflict which is often due to the responsibilities, requirements, expectations, duties, and commitments of a given role within the family and/or work domain (Netemeyer et al. 1996). Previous studies have confirmed that this role stress may result in negative personal behavior such as alcohol abuse, physical ailments, and depression (Adams, King, and King 1996; Beutell and Wittig-Berman 1999; Frone, Russell, and Barnes 1996). Furthermore, research has established a positive relationship between WFC, FWC, and such detrimental outcomes as salesperson turnover intention and searching for another job (Netemeyer et al. 1996). In analogy with the Behrman and Perreault’s (1986) role stress model there may be spillover in the workplace and how salespeople cope with this role stress through the increased display of negative behavior or misbehavior at work. Increased role stress between the family and work domain may manifest itself in a growing negative interaction

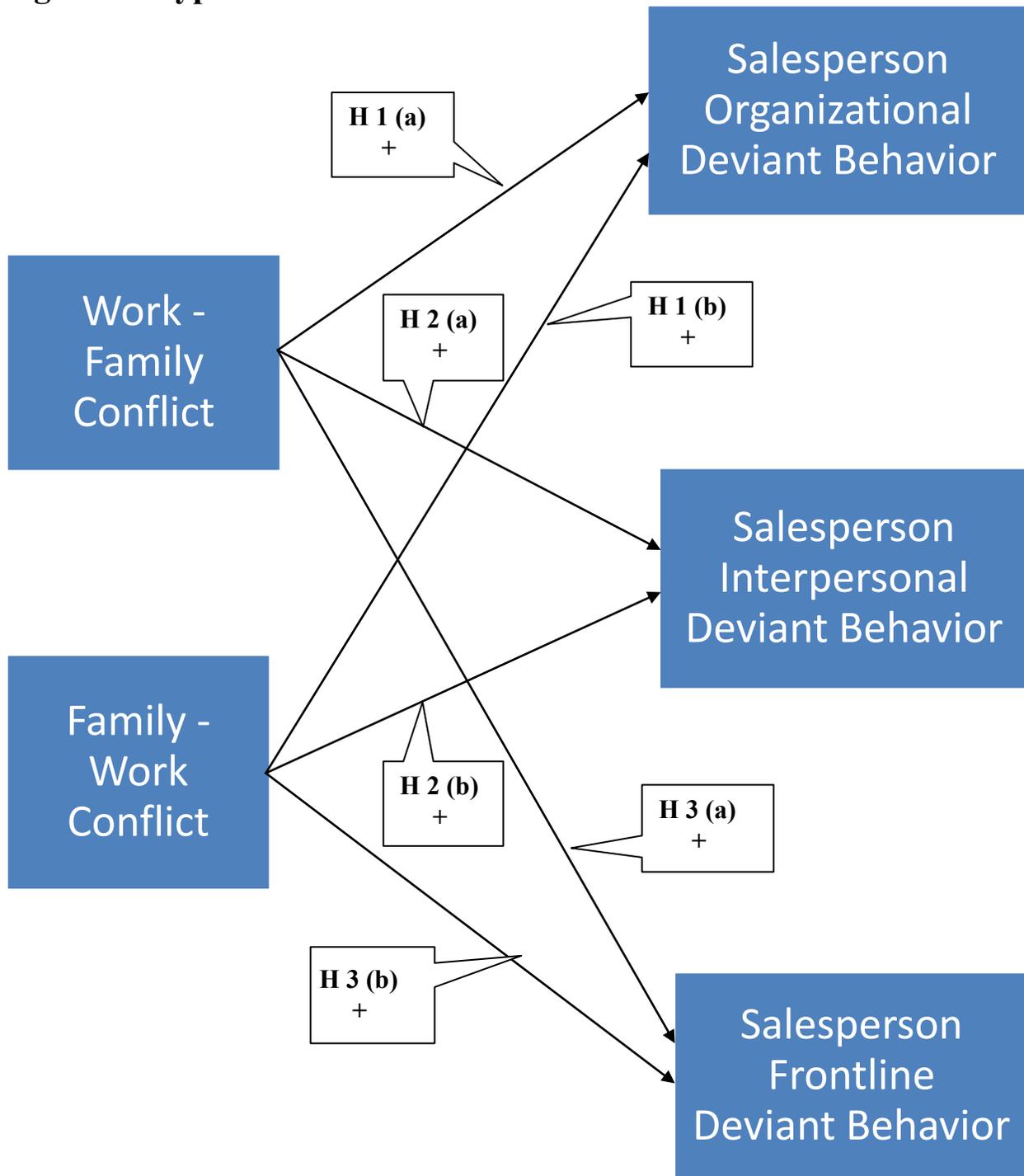
between salespeople and their coworkers and/or colleagues (interpersonal behavior), increased engagement in negative “frontline” behavior with customers, and increased negative behavior directed at the organization. Thus, this implies a positive empirical relationship between these variables.

Hypothesis 1: (a) WFC and (b) FWC are positively related to salesperson deviant organizational behavior.

Hypothesis 2: (a) WFC and (b) FWC are positively related to salesperson deviant interpersonal behavior.

Hypothesis 3: (a) WFC and (b) FWC are positively related to salesperson deviant frontline behavior.

Figure 1: Hypothesized Model



METHODOLOGY

Data Collection

To empirically test our hypotheses, data were collected through the administration of a survey. Business students from two universities in the Southeastern United States were asked to approach three individuals who were active in retail sales. They then asked the salesperson for their participation by filling out a questionnaire. A consent sheet was collected separate from the survey instrument to ensure continuous anonymity. The consent sheets included the respondents' phone numbers, which allowed the researchers to randomly call 10% of the respondents to guarantee the integrity of the responses. The resulting sample was comprised of 147 retail salespeople from multiple industries. Respondents averaged 28 years of age, 25% of the respondents reported they were married versus 75% unmarried, 38% of the respondents were male and 62% were female, the majority of the respondents had completed some college (65%), and earned less than \$30,000 annually (80%).

Traditionally, there has been some concern associated with asking survey respondents to report on sensitive behaviors such as deviance (Robinson and Greenberg 1999). The researchers took several steps to reduce this concern. First, we carefully worded the survey to reduce the threatening nature of certain items, which has been shown to reduce low-base reporting (Peterson 2002). Second, previous research indicated that emphasizing both voluntarism (Fox and Spector 1999) and confidentiality (Aquino, Lewis, and Bradfield 1999) reduces a respondent's reluctance to disclose information. As such, when introducing the survey to the retail salespeople, students emphasized that participation was both voluntary and confidential. Third, aside from collecting a separate consent sheet with phone number where it could be verified that indeed the salesperson filled out the survey, respondents did not provide any other identification information when submitting their responses. Robinson and Bennett (1995) argue that this is necessary for successfully eliciting the reporting of deviant behaviors. Fourth, respondents were encouraged to fill out the survey away from the workplace. Fifth, with regard to the sensitive measures of the three forms of salesperson deviance, respondents were asked to report on behaviors engaged in within the past year. Robinson and O'Leary-Kelly (1998) argue that a retrospective time frame of 12 months can put the respondent at ease to disclose information with regard to sensitive behaviors.

Measures

Both antecedent measures used in this research were borrowed from previous research. Work-Family Conflict (WFC) and Family-Work Conflict (FWC) were measured using five item scales originally introduced by Netemeyer, Boles, and McMurrian (1996). For each of these measures, seven-point Likert scales anchored by 1 "strongly disagree" and 7 "strongly agree" were used. Interpersonal deviance, organizational deviance and frontline deviance were measured using a five item, three item, and four item scale respectively which were introduced by Jelinek and Ahearne (2006), and modified slightly to reflect the retail setting in which the study took place.

RESULTS

Assessment of the Measurement Model

For the analysis of the data in this study, structural equation modeling was used following the two-step approach as recommended by Anderson and Gerbing (1988). First, the measurement model was estimated and in a second step the structural model evaluated.

Amos 16.0 was used to perform confirmatory factor analysis of all measures simultaneously. The survey data did not fit the initial measurement model well. Using modification indices, regression weights, and information obtained from the standardized residual covariance matrix, some problem items were identified and consequently deleted. The items were predominantly redundant items in the scales and the remaining items continued to cover the domain of the constructs. The final scales consisted of the following number of items: WFC – four items, FWC – three items, organizational deviance – three items, interpersonal deviance – three items, and frontline deviance – two items. Results indicated a significant χ^2 (Chi Square 123.3, $df = 77$). However, several absolute and incremental measures of fit such as GFI (0.905), IFI (0.950), TLI (0.929), CFI (0.948), and RMSEA (0.064) indicated an acceptable level of fit for the measurement model. These purified measures were consequently used as input for the structural hypothesized model.

Next, the reliability and validity of the multi-item scales was assessed. All the individual scales exceeded the recommended minimum standards proposed by Bagozzi and Yi (1988) in terms of construct reliability (values greater than 0.60) and percentage of variance extracted by the latent construct (greater than 0.50). Following, we assessed whether the measurement model satisfied the condition of discriminant validity as suggested by Anderson and Gerbing (1988). The confidence interval around the correlation estimates between each pair of constructs does not include 1, which is an indication of discriminant validity of each of the constructs.

Assessment of the Structural Model

In the second phase of the two-step approach suggested by Anderson and Gerbing (1988), structural equation modeling was used to test the structural paths as indicated by the hypotheses. The goodness-of-fit indices for the full structural model indicated that the hypothesized model approached good model fit: GFI (0.888), IFI (0.934), TLI (0.911), CFI (0.932), and RMSEA (0.072).

A closer look at the individual paths for each hypothesis revealed that four of the six paths were in the hypothesized direction and statistically significant. All three hypotheses investigating the relationship between WFC and the different dimensions of salesperson deviant behaviors were statistically significant and in the hypothesized direction. The path from WFC to salesperson organizational deviant behavior was positive and statistically significant (.322, $p < .010$), therefore suggesting that increased perceived conflict between work and family leads to an increase in salesperson organizational deviant behavior and thus supports hypothesis H1(a). The path from WFC to salesperson interpersonal deviant behavior was positive and statistically significant (.243, $p < .041$), thus supporting H2 (a) and suggesting that increased work-family conflict leads to a deteriorating relationship between the salesperson and his/her co-workers

and/or colleagues. Finally, the path from WFC to frontline deviant behavior was positive and statistically significant (.325, $p < .026$), which confirms hypothesis H3 (a) and posits that an increase in conflict between work and family leads to an increase in deviant behavior towards customers.

Of the three hypotheses examining the relationship between FWC and the different dimensions of salesperson deviant behavior, only one structural path appears to be significant and in the hypothesized direction. The path from FWC to salesperson organizational deviant behavior was positive and statistically significant (.278, $p < .026$), thereby supporting H1 (b), while the other 2 paths going from FWC to interpersonal deviance (H1 (b)) and FWC to frontline deviance (H3 (b)) were in the hypothesized direction but not statistically significant.

DISCUSSION

Managerial Implications

Our results have important managerial implications. First, sales managers should be trained to understand that their subordinate salespeople are not only members of their organization, but also are family members, with all the issues and responsibilities that go with it. Managers who ignore this reality and take the attitude of “it’s not my problem” may be contributing to a deteriorating relationship between the salesperson and the organization, the salesperson and his/her co-workers, and the salesperson and his/her customers, and which ultimately may severely hurt organizational goals.

Second, managers can implement family-friendly policies and programs which may send a signal to the sales force that management supports them in their roles as family members. According to an article in Fortune’s “100 Best Companies to Work For” companies included in that list enacted programs such as mentoring, child care, family leave, flextime, maternity/paternity leave, on-site job counseling for work-family matters, etc... (Tkacyk et al. 2003).

Finally, sales managers can institute changes to the work itself. For example, compensation could be restructured to reward customer satisfaction in addition to rewarding prescribed in-role outcomes (e.g., sales quotas). Furthermore, sales managers could encourage retail salespeople to take increased ownership of their jobs in allowing them a voice in determining aspects of their jobs. For instance, sales managers could restructure systems for scheduled employee breaks that allow retail salespeople to participate in the decision as to when the breaks are needed. Thus empowering salespeople may help cultivate an organizational culture which may help employees balance work and family demands.

Limitations and Future Research

The first limitation of this study is the make-up of the sample. The respondents in the sample represent only a limited geographical area and are relatively young, which limits the generalization of this study. However, this research was of an exploratory nature and therefore only provides a first glance at the relationship between the work-family interface and salesperson

deviant behavior. Future researchers should replicate this study with more diverse and representative samples.

Another potential shortcoming of this study is the use of a relatively untested and recently developed salesperson deviance measure. Yet, while relatively untested in the marketing literature, this scale was adapted from Bennett and Robinson's (2000) measure of workplace deviance which has been widely used and accepted by researchers in the management area. This however also represents an opportunity for future research and could encourage academicians to develop a unique salesperson deviant behavior scale.

A final potential shortcoming of this study is the fact that salespeople self-reported their deviant behaviors and may have been reluctant to report such behavior to the interviewers. Yet, this study tried in a number of ways to limit this concern. In addition, if it is assumed that salespeople will underreport their own questionable behaviors, then this strengthens the findings of this study as the paths between the different variables could have been even stronger.

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EFFECT OF PERSONALITY ON CUSTOMER ORIENTATION AND PERFORMANCE OUTCOMES

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EXTENDED ABSTRACT

The aim of this study is to investigate the personality antecedents and performance consequences of individual-level customer orientation in the marketing context through a theoretical model. The personality antecedents are compliant orientation, aggressive orientation, and detached orientation. The performance outcomes are relationship development and individual performance.

In this research study, the CAD dimensions (i.e., compliant, aggressive, and detached), which is an old typology of personality traits, are used to measure personality traits of survey participants. The CAD instrument was first constructed by Cohen (1967) for the purpose of examining consumer behavior in a personality-related context. The CAD instrument is characterized by three dimensions which are (1) a person's compliance with other people, (2) aggression against other people, and (3) detachment from other people (Noerager 1979, p.53). This instrument was originally measured by a total of 35 items. Later, Noerager (1979) reduced the number of items from 35 to 16. In this study, Noerager (1979)'s version of the CAD instrument was utilized.

The suggested research model was tested with data obtained from a random sample of 2000 marketers from a broad spectrum of businesses within the manufacturing and non-manufacturing sectors. A self-administered questionnaire was sent to each respondent along with a cover letter and a postage-paid return envelope. The final sample consisted of 189 usable responses. Marketing managers were the largest group within the sample with 41.8 percent and followed by VP marketing (24.9%), sales manager (13.8%), marketing staff (13.8%), sales staff (3.7%), VP sales (1.1%), and others (1.1%).

No nonresponse bias was found since there were no significant differences between the mean responses of the first and the last quartiles (Armstrong and Overton 1977). Principal component analysis with varimax rotation and Eigen value of 1 was conducted on each construct of the model to verify a single factor structure (unidimensionality of each construct). For each construct, only one factor structure was extracted. This indicates the evidence of unidimensionality of the model constructs. Reliability of each construct was evaluated using the coefficient or Cronbach Alpha (α). The reliability of each construct was higher than the cutoff value of 0.70 recommended by Nunnally (1978).

A structural equation modeling (SEM) analysis via LISREL 8.5 was used for model specification and hypothesis testing. A confirmatory factor analysis was used to estimate the model parameters, to assess the model fit, and to test the suggested hypotheses. A moment

covariance matrix of the observed variables was used for the analysis. During the confirmatory factor analysis, a number of other competing models were obtained by freeing and fixing the model parameters or applying different estimation methods (i.e., unweighted least squares and generalized least squares) to the sample data. Maximum Likelihood (ML) estimation was utilized to estimate the model parameters. The fit between the suggested model and the sample data was found to be very good. Goodness-of-Fit Index (GFI) was 0.94 (greater than 0.90); CFI was 0.95 (greater than 0.90); and NFI was 0.95 (greater than 0.90).

Based on the study results, the marketers who are more detached-oriented display high levels of customer orientation. This finding is not consistent with the arguments that detached-oriented people do not want to interact with others and their interactions with other people are not effective (Noerager 1979) and since detached-oriented people tend to be introvert, they have low levels of customer orientation. There is an insignificant positive relationship between compliant-orientation and customer orientation. The results showed that the marketers who are more compliant-oriented exhibit higher levels of customer orientation as hypothesized. The compliant-oriented marketers are socially-oriented and emphasize other people (Noerager 1979). The study results suggest that, the compliant-oriented people, as marketers, want to know their customers' needs and wants, value their customers' opinions and interests, and establish good, long-term relations with their customers. They have high levels of interpersonal orientation. Although the result suggested a positive relationship, this finding is not statistically significant. The study results revealed that the marketers who are more aggressive-oriented are likely to have high degrees of customer orientation. Yet, this relationship is not statistically significant. This finding does not support the previous argument that marketers who have more aggressive orientation may be sales-oriented and emphasize short-term sales gains.

In terms of the consequences of customer orientation, the study results suggest that higher levels of customer orientation result in higher levels of relationship development. Based on this finding, it is possible to argue that a strong customer orientation (i.e., personal interaction with customers) leads to better overall customer satisfaction which, in turn, results in improved buyer-seller relationship. It was also found that there is a significant positive relationship between customer orientation and performance.

Since this study was conducted over a sample canvassing a wide spectrum of businesses, the study results may be generalizable to a wide range of companies. The study results provide valuable insights and practical implications for company managers. The present study does not reveal statistically significant and conclusive results related to the antecedent role of personality traits. The study findings do not support the hypotheses that were posited. The results showed that there is a positive relationship between compliant orientation and customer orientation. Yet, this relationship is not statistically significant. Based on the study results, it is proper to conclude that personality alone is not a good predictor of customer orientation and not a good tool for recruiting marketing employees who are likely to be customer-oriented. Personality tests should be used with caution in recruiting.

Customer-oriented marketers perform better and contribute to the firm's efforts in developing excellent buyer-seller relationships. Therefore, firms should emphasize on promoting customer-oriented values and behaviors among their employees at all levels. They should

periodically assess the level of their employees' customer orientation. In order to increase their employees' customer orientation, organizations should establish and maintain a friendly, supportive work environment for all employees. This may enhance the chances that each employee will feel himself as an important part of the organization. Firms should design training programs and establish reward systems to promote the levels of customer orientation of their employees.

Future research studies can incorporate additional possible outcomes or consequences of customer orientation into the suggested model. For example, job tension, job turnover rate and customer retention rate can be taken into consideration as possible outcomes of the individual-level customer orientation. Also, a possible link between customer orientation and ethical behavior toward customers can be investigated by future research.

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MODELING VIDEO GAME PREFERENCE MODELLING USING PERSONALITY AND MOTIVATION

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INTRODUCTION

Video gaming has evolved to a form of mainstream entertainment that is bigger than the music and movie industries (Kuchera 2007). Video games market worldwide is expected to grow from \$31.6 billion in 2006 to \$48.9 billion in 2011, which makes it the third fastest growing segment within entertainment industry (Scanlon 2007).

A wide variety of games and hardware are available and gamers represent a diverse group of individuals. Very little is known about consumer behavior pertaining to video gaming in the academic literature (Alpert 2007) and in the domain of professional game designers (Klug and Schell 2006). This paper represents an initial exploration of motivational and personality factors that influence the type of game played. As the market for video games intensifies in competition, understanding effects of specific motivational factors on the preference for genre of game played has implications on future game development and effective market segmentation.

Recent research has provided key insights on the role of individual differences such as motivational factors (Sherry et al. 2006), personality types (Gibb, Labirth, and Wilson 1983), gender and age (Lucas and Sherry 2004) that explain why and how people play video games. However, the relationship between motivation and the type of games preferred or played is very mixed.

In this paper, we report the results of a study that examined (a) the relationship between motivational factors and the genre of the video game played, (b) the relationship between personality types and the genre of the video game played. The rest of the paper is organized as follows. First, we first provide an overview of the different genres of games. Second, we discuss the motivational factors that have been identified in the context of video gaming, and the personality types from psychology literature. Then we provide details of the methodology, analysis, and discussion of the results.

Background

Video gaming has its origins in the 1970s when Atari and Magnavox introduced video game consoles. Over the next three decades, developments in technology spurred the growth of more complex games with increasingly better color graphics and sound effects. Over the years, games have evolved from primarily arcade-type games to games with many divergent characteristics.

The popular video game genres are sports, racing, action, shooter, role-playing, and family entertainment games. Others include adventure, strategy, arcade, and children's entertainment (ESA 2007). Sports genre games simulate sports, such as football, basketball, golf,

etc. The popular titles in this genre are the *Madden* and *NBA*. Racing genre games simulate automobile racing, such as *NASCAR*. Action genre consists of third person games and is played with “avatars” that are fully visible to the player and include classics such as *Virtual Fighter* and *Mario Bros*. Shooter games, such as *Halo*, *Gears of War*, are action games where the screen represents the player’s own vision. Role playing genre comprises games that allow players to participate in a fantasy world within specified parameters and include *Dungeons and Dragons*, and *Final Fantasy*. Family entertainment games are games such as the Wii games that allows family members to interact with each other.

Such game genre taxonomy is subject to criticism because such classification leads to overlapping categories. Caldwell (2004) posits that “different genres of game, even different subgenres of game, deployed such diverse representational strategies as to make general claims seem untenable”. Apperley (2006), furthermore, suggests that “conventional video game genres rely overmuch on games ... visual aesthetics” (p.7). Despite such taxonomical criticisms, we have taken pragmatic approach and adopted classification by computer/video games industry as shown in Table 1.

Table 1 Description game genres

Genre	Description
Sports games	Games that emulate of traditional sports.
Racing	Games that emulate racing.
Action	Games that focus on combat.
Shooter	Sub-genre of action games.
Fighting	Games that involve two player combat.
Arcade	Games that are simple and short involving iconic characters.
Children Entertainment	Games that are played by young children.
Role Playing	Games that require a player to assume ‘specialization’ in order to advance through a predetermined storyline.
Family Entertainment	Games that are played by the whole family.
Adventure	Games that require players to solve puzzles, riddles while non-aggressively interacting with other or the environment.
Strategy	Games that require planning and strategic thinking to achieve victory.

Antecedents of game-playing behavior

Given the variety of available game genres, it is reasonable to expect that there are differences in the reason to play different genres. Presumably, gamers play specific games to fulfill some of their needs. Sherry et al. (2006) provide six dominant motivational factors associated with time spent playing video games: arousal, challenge, competition, diversion, fantasy, and social interaction.

1. *Arousal* is related to the need to stimulate emotions as a result of fast action and high quality graphics. Gamers seeking arousal would likely be attracted to playing fast paced realistic games that raise their adrenaline levels and excite them. Game genres such as sports, racing, action, and shooter are likely to be preferred by this group. Genres such as arcade and strategy are unlikely to be preferred.
2. *Challenge* is a motivational dimension associated with the desire to beat the game or move to the next level. It provides gamers with a sense of personal accomplishment and mastery. At some level, this motivational dimension may be spurring play of any game genre.
3. *Competition* refers to the desire to compete with others and prove to others superior gaming skills. This dimension is more common among males and is more likely to be associated with sports genre (Sherry et al. 2006). We also expect this dimension to influence preference for arcade and racing genres.
4. *Diversions* is associated with the need to seek distraction to avoid stress or responsibilities or to simply pass time. It is unlikely that gamers motivated by diversion would seek out adrenaline rushing game genres such as shooter and racing. This dimension is likely to influence preference for arcade type games that are familiar.
5. *Fantasy* refers to the desire to vicariously experience another world that is not possible in the real world. Improvements in graphics and sound provide an immersive experience that transport gamers to another world. This dimension is likely to influence preference for sports and racing genres.
6. *Social interaction* reflects the desire to fulfill the need to interact with others, typically friends. Certain games, such as Grand Theft Auto, also provide interaction opportunities with total strangers playing the same game at another location. This factor is likely to influence preference for sports genres where gamers hang out together and play games like Madden 2008.

Given the exploratory nature of this research, we aim to answer the following research question:

RQ1: *What motivational factors influence the choice of specific game genres?*

Personality refers to an individual's "unique constellation of consistent behavioral traits" (Waiten 2006). Given this definition, it is reasonable to expect personality differences to influence the type of video games played. One approach in examining traits is to identify higher order factors from which all traits can be derived. Previous studies on personality and game choice have been mixed (Hartmann and Klimmt 2006). McCrae and Costa (2003) have proposed five such higher order traits known as the "Big Five.": extraversion, neuroticism, intellect, agreeableness, and conscientiousness.

Extraversion is the positive emotionality associated with individuals who are sociable, friendly, gregarious, and upbeat. Neuroticism is associated with anxiety, hostility, insecurity, and perceived vulnerability. This is also referred to as negative emotionality. Intellect is associated with curiosity, flexibility, imaginativeness, and unconventional attitudes. Agreeableness is associated with being sympathetic, trusting, cooperative, and straightforward. Conscientiousness is associated with being diligent, disciplined, well-organized, and punctual. At this stage, we are

merely exploring the relationship between the personality traits and game genre choice and aiming to answer the following research question:

RQ2: *What personality traits influence the choice of specific game genres?*

Conceptual framework of this research is presented in Figure 1.



Figure 1. The conceptual framework.

METHODOLOGY

Data collection and instrument pretest

University students have been chosen because the purpose of our research is to understand how this specific population behaves when choosing to play a particular video and computer game genre. Typically, college students may not have sufficient disposable income to regularly purchase video/computer games, but they have ample time and ability to play.

Two forms of survey (electronic and paper-and-pencil) were administered to students in three public medium-sized universities located in Mid- and Southwest. Each form of the survey was pretested for a) clarity and consistency, and b) flow and structure on a small sample ($n < 20$) of students. The final version of the self-administered survey was distributed among 377 students in undergraduate business classes. A total of 357 surveys were returned back.

Instruments

The survey consisted of three instruments: a) amount of time and genres of games played during typical week, b) uses and gratifications of video game play, and c) personality. Since all instruments have been used in the past research, validation was not necessary. Thus, the focus of this study is not to validate the instruments but rather to address the research questions.

The genres were identified through past research (Lucas and Sherry 2004), through popular gaming sites and video game magazines. A total of ten genres were identified: sports, racing, action, shooter, fighting, arcade, role-playing, family, adventure, strategy (See Table 2 for description). Respondents were asked to recall the amount of hours during typical week spent playing each of the ten genres. Those who did not play were asked to write a number 0.

Table 2 Examples game genres

Genre	Examples
Sports games	Madden 2008, NBA 2K8, FIFA
Racing	NASCAR, Need for Speed
Action	Virtual Fighter, Mario Bros
Shooter	Halo, Gears of War, Half-life
Fighting	Street Fighter, Tekken
Arcade	Tetris, Pac Man
Role Playing	Final Fantasy, The Elder Scrolls
Family	Wii Play, Wii Fit
Adventure	The Legend of Zelda, Tomb Raider
Strategy	Age of Empires, Panzer General

The uses and gratification scale consisted of 20 items. Participants were asked to indicate their level of agreement with statements on a 5-point scale (1=Strongly Agree, 5=Strongly Disagree). Subsequently, all items of motivation scales were reverse re-coded to ensure proper directionality and consistent interpretation. The original scale measured six dimensions: competition ($\alpha=.86$), challenge ($\alpha=.80$), social interaction ($\alpha=.81$), diversion ($\alpha=.89$), fantasy ($\alpha=.88$), arousal ($\alpha=.85$) (Sherry et al. 2006). The reliability scores of the administers scale is shown in Table 3 and are within the recommended acceptable range (Nunnally and Bernstein 1994).

The personality scale (Saucier 1994) consisted of 40 mini-markers (adjectives). Participants were presented with a list of traits and asked to describe themselves as accurately as possible using 9-point Likert-type scale (1=Extremely Inaccurate, 9=Extremely Accurate). The original scale measured five dimensions: extraversion ($\alpha=.83$), agreeableness ($\alpha=.81$), conscientiousness ($\alpha=.83$), emotional stability ($\alpha=.78$), openness or intellect ($\alpha=.78$). The reliability scores of the administers scale is shown in

Table 4 and are within the recommended acceptable range (Nunnally and Bernstein 1994).

Table 3 Reliability of motivation scale

Dimension	Reliability (Cronbach's α)
Competition	.79
Challenge	.78
Social Interaction	.66
Diversion	.90
Fantasy	.82
Arousal	.76

Table 4 Reliability of personality scale

Dimension	Reliability (Cronbach's α)
Extraversion	.72
Agreeableness	.77
Conscientiousness	.79
Emotional stability	.70
Openness or Intellect	.74

RESULTS

Data cleaning

194 students out of total 357 were identified as video game players (54.3%). 20 respondents were eliminated because their weekly playing hours exceed 40 which, according to game industry standards, are considered to be extremely heavy gamers. Such game players account for only 2% of the total player population (Thorsen 2007) and, therefore, for the purposes of this study, were deemed as outliers.

Descriptive results

The final sample consisted of 59.2% males ($n=103$) and 39.1% females ($n=68$) with 1.7% unidentified ($n=3$) respondents. Ethnic representation of the sample consisted of 62.1% African-American ($n=108$), 28.2% Caucasian ($n=49$), 8.0% other ($n=14$) and 1.7% unidentified ($n=3$) respondents. The mean age of the respondent was 22.2 years.

Data Analyses

Independent variables. The first set of independent variables consisted of six motivational dimensions and each variable was calculated by averaging the scores of individual items that correspond to that dimension. The second set of variables consisted of big five personality dimensions and each variable was calculated by averaging the scores of individual items that correspond to that dimension (Saucier 1994).

Dependent variable. The game genre preference variable was created by dummy coding number of hours played: if a respondent played a particular genre, then it was coded as '1' and if a respondent didn't play a particular genre, then it was coded as '0'. Only the top four genres were chosen and analyzed (see

Table 5).

Table 5 Ranking of game genres

Genre	Frequency	Rank	Analyzed
Sports games	99 (56.9%)	1	Yes
Racing	42 (24.1%)	7	No
Action	56 (32.2%)	4	Yes
Shooter	68 (39.1%)	2	Yes
Fighting	49 (28.2%)	6	No
Arcade	66 (37.9%)	3	Yes
Role Playing	28 (16.1%)	8	No
Family	56 (32.2%)	5	No
Adventure	26 (14.9%)	9	No
Strategy	19 (10.9%)	10	No

Logistic regression: Identifying the antecedents of game genre choice

The research questions in the study were tested using logistic regression by adding the independent variables using backwards elimination method (Hosemier and Lameshow 2000) because such procedure is suggested for exploratory types of research (Hair et al. 2005). The methods works as follows. First, all independent variables enter the regression model. Second, the variable with the highest non-significance level (cut-off p -value $>.05$ as calculated by Wald χ^2) is removed from the set. Third, the iteration is repeated again (back to step number two) until all remaining variables in the regression equation are significant (p -value $<.05$).

Table 6 displays four logistic regression models with coefficients, Wald χ^2 , p -values, Nagelkerke R^2 , and classification percentages for models including motivational factors. The sports game choice model was achieved in three steps and had three significant motivational factors: arousal, competition, and social interaction. The shooter game choice model was achieved in five steps and had one significant motivational factor: fantasy. The arcade game choice model was achieved in four steps and had two significant motivational factors: diversion and competition. The action game choice model was achieved in five steps and had one significant motivational factor: challenge.

Table 7 displays four logistic regression models with coefficients, Wald χ^2 , p -values, Nagelkerke R^2 , and classification percentages for models including personality factors. The sports game choice model was achieved in five steps and had one significant personality trait: agreeableness. The action game choice model was achieved in four steps and had two significant personality traits: emotional stability and intellect. The arcade game choice model was achieved in five steps and had one significant personality trait: agreeableness. The action game choice model was achieved in five steps and had one significant personality trait: intellect.

Table 6 Logistic regression results (MOTIVATION → GENRE)

RQ	Dependent Variable	Predictors	Coefficients	Wald χ^2	p-value	Negelkerke R ²	Correct Classification (%)	Naïve rate (%)
RQ1	SPORT	<i>Constant</i>	-3.093	16.53	.001	.261	67.2	56.9
		AROUSAL	-.585	4.54	.033			
		COMPETITION	1.098	18.58	.001			
		SOCIAL INTERACTION	.464	6.41	.011			
RQ1	SHOOTER	<i>Constant</i>	-1.074	3.92	.048	.067	63.2	60.9
		FANTASY	.480	8.33	.004			
RQ1	ARCADE	<i>Constant</i>	.686	1.17	.279	.095	65.5	62.1
		DIVERSION	.369	6.63	.010			
		COMPETITION	-.491	7.48	.006			
RQ1	ACTION	<i>Constant</i>	-.295	.32	.569	.037	67.8	67.8
		CHALLENGE	.431	4.27	.039			

Table 7 Logistic regression results (PERSONALITY → GENRE)

RQ	Dependent Variable	Predictors	Coefficients	Wald χ^2	p-value	Negelkerke R ²	Correct Classification (%)	Naïve rate (%)
RQ2	SPORT	<i>Constant</i>	2.33	5.94	.015	.043	53.6	55.4
		AGREEABLNESS	-.303	5.94	.024			
RQ2	SHOOTER	<i>Constant</i>	-5.95	16.46	.001	.129	66.3	62.0
		EMOTIONAL STABILITY	.263	4.151	.042			
		INTELLECT	.557	11.00	.001			
RQ2	ARCADE	<i>Constant</i>	-2.99	8.66	.003	.056	65.1	61.4
		AGREEABLNESS	.361	6.47	.011			
RQ2	ACTION	<i>Constant</i>	-3.235	7.63	.032	.041	68.1	68.1
		INTELLECT	.348	4.62	.006			

Discussion and managerial implications

In this study we have posed two broad research questions to gain better understanding on how motivational and personality factors influence choice of particular game genre. Each question was answered by running a series of multiple logistic regressions. The results indicate that choice of three game genres (sport, shooter, and arcade) can be predicted using both, motivational and personality factors. The choice of action games, however, could not be predicted using logistic regression.

Sports genre games are more likely to be chosen by players who are driven by motivations to compete and by need for social interaction. However, motivation for arousal, according to the empirical model, decreases probability of choice. This is contrary to results obtained by others (e.g., Sherry et al. 2006). The only plausible explanation of such result is possible interaction between the independent variables. Shooter games are likely to be chosen by players who are motivated to fantasize, e.g. because the player can do things he can't in the real life. Finally, arcade games are chosen by players with motivation for diversion and with motivation for *no or little* competition.

Sports genre games, as well as arcade games, are likely to be chosen by players who possess agreeableness trait. Shooter games are likely to be chosen by players who perceive themselves as emotionally stable and intellectual.

Marketing opportunities that could arise from these results would be to market games of specific genres by matching the motivational needs that influence that genre choice. For example, shooter games should emphasize fantasy elements as they are likely increase the probability of choice. Other games, such arcade, should de-emphasize the competitive element to increase the probability of choice. Personality traits, unlike motivation, need to be connected through segmentation strategies.

Limitations and future research

There are several limitations that need to be addressed. First, the sample was drawn from three business colleges with predominantly African-American student population. However, panel research studies, such as (ESA 2007), suggest that African-Americans account for much small proportion in the gaming community as compared to our sample. Therefore, it is possible that the results are confounded due to systematic errors. Future research needs to address this issue by utilizing randomized sampling. Second, the survey did not include the type of gaming devices used by the respondents. Industry reports suggest that there are significant differences between genre preferences among computer and video game players (ESA 2007). Future research would need to account for this important variable. Third, it was assumed that (Lucas and Sherry 2004) scale contains six orthogonal dimensions. However, additional factor analyses (not reported in this study) suggest that some of the items exhibited cross-loadings, and, therefore, this fact could account for discrepancies in some of the regression coefficients. Further research is necessary to re-validate uses and gratifications scale and to verify its dimensionality.

Finally, an assumption was made that the subjects who play the game have also purchased the game. However, this may not necessarily be true as games are shared, rented or traded between college students. It would be important to address this issue by asking the respondents to report their buying behavior.

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HOLLYWOOD RECONSTITUTED & REPACKAGED ON DVD

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EXTENDED ABSTRACT

The current paper analyses a host of straight-to-VHS/DVD film distributor/producer marketing strategies deployed by bootstrapping entertainment-industry entrepreneur Doug Schwab—founder and CEO of Maverick-Entertainment and Breakaway-Films. Since 1997, Maverick has distributed Latin-themed and African-American-themed product in a variety of genres. Although there will be some discussion of Latin product, the central focus will be on Maverick’s flagship “urban”—read African American—product. Maverick’s urban films are classified into sub-genres: urban action, urban comedy, urban drama/thrillers, urban romance, and urban horror. Given the urban action sub-genre’s dominant status at Maverick—both in terms of number of units distributed and in terms of market positioning—this sub-genre will receive more attention than others. Cultural context will be provided regarding the urban action category, drawing on particular examples from the early 1990s cycle which has been referred to as the “ghetto action film cycle” by leading African-American media scholars (Watkins 1999, Jackson 2006).

Doug Schwab is CEO and co-founder of Maverick Entertainment—a straight-to-DVD/VHS distributor—and Breakaway Films, Maverick’s production arm which was formed in 2002. With even a cursory glance at Maverick’s urban-action product it becomes apparent that the company has appropriated the preponderance of its marketing and positioning cues from Hollywood’s hard-core hip-hop youth-themed theatrical box-office winners, from early 1990s *gangsta*’ titles such as *Juice*, to more recent titles such as *8 Mile*. Although the focus of the current paper is on the branding of Maverick’s urban action slate, attention is also given to Maverick’s rather innovative entrepreneurial strategies, which serve to inform and contextualize the tactical positioning of Maverick’s urban action slate. As it happens 1997—the year that Maverick Entertainment CEO Doug Schwab launched the company as a *straight-to-VHS* distributor—was fortuitously (for Schwab) the very same year that “DVD was introduced to the American public, beginning the most rapid diffusion of any consumer electronics product in history” (Sebok 2007).

As media-scholar Bryan Sebok has deftly argued, “DVD, via favorable conditions in industry, technology, culture, economics, and the regulatory environment, replaced existing home video and computing technologies while transforming home entertainment. . . *DVD reshaped these contexts while transforming the nature and business of filmed content distribution. DVD initiated a new era for digital content distribution* [current author’s emphasis] (Sebok 2007).” DVD sellthrough numbers in the US began to increase exponentially in 2003, with the top three DVD revenue generators being Wal-Mart, Target and Best Buy—each generating more than \$1 billion in DVD sales alone. Wal-Mart, with estimated home-video sales of \$4.34 billion in 2003, had surpassed Blockbuster as the top video revenue generator for the first time. 2003 also marked the first year that DVD took over VHS as the dominant rental

format. Though direct-download is an increasingly popular option via purveyors such as Netflix.com, as of late 2008, DVD remains the preferred home-viewing format for feature film content—thus, U.S. feature film distributors currently have more to gain or lose in the DVD sector than any other. This is as true for majors and mini-majors as it is for smaller players, such as Schwab.

Maverick/Breakaway's current self-categorized "urban action" straight-to-DVD line has a wide range of both marketing and narrative influences, certain influences being dominant, others being secondary or tertiary. Having teased out some of these influences it would appear that the gangsta' films of the early 1990s are the most influential set of "texts" vis-à-vis the Maverick/Breakaway urban action slate: in terms of gangsta' rap influenced narratives, in terms of rapper-as-element casting, and in terms of the studio's marketing of the those early 1990s films. The ways that gangsta' rappers are represented on CD by the major record labels also seems to have influenced the Maverick urban action marketing strategy. Breakaway's urban action narrative strategies are influenced not only by gangsta' films, but by classical Hollywood films, and even texts from classical antiquity. Schwab has been an innovative entertainment entrepreneur, particularly in the parallel English/Spanish production of Latin-themed product. If Schwab eventually manages to evolve similarly innovative ways for his urban action product to simultaneously "cross over" from its core audience to a wider domestic audience while it "crosses the border" to find its core audience abroad, Maverick and Breakaway will be entities that thrive throughout DVD's continued meteoric rise, and survive DVDs inevitable ebb and fall.

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BRANDING EFFECTS ON CONSUMER PERCEPTIONS OF QUALITY: AN EXPERIMENT

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DETAILED ABSTRACT

Building a brand is expensive. To the delight of marketers, branding has a profound impact on consumers. Consumers appear to be strongly influenced by branding efforts (Orth and Kahle 2008). Not only have brands and brand communities been associated with intense loyalty, strong brand loyalty has been linked to oppositional loyalty toward competing brands (Thompson and Sinha 2008). Researchers have linked branding with perceptions of quality, satisfaction, trust and commitment (Zhang and Bleomer 2008).

Comfort and familiarity with a brand name appear to be used by consumers and decision makers to shorten the product evaluation process (Grant et al 2008). Even in important decision processes, such as prescribing medication, branding has been shown to influence the selection process and be used to reduce product evaluation efforts (Ward et al 2008). Conceivably, this short cut to the evaluation process is justifiable. If consumers understand that a particular brand is associated with exceptionally high quality and the producer is consistently reliable in delivering that quality, then the ability to by-pass the evaluation process on each consecutive consumption opportunity is warranted.

On the other hand, it is conceivable that the brand association has little to do with actual differences in quality and may be based only on *perceived* differences in quality. The increase of high-end coffee consumption among Americans has provided an opportunity for some companies to build extremely popular brands. The brands are associated with higher quality which is used to demand a much higher price. Are consumers really receiving higher quality?

The purpose of this study was to uncover the branding power over an ordinary product, and give some insight into consumers' perceptions. Using a disguised approach to data collection, this project experimentally tested the degree to which consumers could recognize actual differences in quality and taste in a comparison of a high end coffee and a lower end brand. Insights on the branding process are provided.

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CUSTOMER DISSERVICE:
DIFFERENTIAL MISTREATMENT OF FOREIGN CUSTOMERS
BY US CUSTOMER SERVICE REPRESENTATIVE

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DETAILED ABSTRACT

Language is central feature of human identity and a pervasive conduit for culture. Language is a powerful symbol of a national and ethnic identity (Spolsky 2000). In the humanities, differences in uses of language, dialects and word choice are carefully studied (Louwerse 2004). Similar to concept of a dialect that identifies people with a particular geographic area, the term sociolect is used to define the process of identifying people with particular roles, status, rank and class. In practice, when a person hears someone speak, he or she might make attributions about gender, age, and place of origin. Unfortunately, when a person hears someone speak, he or she might also make unjustifiable attributions about intelligence, education, profession, income and social class (Cargile 2002; Cargile and Giles 1998; Kalin, Rayko, and Love 1980; Singer and Eder 1989).

Cultural stereotypes may be elicited from accented speech (Nguyen 1994). For example, linguistics, using “matched guise” tests, have found that listeners may attach cultural meanings to an accent. This process derives from the stereotypes and prejudices that the listener holds towards the race or ethnic group associated with that accent. The “matched guise” test exposes respondents to tapes of the same words spoken with different accents. The respondents are then asked to evaluate the speaker for qualities such as intelligence, confidence, racial stereotypes, and prejudices they harbor (Nguyen 1994). Although research has shown moderate accent differences rarely impede communication when listeners are motivated and nonprejudiced, research has also indicated that stereotyping affects a listener’s assessment of a speaker’s intelligibility - when listeners succumb to bias, their ability to assess and comprehend speech diminishes (Nguyen 1994). Breakdown of communication is due not so much to accent as it is to negative social evaluation of the accent in question (Lippi- Green 1997).

Discrimination on the basis of a person’s foreign accent has been identified in human resource and employment research (Smith 2005). Accent discrimination may extend to other situations. The purpose of this study is to determine the degree to which these stereotypic evaluations of foreign consumers by customer service representative negatively impact a business related exchange. This study used a matched guise type approach to experimental evaluate reactions by customer service personal to accented and unaccented exchanges in a mock customer service setting.

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DIMENSIONS OF VALUES IN HEALTH CARE

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DETAILED ABSTRACT

Many researchers have explored the dimensions of cultural values in a variety of contexts. Models and latent structures of values have been explored across an assortment of sets of countries and subcultures (Hall 1976, Inkeles and Levinson 1969, Kahle and Kennedy 1989, Lynn 1975, McClelland 1961, Schwartz 1992, Triandis 1989). One of the most well know of these studies explored work related values (Hofstede 1980). Additional studies have examined the communication of values in comic books, (Belk 1987), advertising (Albers-Miller and Gelb 1996, Holbrook 1987, Pollay 1983), in children's books (McClelland 1961). These studies tend to produce a high level of consistency in the underlying structure of cultural values. Cultural values are dynamic, but have a remarkable degree of consistency across contexts and time.

Although the models of culture tend to be highly correlated, each study of values in a different context produces new insight and variation. Each study in a unique context tends to demonstrate how cultural values are actualized differently by context. An important area where structures of values have been understudied is health care. Perceptions about the values associated with health related decisions may conceivably follow a pattern of cultural dimensions which have been observed by other cultural researchers, but also provide important additional understanding about the uniqueness of health related decision making.

Uncovering the dimensions of health related values will not only add to our understanding of culture in general, but will provide important insight for public policy makers and health care providers. Understanding cultural values in a health care context may shed insight on perceptions of managed health care, need for technology, acceptance of modern practices, perceptions of the need for universal availability of health care across groups of individuals, and perceptions of value of individual life. Issues of individualism, collectivism, power relationships, avoidance of risk and uncertainty, sex roles, quality of life, performance expectations and long term orientation may conceivably mirror patterns of cultural dimensions which have been observed by other cultural researchers while manifesting in unique and unforeseen ways in health care.

The purpose of this study is to empirically explore health care values across sub groups within the United States. Dimensions of health related values are provided along with implications for health care administrators, public policy makers and managers. This study lays the foundation for a comprehensive international study.

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THE NUTRITIONAL CONTENT OF FOOD PRODUCTS
MARKETED TOWARD CHILDREN:
AN INTERNATIONAL STUDY

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DETAILED ABSTRACT

Taylor and Albers-Miller (2006) reported that children in the United States see a great deal of advertising for food items, including fast food, snacks, cereals, etc. Many of children's messages are for products that are not considered healthy for a child's diet. Research seems to indicate that children are influenced by the marketing messages to which they are exposed (Albers-Miller and Miller 2005). Children may well respond to those messages and choose foods that are unhealthy. Very conceivably, food items promoted to children may be linked to the increase in childhood obesity.

The concern for healthy children's diets is not confined to the United States. According to the Healthy People 2010 report, childhood obesity attributable to an unhealthy diet is increasing in prevalence worldwide. The Centers of Disease Control and Prevention and the World Health Organization have labeled this increase an epidemic (Centers for Disease Control and Prevention 2005, World Health Organization 1998).

It seems increasingly important to understand the degree to which the food products being marketed to children are "healthy," in terms of appropriate serving sizes, reasonable calorie counts, low salt, sugar and fat, and the degree to which they provide important nutrients such as protein, complex carbohydrates, vitamins and minerals. Conversely, it is important to understand the degree to which the foods are promoting unhealthy choices, in terms of excessive serving sizes, high calorie counts of empty calories, high salt, high sugar, and high fat content.

The purpose of this study is to compare food products marketed toward children in the United States and Europe for nutritional content. Nutrition labels and website nutritional information for products marketed toward children, including cereals, snacks, chips, were content analyzed. Statistical tests of differences between US products and EU products are provided. Managerial and public policy implications are offered.

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A COMPARISON OF SEX APPEALS IN PRINT ADVERTISEMENTS: A MULTICOUNTRY STUDY

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DETAILED ABSTRACT

Advertisers often struggle to break through the clutter that exists. Increasingly, companies appear to be pushing the limits of appropriateness in order to attract attention to their messages. Sex is a popular approach for gaining attention and breaking through clutter. Sex appeals are often used in advertising to: attract initial attention (Reid and Soley 1983), enhance recall (Steadman 1969), evoke an emotional response (Courtney and Whipple 1983; Hoyer and MacInnis 2001), to increase persuasion (La Tour, Pitts, and Snook-Luther 1990; Saunders 1996), and to increase purchase intention (Grazer and Keesling 1995; Liu, Li, and Cheng 2006). Sex appeals are defined as “messages, whether as brand information in advertising contexts or as persuasive appeals in marketing contexts, which are associated with sexual information...the degree of nudity or sexual explicitness” (Liu, Li, and Cheng 2006). One recent study indicated that there are four main characteristics of sexy advertisements: physical features of models, behavior/movement, intimacy between models, and “contextual features such as camera effects” (Blair, Stephenson, Hill, and Green 2006).

When advertisers move into international market places, they will often utilize approaches and tools which have proven to be effective at home. When approaches have been noticed and positively associated with their products, marketers have a desire “to utilize similar advertising campaigns throughout the world” (Biswas, Olsen, and Carlet 1992). Unfortunately, the acceptability or unacceptability of message content is not universal. Biswas, Olsen and Carlet (1992) reported that France is “more sexually liberated than the United States” and because of this “the French are more tolerant and receptive to sexual appeals and nudity in advertising, whereas in the United States, this form of advertising is considered risqué.” If the goal of sexually suggestive content is to shock and attract attention in order to break through clutter, it is conceivable that such a reaction would be less likely in some cultures and more likely in others.

The purpose of this study is to examine the degree to which sexual content is commonplace in advertisements across cultures. This study utilized a content analysis of print advertisements across cultures. Comparisons of sexual content on physical features of models, behavioral elements portrayed in the advertisement, intimacy between models, and artistic effects are described. Managerial and public policy implications are provided.

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EXPERIENTIAL MARKETING OF SPORTING EVENTS

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DETAILED ABSTRACT

The marketing of an experience is a unique form of service marketing. Marketers have been selling experiences to buyers across a wide range of activities. Recently, the area of experiential marketing has received increased academic attention (Bigné, Mattila and Andreu 2008, Gentile, Spiller and Noci 2007, Hume and Mort 2008, Frost et al 2008, Koenig-Lewis and Palmer 2008, Kubacki 2008, Kwortnik and Ross 2007, Sheng-Hsiung, Chiu and Wang 2006 and many others). Researchers and practitioners have considered the marketing of travel, destinations, sport, entertainment, arts, amusements, zoos, museums and even online dating as viable experiences to sell. Giving the consumer an experience often can lead to pleasant feelings associated with the product.

Experiences are different than other services. The consumer may be an active part of the creation of the experience (Frost et al 2008). Researchers and practitioners alike are seeking to clearly understand the elements of an experience which make it different from other service types. One study found that consumers did not only consider the quality of the performer/performance at an entertainment experience, but also include the audience, agents and venue owners as important elements (Kubacki 2008).

Researchers have attempted to gain insight into purchase and behavioral intentions, decision criteria, sustainability, consumer satisfaction and loyalty as they relate to experiences (Bigné, Mattila and Andreu 2008, Frost et al 2008, Gentile, Spiller and Noci 2007, Hume and Mort 2008, Koenig-Lewis and Palmer 2008, Kwortnik and Ross 2007, Sheng-Hsiung, Chiu and Wang 2006). One study explored consumer resistance problems associated with making changes to experiences (Walsh and Lipinski 2008). Additional research is needed to fully understand the marketing of experiences across a wide range of venues.

Satisfaction with an experience is important. Satisfaction and emotions have been linked to future behavioural intention. (Koenig-Lewis and Palmer 2008). Bigné, Mattila and Andreu (2008) reported that pleasure is positively linked to both satisfaction and loyalty behavioral intention. Experience quality and peripheral service quality are associated with satisfaction (Hume and Mort 2008). Kwortnik and Ross (2007) discovered that planning the activities and attendance is an important part of the experience and may be related to overall pleasure and satisfaction of travel experiences.

Sports marketing represents one of the most important categories of experiential marketing. The purpose of this study is to better understand sporting events as experiences. This study provides additional insight into experiential marketing in sports. Managerial implications are provided.

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ATHLETES, ENTERTAINERS AND MODELS:
AN EXPERIMENTAL EXAMINATION OF MEANING TRANSFER

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DETAILED ABSTRACT

For decades, modeling agencies and the fashion industry have relied on the premise that beautiful faces and flawless bodies sell more products. Many marketers have utilized attractive models as an attention gathering feature of their advertising messages. Attracting and retaining attention to an advertisement is important to break through the clutter of messages that bombard prospective customers.

While eye-catching models are one method for gathering attention, another approach is for marketers to utilize sports and entertainment celebrities to endorse their products. Some studies have reported as much as 25 percent of advertising in the United States uses some form of celebrity endorsement (Amos, Holmes and Strutton 2008, Shimp 2000). Researchers have indicated that “physically attractive celebrities are a predictor of advertising effectiveness” (Amos, Holmes and Strutton 2008, Till and Busler 2000).

Endorsements are big business for celebrities. Tiger Woods reportedly earned \$87 million in endorsements in 2006 (Carlson and Donovan 2008). High profile endorsements keep a celebrity in front of his or her fans on a regular basis.

Increasingly, athlete endorsers are outpacing other celebrities, including actors, comedians, and musicians (Carlson and Donovan 2008). Conventional wisdom suggests that athletes are ideal spokespeople for products related to their sport (e.g. Michelle Kwan selling ice skates or Maria Sharapova selling tennis rackets). Practice suggests that consumers are also open to messages from athletes unrelated to their sport (e.g. Dale Earnhardt Jr. endorsing a web hosting site).

Carlson and Donovan (2008) reported that some athlete endorsers make more in endorsements than they do from their annual sports salary. The winning of eight Olympic gold medals in Beijing, China has placed Michael Phelps on track to bring in eight figure endorsement deals (Evans 2008). Marc Ganis indicated, “If he’s handled properly over the next four years, he should generate in excess of \$40 million” (Evans 2008).

Marketers utilizing endorsers are banking on “meaning transfer.” Amos et al. (2008) explained “celebrities develop a persona through the types of roles they play in society as well as how they are portrayed in the media.” Meaning transfer theorizes that “meanings” or characteristics associated with a given celebrity (e.g. sexy, likeable, strong, wealthy, youthful) will transfer to the product endorsed and the product will then transfer that meaning to the consumer of the product - making a complete circle (McCracken, 1989). This circle is completed when the consumer believes they are associated

with the celebrity characteristics (e.g. the celebrity is attractive; the product the celebrity endorses conveys attractiveness; and therefore as an owner of the product the consumer is perceived to be attractive).

What is unclear from the previous research is the degree to which different types of endorsers are more or less effective in this role. This study experimentally tests how consumers respond to different types of endorsers: model, entertainer, and athlete. The findings of this study provide insight into meaning transfer and the effectiveness of various types of endorsers. Managerial implications are provided.

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STUDENT RUN ENTERPRISES:
THE NEXT STEP IN THE EVOLUTION OF HIGHER EDUCATION

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DETAILED ABSTRACT

Helping the next generation achieve their personal goals is the benchmark for academic institutions of higher education in this country and abroad. A successful education system is one that takes the unskilled untrained raw young person who walks onto the college campus with nothing but unbridled desire and commitment to succeed and equips them with their own special skill set. In today's fast paced high tech dynamic competitive world a graduating student hoping to land a financially and emotionally rewarding career needs to have the balance of an academic foundation coupled with hands on experience. Thus the opportunities for student run enterprises.

The law of supply and demand is evident everywhere in the world around us. It is also observable in the education business. Students finishing their high school career scan the horizon anticipating what the future holds for them personally. Advanced training is not an option it is a necessity. The option exists in the many different formats that our economy supplies to them. Institutions are increasingly considering alternative approaches to increasing the attractiveness of their educational programs to both prospective students and future employers.

Does an institution offering a successful student run enterprise program claim a competitive advantage over those who do not? This study examines many of the challenges which institutes face when considering the implementation of one or more student run enterprises, including challenges with identifying appropriate opportunities, financing, day-to-day operations, authority and accountability, intellectual property challenges, ownership issues, academic parameters, consumer expectations, legal constraints, student human resource considerations, financial aid implications and potential profitability. This study examines the concept of student run enterprises as an educational tool. Data regarding prospective consumer acceptance of a variety of options are reported. Academic and administrative implications are provided.

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**THE INFLUENCE OF POWER DISTANCE IN INTERNATIONAL ADVERTISING:
AN ANALYSIS OF STATUS AND QUALITY APPEALS**

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DETAILED ABSTRACT

Researchers have long been interested in exploring the influence of dimensions of cultural on advertising (Albers-Miller and Gelb 1996, Holbrook 1987, Pollay 1983, and others). Values have been explored in a variety of contexts. Models and latent structures of values have been explored across an assortment of sets of countries and subcultures (Hall 1976, Inkeles and Levinson 1969, Kahle and Kennedy 1989, Lynn 1975, McClelland 1961, Schwartz 1992, Triandis 1989). One of the most well know of these studies explored work related values (Hofstede 1980). Additional studies have examined the communication of values in comic books, (Belk 1987), advertising), in children's books (McClelland 1961). These studies tend to produce a high level of consistency in the underlying structure of cultural values. Cultural values are dynamic, but have a remarkable degree of consistency across contexts and time.

One important area of study is perceptions of status and quality. A seller can command a high price and achieve competitive advantage when consumers perceive the product is of high quality or status. The ability to generate that perception is influenced by culture. Pollay (1983) identified several appeals to status.

The purpose of this study is to empirically explore appeals to status and quality across a range of countries. Managerial implications are provided.

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