PROCEEDINGS OF THE ANNUAL MEETING OF
THE ASSOCIATION OF COLLEGIATE MARKETING EDUCATORS
NEW ORLEANS, LA

ADVANCES IN MARKETING

February 29 – March 3, 2012

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EDITORIAL PREFACE

This year we have received about 55 academic papers, 15 student presentations and 4 workshops/special sessions. We are very pleased with the inclusion of papers from a variety of marketing topics.

We would like to thank everybody who participated in, helped with, and arranged 2012 Association of Collegiate Marketing Educators proceedings. We want to acknowledge all track chairs for their masterful handling of the reviewing process in the given time, and would also like to thank all the reviewers for their expert critiques.

We would like to thank all authors and co-authors for their timely submissions and adherence to our proceedings standards. Without your efforts our task would have been next to impossible.

Last, but not least, we wish to acknowledge the assistance of A-CME Program Chair Vaidotas Lukosius in helping us with finalizing these proceedings, especially during the final stages of the process.

Vivek S. Natarajan, Ph.D. Malini Natarajarathinam, Ph.D.
2012 ACME Proceedings Co-Editor 2012 ACME Proceedings Co-Editor
Lamar University Texas A&M University
Beaumont, TX College Station, TX
MESSAGE FROM THE PRESIDENT

Welcome to New Orleans and another meeting of the Association of Collegiate Marketing Educators. Each year the members of this association write new and interesting papers, lead workshops in new areas of research and teaching, and help inspire each other to continue our work as teachers and as researchers.

This year’s Program Chair, Vaidas Lukosius, and all the track chairs have worked very hard to encourage submissions. This is not easy in a year of funding cutbacks, increased course loads, and many demands on faculty time. They have nonetheless put together an outstanding program, received more papers, and have provided a meeting we shall profit from.

Thank you to all the officers: Past-President Kishwar Joonas, Membership Vice President Nacef Mouri, and Secretary Prashant Srivastava for their contributions, which were many. ACME is looking forward to providing possible new programing to supplement our always enjoyable annual conference. If you have ideas or needs, let your officers know: we are here to serve the association and its members.

While celebrating the life of the mind and the importance of teaching, I urge you all to take time and enjoy the ambience, culture, and food of New Orleans.

Sharon Thach, Ph.D.
ACME 2012 President
Tennessee State University, Nashville, TN
MESSAGE FROM THE PROGRAM CHAIR

Welcome to the 2012 Association of Collegiate Marketing Educators’ Conference in New Orleans, Louisiana. We have a terrific conference with 55 academic papers, 15 student presentations and 4 workshops/special sessions. Most of all, I am pleased to announce that Maxwell Hsu, Marketing Educator of the Year, will be delivering a presentation at our business meeting-luncheon.

Conference papers were submitted from around the world. After submission, each track chair would assign the submitted paper to two experienced reviewers. Constructive comments were offered to the authors for them to enhance the quality of their papers. Based on the recommendations from the reviewers, the (co)track chairs decided whether a paper would be accepted for their track and which paper, if any, would receive the “best paper in track” award. A panel of four judges then reviewed the recommended best papers and selected a paper for the distinguished research paper award.

I want to congratulate the authors of all the accepted papers and presentations, “best papers in track”, and the best overall paper. I also want to thank my colleagues for organizing roundtable discussions and workshops: Renee Gravois Lee, Ramaprasad Unni, Ismail Capar, Prashant Srivastava, Gopala Ganesh, Kishwar Joonas, Vivek Natarajan, and Kimball P. Marshall.

I also would like to extend my appreciation to all individuals who contributed to the technical aspects of this program. First of all, all of the current Association officers: Kishwar Joonas, Sharon Thach, Nacef Mouri, Prashant Srivastava and Dennis Emmett. I want to acknowledge Malini Natarajarathinam and Vivek Natarajan, our proceedings Co-Editors, for their work. My grateful thanks go out to all chairs and co-chairs of our conference. Their promotion of the conference, solicitation for the manuscripts, and choice of reviewers is what has made our meeting successful. Last, but not least, I want to thank all the reviewers for their dedication and commitment to our Association.

It was my pleasure to serve as the Program Chair for the Association. This could not have been done without Sharon Thach’s guidance and support.

Enjoy our program and attend as many sessions as you can, network with your old colleagues and meet new ones. Start making preparations to join us in 2013 and help our incoming Program Chair, Nacef Mouri, prepare another exciting program in New Mexico – Albuquerque – when ACME and all of the other associations of Federation of Business Disciplines enter the new waters.

Vaidotas Lukosius, Ph.D.
ACME 2012 Program Chair
Tennessee State University, Nashville, TN
ACCEPTANCE LETTER FROM DISTINGUISHED EDUCATOR AWARD WINNER

President Thach, Conference program chair Lukosius, distinguished ACME officers and guests,

It’s a truly wonderful sight to see so many distinguished professors and promising scholars gathered together in one room. Being chosen as the ACME 2012 Educator of the Year is, unquestionably, the most extraordinary honor of my career, and I wish to express my gratitude to you all. This award symbolizes the hard work of an educator and my American dream. Only in this great country can a hard working foreign-born professor be named ACME Educator of the Year. I am incredibly grateful to both Prof. Nacef Mouri and the ACME nominating committee for their work and for the honor. I am deeply humbled by this distinctive and distinguished recognition.

And a special thank you to my parents and grandparents. They taught me the importance of education, integrity, and responsibility. My father always reminds me and my brother of Benjamin Franklin’s quote: “He who is good at making excuses is seldom good for anything else.” My father was a tough economics professor in Taiwan, and he gets more pleasure from his students’ accomplishments than from his own. Even though my father has been retired for almost two decades, his former students still stay in close touch with him today.

I tell my students at the beginning of each semester that I am a perpetual student myself, and I strive to be a helpful learning facilitator. It is important to create a dynamic learning environment by preparing a systematic but flexible course syllabus. Class projects should be designed to sharpen students’ written and analytical ability. When I set expectations, I set them high so students have to work hard to succeed in my classes. I pay special attention on the tasks associated with evaluating student performance, and I strive to offer students timely feedback on the exams and assignments.

Our profession fills me with an emotion I cannot fully express. Although my school only offers undergraduate and MBA courses, I have been blessed by having had opportunities to teach in the Ukraine and to supervise several outstanding PhD students’ work in China. For more than a decade, teaching and learning have been my greatest reward, affording me a platform to build lifelong relationships with students and colleagues.

I am fortunate to have a few great mentors who serve as my role models. The first one who comes to mind is Dr. Hani Mesak at Louisiana Tech University. He was my dissertation chair, and he has been a great role model for me. Although Dr. Mesak has been an endowed professor for almost two decades, he still works hard on research projects. Our most recent co-authored work was published in the Journal of Business Research this year and we are working collaboratively on a promising research project related to the diffusion of service innovations. Another person is Dr. Lou Pelton at the University of North Texas. He inspired me to be a prolific teaching scholar and taught me many things outside the classroom. He recently participated in the 2012 APEC CEO Summit, and was a Voice of the Future Delegation Leader, stewarding a learning and living experience for five-to-seven students from each APEC member economy. He is confident in my research skills and has invited me to participate in a few research projects. In addition, Dr. Maosen Zhong and I were classmates, and we worked on many research projects together in the early years of my career. He retired as a tenured associate
finance professor from the University of Queensland at age thirty-six and is now a full-time monk serving the Hong Kong Buddhism community. His dedication to Buddhism education is a huge loss to the academic community but a great addition to the cross-cultural understanding of Buddhism. My list of thankful mentors/colleagues is a long A to Z list. This being said, I do appreciate the strong support from Dean Clements at UW-Whitewater and my helpful marketing colleagues. For example, Dr. Jimmy Peltier invited me to work on a worthy research project and our paper was recently published in a top tier medical journal named *American Journal of Transplantation*.

I have thanked many “giants” (e.g., my parents, my mentors, my colleagues) who allow me to stand on their shoulders so that I can look farther. Although we will never be kings, we have a chance to be makers of kings. Let’s lend our shoulders to promising scholars and students, and we will challenge them to live a meaningful life and bring peace and prosperity to this world.

Respectfully,

Maxwell K. Hsu
Associate Professor of Marketing
University of Wisconsin-Whitewater, WI
2011-2012 PROGRAM LEADERSHIP TEAM
Track Chairs

Arts and Music Marketing:
Clyde Rolston
Belmont University
Nancy Albers-Miller
Berry College

Assurance of Learning:
Prashant Srivastava
University of Akron

Business-to-Business and New Product Development:
Vivek S. Natarajan
Lamar University

Consumer Behavior and Customer Relationship Management:
Kishwar Joonas
Prairie View A&M University

Creating Sustainable Competitive Advantage in Marketing:
Silvia L. Martin
Lynchburg College

Ethics, Legal and Public Policy:
John C. Knapp
Samford University

Experiential and Service Learning:
Patrick D. “Pat” Fountain
East Central University

Global and Cross-Cultural Marketing:
Lynn Murray
Pittsburg State University

Logistics and Supply Chain Management
(Idea Academic and Practitioner Tracks):
Gordon Mosley
Troy University

Marketing Education:
Bimal Nepal
Texas A&M University

Marketing Research:
Sanjay Mehta
George Mason University

Marketing Strategy and Entrepreneurship:
John Newbold
Sam Houston State University

New Media, Advertising and Marketing Communications:
Sharon Thach
Tennessee State University

Not-for-Profit Marketing and Social Marketing:
Maxwell Hsu
University of Wisconsin-Whitewater

Personal Selling and Sales Management:
Michael Pass
Sam Houston State University

Pharmaceutical and Health Care Marketing:
Ashish Chandra
University of Houston- Clearlake

Retailing and Services Marketing:
Ramaprasad Unni
Tennessee State University

Student Papers:
Nancy Albers-Miller
Berry College

Technology Transfer and Commercialization:
Kimball P. Marshall
Alcorn State University
Recipient of the 2012 McGraw-Hill/Irwin Distinguished Paper Award

Creating Sustainable Competitive Advantage in Marketing
Change and Stability Management as a Source of Competitive Advantage for Organizations
Jorge Humberto Mejia, Autonomous Technological Institute of Mexico

Recipient of the 2012 Federation of Business Disciplines Outstanding Educator Award

Maxwell Hsu, University of Wisconsin-Whitewater
BEST OF THE TRACK PAPER AWARD WINNERS

Creating Sustainable Competitive Advantage in Marketing  
Change And Stability Management As A Source Of Competitive Advantage For Organizations  
Jorge Humberto Mejia, Autonomous Technological Institute of Mexico

Logistics and Supply Chain Management  
Crisis management among Industrial Distributors: Scale development, analysis and insights  
Arunachalam Narayanan, Texas A&M University  
Daniel F. Jennings, Texas A&M University  
Ismail Capar, Texas A&M University,  
Malini Natarajarathinam, Texas A&M University

Marketing Strategy & Entrepreneurship  
A Conceptual Foundation for New Technology Business Firms to Adopt a Marketing Orientation  
Sandra Potter, Bryant University

New Media, Advertising and Marketing Communications  
The Moderating Effects Of Consumer Involvement, Concern About Air Pollution, And Materialism On Consumer Decision-Making For A Hybrid Automobile: A Retail Advertising Analysis  
William T. Neese, Nicholls State University  
Monica J. Favia, Bloomsburg University

Pharmaceutical & Healthcare Marketing  
Evaluating an Innovative Approach in Patient-Centric Care: The Laborist Model  
Asoke Dey, The University of Akron  
Jessica Clemons, The University of Akron

Retailing & Services Marketing  
Understanding The Impact Of Product Return Policies On Consumers  
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M. Ali Ülkü, Capital University

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NEW MEDIA, ADVERTISING AND MARKETING COMMUNICATIONS

BRAND DEVELOPMENT AND MANAGEMENT IN THE BED AND BREAKFAST INDUSTRY
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ABSTRACT
This paper applies brand development and brand management theories, principles, and practices to the bed and breakfast industry. The methods that bed and breakfast entrepreneurs use in brand development are proposed. Second, the concept of “living the brand” is discussed and applied to this industry which from this paper’s perspective is uniquely positioned to fully employ this theory. Finally, an argument is made that an examination of this service segment can provide other businesses and entrepreneurs with valuable insight into how small business organizations can more effectively develop and manage their respective brands.

INTRODUCTION AND STATEMENT OF PURPOSE
The marketing discipline has long recognized the importance of brand development and brand management to the success of a business’ survival. However, there has been little focus of these topics in relation to small and medium sized business (Berthon, Equing, and Napoli 2008). Further, the majority of the branding literature has focused on tangible products as opposed to services (Turley and Moore 1995). Thus, the literature has focused almost exclusively on large publicly traded companies with many employees and millions or even billions of dollars in revenues annually that produce tangible products. The literature search in this area didn’t reveal any article specifically on brand development and management in the bed and breakfast industry; although, several articles on hotel branding were found (Kayaman and Arasli 2007; Prasad and Dev 2000; Sigala 2004; Tepeci 1999). This lack of attention to small business enterprises and services is surprising considering that small and medium sized firms account for the vast majority of businesses in most countries, and services are an increasingly important sector in the developed world (Culkin and Smith 2000; Graham 1999; Turley and Moore 1995).

Given the lack of literature on small business brand development and brand management, this paper proposes that an examination of branding in the bed and breakfast industry in the United States should be undertaken. A number of propositions are developed that offer to explain how bed and breakfast and small innkeepers go about developing a brand and managing it once established. The concept of “living the brand” is discussed in relationship to the bed and breakfast industry and an argument is made that this industry is in a unique position to employ this concept. Finally, an argument is made that a study of this industry is important to the
marketing literature because it will help further develop the branding literature by extending it to a new context, and further, that other small businesses and entrepreneurs can benefit from the insights gained from this research by employing some of the same tactics to brand development and management that are used by bed and breakfast owners and small innkeepers.

The remainder of this paper is organized as follows. First, a literature review including the theories and principles of brand development and brand management is presented. Second, a number of propositions are developed concerning how bed and breakfast owners go about establishing and managing their brand, and the idea of “living the brand” is presented as a concept that is particularly well suited to the bed and breakfast industry. Finally, this paper concludes with a section on potential contributions, limitations, and implications for future research.

**LITERATURE REVIEW AND THEORETICAL BACKGROUND**

A brand name is, “a name, term, sign, symbol, design, or any combination of these concepts, used to identify the goods and services of a seller” (Bennett 1998, 257). Branding is important because it creates a mental connection in the mind of the consumer between a product’s or service’s supplier, distinguishes the product or service from other providers in the field, and can lead to positive gains in a company’s performance (Berthon, Ewing, and Napoli 2008; Noble, Sinha, and Kumar 2002; Hankinson 2001; Herbig, and Milewicz 1993). Further, the brand name can assist in the consumer decision making process (Turley and Moore 1995).

For many owners of small businesses, brand development and management is often viewed as a luxury that only large corporations can afford. The small business owner is often required to handle all aspects of the business from product development and production, to financial management, sales, distribution, and marketing (Barbu, Ogarca, and Barbu 2010). The marketing that most small businesses focus on is the short term marketing of networking and sales (Gilmore, Carson and Grant 2001; Brodie, Coviello, Brookes, and Little 1997). Brand development and management, on the other hand, is a long term investment and strategy (Barbu, Ogarca, and Barbu 2010). Many small businesses believe that brand development and management require special expertise that they cannot afford as many small business owners are in a survival mode much of the time (Culkin and Smith 2000; Huang, Sautar, and Brown 2002; Orser, Hogarth-Scott, and Riding 2000). Aaker and Joachimsthaler (1999) argue that these small firms fail to recognize that brands can be developed and managed on a relatively small budget and the question then becomes which brand management philosophies and principles are most suitable to small businesses.

**Brand Development**

Developing a brand name for a product or service is so important that some marketing academics have argued that it is the most important marketing management decision a business owner will make (Turley and Moore 1995).

Turley and Moore (1995) suggest what the common elements of a good brand name are;
further, they note several differences between branding a product and branding a service; finally, they develop a typology of how services go about developing their brand names. According to these authors, a good brand name has several elements such as: it should be short, easy to spell, easy to remember, be distinctive, and not carry any negative associations. Since services are intangible, as opposed to products, these authors argue that a number of the well developed concepts in the branding literature are not relevant to the service sector specifically: the battle of the brands (i.e. manufacture versus store label), family branding, packaging, and brand extensions.

In their typology or classification of service brand names, Turley and Moore (1999), note that there are five basic types of service brand names. First, there are descriptive brands. This type of name provides an information shortcut for the consumer by providing some descriptive element in the name such as Merry Maids. In this case, both elements of the name are descriptive such that the consumer knows that they provide housekeeping services in a cheerful and friendly manner.

The second typology is person-based brand. These types of brand names usually include the name or names of the owners or founders. This type of brand development is common among attorneys and other professional business organizations. However, it is also found in other services as well such as Jimmy’s Egg, a chain of breakfast restaurants in Oklahoma. The authors note that this type of brand naming often violates the rules for developing a good brand because these are often not short names and not easily remembered (Turley and Moore 1995). Associative brands are ones that use made up words or words that are not normally associated with the service. For example, the gated housing development in Edmond, Oklahoma named Quo Vidas for equestrian lovers. The term quo vadas is Latin for “where are you going.” In this case the developers are making an association between the question and the implication that if you lived there you wouldn’t want to leave.

The fourth type of service brand is one that uses a geographic reference in the name. For example, the Saratoga Bed and Breakfast located in Saratoga Springs, New York. The authors note that this form of branding has been common in the banking industry (Turley and Moore 1995).

The final category in these authors typology is the alpha-numeric brand name. This type of brand uses a combination of numbers and letters usually in a descriptive manner such as First National Bank of Guthrie. Again, this type of service brand is common in the banking industry and it gives the customer the impression that because it was the first, it must be stable as it has survived a long time. It should be noted that the typologies developed by Turley and Moore are not necessarily mutually exclusive categories as the last example highlights where the name is both an alpha-numeric brand name and a geographic brand name.

Brand Management and “Living the Brand”

Once a company has developed a brand, it is important to manage the brand to ensure that brand image is one that consumers not only recognized but also one which they associate with positively. Brand management has a number of aspects, and in the literature, most
academics make a distinction between image/identification and reputation (Berthon, Ewing, and Napoli 2008). A brand’s identity or image involves what the consumer’s most recent belief about the business is (Balmer 1998). Reputation, on the other hand, is the value judgments that the consumer develops over time about qualities such as reliability and trustworthiness (Fombrun and Van Riel 1997).

De Chernatony (1999) argues that brand management serves to combine the brand’s identity and reputation. This process involves coordination and evaluation between the business and its customers and stakeholders (Berthon, Ewing, and Napoli 2008). The goal is to align what the business’ beliefs about how it is performing and serving stakeholders and the stakeholder’s beliefs are. In order to accomplish this alignment, Park, Jaworski, and MacInnis suggest that the business should use the marketing mix.

Kevin Lane Keller argues that companies that have the best brand management have ten common attributes. The attributes Keller identifies are:

1. The brand excels at delivering the benefits customers truly desire.
2. The brand stays relevant.
3. The pricing strategy is based on consumer’s perceptions of value.
4. The brand is properly positioned.
5. The brand is consistent.
6. The brand portfolio and hierarchy make sense.
7. The brand makes us of and coordinates a full repertoire of marketing activities to build equity.
8. The brand’s managers understand what the brand means to consumers.
9. The brand is given proper support, and that support is sustained over the long run.
10. The company monitors sources of brand equity.

As the forgoing discussion highlights, most of the brand management literature, like the brand development literature, has focused largely on large corporations. In fact, Berthon, Ewing, and Napoli (2008) say there has been no research on brand management in small firms prior to their study.

With the above discussion in mind, this paper now turns to the concept of “living the brand,” and argues that this concept is one that small business owners and bed and breakfast in particular should consider as a part of their brand management strategy. Like brand development and brand management, the literature in this area has to date largely focused on large corporations; however, an argument is made that small business and bed and breakfasts in particular are well suited to “living the brand.”

Since at least the 1980s, corporate management has recognized the value that a company’s reputation can have in contributing to the bottom line (Gotsi and Wilson 2001). Since a business acts through its agents, employees are the ones that are largely responsible for creating and maintaining a company’s reputation. Kennedy (1977) was the first to conduct empirical studies that showed the impact employees have on customers and external stakeholders.
Companies need to create a positive image in the mind of the consumer and external stakeholders, and in order to do this, they should create a consistent image. Creating a vision for the company and communicating this vision to employees, consumers, and other external stakeholders is a necessary aspect of creating the positive image (Kennedy 1997; Gotsi and Wilson 2001; Dowling 1986, 1993).

An employee that “lives the brand” is one the consistently projects the company’s vision, values, and culture (Bendapudi and Benapudi 2005). Czaplewski, Ferguson, and Milliman (2001) argue that in order to accomplish this goal, several things are necessary. First, the company needs to clearly define its vision. Second, hiring talented motivated employees is crucial. Third, continuous training is necessary to continue to refine and develop employee commitment to living the brand. Working as a team is also important to help establish group cohesion. Employee performance should be monitored and rewarded; however, employees should also have some amount of freedom. Finally, knowing the customer is critical. Mitchell (2002) adds that it is critical that the employee have an emotional connection to the company.

With the above frameworks on brand development, brand management, and “living the brand” in mind, this paper now makes several propositions concerning how bed and breakfasts go about developing their brand. Following these propositions, the paper makes several propositions about how bed and breakfasts can manage their brand and thus “live the brand.”

**PROPOSITIONS**

The propositions concerning how bed and breakfasts decide to develop their brand image is largely based on the typology suggested by Turley and Moore (1995) with one additional typology being added.

- **P1A:** In developing a brand name and image for a bed and breakfast, the owners will employ a descriptive brand strategy that focuses on some physical or architectural feature of the property; or
- **P1B:** In developing a brand name and image for a bed and breakfast, the owners will employ a person-based brand strategy that uses their own name, or the name of the home’s original owner/builder; or
- **P1C:** In developing a brand name and image for a bed and breakfast, the owners will employ a geographic brand name strategy that uses the city or town name, or other geographic identifier such as a street name; or
- **P1D:** In developing a brand name and image for a bed and breakfast, the owners will employ a theme based strategy.

The above propositions have a great deal of face validity, and a brief exploratory study of two cities bed and breakfasts’ names using the search engine [www.bedandbreakfasts.com](http://www.bedandbreakfasts.com) (2010) provides initial confirmation of these propositions. The city of Savannah Georgia is well known for its historical homes and buildings, and it has a number of bed and breakfast establishments. Using the above web address, thirty-six listings were provided. Of the bed and breakfasts listed, five had descriptive names, fifteen used either a first name or surname as their brand name, twelve contained geographic names, and four were based on a theme.
The City of Guthrie, Oklahoma bills itself as the “bed and breakfast capital of Oklahoma” since it has Oklahoma’s first bed and breakfast and the most number of bed and breakfasts per capita in Oklahoma according to www.guthriebb.com (2010). Again, using the bedandbreakfast.com search engine, fourteen bed and breakfasts were listed. Of those listed, six had descriptive brand names, three used the names of a person, and five had a theme brand name.

Having discussed the potential ways in which owners in the bed and breakfast industry go about developing brand names and images, the paper now turns to propositions concerning brand management and the concept of “living the brand.” Again, it should be noted that most of the research to date has focuses almost exclusively on large business; however, much of that research can be used or modified for the small business contexts.

**P2:** Because of the small nature of most bed and breakfast businesses, the business’ personality will largely be projected through the personality of the bed and breakfast owner.

**P3:** Bed and breakfast owners will differ in the extent to which they engage in brand management practices.

**P4:** Bed and Breakfasts that are successful (measured in terms of number of years in operation) will be ones that engage in brand management practices.

**P5:** Because of their small nature, bed and breakfasts are flexible and thus, they can offer benefits that customers really desire.

**P6:** Because of the high level of contact bed and breakfast owners have with their customers, bed and breakfast owners are in a good position to monitor consumer perceptions and brand equity.

**P7:** Due to limited size and limited budgets, the monitoring of a bed and breakfast’s brand equity is likely to be done in a less formal and less sophisticated manner than a large firm.

**P8:** Bed and breakfasts can informally monitor their brand equity by soliciting client feedback, monitoring feedback from clients to the local chamber of commerce and better business bureau, and monitoring internet rating sites such as: www.bedandbreakfast.com; www.tripadvisor.com; www.travel.yahoo.com; and www.lanierbb.com.

**P9:** Bed and breakfast owners are in a good position to engage in a “living the brand” strategy as they have a high level of personal contact with clients.

**P10:** Bed and breakfast owners are in a good position to engage in a “living the brand” strategy as they can closely hire, monitor, and train employees.

Propositions two through ten have a good deal of face validity and a discussion of how they can be operationalized is detailed below. Proposition two concerns the personality of the bed and breakfast owner and its impact on the business’ personality. Since bed and breakfasts are smaller lodging establishments, the owners usually have a high level of contact with their guests. This proposition can be operationalized and studied by conducting in depth interviews with bed and breakfast owners as well as individuals with experience staying at bed and breakfasts.
Propositions three and four have been studied in large businesses; however, they are applicable to a small business context as well. Again, these propositions can be operationalized through in depth interviews with bed and breakfast owners.

Proposition five concerning flexibility and the offering of benefits that customers really desire can be operationalized in a couple of ways. In depth interviews of bed and breakfast clients can be done to see what aspects of this type of travel makes it appealing to them. Also, survey research of bed and breakfast clients could be designed to measure this proposition.

Propositions six, seven, and eight all deal with bed and breakfast owners’ ability to monitor their brand equity. Again, this can be done through in depth interviews with a number of bed and breakfast owners. Also, a survey instrument could be designed and sent to bed and breakfast owners to measure how much monitoring of clients perceptions they undertake.

Propositions nine and ten regarding living the brand can be studied and measured both through in depth interview with a number of bed and breakfast owners, and also by constructing a survey to be sent to bed and breakfast owners.

As a number of the propositions described in this paper lend themselves to study by both in depth interviews and survey research, an exploratory study consisting of in depth interviews should be conducted to develop a survey instrument that can be used. An exploratory study and survey should each be undertaken for both bed and breakfast owners and bed and breakfast clients.

**CONCLUSIONS AND IMPLICATIONS FOR ACADEMIC AND MANAGERS**

Brand theory is well developed in the marketing literature. However, this literature has largely focused on large publically traded companies. Further much of the research has been done on firms that offer tangible products. Thus, there is a gap in the literature concerning how small and medium sized businesses develop and manage their brands, and a gap concerning how services engage in brand development and management.

As has been noted above, the economy of most developed nations (the United States included) is largely moving to a service based economy. Therefore, the literature on branding should begin to focus more and more on the service sector especially considering that many of the theories developed for product branding are inapplicable to the service sector.
Just as most developing economies are moving towards a service based economy, so are most developing nations dependent on small and medium sized businesses. Since there is a gap in the literature with regard to these types of businesses, academics in marketing should begin to focus on these types of firms.

Bed and breakfasts are both a service type company and usually a small scale operation. Therefore, the study of brand development and management in this context presents a unique opportunity for marketers to study both of the gaps discussed above in one context. Further, identifying best practices in this context may provide valuable insight for other types of small business organizations.

LIMITATIONS

Due to the gaps in the literature discussed above, some of the limitations are that well developed measures have yet to be constructed. These will have to be undertaken in order to complete a full analysis. Further, many of the propositions discussed above will have to be studied using in depth interview which costly, time are consuming. However, in spite of these limitations, this context offers possibilities for the development and expansion of branding theory into the services and small business sector.

REFERENCES


THE MODERATING EFFECTS OF CONSUMER INVOLVEMENT, CONCERN ABOUT AIR POLLUTION, AND MATERIALISM ON CONSUMER DECISION-MAKING FOR A HYBRID AUTOMOBILE: A RETAIL ADVERTISING ANALYSIS

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EXTENDED ABSTRACT

According to Pepper, Jackson and Uzzell (2009, p.126), “research into sustainable consumption has become a burgeoning field across many perspectives, including in economics, anthropology, psychology, sociology, human geography, and marketing.” Early studies found in the marketing literature focused on profiling environmentally-conscious consumers and determining how their personal characteristics influenced brand beliefs, brand attitudes, and purchase behavior (see for example Kinear and Taylor, 1973, and Kinnear, Taylor, and Ahmed, 1974). More recent studies analyze how individual’s orientation toward ecological issues affects their consumption decisions related to so-called “green” products (e.g., Kaiser, Wolfing, and Fuhrer, 1999). Most studies we found test the impact of environmentalism on purchase decisions under low involvement conditions, so results are often not significant. For example, Laroche, Bergeron and Barbaro-Forleo (2001) found that “the behaviors ‘recycling’ and ‘buying environmentally friendly products’ were not good predictors of consumers' willingness to pay more for green products (p. 515)” such as household cleaning supplies. However, when a high involvement product is considered (a hybrid automobile in this case), a significant relationship between green information seeking and purchase intentions is reported by Oliver and Lee (2010).

Ray (1979) reported that involvement and other constructs (e.g., environmentalism, materialism, etc.) do not directly influence brand purchase intentions but moderate them instead (i.e., act as covariates). We conducted a mall intercept survey to determine the impact that the following three covariates found in the literature might have on purchase decisions for a hybrid car versus the same model with a conventional engine: (1) involvement with automobiles; (2) concern about air pollution, and (3) materialism. Our study hypothesizes the following:

H1: Consumer involvement will significantly moderate hierarchy-of-effects variables in a purchase decision for a hybrid versus a conventional automobile.

H2: Consumer pollution concern will significantly moderate hierarchy-of-effects variables in a purchase decision for a hybrid versus a conventional automobile.

H3: Consumer materialism will significantly moderate hierarchy-of-effects variables in a purchase decision for a hybrid versus a conventional automobile.
We used the hierarchy-of-effects model typically found in advertising effectiveness studies (i.e., attitude toward the advertisement, brand attitude, brand beliefs, and purchase intentions; Cronbach’s alpha = .81, .88, .74, and .84 respectively) to model our multivariate dependent construct. The eight treatments we developed based on newspaper advertisements used by an actual automobile dealership produced the 2x2x2 factorial design for this Multivariate Analysis of Covariance (MANCOVA). The three factors we included in our design are: (1) Honda Accord vs. Civic, (2) Hybrid vs. EX engines, and (3) “Environmentally Friendly” vs. Great Performance” advertising headlines. Each covariate significantly moderated the dependent constructs at the multivariate level, so all three hypotheses stated above are validated. Without considering covariance, the test advertisements appear to directly predict purchase intentions. Two main points can be derived from our analysis: (1) Concerning the uncontrollable factors we studied that can influence consumer decision-making (i.e., involvement with automobiles, pollution concern, and materialism), managers should consider these as bases for segmentation because they identify markets more prone to respond to environmentally-oriented brand attributes. In our study, pollution concern significantly influenced purchase intentions for this product form. (2) Concerning the controllable variables in the marketing mix, specifically the claims made in newspaper advertisements in our study, “Environmentally Friendly” versions produced significantly more positive purchase intentions than “Great Performance” claims did.

REFERENCES


OUTSOURCING THE SALES FUNCTION: THE INFLUENCE OF COMMUNICATION AND CUSTOMER ORIENTATION

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EXTENDED ABSTRACT

Manufacturers may choose to outsource the sales function to manufacturers’ representatives on an extended contract basis. In this abstract, manufacturers’ representatives are referred to as MRs and manufacturers are called principals. When outsourcing the sales function to MRs, the principals benefit from lower sales costs and the MRs’ sales experience. However, a trade-off is the potential loss of customers if the MR ends the relationship and enters into an agreement with a competing principal. Customers more loyal to the MR may discontinue purchasing the principal’s products. Instead, they may purchase the competing principal’s products in order to maintain a connection with the MR. Therefore, it is important for the principal is to ensure that the MR perceives the relationship to be effective and that it leads to acceptable sales levels that are linked to MR commissions. The principal would also want to develop MR dependence on the interfirm relationship. To that end, this study explored the influence of principals’ communication and customer orientation on the MR’s perceptions of effectiveness, performance and dependence.

Figure 1 presents results from tested hypotheses. Customer orientation is defined as “the set of beliefs that puts the customer’s interest first, while not excluding those of all other stakeholders such as owners, managers, and employees, in order to develop a long-term profitable enterprise” (Deshpande, Farley & Webster 1993, Pg. 27). Communication is defined as “the formal as well as informal sharing of meaningful and timely information between firms” (Anderson and Narus 1990, p. 44). Effectiveness of a principal is defined as the extent to which the MR is committed to the relationship and finds it to be productive and worthwhile (Bucklin & Sengupta 1993). Performance is defined as the sales level reached with a principal, how often sales goals are exceeded and how the performance compares with that achieved through other principals (Sujan, Weitz and Kumar 1994). Dependence is defined as existing when a firm needs to maintain the relationship with another firm to achieve its goals (Frazier 1983; Heide and John 1988).

A questionnaire was sent by e-mail to 2,895 executives of MR firms that were selected randomly from a listing provided by the Manufacturers’ Representatives Educational Research Foundation. The low response rate suggests that one consider the study to be exploratory. Of the 2,895 questionnaires distributed, 1,606 of the e-mail messages were opened by potential respondents and 61 were returned to yield a 3.8% response rate. Constructs were measured using previously published scales with Cronbach’s alpha scores exceeding the recommended level of .70 (Nunnally 1978). Mean scores for each measure were modeled with LISREL 8.51 (Joreskog & Sorbom 2001) using a covariance matrix. The model has an acceptable fit, as indicated by fit measures exceeding .90 and the RMSEA below .05. However, the AGFI falls just
below the .90 criterion with an index of .89. Significant relationships were found supporting all hypotheses except H4b. Indirect effects of communication and customer orientation on MR dependence were also examined.

Findings (Figure 1) indicate that communication and customer orientation are key areas needing attention when attempting to improve the MR-Principal relationship. They influence MR perceptions of principal effectiveness and performance; they also indirectly and positively influence MR dependence. Also, the MR’s perceptions of customer orientation and communication are intertwined, so attention must be given to both when interacting with the MR. Placing attention on these areas is likely to reduce the probability that a manufacturers’ representative would terminate the interfirm relationship, thus avoiding the possibility of losing customers.

![Figure 1](image_url)

Loadings are standardized. ns indicates not significant  t-values are in parentheses

SELECTED REFERENCES


THE PERCEPTION OF CONSUMERS IN RELATION TO HOW A CORPORATION MAKES A CONTRIBUTION

Tricia Staudenmaier, Berry College
Nancy D. Albers-Miller, Berry College

EXTENDED ABSTRACT

This study examines the relationship between the perception of consumers to how a corporation makes a charitable contribution. It also discusses how the consumer can be made aware of the contribution and how they feel about it. Previous studies have indicated that a corporation can increase their status in the eyes of their consumers by making a charitable contribution (File and Prince 1998), but it is unclear as to what kind of contribution is seen as the most favorable. That is the object of this study. This paper will discuss what a charitable contribution is, including the positive and negative effects of charitable giving. According to Chen et al., a charitable contribution is a measure of positive social performance (2007). In previous years, corporations and other entities have shown their social responsibility by donating cash assets. According to Giving USA 1999, an annual report on the state of philanthropy published by the American Association of Fundraising Counsel, in 1998, foundations, corporations, and individuals gave $174.52 billion to registered non-profits in the United States alone, and of that staggering amount, corporations only gave about five percent, a mere $8.726 billion in the scheme of things (Klein 1999. Then, there will be a discussion on the social status of a corporation and how consumers view the corporation on the charitable contributions they make. A corporation can make a charitable contribution for many reasons, one simply being the benefit of social status of their company. Jones and Wood have shown that a common way for companies to demonstrate their social responsiveness to their communities is through their philanthropic activities that can stimulate goodwill (1995). Other scholars have argued the company’s stakeholders, including investors, customers, suppliers, and employees, can see the company in a better light because of the charitable contributions that the corporation makes (Buchholtz et al. 2003, Himmelstein 1997, and Smith 1994). A corporate reputation is a collective opinion of an organization held by its stakeholders (Brammer and Millington 2005). The status of this corporation can increase in the eyes of the stakeholders when the corporation does something noteworthy for the better, but it can also decrease if the corporation does something that can be viewed by the public as negative. For example, if a corporation donates an entire day when their employees are normally at work to help out their community in a way that utilizes their services the community will more than likely have a positive opinion of that corporation. On the other hand, if a corporation chooses to become involved in an act that could potentially have a negative impact on their community, such as laying off a large amount of their employees, the community will more than likely have a negative opinion of them. Their reputation has been identified as playing a significant role in improving the firm's value, raising
employee morale and productivity, and improving the retention of their employees (Baker et al. 1998, Beatty and Ritter 1986, and Fombrun and Shanley 1990).
EAGLE SCOUT: LONG-TERM CAREER AND PERSONAL IMPACTS

Nancy D. Albers-Miller, Berry College
Travis D. Miller, Rome, GA

EXTENDED ABSTRACT

Research has clearly shown that people who graduate from college have better career success and earn more than those who do not (Economist 2010). Success in college and through other activities as a young person can have an impact on future opportunities and earning power (Economist 2010). Students applying to college are encouraged to have academic successes (Cole 2009, eHow 2010, Farran 2009, Johnson 2010, Klopfenstein and Thomas 2009, Pinchin 2009, Nui and Tienda 2010); leadership skills (Alberts 2010, Griggs 2009, Kanu 2008, Johnson 2010) and developed talents and strengths (Cole 2009, eHow 2010, Griggs 2009, Johnson 2010, Kingsbury 2008, Kanu 2008). Overall, the quality of experience is more important than quantity (Kanu 2008).

Scouting has been recommended as good leadership training (Griggs 2009). Gaining the rank of Eagle Scout or indicating progress toward Eagle Scout has also been cited as predictive of success in college (eHow 2010). Albers-Miller and Miller (2011) found that being a Boy Scout, and in particular an Eagle Scout, was predictive of college success. Boy Scouts and Eagle Scouts were treated favorably in the selection process and in the awarding of scholarship.

The purpose of this study is to examine the degree to which earning Eagle Scout has a lifetime impact on individual. This study examines the perceptions of earning Eagle Scouts by respondents who have achieved that award.

SELECTED REFERENCES


ECO-FRIENDLY MARKETING IN THE COSMETICS INDUSTRY

Alisha Dosani, Berry College
Nancy D. Albers-Miller, Berry College

EXTENDED ABSTRACT

Green marketing is a billion dollar sector in the industry today and continually growing. Consumers are faced with environmentally friendly products in a plethora of product categories and are asked to make decisions about products that will benefit not only the consumer but also the environment. The cosmetics industry has also latched onto the idea of green marketing and display eco-friendly labels and packaging on their products to entice consumers. The study approaches female respondents to find out if the eco-friendly packaging influences their feeling about a product. This study is based on conclusive research and will explain how factors like labels, packaging, green marketing, and false advertising all play a role in influencing a consumer’s product choice.

The research that will be conducted will help to reveal whether eco-friendly packaging triggers consumers to buy cosmetics and what effects “green” size, shape or labeling of a package has on buyers. With hundreds of labels circulating in the cosmetic industry, it will be beneficial for companies to pinpoint what strategies are most appealing. The experiment will consist of a questionnaire that will show multiple types of cosmetics ranging from mascara to shampoos with and without eco-friendly packaging. Respondents’ decisions will allow us to analyze what kind of green marketing works best for a new product entering the competitive and saturated beauty market.
FOOD DESERTS: CONSUMER BEHAVIOR DECISIONS ASSOCIATED WITH THE SELECTION OF HEALTHY FOOD ALTERNATIVES

Ari Mincey, Berry College  
Nancy D. Albers-Miller, Berry College

EXTENDED ABSTRACT

One issue that has recently received recognition in relation to health inequality was the availability, location and price of food that met current guidelines for a healthy diet. Food deserts refer to an area where healthy, affordable food is difficult to obtain. This occurs primarily in rural, urban areas and low-socioeconomic communities. This limited access to healthy food options is associated with a variety of diet-related health problems. Studies have shown that residents of these areas are surrounded by fast food, and a large reflection of America’s unhealthy, obese population. Congress and Michelle Obama have recently been working to make sure everyone has access to healthier food and food deserts are eliminated. They have joined with several stores, offering financial assistance to stores that expand into food deserts, which offer healthier alternatives. Although these initiatives have been helpful in eliminating some food deserts some feel that consumers are not taking advantage of these developments. They do not believe that if healthy food is introduced into the market it will be bought. This research examines consumer’s decisions to consume healthy food versus unhealthy food. This research will investigate if healthy food options are provided for food deserts how respondents will react. It is hypothesized that respondents will not make adjustments to their daily regimen when presented with healthy options if they are unaware of being in a food desert and efforts of others to provide them healthier options. This is vital research because it addresses consumer response in the marketplace relative to healthy options. This study will reveal if presenting those in a food desert with healthier food options is enough to encourage them to eat healthier. This will also inform others of food deserts, their affect on obesity in America and efforts to combat them in the United States.
CONSUMER BEHAVIOR

AN INTRODUCTORY STUDY OF THE RELATIONSHIP BETWEEN MATERIALISM AND SOCIAL MEDIA

David K. Amponsah, Troy University
Ingyu Lee, Troy University
Gordon Mosley, Troy University

ABSTRACT

A convenience sample of business students was studied to determine if any relationships among materialism, social media, and demographics could be established. Several relationships were found, but the study was hampered by correlations among several of the demographic variables.

INTRODUCTION

Social media have become indispensable to the self concept of many of today’s youth. Facebook, Twitter, Skype, blogging and other social media are mainstream communication media for youth. Access to these media is acquired by obtaining both communication hardware (e.g., computers, cell phones) and connection service, which is often quite costly. In addition, users of the social media have to keep up with the fast changing communication technology and accompanying services. The questions that inspired this study are these.

1. To what extent do youth’s desire for social media products drive them into materialistic lives?
2. Are they aware that their social media wants drive them into a materialistic lifestyle?
3. What motivates youth to continually acquire social media technology and services?

We have seen no other research studies that linked materialism the use of social media, so this paper is a first step at investigating these two potentially related variables.

LITERATURE REVIEW

Materialism refers to the importance people attach to worldly possessions (Kleine and Baker 2004). Goldsmith and Flynn (1999) have suggested that some materialists are motivated to acquire products to demonstrate both to themselves and to other people their status in society. Solomon (2011) has also noted that people are attached to consumption objects to the extent that
they rely on them to maintain their self concept. These consumption objects act as “security blankets” when they reinforce product users’ identities.

Studies have found relationships between materialism and social acceptability and communicative ability of products and brands to other people (Fitzmaurice and Comegys 2006). People, especially youth, may acquire the most up-to-date technologies to “fit in” with their peers and to communicate their self concept to the groups that they associate with.

Studies have also found that materialistic youth tend to shop more and save less, they are very responsive to advertising and promotional efforts, and their parents regard them as being market savvy (Goldberg, Gorn, Peracchio & Bamossy 2003). The implication of the study findings is that the more materialistic youth use material possessions to build up their self concepts. The materialistic youth’s image is also enhanced in the eyes of their parents. This consumption outcome can further drive the person deeper into consumption behavior.

How does materialism develop from childhood to adolescence? Chaplin and John (2007) found that materialism increased from middle childhood to early adolescence, and declines from early to late adolescence. Their study further found that age differences are moderated by changes in self-esteem occurring from middle childhood through adolescence. In addition, the study found that high self-esteem reduces materialism among adolescents, and the effect of age differences on the level of materialism disappears.

Flouri’s (1999) integrated model of materialism study showed that materialism in adolescents is positively related to peer influence and is negatively related to satisfaction with one’s mother’s materialistic lifestyle, religious service attendance, and economic socialization. Adolescents’ materialism correlated with peer influence and religious service attendance, but economic socialization did not have an impact.

Moschis and Moore (1982) posit that material possessions project social meanings and status. Hence, the level of materialism may be driven higher by the desire to project a certain image to peers or others that are important to the individual.

Schaefer, Hermans and Parker (2004) also investigated similarities and differences in materialism among 14-17 year-olds in China, Japan and the USA. They found significant differences among the youth in the three countries for materialism and discretionary spending power. They found discretionary spending power has a significant effect on materialism across nations. The study, however, found that although the Japanese respondents had more discretionary income than the American respondents, the Americans had higher levels of materialism due to their more individualistic culture. This finding thus supports Hofstede’s Individualist/collectivist construct (Schaefer, et. al. 2004). Schaefer’s research group also found evidence that supported cross-national differences in the psychological structures of the materialism constructs.

Materialism has a negative side to it. Domagalski (2004), in her review of Tim Kasser’s book *The High Price of Materialism*, observes that Kasser showed that the “greed is good” mentality of materialistic ideals, may have a damaging psychological effect on its adherents.
Kasser observed that individuals who value materialism bear the costs of these ideals psychologically and socially. Secondly, he argues that materialism costs are borne also by communities and the environment. Kasser, in his evaluation of the relationship between materialism and the happiness and well-being of people, concluded that money does not buy happiness. Kasser concludes that the pursuit of wealth, power, and image is not the most desirable value to pursue. Other terminal values are more important than the instrumental value of acquiring material assets. Terminal values (e.g., liberty, happiness, inner harmony) have the capacity to lead to a life of satisfaction and well-being to a greater extent than does materialism (Kasser, 2002).

**HYPOTHESES**

With no previous works addressing the relationship between the materialism variables and social networking variables, the following null hypotheses are offered for exploratory testing:

**H1:** There will be no difference in materialism, social consumption motivation, opinion leadership, Facebook® Importance, Other Social Media Importance, and Cell Phone Importance scores based on the respondent’s gender, age, university classification, or citizenship.

**H2:** Materialism, social consumption motivation, opinion leadership, Facebook® Importance, Other Social Media Importance, and Cell Phone Importance scores will not be correlated with each other.

**METHODOLOGY**

A survey instrument was created that collected data on materialism, use of social media, and demographic data. Data was collected from student volunteers at a publicly supported university in the Southeastern United States. This was a convenience sample of students in upper level business classes.

**Sample characteristics**

A total of 302 usable questionnaires were obtained. This sample included 162 males and 135 females. Gender information was missing for five respondents. The average age was 22.8 years old (range 19 – 36). Two-hundred-sixteen of the respondents were undergraduates, while 81 were MBA students. One-hundred-sixty-seven of the respondents were citizens of the United States, while 118 were citizens of 18 other countries. Eight respondents did not include information on their nationality. One major problem with this sample is that the ratio of USA citizens to non-citizens is different between the undergraduate and the MBA students. Only 20.5% of the MBA students were USA citizens, while 70.2% of the undergraduates were USA citizens. Further confusing the analysis, age, university classification, and citizenship were all correlated (age-classification: r = .637; age-citizenship: r = .319; and classification-citizenship = .244—all significant at the 0.01 level).

**Measurement of variables**

*Materialism (henceforth MAT).* This variable was measured using the mean of 18 items developed by Richins and Dawson (1992) using a 5-point Likert-type scale anchored by strongly
disagree (1) and strongly agree (5). Using this same scale, Fitzmaurice and Comegys (2006) reported a coefficient alpha of .88. The MAT scale achieved an alpha coefficient of .78 in the current study.

**Social Consumption Motivation (henceforth MOTIVE).** This variable was measured using the mean of four items developed by Moschis and Moore (1982) using a 5-point Likert-type scale anchored by strongly disagree (1) and strongly agree (5). Previous studies using this scale have reported alpha coefficients in the .71 to .85 range. Most recently, Fitzmaurice and Comegys (2006) reported a coefficient alpha of .87, while the current study found an alpha coefficient of .86 for this variable.

**Opinion Leadership (henceforth OPIN).** OPIN was measured using the mean of six items (three negatively worded and three positively worded) from Flynn, Goldsmith, and Eastman (1996). Again, a 5-point Likert-type scale with the same anchors as above was used. Fitzmaurice and Comegys (2006) reported a coefficient alpha of .81, while the current study found an alpha coefficient of .74 for this variable.

**Importance of Social Media.** Several aspects of social media were investigated with nine different items developed specifically for this study (See Appendix A). These items were factor analyzed and produced three identifiable factors: (1) Facebook® Importance [Item 30] (henceforth FACE), (2) Other Social Media Importance [Items 31 – 35] (henceforth OTHER), and (3) Cell Phones Importance [Items 37 – 39] (henceforth CELL). See Table 1 for the factor loadings. Since the FACE factor has only one item, no coefficient alpha could be calculated. The OTHER factor produced a coefficient alpha of .73, while the CELL factor had a coefficient alpha of .68. Each of these three factors was measured as a separate variable. All of the items used in these scales were measured using a 5-point Likert-type scale with the same anchors as used above. The scores for OTHER and CELL were the mean scores of their component items.

**TABLE 1: FACTOR LOADINGS FOR IMPORTANCE OF SOCIAL MEDIA ITEMS**

<table>
<thead>
<tr>
<th>Rotated Factor Matrix</th>
<th>Item 30. Facebook Importance</th>
<th>Item 31. Twitter Importance</th>
<th>Item 32. Skype Importance</th>
<th>Item 33. I love podcasting</th>
<th>Item 34. Blogging Importance</th>
<th>Item 35. YouTube/My Space Importance</th>
<th>Item 37. Cell Phone Importance</th>
<th>Item 38. High Tech Cell Phone</th>
<th>Item 39. Social Networking is a good value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Item 30. Facebook Importance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.975</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 31. Twitter Importance</td>
<td></td>
<td>.476</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 32. Skype Importance</td>
<td>.565</td>
<td></td>
<td>.504</td>
<td>.293</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 33. I love podcasting</td>
<td>.736</td>
<td></td>
<td>.742</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 34. Blogging Importance</td>
<td>.736</td>
<td></td>
<td>.767</td>
<td>.293</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 35. YouTube/My Space Importance</td>
<td>.438</td>
<td></td>
<td>.599</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 37. Cell Phone Importance</td>
<td></td>
<td>.767</td>
<td></td>
<td>.293</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 38. High Tech Cell Phone</td>
<td></td>
<td></td>
<td>.599</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 39. Social Networking is a good value</td>
<td></td>
<td>.504</td>
<td>.293</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Extraction Method: Maximum Likelihood.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations. Loadings under 0.25 were suppressed.

With the exception of the CELL scale, each of the above described scales used to measure MAT,
MOTIVE, OPIN, and OTHER had a coefficient alpha of .70 or higher, as recommended by Nunnally (1978) for exploratory research. The CELL scale achieved a coefficient alpha of .68—close to Nunnally’s standard. Nonetheless, results based on the CELL scale should be viewed with moderate caution.

Demographic Data. Data was also collected about each respondent’s: (1) gender, (2) age, (3) citizenship, and (4) university classification.

Statistical Tests. T-tests were run to determine if there were differences among the respondents in the materialism and social networking variables based on gender, age, university classification, or citizenship. Further, correlation analysis was performed to determine if there were “markers” for materialism among the other studied variables.

RESULTS

Both of our null hypotheses were found to be partially wrong, indicating that the hypothesized lack of relationships among the variables was not supported. The respondents’ scores on MAT, MOTIVE, OPIN, FACE, OTHER, and CELL were analyzed with t-tests to determine if there were differences based on gender, age, university classification, or citizenship. Results for gender (Table 2), age (Table 3), university classification (Table 4), and citizenship (Table 5) are reported. Statistically significant relationships are displayed in bold print in these tables.

Gender. As can be seen in Table 2, two of the six measured attitudinal variables differed based on gender, MOTIVE and FACE. Males were found to score higher than females on MOTIVE, and lower than females on FACE.

<table>
<thead>
<tr>
<th>Variable, Gender and coefficient α</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>df</th>
<th>Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materialism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male α = .78</td>
<td>161</td>
<td>2.9422</td>
<td>.479</td>
<td>.434</td>
<td>294</td>
<td>.664</td>
</tr>
<tr>
<td>Female</td>
<td>135</td>
<td>2.9183</td>
<td>.462</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Social Consumption Motivation</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Male α = .86</td>
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<td>2.8704</td>
<td>.954</td>
<td>.954</td>
<td>295</td>
<td>.024</td>
</tr>
<tr>
<td>Female</td>
<td>135</td>
<td>2.6142</td>
<td>.990</td>
<td>2.265</td>
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</tr>
<tr>
<td>Opinion Leadership</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Male α = .74</td>
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<td>3.1768</td>
<td>.599</td>
<td>.097</td>
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<td>.923</td>
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<td>Female</td>
<td>135</td>
<td>3.1701</td>
<td>.580</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Facebook®</td>
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<tr>
<td>Male α = .73</td>
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<td>.634</td>
<td>-2.536</td>
<td>277</td>
<td>.012</td>
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<tr>
<td>Female</td>
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<td>3.6769</td>
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<tr>
<td>Other Media</td>
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<td></td>
</tr>
<tr>
<td>Male α = .73</td>
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<td>-1.936</td>
<td>202</td>
<td>.054</td>
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<td>2.9377</td>
<td>.755</td>
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<tr>
<td>Cell Phone Use</td>
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<tr>
<td>Male α = .68</td>
<td>155</td>
<td>3.3581</td>
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<td>.417</td>
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<tr>
<td>Female</td>
<td>129</td>
<td>3.4457</td>
<td>.878</td>
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</tr>
</tbody>
</table>

Respondents differed on MAT, MOTIVE, and FACE based on age (See Table 3).
TABLE 3: AGE AND SOCIAL MEDIA AND MATERIALISM VARIABLES

<table>
<thead>
<tr>
<th>Variable, Age and Social Media</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>df</th>
<th>Significance (2-tailed)</th>
</tr>
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<tbody>
<tr>
<td>Materialism</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>&gt;= 23</td>
<td>108</td>
<td>3.0151</td>
<td>.447</td>
<td>2.308</td>
<td>288</td>
<td>.022</td>
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<tr>
<td>&lt; 23</td>
<td>182</td>
<td>2.8835</td>
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<tr>
<td>Social Consumption Motivation</td>
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<tr>
<td>&gt;= 23</td>
<td>109</td>
<td>3.0298</td>
<td>1.032</td>
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<tr>
<td>&lt; 23</td>
<td>182</td>
<td>2.6039</td>
<td>.921</td>
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<tr>
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</tr>
<tr>
<td>&gt;= 23</td>
<td>109</td>
<td>3.1596</td>
<td>.573</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 23</td>
<td>181</td>
<td>3.1678</td>
<td>.588</td>
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<td></td>
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<tr>
<td>Facebook®</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>&gt;= 23</td>
<td>97</td>
<td>3.2474</td>
<td>1.173</td>
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</tr>
<tr>
<td>&lt; 23</td>
<td>177</td>
<td>3.6271</td>
<td>.987</td>
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</tr>
<tr>
<td>Other Media</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;= 23</td>
<td>75</td>
<td>2.8418</td>
<td>.900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 23</td>
<td>123</td>
<td>2.7851</td>
<td>.825</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell Phone Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;= 23</td>
<td>102</td>
<td>3.3529</td>
<td>.947</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 23</td>
<td>177</td>
<td>3.4435</td>
<td>.874</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

However, the differences in MAT (significance = .921) and MOTIVE (significance .935) disappeared when only undergraduate respondents were analyzed. Age, then, was not associated with MAT and MOTIVE when university classification was controlled for. The age difference associated with FACE did remain when only undergraduate respondents were analyzed (significance = .012).

Several differences were found in the social media and materialism variables based on whether the respondents were master’s level or undergraduate students (See Table 4). Master’s level students scored higher on MAT and Social MOTIVE, as well as finding OTHER (e.g., Skype®, YouTube®) more important. Undergraduates found FACE to be more important than MBA students did.

TABLE 4: UNIVERSITY STATUS, SOCIAL MEDIA, AND MATERIALISM VARIABLES

<table>
<thead>
<tr>
<th>Variable, Univ. Status and Social Media</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>df</th>
<th>Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materialism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS/BA</td>
<td>216</td>
<td>2.8906</td>
<td>.475</td>
<td>2.475</td>
<td>294</td>
<td>.014</td>
</tr>
<tr>
<td>MBA</td>
<td>80</td>
<td>3.0418</td>
<td>.444</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Consumption Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS/BA</td>
<td>216</td>
<td>2.5922</td>
<td>.975</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBA</td>
<td>81</td>
<td>3.1821</td>
<td>.835</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opinion Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS/BA</td>
<td>215</td>
<td>3.1879</td>
<td>.595</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBA</td>
<td>81</td>
<td>3.1342</td>
<td>.579</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facebook®</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS/BA</td>
<td>205</td>
<td>3.5707</td>
<td>1.030</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBA</td>
<td>75</td>
<td>3.2667</td>
<td>1.131</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Media</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS/BA</td>
<td>147</td>
<td>2.6768</td>
<td>.868</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBA</td>
<td>56</td>
<td>3.1003</td>
<td>.804</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell Phone Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS/BA</td>
<td>211</td>
<td>3.4147</td>
<td>.912</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBA</td>
<td>75</td>
<td>3.3600</td>
<td>.893</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Those respondents who were not citizens of the USA scored higher on MAT and MOTIVE, and rated the importance of OTHER more importantly than did USA’s citizens (See Table 5).
TABLE 5: CITIZENSHIP, SOCIAL MEDIA, AND MATERIALISM VARIABLES

<table>
<thead>
<tr>
<th>Variable, Citizenship and coefficient α</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>df</th>
<th>Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materialism USA</td>
<td>166</td>
<td>2.8186</td>
<td>.487</td>
<td>5.118</td>
<td>291</td>
<td>&lt;.000</td>
</tr>
<tr>
<td>α = .78</td>
<td>127</td>
<td>3.0862</td>
<td>.407</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Consumption Motivation non-USA</td>
<td>167</td>
<td>2.3752</td>
<td>.917</td>
<td>8.420</td>
<td>292</td>
<td>&lt;.000</td>
</tr>
<tr>
<td>α = .86</td>
<td>127</td>
<td>3.2461</td>
<td>.824</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opinion Leadership USA</td>
<td>167</td>
<td>3.2146</td>
<td>.621</td>
<td>-1.499</td>
<td>291</td>
<td>.142</td>
</tr>
<tr>
<td>α = .74</td>
<td>126</td>
<td>3.1119</td>
<td>.548</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facebook® USA</td>
<td>159</td>
<td>3.5660</td>
<td>.997</td>
<td>6.081</td>
<td>276</td>
<td>.136</td>
</tr>
<tr>
<td>Non-USA</td>
<td>119</td>
<td>3.3697</td>
<td>1.141</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Media USA</td>
<td>104</td>
<td>2.4591</td>
<td>.852</td>
<td>6.081</td>
<td>201</td>
<td>&lt;.000</td>
</tr>
<tr>
<td>α = .73</td>
<td>99</td>
<td>3.1409</td>
<td>.744</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell Phone Use USA</td>
<td>164</td>
<td>3.4248</td>
<td>.942</td>
<td>- .780</td>
<td>282</td>
<td>.436</td>
</tr>
<tr>
<td>α = .68</td>
<td>120</td>
<td>3.3403</td>
<td>.843</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interestingly, there were no differences based on gender, age, university classification, or citizenship on two of the studied attitudinal variables—OPIN and CELL.

To determine if relationships existed among the target attitudinal variables, correlations among social media and materialism variables were performed (See Table 6). With fifteen separate correlations, nine were found to be significant at the 0.01 level. However, the largest correlation size was 0.384. The three materialism variables (MAT, MOTIVE, and OPIN) all correlated with each other, and the three social media variables (FACE, OTHER, and CELL) all correlated with each other as well. The analysis found no relationship between MAT and FACE, although a relationship was found between MAT and OTHER and CELL. Further, CELL was also correlated with OPIN, and OTHER was correlated with MOTIVE.
TABLE 6: CORRELATIONS AMONG SOCIAL MEDIA AND MATERIALISM VARIABLES

<table>
<thead>
<tr>
<th></th>
<th>Materialism</th>
<th>Social Consumption Motivation</th>
<th>Opinion Leadership</th>
<th>Facebook Importance</th>
<th>Other Social Networking Importance</th>
<th>Cell Phone Importance for Social Networking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correlation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materialism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson</td>
<td></td>
<td>.384**</td>
<td>.265**</td>
<td>.048</td>
<td>.221**</td>
<td>.166**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.421</td>
<td>.001</td>
<td>.005</td>
</tr>
<tr>
<td>N</td>
<td>301</td>
<td>301</td>
<td>300</td>
<td>282</td>
<td>205</td>
<td>205</td>
</tr>
<tr>
<td><strong>Correlation</strong></td>
<td>.384**</td>
<td></td>
<td>.085</td>
<td>.082</td>
<td>.269**</td>
<td>.066</td>
</tr>
<tr>
<td>Social Consumption Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.265**</td>
<td>.085</td>
<td>1</td>
<td>.041</td>
<td>.081</td>
<td>.234**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.140</td>
<td>.494</td>
<td>.247</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>301</td>
<td>302</td>
<td>301</td>
<td>283</td>
<td>206</td>
<td>287</td>
</tr>
<tr>
<td><strong>Correlation</strong></td>
<td></td>
<td>.260**</td>
<td>.082</td>
<td>.041</td>
<td>.355**</td>
<td>.356**</td>
</tr>
<tr>
<td>Opinion Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson</td>
<td>.265**</td>
<td>.085</td>
<td>1</td>
<td>.041</td>
<td>.081</td>
<td>.234**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
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<td>.000</td>
<td>.140</td>
<td>.494</td>
<td>.247</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>301</td>
<td>301</td>
<td>301</td>
<td>283</td>
<td>206</td>
<td>287</td>
</tr>
<tr>
<td><strong>Correlation</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Facebook Importance</td>
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<tr>
<td>Pearson</td>
<td>.048</td>
<td>.082</td>
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<td>1</td>
<td>.355**</td>
<td>.356**</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.421</td>
<td>.171</td>
<td>.494</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>282</td>
<td>283</td>
<td>283</td>
<td>283</td>
<td>204</td>
<td>276</td>
</tr>
<tr>
<td><strong>Correlation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Social Networking Importance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson</td>
<td>.221**</td>
<td>.269**</td>
<td>.081</td>
<td>.355**</td>
<td>1</td>
<td>.350**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.001</td>
<td>.247</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
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<td>N</td>
<td>205</td>
<td>206</td>
<td>205</td>
<td>204</td>
<td>206</td>
<td>201</td>
</tr>
<tr>
<td><strong>Correlation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell Phone Importance for social Networking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson</td>
<td>.166**</td>
<td>.066</td>
<td>.234**</td>
<td>.356**</td>
<td>.350**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.005</td>
<td>.264</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>286</td>
<td>287</td>
<td>286</td>
<td>276</td>
<td>201</td>
<td>287</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

DISCUSSION

Both MAT and MOTIVE were found to be higher among older, master’s students who were not citizens of the USA. As noted earlier, these three demographic variables were correlated. This would seem to make sense since most student respondents who enroll in MBA programs are older (and in this data set have a predominance of non-USA citizens) and wish to increase their employability and future earnings. The desire for a higher income is often associated with a higher standard of living, implying higher levels of materialism. Further, in our sample, MOTIVE was found to be higher in males. For both OPIN and CELL, no differences were found based on the demographics that were measured.
FACE was found to be more important to females than to males, to younger rather than older respondents, and to undergraduates rather than to MBA students. Perhaps students who became involved with Facebook® at an earlier age have learned to become more dependent upon it.

OTHER scores were higher for MBA students and non-citizens of the USA, but surprisingly—given the correlations involved—not for older students. Since there is such a high prevalence of non-citizens in the MBA demographic, perhaps this skews the data. Non-citizens may use other social media more to keep in touch with family and friends in their home countries.

When correlating the attitudinal variables, no relationship was found between MAT and FACE, but a relationship was found between MAT and OTHER, and MAT and CELL. Perhaps for this group of respondents, Facebook® use is so ubiquitous that its use no longer connotes status. Perhaps use of at least some of the other social media and possessing the latest smart cell phones still are materialistic goals for them. The correlation between OTHER and MOTIVE provides additional evidence that this could be true. CELL’s correlation with OPIN may indicate the cell phone as a normal tool used in the exercise of opinion leadership today.

LIMITATIONS AND FUTURE RESEARCH

This study had several limitations. First, it used a convenience sample of business students at a publicly-supported university located in the Southeastern United States. Thus, its results are not generalizable to any larger population. Secondly, the correlations among age, university classification, and citizenship made it impossible to tease out the unvarnished specific effects of each of these demographic variables. Thirdly, the imbalance of USA and non-USA citizens between the undergraduates and the MBA students further complicated discovering the most important demographic variables. Lastly, the international students may not be representative of university students in similar programs in their home countries. They often have higher levels of ambition, self-confidence, and income (not to mention better English language skills) than their peers who have stayed in their home countries.

Considering these limitations, future research should try to assure that the number of respondents in each sub-category (e.g., male, non-citizen, MBA students) is sufficient to discover the differences that actually exist. Further, the speculations included in the Discussion section above could be tested in future research.

REFERENCES


APPENDIX A

ITEMS USED TO MEASURE FACEBOOK® IMPORTANCE,
OTHER SOCIAL MEDIA IMPORTANCE,
AND CELL PHONE IMPORTANCE

Facebook® Importance Measure
30. Facebook social networking is important to me.

Other Social Media Importance Measure
31. Twitter social networking is important to me.
32. Skype conversations are important to me.
33. I love podcasting.
34. Blogging interactions are important to me.
35. YouTube and/or MySpace activities are important to me.

Cell Phone Importance Measure
37. My cell phone and I are inseparable.
38. I will always buy the cell phone with the latest technological features.
39. My use of cell phones and computers for social networking is certainly worth the money.
THE RELATIONSHIP BETWEEN FASHION INTEREST AND SPENDING PREFERENCE AMONG TEEN CONSUMERS

Anna A. Magie, Texas Woman’s University
Deborah D. Young, Texas Woman’s University

ABSTRACT

As a result of the large size and enormous spending power of the teen market segment, marketers are taking great notice of this market segment that has great autonomy over personal purchases and significant influence over family purchases. Research has been conducted about the spending preferences of teens, but little information has been obtained about the relationship between spending preferences and fashion interest. The researchers examined the relationship and results indicated significance. Findings and implications are discussed.

INTRODUCTION

The concept of shopping orientation was introduced by Stone (1954) and can be used to predict why consumers shop specific types of stores and why consumers purchase particular products. Shopping orientations or shopping patterns include “activities, interests, and opinions concerning the shopping process” (Moye and Giddings 2002, p 262), are formed through previous experiences at retail stores combined with personal preferences, and can indicate categories of shopper styles as well as needs for products and services. Consumers tend to exhibit different shopping orientations that influence their shopping behavior and spending preferences, thus, for decades, researchers have developed profiles to better understand consumers and their behaviors (i.e. Darden and Howell 1987, Dickson 2000, Gutman and Mills 1982, Lumpkin 1985, Shim and Kotsiopulos 1992a, Shim and Kotsiopulos 1992b, Taylor and Cosenza 2002).

Research about shopping orientation has been useful in understanding behaviors of consumers and has been a reliable predictor of shopping behavior (Vijayasarathy, 2003a). Past research indicates that shopping orientations are related to general inclination toward acts of shopping (Hassan, Muhammad and Bakar 2010). Currently, because operators of most retail store formats focus marketing efforts on specific niche groups in order to cater to the diverse characteristics of consumers within the U.S. market, knowledge of the shopping orientations and behaviors of many varied consumer groups must be updated continually to best understand consumer demands. Therefore, in addition to analyzing basic demographic information, retailers and market researchers must work to better understand customers by continually focusing on the dynamic and evolving shopping orientations that are related to purchasing behaviors. Additionally, shopping orientations vary according to individual demographic and psychographic characteristics, and researchers have found links between shopping orientation and consumer
patronage (Moye and Kincade 2003). Thus, consumers with different shopping orientations portray varied attributes and behaviors in regards to shopping preferences (Gutman and Mills 1982, Lumpkin 1985) and consumer characteristics are used to identify niche markets interested in the purchase of specific products (Dholakia and Uusitalo 2002).

Currently, the thriving teen market, a segment of approximately 39 million consumers with diverse interests and immense buying power, spends more than an estimated $208 billion annually on products at retail (Faw 2011). As a result, marketers are taking notice of spending preferences by teens because it is critical to gain a better understanding of this economically powerful group. In addition, because teen buyers today are also buyers of fashion products and sure to affect the retail marketplace for years in the fashion adoption process, marketers work to develop fuller fashion interest profiles to better understand teens and their consumer behaviors. Thus, as a result of a study of the background of the problem, the researchers proposed that levels of fashion interest may be related the types of merchandise on which teens choose to spend their money, and the subsequent study asked what are the fashion interests of teen consumers?, are fashion interests related to spending preference by category among teen consumers?, and on what merchandise category do teen consumers prefer to spend their money most often? Consequently, this study examined the relationship between fashion interest and spending preference by category among U.S. teen consumers, ages 13 to 18.

**METHODOLOGY**

The research results reported here were partial results from a larger study of teen consumers. The population for the study was female and male consumers, aged 13 to 18, residing in the United States, who had access to the Internet. The sample group consisted of a random sample of teens living throughout the United States. Subjects were 3,600 random members of Zoomerang.com’s 250,000 teen Internet users. Zoomerang.com placed the survey online, sent emails that allowed survey access, and captured responses. Before beginning the online survey, participants age 13 to 17 had to seek permission from parents to participate and had to acknowledge that fact at the beginning of the survey. Complete responses for 440 participants resulted in a response rate of 12.2%.

A questionnaire was developed using an adaptation of Dillman’s (2007) Tailored Design Method. The self-administered, Web-based questionnaire was designed to acquire information regarding participants’ demographics, importance placed on store attributes, shopping behaviors, and spending preference by merchandise category. Demographic questions included inquiries about the following items: gender, educational status, employment status, personal monthly take-home pay from job during school year, primary source of month income, secondary source of income each month, typical monthly income from parent or relatives during the school year, summer employment status, personal monthly take-home pay from job during summer, ethnic identification, total number of people living in household, zip code of current residence, and product category of most frequent spending.

For information about fashion interest, the questionnaire elicited information about those factors most important to the participants by requiring them to respond to a matrix question consisting of five statements that focused on fashion interest through the use of the Clothing
Interest Scale (Lumpkin 1985). The participants were asked to rate each statement regarding fashion interest to the extent the statement applied to their beliefs on a four-point, Likert-type summated ratings scale that listed four responses ranging from (1) strongly disagree to (4) strongly agree. Fashion interest scores ranged from 5 to 20. Higher scores indicated higher levels of fashion interest, and lower scores indicated lower levels of fashion interest.

For information about spending preferences, participants identified the product category on which they most often spent from among apparel, auto expense, cosmetics, entertainment, food, hair care, video games, and other; when responding to other, participants were asked to write in specific information which would be captured for discussion purposes. Participants also were provided with a listing of retail store formats created by the researcher and were asked to rank their top two choices where they were most likely to shop for apparel. Finally, participants indicated their favorite apparel store by name.

ANALYSIS AND RESULTS

Participants lived in the United States, and were female (50.2%) and male (49.8%), ranging in age from 13 to 18 with the greatest percentage being 17 (24.3%). The vast majority (87.0%) were white, non-Hispanic. All lived at home with at least one parent, and the largest percentage (34.1%) reported four persons living in their household. A majority was enrolled in high school (68.4%), followed by 108 enrolled in junior high (24.5%). The sample group was evenly distributed throughout the United States according to state of residence. The largest percentage of participants was from Pennsylvania (9.8%), followed by New York (7.5%), Texas (5.5%), and Florida (5.0%). Overall, participants from 45 states responded to the survey. In addition, about half of participants lived in urban areas (48.3%), while the other half were evenly split between suburban (26.8%) and rural (24.9%) areas.

The majority of the participants did not work during the school year (74.1%) or the summer months (53.0%). A minority of teens worked part-time during the school year (24.8%) and the summer (33.4%), and only 13.6% reported working full-time in the summer. Parents (71.8%) or current job (20.7%) were the most frequent primary sources of monthly income, while parents (47.0%), relatives other than parents (32.5%), and savings from earlier summer jobs (14.3%) were the most frequent secondary sources of monthly income.

Fashion interest

Participants were asked to respond to statements about fashion interest through the use of the Clothing Interest Scale (Lumpkin 1985). The distribution of responses by participants that agreed or strongly agreed to the fashion interest statements was similar for all and included I enjoy apparel like some people do such things as books, music, and movies (45.7%), I would like to be considered one of the best dressed (44.8%), planning and choosing my wardrobe can be included among my favorite activities (42.5%), apparel is so attractive to me that I am tempted to spend more money than I should (37.7%), and I would rather spend money on apparel than anything else (34.1%). Table 1 shows the frequencies and percentages of the teen’s responses to the five fashion interest items.
Spending preferences

When asked about the product categories on which they most often spent their money, the largest percentage of teens reported apparel (33.2%) with video games (21.8%), and entertainment (18.6%) close behind. Fewer teens most often spent their money on food (10.2%), other (8.0%), auto expense (4.3%), cosmetics (2.7%), and hair care (1.1%). Table 2 shows the frequencies and percentages of the teen’s responses to the spending preference inquiry.

Table 1
Frequencies and Percentages of Fashion Interest Items

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy apparel like some people do such things as books, music, and movies</td>
<td>119 27.0</td>
<td>120 27.3</td>
<td>122 27.7</td>
<td>79 18.0</td>
</tr>
<tr>
<td>Apparel is so attractive to me that I am tempted to spend more money than I should</td>
<td>144 32.7</td>
<td>130 29.5</td>
<td>104 23.6</td>
<td>62 14.1</td>
</tr>
<tr>
<td>I would like to be considered one of the best dressed</td>
<td>106 24.1</td>
<td>137 31.1</td>
<td>134 30.5</td>
<td>63 14.3</td>
</tr>
<tr>
<td>Planning and choosing my wardrobe can be included among my favorite activities</td>
<td>127 28.9</td>
<td>126 28.6</td>
<td>124 28.2</td>
<td>63 14.3</td>
</tr>
<tr>
<td>I would rather spend my money on apparel than anything else</td>
<td>161 36.6</td>
<td>129 29.3</td>
<td>94 21.4</td>
<td>56 12.7</td>
</tr>
</tbody>
</table>

Table 2
Frequencies and Percentages of Spending Preferences of Teens

<table>
<thead>
<tr>
<th>Product</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparel</td>
<td>146</td>
<td>33.2</td>
</tr>
<tr>
<td>Video games</td>
<td>96</td>
<td>21.8</td>
</tr>
<tr>
<td>Entertainment</td>
<td>82</td>
<td>18.6</td>
</tr>
<tr>
<td>Food</td>
<td>45</td>
<td>10.2</td>
</tr>
<tr>
<td>Other</td>
<td>35</td>
<td>8.0</td>
</tr>
<tr>
<td>Auto expense</td>
<td>19</td>
<td>4.3</td>
</tr>
<tr>
<td>Cosmetics</td>
<td>12</td>
<td>2.7</td>
</tr>
<tr>
<td>Hair care</td>
<td>5</td>
<td>1.1</td>
</tr>
</tbody>
</table>
Patronage behavior

Participants were asked questions about store type preference, favorite apparel store, and apparel shopping behavior. As shown in Table 3, the largest percentage (48.1%) listed department stores as the type of store from which they buy apparel most often followed by discount stores (23.6%), catalogs (13.7%), and specialty stores (7.8%). In addition, the majority (67.4%) ranked discount stores as their second most favorite store from which to buy apparel. When asked about their favorite apparel store, Wal-Mart (9.8%), Old Navy (7.2%), American Eagle (7.0%), Kohl’s (6.8%), Hot Topic (6.4%), Hollister (6.4%), Aeropostale (6.1%), JC Penney (5.5%), Target (3.2%), and The Gap (2.7%) were the most frequent listings (see Table 4).

When asked about apparel shopping behavior, the largest percentage of teens reported shopping for apparel once (39.5%) or twice (24.5%) for either 1 to 3 (51.4%) or 4 to 6 (24.5%) hours in a typical month. In addition, the largest percentage of teens reported buying an apparel item once (40.5%) or twice (25.9%) and spending between $1 and $99 (63.4%) during a typical month (see Table 5).

Table 3
*Store Type Preferences for Purchasing Apparel*

<table>
<thead>
<tr>
<th>Store Type</th>
<th>Most Often</th>
<th>Second Most Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department Store</td>
<td>48.1</td>
<td>18.4</td>
</tr>
<tr>
<td>Discount Store</td>
<td>23.6</td>
<td>67.4</td>
</tr>
<tr>
<td>Catalog</td>
<td>13.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Specialty Store</td>
<td>7.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Off-price Store</td>
<td>3.3</td>
<td>4.5</td>
</tr>
<tr>
<td>Outlet Store</td>
<td>2.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Resale Store</td>
<td>1.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Internet Store</td>
<td>0.0</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Table 4

*Frequencies and Percentages of Favorite Apparel Stores*

<table>
<thead>
<tr>
<th>Store</th>
<th>n</th>
<th>%</th>
<th>Store</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wal-Mart</td>
<td>43</td>
<td>9.8</td>
<td>Victoria's Secret</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td>Old Navy</td>
<td>31</td>
<td>7.2</td>
<td>K-Mart</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td>American Eagle</td>
<td>31</td>
<td>7.0</td>
<td>Nordstrom</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Kohl's</td>
<td>30</td>
<td>6.8</td>
<td>Dick's Sporting Goods</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Hot Topic</td>
<td>28</td>
<td>6.4</td>
<td>Polo</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Hollister</td>
<td>28</td>
<td>6.4</td>
<td>Express</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Aeropostle</td>
<td>27</td>
<td>6.1</td>
<td>Rue 21</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>JC Penney</td>
<td>24</td>
<td>5.5</td>
<td>Boscovs</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Target</td>
<td>14</td>
<td>3.2</td>
<td>Fashion Bug</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Gap</td>
<td>12</td>
<td>2.7</td>
<td>Tilly's</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Macy's</td>
<td>11</td>
<td>2.5</td>
<td>Nike</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Abercrombie &amp; Fitch</td>
<td>10</td>
<td>2.3</td>
<td>Eddie Bauer</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Pac Sun</td>
<td>8</td>
<td>1.8</td>
<td>Goody's</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Sears</td>
<td>6</td>
<td>1.4</td>
<td>Thrift Store</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>TJ Maxx</td>
<td>5</td>
<td>1.1</td>
<td>Wet Seal</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Steve and Barry's</td>
<td>5</td>
<td>1.1</td>
<td>Charlotte Russe</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Ross</td>
<td>4</td>
<td>0.9</td>
<td>Marshall's</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Dillard's</td>
<td>4</td>
<td>0.9</td>
<td>The Buckle</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Urban Outfitters</td>
<td>3</td>
<td>0.7</td>
<td>Zumiez</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Deb's</td>
<td>3</td>
<td>0.7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5

Frequencies and Percentages of Teen Shopping Behaviors

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of times shopped for apparel during a typical month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>42</td>
<td>9.5</td>
</tr>
<tr>
<td>1</td>
<td>174</td>
<td>39.5</td>
</tr>
<tr>
<td>2</td>
<td>108</td>
<td>24.5</td>
</tr>
<tr>
<td>3</td>
<td>43</td>
<td>9.8</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
<td>9.1</td>
</tr>
<tr>
<td>5 +</td>
<td>33</td>
<td>7.5</td>
</tr>
<tr>
<td>Number of hours spent shopping for apparel during a typical month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No time</td>
<td>40</td>
<td>9.1</td>
</tr>
<tr>
<td>1 - 3 hours</td>
<td>226</td>
<td>51.4</td>
</tr>
<tr>
<td>4 - 6 hours</td>
<td>108</td>
<td>24.5</td>
</tr>
<tr>
<td>7 - 9 hours</td>
<td>25</td>
<td>5.7</td>
</tr>
<tr>
<td>10 - 12 hours</td>
<td>15</td>
<td>3.4</td>
</tr>
<tr>
<td>15+ hours</td>
<td>26</td>
<td>5.9</td>
</tr>
<tr>
<td>Number of times bought an apparel item during a typical month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>48</td>
<td>10.9</td>
</tr>
<tr>
<td>1</td>
<td>178</td>
<td>40.5</td>
</tr>
<tr>
<td>2</td>
<td>114</td>
<td>25.9</td>
</tr>
<tr>
<td>3</td>
<td>45</td>
<td>10.2</td>
</tr>
<tr>
<td>4</td>
<td>32</td>
<td>7.3</td>
</tr>
<tr>
<td>5 +</td>
<td>23</td>
<td>5.2</td>
</tr>
<tr>
<td>Approximate money spent on apparel during a typical month?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>42</td>
<td>9.5</td>
</tr>
<tr>
<td>$ 1 - $ 49</td>
<td>140</td>
<td>31.8</td>
</tr>
<tr>
<td>$ 50 - $ 99</td>
<td>139</td>
<td>31.6</td>
</tr>
<tr>
<td>$100 - $149</td>
<td>72</td>
<td>16.4</td>
</tr>
<tr>
<td>$150 - $200</td>
<td>32</td>
<td>7.3</td>
</tr>
<tr>
<td>More than $200</td>
<td>15</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Fashion interest and spending preferences

A one-way MANOVA was conducted on spending preference and fashion interest. Prior to testing, participants were grouped according to spending preferences resulting in apparel teens (33.2%) spending most often on apparel, entertainment/food teens (30.0%) spending most often on entertainment or food, video game teens (22.5%) spending most often on video games, and other teens (14.3%) spending most often on other products. Cosmetics, hair care, and auto
expense were not included in testing due to low responses. The analysis revealed significant effects for spending preference by category on fashion interest, $F (1,346) = 84.47, p < .001$. Post hoc comparisons using a Scheffé test indicated that apparel teens had greater scores for fashion interest ($M = 3.03$) compared to other teens ($M = 2.16$), entertainment/food teens ($M = 1.86$), and video game teens ($M = 1.71$) (see Table 6).

Table 6
Multivariate Analysis of Variance of Fashion Interest and Spending by Category

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fashion Interest</td>
<td></td>
<td></td>
<td></td>
<td>84.47</td>
<td>.000</td>
</tr>
<tr>
<td>Apparel teens</td>
<td>146</td>
<td>3.03</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entertainment/food teens</td>
<td>132</td>
<td>1.86</td>
<td>.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video game teens</td>
<td>99</td>
<td>1.71</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other teens</td>
<td>63</td>
<td>2.16</td>
<td>.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CONCLUSIONS AND IMPLICATIONS**

Teens are a diverse, growing, critical market within the retail industry today, thus, results of this study provided implications for retailers. Current demanding economic conditions have forced retailers to pare down inventories while attempting to maintain level sales activity. As a result, retailers must be extremely focused on offering desired products within the formats and atmospheres preferred by consumers and able to identify specific variables that are influential on spending preferences within all segments of consumers, including teens. Therefore, the researchers for this study conducted an investigation into shopping orientations in order to determine information about spending preferences of teens as related to fashion interest.

In the current study, prior to testing, teen participants were grouped according to responses about the product category on which they most often spent money. The analysis resulted in the identification of apparel teens that preferred to spend their money on apparel, entertainment/food teens that spent most often on entertainment or food, video game teens that spent their money most often on video games, and other teens that preferred to spend money on other product categories. Results also indicated that teens with significantly different fashion interest levels most often purchased different types of products, and that fashion interest was highest among apparel teens followed by other teens, entertainment/food teens, and video game teens.

Apparel teens were those that spent money most often on apparel, but also were those that had the highest mean scores on fashion interest among all four teen groups. Thus, the apparel teen expresses fashion interest and responds to changing apparel trends through the choices made when selecting a fashion retailer. Because so many retailers currently cater to this niche market, those wanting to capture a greater market share of those teens that really focus on purchasing fashion-oriented apparel must distinguish themselves from the competition in ways outside of merchandise assortments. For example, strong teen specialty stores, Urban Outfitters and PacSun, have experimented with “communities” on their websites that organize social media
applications and allow shoppers to communicate with other teens via blogs, be notified of trends via postings, hear new music, send photos through Flickr, watch videos through YouTube, and share and receive information through applications such as Facebook and Twitter. As a result, the possibility exists that apparel teens will become more interested in purchasing fashion products offered by retailers that friends and other teens like as well.

While many retailers already focus on apparel teens, opportunities do exist for developing appeals to teens that most often purchase other types of products. As indicated by information supplied by the participants, other teens preferred to spend on items such as books, music, computers, electronics, and DVDs. In addition, these teens had the second highest level of fashion interest, which is quite understandable. While much of the world thinks of fashion only as apparel and accessories, all of the products most often purchased by other teens actually are fashionable items. Certainly, teen spending on books, music, and DVDs are not on old products, but rather, on new, trendy, popular (e.g. fashionable) products. Thus, retailers that sell books, music, DVDs, and electronics should, in particular, analyze existing stores and websites to develop strategies that appeal to this market from the assortment mix as well as the fashion appeal; some have already made this a focus. For example, a recent study indicated that, in 2009, adult book sales were expected to fall 4% while juvenile and young adult book sales were expected to increase 5% (Fitzgerald 2009). As a result, Barnes and Noble took advantage of this shift by expanding teen book sections due to the increased popularity and demand for book series that include Harry Potter, Twilight, and The Hunger Games. Because of success in that strategy, anecdotal evidence suggests that the teen section within the stores is much increased in physical space as well as titles.

The concept of entertaining consumers while shopping is not a new idea, however, it has increased in importance for the teen market, especially for the entertainment/food teens, due to their demands for interactive teen-oriented activities and technologies in the retail environment. While many shopping centers have entertainment and food sites, most are directed toward adults. However, rather than placing restrictions on teens, centers that include multiple teen retailers should work to develop venues that actually cater to teens in effective ways. Selected shopping centers around the country have worked to attract the teen customer within the shopping mall by combining the many elements of entertainment and food. Besides stores, these centers include restaurants and/or food courts, a multiplex movie theatre, an arcade, a central lounge area designed for a younger customer, and some sort of physical activity area such as an ice skating rink or a climbing wall. For example, Grapevine Mills Mall in Texas welcomes teens through a 30-screen cinema, a Sea Life Aquarium, a Legoland Discovery Center, and an enormous food court.

Finally, video games teens are looking for clear organization and presentation of products, exclusive offerings, sales, downloads, pre-owned products, and the interactive ability to test and trade products rather than fashion-oriented products. In addition, research results (Faw 2011) have indicated that teens view games as an inexpensive way to relax, have fun, and interact with friends. Importantly, a recent study revealed that video game expenditures comprise 8% of the teen consumer’s budget (Fitzgerald 2009), while 78% of teens age 12 to 17 report their favorite online activity is playing games (Jones and Fox 2009). Thus, retail giants, including Target and Walmart, that offer video games, must reconsider how gaming products are sold. At
Target.com, the focus is on fashion and the pages where video games are sold are found under toys which likely would not be appealing to gamers. Similarly, at Walmart.com, the pages where video games are sold look exactly like all of the other pages in the site – certainly not appealing to a video game teen in comparison to a site such as GameStop.com where pages are flooded with images, ideas, and offerings.

Teens who are shopping for games tend to be destination shoppers and may purchase either via brick-and-mortar or e-commerce sites. Interestingly enough, in locations where there is a dearth of video game specialty stores, Walmart, a store that does not attract those with fashion interest, has become a favored destination for teen boys because customers are allowed to test video games consoles and games in the store (Faw 2011). Thus, retailers marketing video games must be able to adapt all retail formats and channels of distribution with interactive technologies and appealing environments to capture a larger video game teen market share. In addition, retailers should consider how to join together friends within online sites as well as store locations in order to attract video game teens.

Knowledge of shopping orientations such as fashion interest and behaviors of consumer groups must be updated continually to best understand consumer demands. Results of this study indicated that teen consumers with different fashion interests portray varied shopping behaviors in regards to shopping preferences by merchandise category. Retailers today must try to better understand how the fashion interests of teens impact their spending preferences, because teens are a key group driving the fashion market. By evaluating spending preferences and shopping behaviors, marketers can create concepts that fit the needs of this diverse market segment.

Retailers today must better understand teen spending preferences because teens are a key group driving the retail market. Teens are young, technologically savvy consumers who view themselves as knowledgeable, and are social in their orientation. An opportunity exists for retail stores to develop successful strategies that meet the wants and needs of the groups within the important teen market. Based on the findings of this study, information about fashion interest provides data about teens that will allow all levels in the merchandising process to plan effective methods of catering to this market segment. As imaginative retailers with innovative strategies heighten competition, the companies most likely to maintain a competitive edge in the teen market are those that examine concepts such as fashion interest and spending preferences of teens, and then prepare strategic plans that react to consumer demands and are tailored specifically to the diverse groups found within the teen segment.

REFERENCES


In compliance dependent services (CDS), e.g., weight loss, retirement savings, education, credit repair, the customer’s role extends beyond the face-to-face customer-provider interaction and requires the customer to comply with prescribed behaviors when away from the service provider (Dellande and Gilly 1998). We empirically investigate the impact of self regulatory focus (SRF) on long-term customer compliance behavior in the context of weight loss. This study is important given that noncompliance is one of the greatest concerns facing the health care industry today.

An experiment was conducted using 243 clients at a weight-loss/fitness clinic in south India where the subjects attempt to lose modest amounts of weight over an eight week period. A weight loss/fitness center in India was chosen for this study to explore compliance behavior in a sample outside of the U.S. Like the U.S., India is realizing increasing rates of overweight. According to the World Health Organization (WHO) 15% of the population in India were overweight as of 2002 and projected to increase to 20% by 2010.

As part of the regular routine at the clinic, subjects are weighed upon enrollment and then at the conclusion of the eight-week program. Upon signing up for the program, respondents completed a survey that included several scales of regulatory focus and a question eliciting reasons for wanting to lose weight.

After the first week subjects were randomly assigned to one of three conditions. Subjects in one group (gains focused message) were provided a fortnightly progress report which also included a list of four benefits to be realized by losing weight. The second group received the same progress report but with the same four advantages reworded in terms of how losing weight can help avoid the adverse consequences of being overweight (avoidance focused message).

Finally, the third group received a progress report with the same four advantages listed in both their gains focused and the avoidance focused formats, but in random order. Each fortnight’s progress report featured a new list of advantages.

The aim of the study was to extend prior research on self-regulatory focus (Higgins 1997) into the field of long-term consumer compliance behavior by hypothesizing that individuals who are promotion focused will be more likely to engage in long-term compliance behavior compared to prevention focused individuals. Further we hypothesize that the long-term compliance behavior of promotion focused subjects will be more influenced by gains focused motivational messages and that the long-term compliance behavior of prevention focused individuals will be more influenced by loss prevention based messages.
Additionally, we hypothesize that situation specific measures of self regulatory focus are significantly superior (Higgins 2002) to the more generalized measures of self regulatory focus, commonly used in consumer research, in establishing differences between subjects who are promotion versus prevention focused. Support was found for all of the hypotheses.

Promotion focused individuals achieve greater weight-loss compared to prevention-focused individuals, a finding that is supported by the extant literature. This suggests that providers of CDS will likely achieve better outcomes from clients who focus on gains rather than on clients who focus on preventing losses.

An important study finding is that the specific measures of SRF were indeed more reliable and valid than the general measures of SRF. When weight loss clients are grouped as promotion and prevention focused on the basis of situation specific measures of regulatory focus the results were more pronounced than when the examination is performed using the general measures of SRF. This suggests that it is more meaningful to examine regulatory focus using situation specific measures rather than general measures of SRF. These results are especially meaningful given the popularity of examining SRF in consumer behavior studies and the wide-scale use of the general measures of SRF.

Consumer noncompliance in long-term services could lead to consumers not achieving the desired outcome and customer dissatisfaction (Hausman 2001). As a result, businesses may realize a drop in customer retention and negative word-of-mouth communication. Marketers of CDS programs will be able to use the findings of this research to find new ways to increase long-term customer compliance behavior.

Though this research project examines consumer behavior in the context of weight loss activities, it has far ranging implications for various services requiring consumers to engage in prescribed behaviors over the long run (Howlett et al. 2008). For example, the success of debt counseling services and retirement savings programs require clients to engage in certain behaviors over the long run.

REFERENCES


HEALTHCARE MARKETING

OBESITY: A SOCIAL MARKETING APPROACH

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ABSTRACT

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. Social marketing is an attempt to change social behavior. Developing a social marketing program for obesity requires that one knows the population being addressed. Then, a program is developed to change this behavior. This paper is an attempt to show the attitudes and beliefs about obesity and how a program might change those behaviors.

INTRODUCTION

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). More than one-third of U.S. adults (over 72 million people) and 17% of U.S. children are obese. During 1980–2008, obesity rates doubled for adults and tripled for children. During the past several decades, obesity rates for all population groups—regardless of age, sex, race, ethnicity, socioeconomic status, education level, or geographic region—have increased markedly (CDC, 2011). 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).

There is a high cost associated with obesity. Medical costs associated with obesity in the United States in 2008 were estimated at $147 billion (CDC, 2011). For each obese individual, medical costs were $1,429 higher that individuals with normal weight (CDC, 2011). In addition, obesity has been linked to reduced worker productivity and workplace absences.

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). The CDC lists numerous other diseases; such as, colon cancer, infertility, and even mental health conditions (CDC, 2011).

Demographic characteristics are an important part in the obesity 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 that $60,000 a year (Sloane, 2005). Race/ethnicity is also a factor. The obesity rate for non-Hispanic black women was 51% versus 43% of Mexican Americans and 33% of Whites (CDC, 2011).

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). 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 that 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. “The causes of obesity in the United States are complex and numerous, and they occur at social, economic, environmental, and individual levels. American society has become characterized by environments that promote physical inactivity and increased consumption of less healthy food. Public health approaches that can reach large numbers of people in multiple settings—such as in child care facilities, workplaces, schools, communities, and health care facilities—are needed to help people make healthier choices” (CDC, 2011).

Social marketing is a theory that relies heavily of the concepts and principles of commercial marketing (Kotler and Zaltman, 1971). Andraesion (1995) defines it as “the application of commercial marketing technologies to the analysis, planning, execution and evaluation of programs designed to influence the voluntary behavior of target audiences in order to improve their personal welfare and that of society.” Social marketing is not complex or expensive and it can provide solutions to social problems (Hastings, 2003).

Social marketing can be used in two different ways. First, it is a set of concepts and principles for the development and implementation of strategies aimed at behavior change. Second, social marketing is specific intervention or planned process to achieve targeted behavioral goals (National Social Marketing Centre, 2006). Behavior change is critical for addressing obesity. That makes social marketing an attractive option (Raynor, 2007). Very little of the theories of behavior change, including social marketing theory, have been subject to empirical verification (Raynor, 2007).

In basing its assumptions about the causes of behavior change on the theories that underpin commercial marketing, social marketing theory assumes that the purpose of an intervention aimed at behaviour change is to ‘market’ that behaviour change, using a mixture of marketing techniques. Social marketing theory therefore tends to see (or value) behaviour as largely the responsibility of the individual, rather than of society as a whole. This means that social marketing theory is a popular model in relation to tackling obesity at the current time. This is because the behavior patterns that are related to obesity – low levels of physical activity and unhealthy eating habits – are often seen as inextricably linked with a range of different personal choices – car ownership, consumption of luxury foods such as chocolate and ice cream, etc. – rather than society-wide factors, such as the declining cost of car ownership relative to other forms of transport, increasing availability of cheap luxury foods, etc. Governments are increasingly unwilling, and may be increasingly unable, to interfere in societal trends but see some hope in persuading people of their personal responsibility and choice in the matter (Raynor, 2007). Social marketing has been applied to a variety of issues; such as, HIV transmission risk, increasing breast cancer screening.

Social marketing principles have been used to address public health problems. Most of the effort has been dominated by message-based, promotion-only strategies. Effective implementation has been hampered by both a lack of understanding and use of all components of
social marketing and lack of training (Turning Point Social Marketing National Excellence Collaborative, 2003 and Alcalay and Bell, 2001). Both of these studies use the same fundamental customer-centered approach:

1. Audience segmentation – identifying subsets of the population for whom appropriate interventions can be designed.
2. Market research – understanding the characteristics of the audience.
3. Exchange theory – people accept or reject a new behavior in return for benefits they believe outweigh the cost of that behavior.
4. Competition – behaviors that the target audience is accustomed to or prefers over the behavior you are promoting.
5. 4 Ps of the marketing mix. 1) Product – the goods, services, or interventions that support or facilitate behavior change. 2) Price – the cost or barriers that one faces in making desired behavior change. 3) place – where and when the desired behavior takes place 4) promotion – messages, materials, channels, and activities that will effectively reach the audience.

There are numerous way to tackle the problem of obesity. Rothschild (1999), an advocate for social marketing interventions, argues that the management of health and social issue behaviors requires education, marketing, and law as the three primary tools. Stead et al. (2007) suggest that social marketing has a great potential. The problem may be that there is a long time line needed. There are those that suggest that obesity is not the right target for social marketing due to the fact the results are not substantial or do not have lasting benefits (Walls et al, 2011). In addition, it has even been suggested that it might have negative effects created by a focus of the interventions on body shape and size (Walls et al., 2011).

This paper is an attempt to examine one segment of the market and determine the characteristics of that segment. Based on these characteristics, options will be suggested for a social marketing approach.

**ANALYSIS OF DATA**

A survey was administered to 692 individuals in the United States. These individuals were in a state with a high level of obesity (>30%). This represents a segment of the audience which needs a change in behaviors. 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 rationale for adopting this type of sample was that despite its minor drawbacks, it had content validity, since all the respondents were legitimate consumers. 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. The responses for each question were categorized as agree, neutral, or disagree. Table 1 provides the mean responses to each question

The results are very similar to what past studies have shown. There is a strong awareness that obesity is a major problem with 94.4% agreeing that obesity is a major problem. A vast majority (95.9%) felt that the problem is growing.

Table 1 Basic Statistics

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>At present, I would consider obesity as a major health care problem in (country).</td>
<td>627</td>
<td>25</td>
<td>12</td>
<td>664</td>
</tr>
<tr>
<td>I believe that obesity is a growing health care problem in (country).</td>
<td>638</td>
<td>16</td>
<td>11</td>
<td>665</td>
</tr>
<tr>
<td>I believe that most of the people in America understand how obesity is defined.</td>
<td>218</td>
<td>123</td>
<td>318</td>
<td>659</td>
</tr>
<tr>
<td>I feel that I have a problem with obesity.</td>
<td>167</td>
<td>92</td>
<td>403</td>
<td>662</td>
</tr>
<tr>
<td>I believe that diet in (country) contributes to obesity</td>
<td>583</td>
<td>45</td>
<td>25</td>
<td>653</td>
</tr>
<tr>
<td>I believe that heredity/family history contributes to obesity</td>
<td>486</td>
<td>117</td>
<td>46</td>
<td>649</td>
</tr>
<tr>
<td>I believe that weight-reducing medicine is an effective method of treating obesity.</td>
<td>127</td>
<td>198</td>
<td>301</td>
<td>626</td>
</tr>
<tr>
<td>I believe that regular exercise in an effective treatment of obesity.</td>
<td>624</td>
<td>29</td>
<td>10</td>
<td>663</td>
</tr>
<tr>
<td>I believe that Gastric Bypass Surgery is an effective treatment of obesity.</td>
<td>210</td>
<td>222</td>
<td>183</td>
<td>615</td>
</tr>
</tbody>
</table>

For definition of obesity, the responses were dichotomous with 33.1% feeling that they know how obesity is defined and 48.3% not knowing. This result suggests many individuals do not know how obesity is defined. In addition, 60.9% of the individuals felt they did not have a problem with obesity.

Those questions related to causes provided some interesting results. Diet was seen as a big problem in the United States with 89.3% of the individuals agreeing. Heredity or family history was seen as a problem by 74.9% of the respondents. When weight-reducing medicine is examined, 48.1% of the respondents felt that medicine is not an effective method with only 20.3% stating that it was. Exercise is seen as an effective remedy for obesity by 94.1% of the respondents. The verdict for gastric bypass surgery was mixed with approximately equal number of individuals agreeing, neutral, and disagreeing.
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.

When gender is examined, there are four significant results. First, gender is related to belief that obesity is a growing problem in the United States. Females supported this idea more than males. Second, females felt that people knew how obesity was defined more than males. Third, more females felt that they had a problem with obesity than males. Fourth, females more readily agreed that heredity and family are causes of obesity.

When age is examined, there were three statistically significant results. Younger individuals were less likely to indicate that they had a problem with obesity than older individuals. Older individuals are more likely to believe that family/heredity has an impact on obesity. Finally, younger individuals are more willing to believe that medicine is an effective method of treating obesity.

Marital status is related to four statistically significant results. Single individuals are more likely to see obesity as a growing problem than married individuals. 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 are more likely to feel that this contributes to obesity. Finally, married individuals believe more strongly that family history/heredity is a contributing factor in obesity.

Education provides three statistically significant results. First, individuals without a college degree are more likely to suggest 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.
Table 2 Analysis Using Demographic Variables

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Question</th>
<th>Gender</th>
<th>Age</th>
<th>Marital Status</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>At present, I would consider obesity as a major health care problem in (country).</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I believe that obesity is a growing health care problem in (country).</td>
<td>.077*</td>
<td>-</td>
<td>.019*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I believe that most of the people in America understand how obesity is defined.</td>
<td>.007**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I feel that I have a problem with obesity.</td>
<td>.052*</td>
<td>.000**</td>
<td>.005*</td>
<td>.011**</td>
<td></td>
</tr>
<tr>
<td>I believe that diet in (country) contributes to obesity</td>
<td>-</td>
<td>-</td>
<td>.082*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I believe that heredity/family history contributes to obesity.</td>
<td>.001***</td>
<td>.099*</td>
<td>.022*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I believe that weight-reducing medicine is an effective method of treating obesity.</td>
<td>-</td>
<td>.045**</td>
<td>-</td>
<td>.039**</td>
<td></td>
</tr>
<tr>
<td>I believe that regular exercise in an effective treatment of obesity.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.021**</td>
<td></td>
</tr>
<tr>
<td>I believe that Gastric Bypass Surgery is an effective treatment of obesity.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

BUILDING A SOCIAL MARKETING PROGRAM

Building a social marketing program for obesity will require several steps. These steps will be analyzed using the results of the survey analyzed above.

1. Recognition of Problem and Understanding of Definition of the Problem

   a. Most individuals understand that obesity is a major problem and that obesity is a growing health care problem. With regards to the growing problem, men and single individuals were not quite as concerned. The point here is that the social marketing program should not be worried about these two aspects. Most individuals know that obesity is a growing problem.
b. The definition of obesity is a problem. A large percentage of individuals do not know how obesity is defined. There are charts and calculators available that combines height and weight to find Body Mass Index (BMI). However, this is something that the average person does not know where to find these calculators. Males are more likely not to know how obesity is defined. We have to find a mechanism for reaching males.

c. If one does not know how to define obesity, then they will not know whether they have a problem. This lead to the question of getting people to recognize that they have a problem. All of the demographic factors were significant here. Females are more likely to determine that they have a problem with obesity. Younger individuals are less likely to indicate a problem with obesity. Single individuals are less likely to recognize that they have a problem with obesity. More educated people are less likely to indicate that they have a problem with obesity. The question is how to single, younger, more educated, and males. The social marketing campaign has to focus primarily on these groups. We are well-along with this process, but still more work is needed to reinforce these ideas.

2. Understanding the Causes of Obesity – This paper lists two possible causes of obesity, diet and heredity.
   a. Most of the respondents to the questionnaire realize that diet (89.3%) is important cause of obesity. In addition, married individuals are more likely to believe that diet is a cause. This means that the program of social marketing should be directed by single individuals.
   b. For heredity, 74.9% feel that it is a cause of obesity. Males are less likely to heredity as a problem. Younger individuals are less likely to see heredity as a factor in obesity. Single individuals are less likely to see heredity as an issue. Special emphasis needs to be placed on these individuals. Also, heredity cannot be changed. Therefore, some individuals may feel that they are destined to obesity. This is a belief that will have to be addressed in the social marketing program.

3. Examining Possible Ways to Eliminate Obesity – The questionnaire looked at three possible solutions to the obesity problem- Medicine, Exercise, and Surgery. Changing the diet is another possible solution.
   a. Medicine is only believed by 20.3% of the people to be a effective treatment for obesity. If medicine is an effective treatment, then the marketers have done a poor job of convincing people. Part of the problem here is with the wide variety of products on the market that claim they allow people to lose weight. There are only a few that are approved by the FDA. Age and education were factors here. Younger individuals and less educated individuals are more like to believe that medicine is effective. The social marketing campaign needs to target older individuals and more educated individuals. Medicine is an easy method to lose weight. All medicines state that the product needs to be used with a sensible diet.
   b. Exercise is a vital part of the solution to obesity. Most of the individuals (94.1%) know that. Individuals with college degree or more are more certain of this. This is a difficult concept to market. How do you get people to exercise more?
c. Surgery, such as Gastric Bypass, is one way to combat obesity. Few individuals (34.1%) felt this was the answer to the problem.

People know that obesity is a problem and that it is growing. Individuals are not sure that they can define it or recognize that they have it. Individuals know that diet and heredity are important factors in contributing to obesity. Individuals know that exercise is a good remedy. Medicine and surgery are seen in a less positive way for solutions to the obesity problem.

Where do we go from here? There have been numerous attempts at addressing this problem. Fast-food companies are now required to have a list of products with calories and fat content. We have political leaders (First Lady Michelle Obama) leading the charge. We have sports figures and professional sports team advocating exercise. We have companies offering wellness programs in the workplace. Whatever is done, changes in behavior have to take place. Behavioral change is difficult.

The key point in any social marketing program is to identify the problem, provide reasons for the problem, and provide solutions. The key is to get people to accept the solutions and change behavior. It is difficult. From past attempts, such as smoking, we have found that changing behavior is difficult. Some of the tactics used included bans on smoking in public places. States added additional taxes on cigarettes as a deterrent. These tactics have been somewhat successful. We must find “hot buttons” that will enhance individuals to change. Providing reductions in healthcare premiums or penalties may be a reasonable alternative. Helping individuals, especially the poor, with vouchers to buy healthy food.

The problem is extreme and the cost to the American economy is extreme. It is worth the effort to find a way to reaching these individuals.

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WHAT DO HEALTH CARE ADMINISTRATION FACULTY THINK ABOUT THEIR IRBS? AN EMPIRICAL INVESTIGATION

David P. Paul, Monmouth University
Ashish Chandra, University of Houston-Clear Lake

ABSTRACT

This research study examines how Health Care Administration faculty members feel about their Institutional Review Board. Participants were faculty members of colleges and universities with Health Care Administration programs (i.e., educational programs teaching Health Care Administration at the undergraduate, masters- and doctoral-level, as well as Executive Education). Contact information for these individuals was obtained from the Association of University Programs in Health Administration (AUPHA) Directory, updated by examination of each institution’s web site, where this was available. Results should be interesting to not only Health Care Administration faculty, but also to all faculty involved in research requiring I.R.B. approval.
MARKETING EDUCATION AND SERVICE LEARNING

MARKETING MAJORS’ ATTITUDES TOWARD EDUCATION
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ABSTRACT
Undergraduate marketing students at a southern regional state university were surveyed regarding their “consumeristic” (i.e., “we are customers”) attitudes toward education, faculty and cheating issues. Although several significant findings were discovered, students generally appeared less “customer-oriented” than expected.

INTRODUCTION
A Penn State professor identified a shift from the perspective of students as clients to students as consumers and noted that “competition for students, for good or ill, has bred consumerism … [a view of] students as customers who must be pleased with a variety of amenities …” (Blaum 2005). Two other factors have affected this change in perception and creation of a sense of entitlement. “There has been a continuous demand for universities and higher education institutions to account for the large amount of spending and to justify the returns in more concrete terms (Steele 2007, p. 415). “Another phenomenon that is driving student consumerism is the number of higher education institutions that are in the business for making money (Steele 2007, p. 415). Singleton-Jackson, et al. (2010, p. 344) noted that “the idea of student entitlement, at its core, indicates that on some level students believe they are entitled to or deserving of certain goods and services to be provided by their institutions and professors . . .”

The Higher Education Research Institute’s (HERI) survey of college students in 2005 found that 72.4% reported coming late to class “frequently” or “occasionally” and 27% “frequently” felt bored in class (Saenz and Barrera 2007, p. 6). Researchers reported in 2006 that college students were more self-centered and narcissistic than ever before (Crary 2007; Zaslow 2007). Greenberger, et al. (2008) “found that academic entitlement was `moderately related to an overall sense of entitlement and to narcissism’ (p.1193). These researchers also found that students with higher levels of academic entitlement reported having parents who pushed for achievement and used social comparison and material rewards for grades as motivators. The students in Greenberger et al.’s study also `scored higher than their peers in achievement anxiety and extrinsic motivation, and engaged in more academic dishonesty’ (p.1193)” (as cited by Singleton-Jackson et al. 2010, p. 345).
The authors’ personal experiences with their students have reflected these findings, given more students becoming more vocal about their dissatisfaction with how classes are taught, the increasing tardiness or outright skipping of classes, and the ever-present pressure of student evaluations hanging over professors (see Chonko 2004). The stimulus for this study was a study of consumerism among sociology majors in *The Teaching Professor* (“Evidence of” 2004).

Research over the past decade suggests that college students are more self-centered, expecting higher grades for minimal effort. The purpose of this study was to assess how much marketing majors enrolled at a regional southern state university approached their marketing classes from the perspective of being “customers.” Do they expect to “get what they paid for” (i.e., high grades), or do they see classes as opportunities to grow and increase their knowledge and skills.

**LITERATURE REVIEW**

The perception of “the student as customer” instead of “the student as product” developed in the 1980s. Bay and Daniel (2001, pp. 6-7) noted the dangers involved in sustaining the customer focus, including shifting power from professors to students, the misuse of student evaluations, and ultimately, lack of skill and talent development among students themselves (and subsequent “costs” to society). Franz (1998, as cited by Ikeda, Campomar, and Veludo-de-Oliveira 2007, p. 3509) warned of such dangers as rampant grade inflation, classes becoming popularity contests, and pedagogy becoming entertainment (also see Chonko 2004; Shrout 2009).

Clayson and Haley (2005) also called for a new model built around partnership. Armstrong suggested the use of “client” as a better metaphor for undergraduates, noting that “clients can always be right about their symptoms or wants [for example, A’s with little work] but wrong about their underlying needs [what they really need to learn]” (“Students as Clients” 2004). Emery, Kramer and Tian urged business schools to make a paradigm shift to product-oriented thinking, which requires a focus on learning effectiveness instead of teaching effectiveness (2001, p. 115). Further discussion of this debate has been covered more recently by Eagle and Brennan (2007); Ikeda, Campomar, and Veludo-de-Oliveira (2007); Potts (2006); and Steele (2007).

Pittman and Barney examined the shift of learning responsibility from the student to the professor and concluded that “[a]s faculty we have direct influence over only one cause – students do not recognize their role in the learning process. And our influence over this cause is somewhat limited” (2006, p. 65). They recommended that faculty focus on creating and reinforcing a culture of learning through communication and facilitation, and that “We cannot ‘learn the students the material’” (2006, p. 65). Benton (2006) called for professors to stand up and maintain some standards.

Obermiller, Fleenor and Raven (2005) surveyed both faculty and students at public and private and European universities across several disciplines regarding which orientation, product or customer, was perceived to be at work and which orientation was preferred. Arts & Sciences
and Business students found more product orientation than desired and wanted more customer orientation. European students were dissatisfied with the low level of customer orientation, perhaps due in part to being exposed to American institutions and students through exchange programs (p. 32). Delucchi and Korgen (2002) developed a 41-item questionnaire and surveyed sociology majors enrolled in one of the largest sociology programs in the U.S.A. Over 40% of those responding agreed with the statement, “If I’m paying for my college education, I’m entitled to a degree,” versus about 36% who disagreed. Almost three-fourths of the students agreed with, “I would take a course in which I would learn a little or nothing but would receive an A.” Over half agreed with, “It is the instructor’s responsibility to keep me attentive in class,” compared with a third who disagreed (Table 2, p. 103). Singleton-Jackson et al. (2010) conducted a series of focus group interviews with first-year Canadian college students. One of their findings dealt with grading: “There seemed to be a general agreement among the participants that marks should definitely be rounded up to make sure that students pass and that scholarships are not lost” (Singleton-Jackson et al. 2010, p. 351). In terms of the role of the professor, Singleton-Jackson et al. (2010, p. 352) found that “remarks about accessibility and attention to the student overshadowed references to imparting knowledge or teaching behaviors. This idea of the professor as service provider is a dramatic departure from the traditional view of the professoriate.” Crage and Fairchild (2007, p. 23) in their study of 532 university students found that “Consumerist students are more likely to believe that teachers should make courses appealing to their interests, and that student evaluations of instructors should matter for a variety of things including personnel decisions.”

**METHODOLOGY**

Dr. Michael Delucchi of the University of Hawaii – West Oahu, shared his questionnaire with the authors via e-mail in 2004. The original 41-item Sociology questionnaire was developed in 1998, piloted in two sociology research methods classes that fall, slightly modified by student focus groups after the piloting, and then administered to students in required and elective courses during the spring 1999 semester (Delucchi and Korgen, 2002, p. 101). With Dr. Delucchi’s permission, the authors modified his instrument to fit the marketing curriculum at the regional southern state university. Questions dealt with marketing students’ attitudes and behavior toward a number of topics including course learning, faculty, grades, cheating issues, and relationships with other marketing majors and faculty members.

After approval by the university’s Institutional Review Board, the authors asked fellow marketing professors to distribute the nine-page questionnaire and cover letter in their classes to marketing majors only. Data collection occurred in November and early December 2005, before final exam week. A total of 176 usable surveys were collected from students. This manuscript mainly focuses on the attitudes of marketing majors toward learning, faculty, students and cheating issues.

**RESULTS**

**Profile of Respondents**

Respondents ranged in age from 20 to 49, with the modal age being 22 (45/173, 26%). Over half of the students were women. Just over half of the students (91, 52.6%) began college at
the authors’ university. Descriptive statistics for the profile are provided in Table 1. Primary sources of support identified by students were scholarships/grants, themselves, and their parents.

Table 1. Descriptive Statistics (Respondent Profile)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Mean Years)</td>
<td>24.0</td>
</tr>
<tr>
<td>Percent Female</td>
<td>57.8%</td>
</tr>
<tr>
<td>Percent Not Married</td>
<td>69.4%</td>
</tr>
<tr>
<td>Median Parental Income</td>
<td>$88,500</td>
</tr>
<tr>
<td>Live Within Driving Distance</td>
<td>84.2%</td>
</tr>
<tr>
<td>Parents Didn’t Graduate from College</td>
<td>56.1%</td>
</tr>
<tr>
<td>Percent Caucasian</td>
<td>82.0%</td>
</tr>
<tr>
<td>Didn’t Attend Religious Worship &gt; 1 time/mo</td>
<td>60.7%</td>
</tr>
<tr>
<td>Most Common Self-reported Course Grade</td>
<td>B-/C+</td>
</tr>
<tr>
<td>Credit Hours (Mean)</td>
<td>14.4</td>
</tr>
<tr>
<td>Study &lt; 6 hours/week</td>
<td>27.7%</td>
</tr>
<tr>
<td>Study &lt; 11 hours/week</td>
<td>63.5%</td>
</tr>
<tr>
<td>Off-campus Job (21-30 hours/week)</td>
<td>32.2%</td>
</tr>
</tbody>
</table>

Overview of Findings

Students were asked about their experiences with course learning and faculty members (see Table 2). In general, students were less likely to interact with faculty and more likely to focus on course learning. Students reported working on assignments with other students very often. They were only occasionally likely to complete assigned readings for their classes. Their other course learning experiences tended to fall in the “often” response. They were only likely to “often” ask their instructors for course information about such things as grades and assignments. Participants reported “never” socializing with their professors outside the classroom and working with them on research projects.

When asked, “How well do you like college?” most students said they liked it (91, 51.7%) or were enthusiastic about it (48, 27.3%). Respondents tended to report relatively friendly and supportive relationships with other marketing majors at the university (mean = 5.25, S.D. = 1.225, median and mode = 5, n = 164). They also reported that faculty members tended to be approachable, helpful and understanding (mean = 5.42, S.D. = 1.31, median and mode = 6, n = 167).

Seven questions dealt with the issue of cheating (see Table 3). First, participants said an average of 37.61% of marketing students have cheated on exams or papers (S.D. = 31.491%). Two thirds of marketing students (67.5%) claimed that they had never cheated on a test, while 9.4% admitted that they had cheated twice. Over three fourths of students (78.8%) claimed that they had never turned in a paper that wasn’t 100% their own work. Three out of five students (61%) said that they had never heard of any student who was caught cheating at the university, and a similar number (61.6%) said they never heard of any student being punished for cheating. Of those who had heard of students being punished, 23 (32.4%) said the punishment had been “zero grade on test or paper,” while 20 (28.2%) said it had been “failing the class.” The last
cheating question dealt with the most appropriate type of punishment that should befall cheaters. Over four in ten (42.9%) said it should be “zero grade on test or paper.”

Table 2. College Experience: Course Learning & Faculty Experiences

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed assigned readings</td>
<td>2.41</td>
<td>.922</td>
</tr>
<tr>
<td>Took detailed notes</td>
<td>1.73</td>
<td>.831</td>
</tr>
<tr>
<td>Contributed to class discussion</td>
<td>2.29</td>
<td>.891</td>
</tr>
<tr>
<td>Tried to understand how facts &amp; ideas fit together</td>
<td>1.82</td>
<td>.749</td>
</tr>
<tr>
<td>Worked on assignments with others</td>
<td>1.76</td>
<td>.888</td>
</tr>
<tr>
<td>Applied learned material to other areas (e.g., job)</td>
<td>1.98</td>
<td>.852</td>
</tr>
<tr>
<td>Used life experience in class discussion</td>
<td>1.94</td>
<td>.865</td>
</tr>
<tr>
<td>Tried to explain course material to someone else</td>
<td>2.10</td>
<td>.853</td>
</tr>
<tr>
<td>Faculty Experiences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asked instructor for course information</td>
<td>2.23</td>
<td>.865</td>
</tr>
<tr>
<td>Discussed academic program with a professor</td>
<td>2.66</td>
<td>.894</td>
</tr>
<tr>
<td>Discussed paper or project idea with a professor</td>
<td>2.80</td>
<td>.909</td>
</tr>
<tr>
<td>Discussed career plans with a professor</td>
<td>2.97</td>
<td>.964</td>
</tr>
<tr>
<td>Worked harder after professor’s feedback</td>
<td>2.53</td>
<td>.843</td>
</tr>
<tr>
<td>Socialized with professor after class (e.g., snack)</td>
<td>3.37</td>
<td>.906</td>
</tr>
<tr>
<td>Participated with other students in discussion with professor(s) outside of class</td>
<td>3.12</td>
<td>.868</td>
</tr>
<tr>
<td>Asked instructor for comments about performance</td>
<td>3.18</td>
<td>.861</td>
</tr>
<tr>
<td>Worked harder to meet instructor’s standards</td>
<td>2.68</td>
<td>.910</td>
</tr>
<tr>
<td>Worked with professor on a research project</td>
<td>3.57</td>
<td>.841</td>
</tr>
</tbody>
</table>

N ≥ 173; Scale: 1 = Very often, 2 = Often, 3 = Occasionally, 4 = Never.

Table 3. Responses to Cheating Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>What percentage of marketing students do you believe have cheated on exams or papers? (Mean percent)</td>
<td>37.6%</td>
</tr>
<tr>
<td>How many times have you cheated on a test? (Percent reporting zero times)</td>
<td>67.5%</td>
</tr>
<tr>
<td>How many times have you turned in a paper that wasn’t completely your own work? (Percent reporting zero times)</td>
<td>78.8%</td>
</tr>
<tr>
<td>Have you ever heard of a student being caught cheating at this university? (Percent reporting “No”)</td>
<td>61.0%</td>
</tr>
<tr>
<td>Have you ever heard of a student being punished for cheating at this university? (Percent reporting “No”)</td>
<td>61.6%</td>
</tr>
<tr>
<td>If yes, what was MOST OFTEN the punishment? (A zero on the test/paper)</td>
<td>32.4%</td>
</tr>
<tr>
<td>If yes, what was MOST OFTEN the punishment? (Failing the class)</td>
<td>28.2%</td>
</tr>
<tr>
<td>Which of the following do you believe is the most appropriate punishment for a student who is caught cheating at this institution? (A zero on the test/paper)</td>
<td>42.9%</td>
</tr>
<tr>
<td>Which of the following do you believe is the most appropriate punishment for a student who is caught cheating at this institution? (Failing the class)</td>
<td>19.4%</td>
</tr>
</tbody>
</table>
The final questions dealt with student responses to a series of “customer-oriented” statements (see Table 4). Students were “somewhat likely” to take a class in which they’d learn a lot but only earn a C grade, while they were more “likely” to prefer a class in which they’d get As but not learn much. They leaned toward disagreement with the “consumeristic” statements regarding degree entitlement and grading leniency, and leaned more toward agreement with the idea that the professor is responsible for keeping their attention in class.

Table 4. “Customer-oriented” statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>S.D.</th>
<th>Median</th>
<th>Mode</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>How likely would you be to take a class in which you would learn a great deal but would receive a grade of C?</td>
<td>3.13</td>
<td>1.079</td>
<td>3</td>
<td>3</td>
<td>171</td>
</tr>
<tr>
<td>How likely would you be to take a course in which you would learn little or nothing but would receive an A?</td>
<td>3.50</td>
<td>1.062</td>
<td>4</td>
<td>4</td>
<td>170</td>
</tr>
</tbody>
</table>

Extent of agreement with (next four):²

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>S.D.</th>
<th>Median</th>
<th>Mode</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>If I’m paying for my college education, I’m entitled to a degree.</td>
<td>2.71</td>
<td>1.205</td>
<td>3</td>
<td>2</td>
<td>171</td>
</tr>
<tr>
<td>An instructor should take into account the grade I need in a particular course (for grad school, etc.).</td>
<td>2.64</td>
<td>1.131</td>
<td>3</td>
<td>2</td>
<td>171</td>
</tr>
<tr>
<td>It is an instructor’s responsibility to keep me attentive in class.</td>
<td>3.16</td>
<td>1.211</td>
<td>4</td>
<td>4</td>
<td>171</td>
</tr>
<tr>
<td>I believe it is important to attend my classes consistently.</td>
<td>4.17</td>
<td>1.032</td>
<td>4</td>
<td>5</td>
<td>172</td>
</tr>
</tbody>
</table>

¹Scale: 1 = never, 2 = not likely, 3 = somewhat likely, 4 = likely, 5 = definitely.
²Scale: 1 = strongly disagree, 3 = unsure, 5 = strongly agree.

The data was subsequently subjected to further analyses depending on the levels of data being evaluated. First, age and parent’s income were recoded into five categories each, in an attempt to have approximately 20% of the data fall into each category. The following section focuses on significant parametric relationships identified by each demographic variable that had sufficient responses across all categories.

Significant Relationships: Parametric

Results from independent t tests are reported first in this section, followed by significant ANOVA results. Given the number of questions being evaluated, the significance level for this section is set at α ≤ .05.

Two significant t-test results were identified by gender. Students were asked, “How likely would you be to take a class in which you would learn a great deal but would receive a grade of C?” Women were less likely to take such a class than men were (2.94 vs. 3.39, where 2 = not likely; t = 2.761, df = 168, p = .006). Students were asked on a six-point scale, where 6 = all or nearly all, to indicate sources of support for their college expenses. Regarding self as a source, male students indicated that about half (= 4) of their expenses came from their own efforts, whereas female students indicated less than half of their expenses were self-generated (3.85 vs. 3.15, t = 2.376, df = 140, p = .019).
The first significant ANOVA results were indicated for the independent variable, “What have most of your grades been?” Students who typically earned “As” were less likely to take a class where they learned a lot but only earned a grade of C, compared to “B-/C+” students who were somewhat likely to take such a class (2.68 vs. 3.43, F = 2.906, p = .023). “A” students tended to disagree with the statement, “An instructor should take into account the grade I need in a particular course (for grad school, financial aid, etc.),” whereas a “B” student was unsure (1.95 vs. 2.83, F = 2.49, p = .045). “C/C-” students tended to rely on employer support as a source for about half of their college expenses, whereas “A-/B+” students tended not to rely on employer support (3.5 vs. 1.19, F = 5.129, p = .001, homogeneity of variance problem, Welch p = .077, Brown-Forsythe p = .087).

Several significant results were uncovered for the demographic variable age, which had been recoded into categories. Twenty-two year olds reported spending an average of 11.2 hours per week watching television, while 20-21 year olds only spent an average of 6.14 hours per week (F = 2.489, p = .045, homogeneity of variance problem, both robust tests had p ≤ .05). Three sources of college expenses were identified as being significant by age. Twenty-two year olds were likely to rely on their parents for about half of their funds versus 24 and 25 year olds, who relied on parents for very little money (3.72 vs. 2.3, F = 2.925, p .024). Older students (26+) relied on scholarships and grants for less than half of their support, whereas 20, 21, 24, and 25-year-olds relied on this source for half of their expenses (2.67 vs. 4.19 and 4.1, F = 3.08, p = .018). Older students (24-25) relied on loans for half their expenses, while the youngest students (20-21) depended very little on loans (4.17 vs. 2.2, F = 5.361, p = .000).

Four significant results were found by parents’ income (recoded into categories). Students whose parents earned between $50,000 and $70,000 tended to rate their relationships with other marketing majors as leaning towards “friendly/supportive,” while those whose parents earned less than $50,000 tended to rate their relationships in more neutral terms (5.64 vs. 4.83, F = 2.822, p = .028). Students in the first income category as previously mentioned tended to rate their relationships with faculty members as being “approachable/helpful,” while those in the latter income category rated the relationships as being less so (6.19 vs. 5.04, F = 3.279, p = .014). Turning to sources of financial support, a clear income dichotomy appeared between lower income and upper income students with regard to parents versus scholarships and grants. Marketing students with parents who earned $150,000 or more relied on their parents for about half of their college expenses (4.0 vs. 2.53 for <$50K students, F = 2.92, p = .024) while relying very little on scholarships and grants (2.33 vs. 4.38 for <$50K students, F = 4.412, p = .002).

**DISCUSSION**

**Conclusions and Recommendations**

The primary focus of this manuscript was to assess the attitudes of marketing majors toward education. Participants stated that they were most similar to students concerned with studying or casual, ordinary students and least wanted to be identified with partiers or fraternity/sorority students. Most of the participants claimed they had never cheated on a test or turned in a paper that was not entirely their own work. Female students and those with higher GPAs were
less likely to take a course in which they’d learn a lot but only get a “C” grade. In general most students were not as “consumeristic” or “customer-oriented” as anticipated, based on how the authors’ students have behaved in the classroom and in the office.

Future research should follow one of three paths. First, using the same questionnaire (which would be made available by the authors), researchers could survey marketing majors at their respective schools and/or compare marketing students across universities. A second path would be to take the questionnaire, slim down the length of the instrument, and then use it to assess marketing majors at one’s school or across schools of higher education. Finally, more recent data from this university’s marketing majors is needed to assess their degree of “customer-oriented” behavior. Guiding all research in this area are two questions: 1) does “customer-centered” student behavior really exist? 2) is it getting worse?

Limitations

While this study involved identifying and surveying all marketing majors at one university, the results are based on a small population base to begin with. Item omissions are a problem, lowering the effective sample size. The rather long survey may have contributed to the item omissions. Another concern is that of respondent bias in the form of social desirability. The respondents were not as consumeristic as the authors had thought they would be, based on their classroom behavior. This may be due to social desirability bias. The students modified their responses to indicate what would be “acceptable” or the “norm,” and their professors were in the classrooms when they completed the surveys. Of course, they may indeed not be as consumeristic as the authors thought they were. Also, there is no way of measuring the attitudinal impact, if any, of Hurricane Katrina, which disrupted the beginning of the Fall 2005 semester. The data is also rather old, thus diminishing its usefulness to marketing professors. Finally, the results from this one university cannot be construed to represent a sample of all U.S. marketing students. Thus some of the findings may be due more to these outside factors than due to true student behaviors and beliefs.

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“Students as Clients: Exploring the Metaphor Further” (June-July 2004), *The Teaching Professor*, 18, 2.

MARKETING MARKETING TEXTBOOKS
Kristen M. Maceli, Pittsburg State University
Donald Baack, Pittsburg State University

ABSTRACT
The textbook industry faces many challenges. Consumers and students drive the industry. Students are the first generation to grow up on online. They are informed, savvy, and more demanding. Publishers, bookstores, and authors are the providers at the other end of the spectrum. Publishers provide course content in a format that provides a profit to them. Bookstores carry content that generate profit. Authors must be compensated for their efforts. The situation is becoming increasingly complex. Students question the value of textbooks and demand additional options. The result has been dismal financial results for the providers and frustration for consumers.

INTRODUCTION
The Consumers—College Students—and How they Learn

College students today are surrounded by choices. This young adult generation is the first to have grown up using the Internet (Solomon, Marshall, Stuart, 2009). Even as children using the Internet for school or games, they had the access to information and extensive choices available for as long as they can remember. This makes them especially challenging to get and retain as loyal customers.

Today’s traditional college students are part of Generation Y, which includes consumers born between the years 1977 and 1994. This generation is made up of the 71 million children of the baby boomers. As the first generation to grow up online, they are more at ease with technology than previous generations. They are also more ethnically diverse, which ultimately creates opportunities from a marketing perspective. The generation is an attractive market because of their size, approximately 26 percent of the population, and because of their free spending nature. They are especially challenging to marketers as they resist reading and often opt to not watch television (Solomon, et al., 2009).

These consumers learn in a different manner than previous generations. In the past, consumers were somewhat limited in the information they could find. Their search was somewhat restricted to what they could find in a local library. Most importantly, the information was static in nature, as it could not be updated easily. Consumers were not always informed in their decision making. Their knowledge of products was limited to their experiences, or those experiences of people that they knew. Today that is different. Consumers can access information and even virtually experience a product through the use of the Internet.

Learning is connected to behavior, though many people argue the extent to which
learning changes behavior. As stated by Catania in *Learning, Fourth Edition*:

“Learning: roughly, acquisition, or the process by which behavior is added to an organism’s repertory; a relatively permanent change in behavior. The term has been used in so many different ways in both technical and colloquial vocabularies that it’s of limited usefulness. Decisions about whether learning has occurred and what’s been learned sometimes depend on what the experimenter looks at. Latent learning provides an example. A rat explores a maze and the results of its exploration are assessed later when food reinforcers are available for the first time at the end of its run through the maze. Latent learning is said to have occurred if the rat negotiates the maze more rapidly and/or accurately than if it hadn’t explored. The difficulty is that exploring the maze involves other contingencies (e.g., which turns lead where); these contingencies act on behavior but their effects are harder to get at than those involving food reinforcers” (Catania, 1998, p. 396).

Over the last 20 years, our understanding of the nature of effective learning has changed (Boyle, Duffy, Dunleavy, 2003). Some areas that have been researched include deep learning, self-regulated learning, and learning styles.

Deep learning has especially been influential in the literature on effective learning in higher education (Boyle, et al., 2003). “Deep learners actively try to understand meaning by working out relationships between concepts, relating new material to previously known information and adopting a critical attitude to information. Deep learners are intrinsically motivated by intrinsic interest. Surface learners on the other hand focus on memory strategies which emphasise the retention of knowledge and are extrinsically motivated by the desire to get qualifications or a job” (Boyle et al., p.268).

In self-regulated learning, students become actively engaged in the selection of relevant information, as well as planning and directing processing activities (Boyle et al., 2003). This can be something simple, such as a student controlling their studies and study habits. Engagement is thought to provide more effective learning, and can account for comparable results as intelligence scores.

Learning styles are important because not all students react in the same way to the same stimuli. “Researchers are increasingly recognizing the complexity of learning and are interested in examining how different aspects of learning work together” (Boyle, 2003, p. 269).

In a recent study Vermunt (1998) proposed an approach to studying learning styles, which attempted to provide a more comprehensive and integrated account of learning. His theory brought together four different aspects of learning, cognitive processing strategies, regulation strategies, students’ views of learning and orientations to learning, similar to motives (Boyle, et al., 2003).

Vermunt developed the Inventory of Learning Styles (ILS), a questionnaire based on this model of learning. He identified four different learning styles—a meaning-directed style, a reproduction-directed style, an application-directed style and an undirected style. Each learning style showed strong interrelations among these learning components (Boyle, et al., 2003).
Vermunt also examined links between the ILS components in more detail using multiple regression. “Regression analyses supported his view that the regulation component plays a central role in coordinating the other learning, self-regulation of learning and the adoption of deep processing strategies and between an intake model of learning, external regulation and surface processing strategies” (Boyle, et al., p. 269).

**STUDENTS’ COURSE CONTENT PREFERENCES**

Students are posed with many options regarding course content. Some choices they have are traditional hard-back textbooks, soft-back textbooks, custom texts (usually offered in hard or soft back at a reduced price), loose-leaf notebooks, and digital content. Students sometimes are given the option to rent textbooks instead of purchasing the content. They often can rent digital content as well (e-books).

Many students still have the choice to buy a textbook either in new or used form. However, an increasing number of students do not see the value in having a text that can be kept in the future. Because students are so adept at retrieving information via the Internet, some industry experts believed sales traditional textbooks would quickly lose ground. Students believe the information would be outdated soon, not to mention the burden of moving the textbooks. Many textbooks are only updated every three years. These books are often resold as used books, even after newer editions are available.

Loose-leaf versions of textbooks contain the same material, but are not bound in the same manner as traditional textbooks, and as such, are cheaper to produce. These notebooks often sell for 70% of the list price. Students can add a product, such as the homework system Connect, for an additional $10 in a bundled price (Bryan, et al., 2010). Though this is a good price break for the student, the re-sale value of the notebook is questionable.

Many schools are structuring textbook access as part of student fees, whether with traditional textbooks, e-books, or even a combination. The students pay less for renting the material, but all students must pay the fees. As such, even though the price is not as high, the publishers are somewhat guaranteed to generate revenue, so it can be advantageous for them as well.

The biggest impact on the industry is the Internet. The potential for digital format is undeniable and something publishers cannot ignore. “There is a sense of inevitability on college campuses that this is going to happen” (Wall 2010). The information provided via the Internet can be either rented or purchased by the student (Bryan et al., 2010). How this content is delivered electronically is also changing the marketplace. Digital content can used on computers, tablets, Kindles, and other types of electronic readers.

E-books offer new opportunities for publishers, faculty, and students. Most importantly, the content in this format can be updated on an on-going basis relatively easily. This also facilitates offering the product at a lower price point, which can encourage purchase by consumers who may not have considered buying traditional textbooks at higher prices. There is
potential for higher profit margins since the investment in traditional printing methods is bypassed; this could have a major impact on this industry.

Pricing for e-books is still experimental, as publishers do not have a standard mark-up for e-books (Christman 2010). Students also view the investment in e-books differently. “Even if there were sufficient content available, there is the issue of e-textbook prices. Students expect to pay significantly less for digital content, but publishers, who are often making extra investments in interactive features, want to charge the same or more. McGraw-Hill, for example, said its Inkling editions are priced at about 80% of the print cost, while the Course Smart editions are about half the price” (Kane 2011).

Price might not be the only product feature that drives students to select e-books. E-books can offer advantages regarding content, flexibility and availability. “…students are becoming more aware of the special features a digital book can offer them such as interactivity, streaming audio and video, and search capability…The digital copies of textbooks are growing in popularity each semester, she said, but by no means have they replaced print copies” (Christman 2010).

Even though e-books are gaining favor, they still face an uphill climb. “A survey released in October by the National Association of College Stores revealed that 76 percent of students prefer a print textbook over a digital one. 78 percent said printed texts are easier to read. But the special tools that go with digital textbooks---like the ability of professors and students to make notes and highlights in key passages and share them with the rest of the class—get high marks…Above all other factors, the price advantage of digital books will drive explosive growth (Wall 2010).

As notebook computers become more popular, it is likely that many publishers will develop products for these users. “Students can use them immediately in a way that’s coherent with the course of instruction as opposed to leaving the classroom and going to a computer lab,” said Matt Federoff, chief information officer for the Vail School District in Arizona. Since last year, the Vail district, with 10,500 students and 16 schools, has tested iPads in special-education classes, high schools and elementary schools” (Kane 2011). The iPads offer a flexibility not provided by traditional textbooks; their advantages will continue to increase as students and instructors become more accustomed with their use.

Instructors can customize e-books in a way not previously possible. “Finally, some of these new electronic platforms permit individual instructors to modify the text for their own classes’ use, eliminating material that isn’t required and adding the instructor’s own material, such as video clips, study aids, or self-test material. In addition, with the use of electronic textbooks, the net cost of instructional materials will be substantially reduced due to the elimination of printing, binding, warehousing, returns, distribution, and other publisher costs. Students, professors, and educational institutions as well as authors and publishers all stand to gain through use of the digital format” (Publishers Weekly 2010).

INDUSTRY BACKGROUND
Twenty five years ago, there were nearly 30 textbook publishing houses; however, the last decade has brought considerable consolidation of the industry. As of July 2008, there were four major players remaining: Prentice-Hall, Cengage, Wiley, and McGraw-Hill. (Bryan, Swanson, & Lhuillier 2010). There have been a couple of dominant forces driving this consolidation—rapidly changing technology, which means more investment for the publishers, and changing consumer demands.

Publishers face greater demands from instructors to provide relevant, updated supplemental support materials. However, supplying videos, PowerPoint presentations, test banks, etc., are all very expensive to produce and the adoptions have to be supported for three years in most cases by the publisher (Bryan, et al., 2010). The industry cannot ignore that increasing numbers of students will prefer digital content. It also cannot ignore the relative advantages e-books provide for the industry.

“Rather than the abbreviated three-year pattern of publisher sales, an e-textbook will in effect be continuously sold until publication of the new edition. This represents a staggering 90%-100% increase in sales for the publisher over the same three-year life of an edition. Since the publisher is allowed a full three years of sales to recoup is costs and to realize a profit, the new sales model will deliver a number of benefits: cheaper textbooks, increased royalties for authors, and less money wasted on middlemen. Publishers will no longer be driven by the used-book market to prematurely publish the next edition. New editions will be published only as changes in the discipline warrant. Further cost savings and corresponding price reductions may be available if publishers opt for a continuously updated textbook. Rather than a whole new textbook every three years with content that’s dated before it hits the market, a continuously or periodically updated textbook will always be current” (Publishers Weekly 2010).

The used book market has presented many challenges for publishers. Publishers do not benefit from the sale of the used books, while bookstores do. The impact of having a less expensive text option for students has disadvantages, even though there is an initial price savings. “The perceived student savings from buying lower-priced used books is deceptive, because the used-book industry essentially forces publishers to prematurely publish expensive ‘revised editions’ for the primary purpose of reducing their losses from used-book sales. Actually, without the 50% loss of market to the used book industry, only a few disciplines would require the expense of a new edition every three years” (Publishers Weekly 2010).

A new threat has been posed in the last 10 years by international editions coming back into the American market. International editions, for the most part, are the same content, but printed in one color and soft back. This selling abroad narrows publishers’ profit margins, and, once again, impacts their ability to sell the original versions in the United States at the original costs. Students may be left with textbooks that did not meet the needs of the course, but they may believe that the price savings is worth the sacrifice of content (Bryan, et al., 2010).

Publishers struggle with finding new authors in the fields of business, engineering, and computer science (Bryan et al., 2010). Many authors feel as though they do not reap enough return on their investment of time to deem writing a textbook worthwhile. Also, it is necessary
that they constantly update their books, which again means more investment of time without significant financial benefits.

“The Copyright Act of 1976 includes a provision prohibiting the payment of royalties upon second or subsequent sales of a book including a textbook. Because of this provision, a used-book industry has arisen that captures about 50% of all textbook sales. Looked at another way, 50% of what could otherwise be author royalties and publisher revenues instead becomes a windfall to a corporation that neither created content nor manufactured the product. The creator of content (the author) and the manufacturer of the product (the publisher) must recoup all their costs and earn any profit within the first or the first two semesters following publication” (Publishers Weekly, 2010).

**TEXTBOOK FORMATS AND THE IMPACT ON STUDENT LEARNING**

All students learn differently. As such, it is impossible to state that one format of course content is going to be superior to others for all students. However, keeping in mind that the nature of learning has changed, deep learning, self-regulated learning, and learning styles are all important to higher education.

Recognizing that most college students grew up with the similar technology and technological advancements can help predict some learning behaviors of this group. It is plausible that an increasing number of students will seek digital content, even if they grew up with traditional textbooks. Students have definitely changed their perception of value regarding course content. Since they don’t see the need to have a textbook into the future, the format is not going to prove profitable for publishers in the long run. As students are exposed more to digital content, it is likely that their preferences will grow in this direction. Loose-leaf notebooks, though a viable alternative, have relatively no re-sale value. Consequently, students will weigh the decision to use the course content in this form, versus possibly paying more for traditional formats, or possibly even paying less for digital content.

Renting course content will always be a debated topic. The renting of traditional texts does not provide much incentive for any the publishers or bookstores because of the static nature of the content. However, the rental of digital content provides much opportunity for all involved. The publishers can make money, as they can update the course content relatively easily and at a low cost. Bookstores may lose some of the revenues that are generated by inventory turnover, but they also won’t be missing out on the students that opt out of buying content because of the costs.

As stated earlier, Vermunt’s theory illustrated the necessity of active student involvement in the learning process. Students need to be involved with the entire learning process—from regulating the experience internally and externally to deep processing strategies (Boyle et al., 2003).

Learning styles could be more readily met through digital content for many students. Students could access information in formats that suit their needs. Even if students prefer
traditional textbooks, they can print the parts of the text they want to read in that format. Some students like taking quizzes and practice tests, all of which can be accomplished through digital content. Students could be given homework choices, since all would have access to the information. At some point, students may even get to select what exercises they complete and guide their learning experience.

Deep learning is preferable in higher education. Students must go beyond memorization to utilizing engaging activities that apply what they have learned and set a basis for future activities. To achieve deep learning, course content must be provided to students in a form that engages them. Because this current college generation does not actively read hard back books, even for pleasure, as much as previous generations, it is plausible that this form of course content will not provide the learning experience necessary for many students. This does not mean that students should not have traditional textbooks; it means that to truly engage them, the students need more stimulation that the static nature of the traditional text. As such, digital content could provide learning opportunities to these and future generations that are comfortable with technology and seek convenience.

Deep learning has especially been influential in the literature on effective learning in higher education (Boyle, et al., 2003). “Deep learners actively try to understand meaning by working out relationships between concepts, relating new material to previously known information and adopting a critical attitude to information. Deep learners are intrinsically motivated by intrinsic interest. Surface learners on the other hand focus on memory strategies which emphasise the retention of knowledge and are extrinsically motivated by the desire to get qualifications or a job” (Boyle, 2003, p.268). Because of this, students seeking deep learning will want whichever format suits their needs the most. However, it would seem that the trend toward digital content will facilitate deep learning because of its interactive nature, adaptability, and access to current information.

In self-regulated learning, students become actively engaged in the selection of relevant information, as well as planning and directing processing activities (Boyle, 2003). This can be something simple, such as a student controlling their studies and study habits. Simply put, Engagement is thought to provide more effective learning, and can account for comparable results as intelligence scores.

To address the needs of self regulated learning, it is plausible that many forms of course content could be utilized, depending on the students, the instructor, and the nature of the course. Whether traditional forms or digital content are utilized, both let the student pace their learning experience to an extent. However, the digital format provides more opportunity for the student to be interactive. It some instances, digital formats also provide the students with feedback on their progress. Homework systems, on-line quizzes and tests help the student understand the material, as well as moderate their progress. The regulation component plays a central role in coordinating different types of learning, self-regulation of learning and the adoption of deep processing strategies. Students have input to their intake model of learning, external regulation and surface processing strategies (Boyle, et al, 2003).
CONCLUSION

This is a critical time for the publishing industry. The struggle between technology driving the use of one company’s products over another versus intellectual property is on-going (Bryan et al., 2010). The decision process for faculty has become more complicated, and yet offers many potential educational opportunities. And, at the center of the struggles are the students. They question the value of course content, while demanding more options at affordable price points. It seems impossible to deny that the future of the industry is digital. Profit margins, content changes, and user demand will drive the changes in the industry. It is more a matter of how far and when, than a matter of if.

Learning styles are important because not all students react in the same way to the same stimuli. “Researchers are increasingly recognizing the complexity of learning and are interested in examining how different aspects of learning work together” (Boyle, 2003, p. 269). Instructors could track their students’ activity through the use of digital content. This could provide the instructors with better indicators of student success or lack thereof. It could also help them tailor their courses on an on-going basis to meet student needs and stay current.

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"New Agreement Improves Access to Textbooks for Disabled Students at 50 Georgia Colleges


DETERMINANTS OF SUCCESSFULLY MARKETING STUDY ABROAD PROGRAMS
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ABSTRACT

Study abroad programs are becoming an ever increasing part of university curricula. Every year thousands of students participate in study abroad programs. Colleges and universities are creating more programs to meet the demand. Marketing study abroad programs poses a variety of unique challenges. This is a proposal to investigate the most effective modes of marketing such programs and to learn more about the factors that students believe are important when choosing such program. A methodology is proposed to investigate these research questions.

INTRODUCTION

Study abroad experience is marketed differently to students depending on their area of interest. For business students, this is a preparation for international business careers; for language students, this is a better understanding of living and breathing language; for media and communication students, it opens grounds for better contextual understanding of social and technological change. Social science majors represent the largest group of study abroad students, business and management majors are second, and humanities majors are third (Ortiz, 2004).

A survey by the Institute of International Education (IIE) found steady growth in the number of students participating in study abroad programs. Over 260,000 study abroad students have earned academic credit at their home institution (Anonymous, 2010). The number of programs and schools that are engaged in such activities is also increasing. This can be attributed to a number of reasons: preparing competent business leaders (Hulstrand, 2007), increased intercultural proficiency (Clarke, Flaherty, Wright, & McMillen, 2009; Deardoff, 2006), increased learning (Holoviak, Verney, Winter, & Holoviak, 2011). Study abroad programs should be looked as “complementary means to offer a rounded education, by allowing participating business students to gain international exposure” (Ortiz, 2004, p. 264). Classes, offered as a study abroad program are evaluated more highly than those offered at home, students report changes in their worldview, self-reflection, and cross-cultural understanding (Budden, Baraya, & Juban, 2005).

CASE STUDY

Study abroad initiatives in the State of Tennessee for the Tennessee Board of Regents (TBR) system is administered by Tennessee Consortium for International Studies (TNCIS). The mission of TNCIS is “to make international education and cultural understanding a central goal of higher education throughout the state of Tennessee” (www.tncis.org/about_us.aspx). 19 colleges and universities from the TBR system comprise this consortium and offer variety of study abroad programs. Most of the programs are 3 weeks long and fall in the category of ‘study
tours’ (Budden, et al., 2005). In 2012, there were over 60 courses offered in 18 different geographic regions.

TNCIS programs are structured as follows. Each program has at least one coordinator (director) who is responsible for the logistical aspects of the program. Issues, such as accommodation, transportation, meeting spaces, meals are handled by the director and coordinated through the central office. Faculty teaching in a particular program are responsible for the academic aspect of their course. Course development, site visits, guest speakers fall under faculty’s guidance.

Marketing of study abroad programs through TNCIS is performed using several platforms. The website, also called the student/faculty portal, details all programs and courses offered with one-two paragraph description of highlights of the country, sites to be visited and basic accommodation details. Some programs feature videos with student interviews from the past trips.

Approximately 9 months ahead of departure date, TNCIS prints flyers. One large-sized flyer is intended to list all programs and provides website, email, QR code and telephone to the central office. A set of leaflets listing programs in each continent is also printed to provide information to interested students. The philosophy behind this strategy is that students typically chose a continent that they want to visit, say, Europe, and only then do they chose a particular country.

TNCIS recruitment mechanisms (website, flyers, leaflets) alone would not be able to attract sufficient students for programs to be financially self-sustaining. Therefore, both, faculty and directors are required to recruit students for their particular course and program as whole. Depending on the discipline and the country where the program will be conducted, faculty and directors choose a variety of methods to market their program.

THEORY

Marketing study abroad programs poses unique challenges because it is a service coupled with educational experience. First, it should be treated as service package, including “a bundle of goods and services with information that is provided in some environment (p. 22) (Fitzsimmons & Fitzsimmons, 2011). Criteria for evaluating the package include:

1. supporting facilities, e.g. housing and transportation conditions abroad;
2. facilitating goods and services, e.g., ability to visit multiple sites while abroad;
3. information, e.g. faculty’s knowledge about countries to be visited;
4. explicit services, e.g. comprehensiveness and consistency of classes abroad;
5. implicit services, e.g. faculty’s attitude and rapport with students.

Programs abroad are intangible, inseparable and unique and the students will have difficulty touching or feeling it. Because services are higher in perceived risk, they will create distinctive information needs in students (consumers) (Murray, 1991). Teaching faculty are indispensable for service delivery and each experience will vary.
Study abroad programs fall in the category of unsought goods and services, simply because students don’t always know what they want or need until after they learn about it. Mason (2005) suggests that unsought goods are “purchased when a sudden problem arises or when aggressive selling is used to obtain a sale that would otherwise not take place” (p. 317). Successfully marketing study abroad program as unsought good requires careful planning and monitoring of marketing activities.

RESEARCH QUESTIONS

The goal of the study is understand the effectiveness of marketing campaign on student choices for various study abroad programs. The following research questions are posed to guide this research study:

1. What presentation format is deemed as effective in generating student interest and decision to go on a study abroad program?
2. What aspects of study abroad program are important when deciding to participate in a particular program?
3. Do students perceive study abroad programs as unsought goods and services?

PROPOSED METHODOLOGY

The study will be based on a sequence of online research surveys. The first survey will be conducted prior to the start of the study abroad program. All faculty teaching and directing study abroad programs will be asked to participate in the survey. The goal of the survey will be to measure faculty marketing efforts in promoting the program as well as recruiting students. The second survey will be conducted by asking students, who already committed and paid for the program, about their perceptions of marketing campaigns.

Using web-based platform, a scripted email will be sent inviting participants to take part in the study by clicking a survey link. Only one respondent per survey will be allowed. All non-respondents will be contacted again, after two weeks of the first emailing.

Population

There are two populations in this study. The first population is the faculty teaching and directing in the study abroad program. The second population is the students who are enrolled in one or more study abroad programs. On average, there are about 40 faculty teaching and directing the programs and over 300 students participating in those programs on an annual basis.

Survey instruments

Two survey instruments will be developed. One instrument will be administered to the faculty, and the other instrument will be administered to the students.

Faculty instrument will consist of series of open- and closed-ended questions and statements related to their marketing efforts of the programs. Questions will ask: their past participation in study abroad, content and mode of delivery of their marketing materials,
frequency at which contacts with student population was made, amount of time spent on various marketing activities.

Student instrument will consist of series of open- and closed-ended questions and statements related to their decision to go on a study abroad program. Questions will ask: their past participation in study abroad, reasons why this particular country/program was chosen, the impact and credibility of personal and impersonal informational-marketing sources, expectations from the program, the amount of time it took to make a decision to commit, and perceptions about study abroad program.

CONCLUSION

Marketing study abroad program is crucial to its success. Over the years, the author of the study has observed a number of study abroad programs fail to attract students simply because they were not marketed properly. While anecdotal, marketing practices, such as promotional materials with pertinent program information, providing preliminary itinerary, show a video featuring study abroad students share their experience, bringing artifacts from foreign countries, speaking to the student body on a very frequent basis, all were significant instances of factors that may have led to higher than average enrollment, positive attitude, and increased student engagement. Based on informal discussions with students, factors, such as program cost, duration, number of countries to be visited, were some of the attributes that students perceived as important in their decision to go on a study abroad program.

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MARKETING STRATEGY AND ENTREPRENEURSHIP

A CONCEPTUAL FOUNDATION FOR NEW TECHNOLOGY BUSINESS FIRMS TO ADOPT A MARKETING ORIENTATION

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ABSTRACT

The purpose of this paper is to identify the critical factors that affect the adoption of market orientation by new technology business firms (NTBFs) and propose an approach that will assist these types of firms in adopting and utilizing a market orientation. Market orientation has been found to have a positive effect on a firm’s ability to sustain a profitable competitive advantage. Successful NTBFs contribute to the life-blood of countries in which they create their base. These firms feed the growth and global competitive standing of their countries’ economic systems, contributing new jobs, new processes, and new products (Romer 1993).

INTRODUCTION

Drucker’s (1954) seminal work in marketing contributed a simple premise that businesses are created to serve customers. Businesses succeed in serving the customer when they offer the right product or service at the right price, at the right place, with the right message, and at the right time. Drucker also emphasized the necessity of innovation. Innovation allows a business to create a unique and valued position in the customer’s mind (Armstrong & Kotler 2007; Boone & Kurtz 2007; Kerin, Hartley, & Rudelius 2007; Kotler & Armstrong 2006; Lamb, Hair, & McDaniel 2007). A unique and valued position is typically comprised of a bundle of values, not just one value. As an example of a bundle of values, consider computers sold to businesses. Businesses are not simply purchasing the machine but also services such as instruction in use, maintenance and repair, warranties, special software programs that run on the machine, etc. Further, Drucker (2006) emphasized that a firm offering a technology-based innovation will succeed only to the extent that the firm utilizes an innovative marketing concept that answers the question “Why would a customer want to do business with us?” New technology business firms (NTBFs) tend to value engineering expertise, not marketing expertise (Mohr & Shoostari 2003). Generally, NTBFs are competent in science and technology but quite weak in marketing skills (Oakey 1991; Jones-Evans 1996), especially in knowing how to identify their target market’s perceptions of what creates unique value.

Having a market orientation allows firms to better assess and manage risk as they look to take their product or service from idea to concept and then to product and/or service. The adoption of a market orientation allows both macro- and micro- level environmental information and analysis to be available to them dynamically. This allows the firm to decide what’s feasible
in terms of their abilities versus the needs/wants of the market. Understanding marketplace reality is a key to profitable survival.

**LITERATURE REVIEW**

Market orientation is traditionally viewed through an economic lens. To the extent that a firm’s market orientation provides a means of offering a non-imitable and effective product or service to the firm’s targeted customer segments, known as competitive advantage, market orientation contributes to the firm’s economic rents (Kirca, Jayachandran, & Bearden 2005; Rodriguez Cano, Carrillat, & Jaramillo 2004). While the research into the link to performance is not unequivocal, there is a general perception in the literature of a belief in a positive link. A positive link between firm performance and market orientation is generally accepted. Many U.S.-based studies found a positive association between market orientation and performance (Jaworski & Kohli 1992; Narver & Slater 1990; Slater & Narver 1994; Ruekert 1992). Dawes (2000) did a meta-analysis of 36 studies in the 1990 to 1999 timeframe, finding support for a positive connection between performance, as measured by profitability, and market orientation. Kirca, Jayachandran, and Bearden (2005) did a meta-analysis of 114 market orientation studies from which they concluded that the overall positive effects of market orientation performance are indeed generalizable. Their findings were in line with those of Rodriguez Cano, Carrillat, and Jaramillo (2004), who also performed a meta-analysis of studies. Kirca et al. found, relative to market orientation’s impact on performance, an overall strong relationship with particular strength in the relationship between market orientation and performance for manufacturing firms.

Little in the way of research into market orientation utilizes theories and paradigms from organizational and entrepreneurial research to extend our understanding of how market orientation’s ability to effect economic rents is moderated. Hunt and Lambe (2000) emphasized the need for more dialogue as well as an improvement in that dialogue between marketing and other disciplines. After briefly discussing the two key streams of research on market orientation, this paper will then explore organizational and entrepreneurial factors that likely moderate the link between a firm’s performance and market orientation. We will discuss: Detect Opportunity and Exploit to Thrive in Environmental Turbulence; Effective Environmental Scanning Incorporates Market Orientation Behaviors; A Market Oriented Learning Culture Needs to Evolve; Evolution Requires Cultivation of Key Resources; and finally, Cultivating Key Resources Requires Effective Cognition and Social Skills.

Research on market orientation evolves from two major streams. One stream explores the relationship between business performance and a culture-based market orientation of organizations (Narver and Slater 1990). The other stream seeks to understand a behavior-based market orientation. In this latter stream, the characteristics that differentiate firms with a high level of market orientation from those with lower levels of market orientation are examined (Kohli and Jaworski 1990). Narver and Slater believe market orientation is a business culture that sustains effective and efficient creation of superior customer value. Their emphasis is on the need for a firm to engage in intelligence gathering and then respond organization-wide with what the customer values. Narver and Slater emphasize the need for a customer and competitor orientation with inter-functionally coordinated efforts to utilize the firm’s unique blend of resources to deliver a product that customer’s value. Kohli and Jaworski’s emphasis is on the activities in which the firm must engage to generate, disseminate, and act on information
regarding forces outside the firm’s control, particularly their influence on customer needs, present, and future. Both streams of research support a commitment to market orientation on the part of firms who wish to be viable long-term and emphasize providing customer value.

**Culture-based Market Orientation**

Narver and Slater (1990) believe that market orientation is a business culture that sustains effective and efficient creation of superior customer value. Narver and Slater’s emphasis is on the need for a firm to engage in intelligence gathering and then respond organization-wide with what the customer values. They emphasize the need for a customer and competitor orientation with inter-functionally coordinated efforts to utilize the firm’s unique blend of resources to deliver a product that customers value. Narver and Slater defined the culture of market orientation as emphasizing customer orientation, competitor orientation, and inter-functional coordination.

Their 1990 exploratory study started with a review of the literature on *sustainable competitive advantage* and of market orientation in order to pinpoint common points. The literature they reviewed included: Aaker 1989; Kotler 1977; Levitt 1960; Peters & Waterman 1982; and Porter 1980, 1985). Their view was subsequently reiterated by: Day 1994; Deshpande, Farley, and Webster 1993; and Narver and Slater with Tietje 1998. They subsequently positioned sustainable competitive advantage as value perceived by the buyer that the firm is able to deliver repeatedly. There are many alternatives through which a seller creates a perception of value in the eyes of a buyer to answer the question “Why should I buy?” These are called *value propositions* and address the nature of the benefits the product or service will deliver to satisfy customer needs. For instance, a product might offer higher safety, protection from viruses, energy to ward off fatigue, high performance, etc. For an NTBF, a wireless software vendor may offer an application that changes the performance paradigm of a business process such as banking by mobile phone.

Slater and Narver (1994) stress that the efforts at collection of information, dissemination and creation are not just here and now but must be continued as needs evolve and change. Narver and Slater (1990) also emphasize the necessity for superior generation, assimilation, and response to information. Slater (2001) distinguishes between those firms capable of serving the articulated needs of their customers versus those capable of understanding the unarticulated needs for breakthrough products and services. Therefore, this suggests that a focus on continuing to update existing products, within their life cycle, as well as having the foresight to spot and fulfill needs yet to be articulated lies within the continuum that is market orientation.

**Behavior-based Market Orientation**

The research stream seeking to understand the connection between organizational characteristics and market orientation really began receiving research interest with the seminal study of Kohli and Jaworski in 1990 which suggested a positive relationship between organizational characteristics and an information-based market orientation. They cautioned at that time that the link might not be as strong in technologically-based turbulent markets. In 1993, Jaworski and Kohli expanded their initial 1990 work and proposed that the competitive advantage for organizations working within technologically turbulent markets might indeed be
able to benefit from market orientation. Jaworski and Kohli’s work has been followed by others but again, new technology business firms have been all but ignored. Findings in the follow-on research that has been done have been extremely mixed and potentially context driven, ranging from no relationship to a positive relationship, to a positive, mixed or negative relationship under certain conditions. For example, Langerak (2001) evaluated sales force management characteristics vis-à-vis market orientation within German manufacturing firms and found that, within the same firm, the market orientation towards customers can be in conflict with the market orientation towards suppliers. Han, Kim, and Srivastava (1998) found that within the U.S. banks investigated, there was a positive correlation between market orientation and level of innovativeness. Lukas and Ferrell (2000) evaluated new product development practices and innovation vis-à-vis market orientation within 194 U.S. manufacturing firms and found that level of product innovation varies with the level of market orientation. A limited number of studies have focused on firm stakeholders such as customers, suppliers, community, etc. Webb, Webster, and Krepapa (2000) found a strong link between market orientation and customer satisfaction in the context of 77 client firms of one U.S. bank. Due to the one bank and one industry context, the study’s results are not generalizable. Krepapa, Berthon, Webb, and Pitt (2003) found that divergence in market orientation perception by customers and service based firms tended to result in reduced customer satisfaction. Qu and Ennew (2004) found that for two business sectors in China, a high level of market orientation also meant the firm would be more socially responsible.

Of particular interest is the work done by Matsuno and Mentzer (2000). Kohli and Jaworski (1990), and Jaworski and Kohli (1993) operationalized market orientation using a 32-question scale, the MARKOR, that emphasized intelligence-related activities. Matsuno and Mentzer, while supporting the basic work, saw MARKOR as lacking breadth as well as fit and factorial structure. Matsuno and Mentzer saw more breadth needed in terms of market factors such as environmental forces and stakeholders, referencing environmental scanning literature, including that of Aguilar 1967; Hambrick 1982; Rhyne 1986 as well as stakeholder literature that includes Anderson 1982; Pfeffer and Salancik 1978; and Zeithaml and Zeithaml 1984.

MARKOR’s fit problems in the original second-order factorial structure were noted by Kohli, Jaworski, and Kumar (1993) as well as Siguaw, Simpson, and Baker (1998). Siguaw et al. dealt with it by removing items from MARKOR, which Matsuno regarded as weakening an already narrow question domain. Instead, Matsuno and Mentzer (2000) expanded the breadth of MARKOR from 32 to 46 items after a pretest of a 69-item scale. Their 46-item scale expanded the domain of questions to include the macro environment, suppliers, social and cultural trends and regulatory factors. Matsuno and Mentzer used their scale to investigate the potential moderating role of strategy on the relationship between market orientation and economic performance for US manufacturing firms across a wide range of industry sectors, using Miles and Snow (1978) business unit level strategy typology. The Miles and Snow typology labels business units as prospectors when their actions are characterized by a strong focus on market and product innovation, analyzers when their actions are characterized by a strong focus on both calm and turbulent markets, reactors when their actions are characterized by ineffective response to uncertainty and turbulence and defenders when their actions are characterized by improving the operational efficiency within their narrow product and/or market. Matsuno and Mentzer’s
investigation found a high level of competence in market orientation yields prospectors, those creators of new markets and new products, greater gains in ROI, market share, sales growth and new product sales than those achieved by other types. Although the majority of their 1000-firm sample universe was strategic business units having more than 100 employees, the results raise the possibility that NTBFs competent in market orientation will succeed.

In the following sections, we respond to calls for more connection amongst marketing, organizational and entrepreneurial theories and paradigms. We extend our understanding of how market orientation’s ability to effect economic rents is moderated by certain key factors highlighted in these complementary research streams. Examples given of NTBFs draw on knowledge of new technology firms in the wireless telecommunications sector. First to be discussed and setting the stage for follow-on discussions is how thriving in an environmentally turbulent market requires being able to detect threats and exploit emergent opportunities.

MODERATORS OF MARKET ORIENTATION

Detect Opportunity and Exploit to Thrive in Environmental Turbulence

Chandler (1977) believed perceptions of environment drive market orientation. Functionalists Deal and Kennedy (1988) noted that the business environment in which a firm operates will dictate what “reality” a firm must embrace in order to succeed (p.13). Due to the acknowledged asymmetry in resources among entrepreneurial firms, Kirzner (1973) noted that those firms intent on thriving search for information that leads to profitable opportunity. For those firms pursuing the commercialization of radical innovations, they are performing this search in an environment of turbulence. A turbulent market means a market in which there is rapid and discontinuous change in products, competitors, and market demand, and which places a premium on a firm’s ability to make rapid transitions (D’Aveni 1994; Eisenhardt 1989). Kegan (2000) noted that the individuals and the organizations they inhabit need not be static, forced to construct and stick with one way of seeing the world or reality. Rather, they have the option of being dynamic, acquiring new means and methods such as the behaviors of market orientation under study here for expanding and changing their reality.

A turbulent market may also be viewed as a complex dynamic system, i.e., one in which propensity for change is based on a firm’s individual history but is moderated by the rules, processes, and interactions with entities embedded in the same environment (Bonabeau & Meyer 2001). Pascale (1999) views firms as being capable of being dynamic and of moving among certain zones: static; creative adaptability; and true chaos. Moving among these zones requires a clear sense of mutuality of goals and purpose among the people in the firm’s network. Firms that opt simply to follow their initial offering through its market life cycle and not work on other offerings are in a static state and not innovating, and, if they fail to change and adapt as needed, face certain corporate death. Firms in the zone of creative adaptability are able to detect turbulence such as competitive threats and to exploit emergent market opportunities. These firms encourage employees to take risks and give them both authority and responsibility for outcomes. Firms in chaos are not only able to detect competitive threats and exploit emergent opportunities;
they are capable of the kind of adaptation that creates new industry sectors such as the wireless sector under study here.

Next, the connection between behavioral market orientation and environmental scanning will be highlighted. Adaptation in a turbulent market environment requires information garnered from the environment, as well as behaviors that allow a firm to take advantage of such information.

**Effective Environmental Scanning Incorporates Market Orientation Behaviors**

Organizational research defines scanning as searching for and gathering specific information as well as viewing and evaluating other information that may then be gathered via formal methods, informal methods or both (Choo 1999). Research demonstrates that not scanning the environment within which the firm exists frequently leads to failure to survive (Terreberry 1968). NTBF entrepreneurs need to fill the gap between what they know and what they need to know to make decisions that will sustain competitive advantage (Aguilar 1967). Particularly in a turbulent environment where variability and complexity are the norm, knowledge of the environment tells the firm what conditions it is presently encountering and might encounter later (Pearce, Chapman, & David 1982). Prior research, although not unequivocal, indicates that as perceptions of uncertainty increase, scanning increases (Auster & Choo 1993). Huber and Daft (1987) note that this allows threats and opportunities to be identified. Research into which environmental factors are likely to be scanned by firms indicates it is those deemed most complex and potentially variable (Boyd & Fulk 1996; Daft & Weick 1984).

The three stages of organizational scanning are: monitoring for data; interpreting that data, thereby converting it to knowledge; and taking action based on the data (Daft & Weick 1984). Implicit in the definition of behavioral market orientation is that data gathering is preceded by monitoring the environment for the data that will then be gathered. Therefore, the stage model of scanning correlates with the behaviors necessary for a firm to utilize behavioral market orientation, i.e., gathering, analyzing, disseminating, and responding.

The type of data for which an NTBF might monitor includes, but is not limited to, patterns in socio-cultural and demographic data on smart versus cell phones, technological rumors and forecasts, competitor and competitive products or rumored products, new or updated regulations and laws as well as likely political support, and economic indicators such as buying power and patterns.

Having established the need for environmental scanning by NTBFs in their turbulent markets, we will now discuss how a market-oriented culture evolves as the behaviors of market orientation evolve, wrapping a framework around gathering and utilizing environmental data.

**A Market Oriented Learning Culture Needs to Evolve**

In the cultural view of market orientation (Slater & Narver 1994), a prerequisite to being
a firm with the ability to learn and change is having a market-oriented culture. Stressed is evolution over time as market needs change. This perspective is in step with emphasizing that marketing processes must evolve. Nakata (2003) viewed culture as dynamic, not static, environmental phenomena. Rashid, Sambasivan, and Rahman (2004) observed that a culture with a positive attitude toward change allows a firm to shift and adapt in turbulent markets. Tellis, Prabhu, and Chandy’s (2009) preliminary research elevated corporate culture above the other three factors that have an effect on innovation, those being capital, government, and skilled labor. In an NTBF, this ability to learn and change allows a firm to continue being creatively destructive. Creative destruction refers to the ability of a firm to innovate constantly, looking for the next breakthrough in technology that will lead to a new set of products for existing or future customers (Schumpeter 1942).

So, would the first culture of an NTBF likely be market oriented? Cultures have contexts that make them right for their time. A communal culture, one in which there is high solidarity and high sociability with risks and rewards shared and an emphasis on being fair, is typical of high-tech startups (Goffee & Jones 1998). A communal culture offers much to firms in highly innovative, fast moving sectors. In the new product development literature for radical innovations, Thieme and Song (2002) found that market orientation is less likely to be beneficial early in development but becomes more so as products move to commercialization. This supports the existence of a market orientation continuum where, over time, firms begin to exhibit some of the behaviors of market orientation as their culture shifts in response to market change. Case studies of eight entrepreneurial founders and teams (Shane 2000) support this observation. Prior knowledge helps more than customer input, at least initially, to see how a discontinuous innovation solves a problem for a potential customer. Prior knowledge from education, training, and simply experience allows the founders to “see” what essentially did not exist before, that is, the application of a new technology to a customer problem. As stated, customers may not have sufficient expertise to be able to articulate their need or critique a concept for a product based on breakthrough technology. However, prior to deciding to commercialize a product or service, the question “What makes you believe this will meet a need?” must be answered by evaluating customer response to the prototype product and adjusting as necessary (Cooper 1998). Called feasibility testing, this is the point at which a firm should involve potential customers and listen to their feedback so that a product’s chances of success are much improved. The key here is that, in technology-based markets, NTBFs with products approaching the mainstream market stage need to re-examine their assumptions.

In a firm with a strong market orientation, a key building block is learning (Day 1994, 2000; Jaworski & Kohli 1993; Kohli & Jaworski 1990; Narver & Slater 1990; Sinkula, Baker, & Noordewier,1997; Slater & Narver 1994, 2000). Organizational learning theory’s proposition (Cyert & March 1963) is a cyclical one in that firms, in interacting with their environments, update their knowledge. Both practitioners and academic researchers appear to agree that a central tenet in organizational learning is that a firm needs to be adaptable, be flexible, embrace experimentation, and provide permission to question actions and results of those actions to its employees (Argyris 1999, 2004). Learning within a firm starts with the individuals (Sinkula 1994) and it is implicit that the learning is at their level of cognitive and sense-making ability. However, according to a literature review done by Argyris, the majority of scholarly research in organizational learning leans towards depicting organizational learning as being more about
repetition, that in which any learning is used to reinforce or repeat the same scripts since most individuals have inherent information processing limits designed as protection from embarrassment or censure. This then creates a barrier to the firm operating with the best information possible for the environment being faced. Implicit in this is that the problem grows worse as the firm matures, if indeed, it does survive.

We will now discuss how a firm wishing to create and maintain a sustainable competitive advantage needs to utilize the structure of market orientation in order to cultivate the productive opportunities highlighted in resource-based theory.

**Evolution Requires Cultivation of Key Resources**

The behavioral definition of market orientation as market intelligence generation, dissemination, and responsiveness stresses intelligence or knowledge (Kohli & Jaworski 1990). Resource-based theory views the productive opportunities of the firm as being the ability to capture resources and capabilities in order to build a sustainable competitive advantage (Barney 1991; Grant 1991; Eisenhardt & Martin 2000). A firm’s resources are physical and intellectual elements that enable strategic conception and execution to maximize performance (Barney 1991; Maijoor & Van Wittelsstijn 1996). Capabilities include the ability of management to institute effective and dynamic routines (Edmondson & Moingeon 1999). The routines of interest in this research are gathering information from the environment, analyzing that information, disseminating that information, and responding, as well to implications of the analysis. Grebel, Pyka, and Hanusch (2003) as well as Barney (1991) suggested that resources are distributed heterogeneously among competing firms. Dosi (1982) suggests that technological paradigms guide both problem framing and possible solutions.

Day (2000) noted that even with superior execution of market orientation’s essential behavior and activities, a firm lacking significant resources will be unable to succeed. Intuitively one would hypothesize that the more experience one has in a certain area, the more effective one should be in assessing and responding to environmental situations in which this variable is a critical element. Such intuition lacks acknowledgement of the potential for differences in the industry or firm paradigm within which that expertise was developed. Specifically, if the paradigm was one that contained nothing new or unexpected with which the individual contended, their frame of reference likely contains habitual routine reactions inappropriate to the current environment. However, what if the paradigm with which the individual is most familiar was not routine but instead turbulent? If so, then their frame of reference, coupled with the behaviors of market orientation, may be more than sufficient to create tacit knowledge, a significant and most importantly difficult for the competition to replicate resource.

We now continue the discussion of resources with a discussion of how success or failure in the use of resources requires cognitive and social skills that allow optimum sense-making.

**Cultivating Key Resources Requires Effective Cognition and Social Skills**

Gartner, Shaver, Gatewood, and Katz (1994) found that entrepreneurial teams are more
likely than individuals to start firms. Timmons (1994) provides evidence that teams provide better results than individuals. O’Reilly, Snyder, and Boothe (1993) found that it is the team, not the individual executive that has the most ability to influence the firm’s performance. Some of the research into top management teams points to a link between a venture’s performance and its management team, most particularly under turbulent conditions (Eisenhardt & Schoonhoven 1996; Michel & Hambrick 1992; Murray 1989).

It has been suggested that an entrepreneur’s cognitive ability may be likened to an independent variable with significant effect on a firm’s success or failure (Meyer, Gartner, & Venkataraman 2000). Implicit here is the idea that the firm that fails to learn, fails due to the lack of sense-making ability of the management team. Learning in pursuit of stability and status quo as opposed to change (Fiol & Lyles 1985; Leavitt & March 1988) is not what organizational learning needs to be in an NTBF.

Eisenhardt and Bourgeois (1988), in studying high velocity firms, suggested socially cohesive and integrated groups of people have greater bandwidth to apply to innovative thinking. Ouchi (1980) saw increased efficiency and flexibility due to lower transaction costs in communication and coordination. Smith, Smith, Olean, Simms and Scully (1994) suggested that high social integration may be inferred from effective frequent communication patterns that suggest the likelihood of superior organizational performance. An entrepreneurial team may possess the needed bridging and bonding in social capital (Woolcock 1998) to pursue different views. Several top management team (TMT) studies have demonstrated a positive correlation between effective and frequent information sharing and effectiveness (Wagner, Pfeffer, & O’Reilly 1984; Zenger & Lawrence 1989).

CONCLUSIONS AND MANAGERIAL IMPLICATIONS

In this paper, we conceptually explored the distinct contributions the organizational and entrepreneurial literature make to our understanding of market orientation. The practical implications for NTBFs battling for viability in turbulent markets are many. First, practitioners should assess where on the continuum of the behaviors of market orientation they currently are and make the changes necessary to move their embrace of market orientation forward. While doing so does not guarantee market success, not doing so opens the door to continued information asymmetry and the risk of reduced market success. Second, those factors deemed most complex and potentially variable (Boyd & Fulk 1996; Daft & Weick 1984) should be sought dynamically, utilizing means and methods that expand and inform their changing reality. Their efforts need to focus on being creatively destructive, always looking for the next breakthrough in technology that will lead to a new set of products for existing or future customers (Schumpeter 1942). Third, the prior knowledge that entrepreneurs bring to their startups allows them to visualize how an innovation solves a pressing problem for the target market, even when the target market is unable to “see” this initially (Cooper 1998). Key here is to show the prototype product to the target market, allowing them to catch up with the entrepreneurial vision and provide feedback that aligns the product with the market. Fourth, the innate abilities of the management team, as well as the firm’s physical resources, limit or enhance the ability of market orientation to contribute to the firm’s performance. Fifth and finally, NTBFs with a team at the helm, as opposed to a lone entrepreneur, are more likely to perform strongly (Timmons 1994; O’Reilly, Snyder, and Boothe 1993). The individual cognitive
ability of individuals on the team leads to improved sense-making skills. Key to this improvement is that the team be socially cohesive and integrated so that communication is not just frequent but also effective (Eisenhardt and Bourgeois 1988).

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ETHICS, LEGAL AND PUBLIC POLICY

THE ROLE OF SOCIAL MARKETING AND SOCIAL MEDIA IN CULTURAL ADAPTATION: IMPLICATIONS FOR THE MARKETING ETHIC

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ABSTRACT

The modern world, driven by the speed and complexity of technology, is having a difficult time adjusting to changes created by this newest version of modernity. As a result, new challenges to marketing constantly emerge and need to be addressed. Terms like social marketing and social media are blending into new concepts such as social media marketing. Their meaning and impact remain a matter of debate. How best to understand and apply these concepts stay at the center of the discussions. This paper addresses some of the ethical questions raised about how the influences of technology have changed the culture of marketing and media and how to cope the difficulties created by them.

INTRODUCTION

This paper examines some ethical dimensions of the relationship of social marketing and social media to our culture.

Social marketing, as a discipline, was born in the 1970’s when Philip Kotler and Gerald Zaltman understood that marketing principles could be used to sell ideas, shape attitudes and influence behavior in the same way they sell goods and services. Social marketing evolved from using PSA’s (Public Service Announcements) to a more sophisticated process involving in-depth research and a constant re-evaluation of social marketing messages. In fact, research and evaluation are the cornerstones of successful social marketing efforts. Social marketing as a process has seemingly given way to the impact of social media as a measure of influence on culture.

The term social media refers to the use of web based and mobile technologies to turn communication into interactive dialogue. It allows for the creation and exchange of user-generated content that are media for social interaction. (Wikipedia 1)

Recent studies indicate that younger people are increasingly engaged with social technologies. Over half of all internet-using teens are “content creators” who create web sites or
blogs, share original media such as photos and videos, or remix content into new creations. (Lenhart & Madden, 2005)

This underscores the importance of understanding how these two processes shape societal collective outcomes such as the transmission and consumption of culture. Social media experts have argued that there may be no formula for what becomes viral. (Cashman 2009) Still other research suggests that collective outcomes depend on what is popular or culturally prominent rather than the characteristics of the content itself. (Bentley, Hahn and Shennan 2004; Bentley and Shennan, 2005) Which songs become popular (highly-downloaded) depend little on the quality of the song and more on the fact that people tend to imitate the behavior of others. (Salganik, Dodds and Watts, 2006)

The emotional element of this process tends to dominate aspects of research. For example, sharing emotional content helps individuals gain a better understanding of people’s beliefs and view of the world. Sharing emotional content with others can coordinate interactions; strengthen social bonds and deepening social connections to facilitate collaboration. (Keltner, Haidt and Shiota, 2006)

Public Service Announcements never could match the impact of social media. Although they have the reach, they lacked the emotional intensity of social media. Current trends in social marketing indicate business is using social media as a marketing tool to sell goods and services while governments and NPO’s (Non Profit Organizations) use social media to sell ideas and influence behavior but without the rigorous process outlined above; where one begins and the other ends becomes more difficult to determine.

MEMES

A controversial theory that has direct implications for the emerging phenomenon of social consumption driven by technology is memes. By definition, a meme is an idea, behavior or style that spreads from person to person within a culture. A meme acts as a unit for carrying cultural ideas, symbols or practices which can be transmitted from one mind to another through writing speech, gestures, rituals or other imitable phenomena in the similar way that genes transmit biological information through DNA. (Wikipedia 1)

Examples of memes are tunes, ideas, catch-phrases, fashion, jokes and implements of all kinds. The relevance of memes to social media is the viral nature of the action. For example, a Conan O’Brien promotional program used one tweet from a Twitter account and sold out in two hours a 32 city comedy tour. Ford Motor Company used 100 people to share their experience of driving a Ford Fiesta. They used Facebook, Twitter, blogs, YouTube and any other social networking technology of their choice. The 6 months results were 11 million Social Networking impressions including 11,000 videos posted, 15,000 tweets and 13,000 photos. (Jeff Bullas, 2002) It has been reported that pop star Kim Kardashian has over 9 million followers on Twitter. The speed and efficiency of the viral effects of social media produce extraordinary and lasting results. Traditional media (television, radio and print) never achieved this outcome. The viral effect, arguably, mimics the memes process and lends validity to the notion of ravenous cultural
consumption for its own sake. Although the quantity of consumption has increased, the question of its quality remains.

**CULTURAL ADAPTATION**

Marketing and media have always influenced how we think and behave. Movies, television and other types of media reflect life either as it is or as it might be. That age old question persists: does art imitate life or does life imitate art? Before television, people listened to the radio. Popular shows like the Lone Ranger, Superman and Little Orphan Annie shaped the behavior of a generation of children in their play, often imitating their on-air heroes in word and deed. Radio sitcoms entertained a generation of adults with shows like The Shadow, Fibber Magee and Molly and The Bickersons, They reflected the social norms of the day with their depictions of life either real or imagined.

Movies of the radio era did the same. Gone with the Wind, The Wizard of Oz, The Philadelphia Story, Mr. Smith Goes to Washington and Casablanca were among the many titles whose content influenced our thinking about our history and culture as Americans. The genres of that era included war movies, westerns and great epics that each contributed to our social value. America was the great “Melting Pot” of immigrants from all over the world striving to define and achieve the good life within the notion of that common good; America.

Television ushered in a new generation of people affecting their thinking and behavior in ways little understood at the time. Before TV, people, by listening to dialogue, used their imagination to create what they were hearing on the radio. Television now provided the images created by others. They were no longer their own. The media’s ability to influence us took a new turn. We either had to accept or reject, in part or whole, what we were seeing. A whole generation of children would emerge dependent on viewing content rather than imagining it. The results are still a matter of debate, but the differences are palpable.

The early TV sitcoms were somewhat an extension of those from radio. Father knows Best, Ozzie and Harriet, Leave it to Beaver and The Honeymooners are perhaps among the best known. Westerns, like the Lone Ranger and Gene Autry, were also part of that transition. They continued attempting to reflect the social norms of the day just as their radio counterparts had done earlier.

Their critics complained that they reflected an unrealistic, Pollyannaish and unattainable way of life and that they were harmful because of it. Their defenders maintained they were reflecting ideals to strive toward, not be able to achieve wholly. Societies need ideals and heroes to guide their thinking and behavior. The Honeymooners were a fine example of this idea. Ralph Kramden, a bus driver in N.Y.C. and with the help of his pal, Ed Norton, a sewer worker, were forever getting involved in hare-brained schemes to make money; money to be used to create a better life for his wife Alice, whom he adored. Of course the schemes always failed but created substantial humor as the cast worked their way through the dialogue of each scene. The ending was always the most important part of the show. Invariably Ralph would sheepishly admit to his failings and Alice would always forgive him. She knew and understood his intentions. They lived in a two room flat with no creature comforts. They struggled to survive. Ralph felt like a failure
because he could not provide a better life for his wife. He tried so hard within the confines of his abilities, but failed every time. For this she loved him. Every show ended with Ralph taking Alice in his arms and saying, “Baby, you’re the greatest.”

Commercial messages explained the benefits of a product and why the consumer should purchase it. These messages spoke to people’s intellect not to their emotions. During the 1950’s this most probably reflected the better part of American life; people striving for better life. The humor was a relief from the daily struggle and instructive about issues involving success and failure. In retrospect, these early sitcoms may not have been as harmful as first thought.

People, in their everyday struggle to survive, are heroic. The ideal of a better life was not only economic but also cultural. Boundaries and guidelines about how people treat each other were a major part of every episode. They taught us how to behave and shaped our attitudes toward all elements of society.

The 1960’s was a tumultuous decade fraught with social, political and economic unrest. This decade is best defined by the Bob Dylan song, “The Times They are a Changing.” Some of the events like the three assassinations (JFK, Robert Kennedy and Martin Luther King), the Vietnam War, the women’s movement, the Woodstock Music Festival, Hippies and the drug culture, along with civil rights issues gave way to the 1970’s.

This decade would witness some of the greatest change in the social milieu in our history. The “Melting Pot” experiment would give way to “Multiculturalism”. Women, minorities and the youth culture would assert themselves in ways never before experienced. The era of the individual was about to replace the more traditional sense of community. Media content now started to reflect this change. Many accept All in the Family as the starting point for television. Archie Bunker made bigotry funny. He also made it socially acceptable. He gave us permission to talk and act it out in ways never imagined. Soon people began referring to others as “meathead”, “dingbats” and other such colorful phrases. Of course the purpose was humor and people have used epithets like this for generations, but has never elevated this behavior to a social norm. Across America, people reveled in this newly found freedom.

Individualism was beginning to exert itself in other ways as well. People no longer had to tolerate the shackles of traditional norms. Popular culture with its lure began to influence language and behavior. The hippie generation, with free love and hip music, allowed the use of drugs and alcohol to define their social norms. This behavior made its way into other TV shows, sitcoms and movies. Saturday Night Live, for example, continued what Archie Bunker started. Previously taboo topics were now becoming common place, particularly around sexual issues.

The 1980’s is generally recognized as the beginning of the “ME” generation. Multiculturalism would now start to recognize the individual as the face of their separate cohorts. This would eventually lead to the evolution of what many consider “excessive individualism.” “Shop till you drop” triggered a buying binge that featured credit purchases on a scale never before witnessed. “If you got it, flaunt it” became part of 80’s experience as designer labels led the drive of conspicuous consumption. Video games, minivans and a host of new technology products paved the way for the “you can have it all” society.
The 1990’s was the decade of the electronic age. The internet was born producing e-mail and e-commerce that would change the way we live and work forever. Hundreds of millions of people were now connected to communicate and socialize with a new on-line language (OMG, LOL, etc.) By the end of the decade, cell phones would continue the new communication revolution adding texting to the mix.

Social intercourse was beginning to approach “real-time.” What would be the effect of this revolution on the overall health of our culture? (For an in-depth look at this subject, see Television and American Culture by Jason Miller)

“Wherever we’re headed, America is evolving in ways most of us don’t like or understand. Individually focused yet collectively adrift, we wonder if we’re headed toward a waterfall. Are we?” Strauss & Howe---The Fourth Turning

The Fourth Turning is an interesting theory about historical cycles and how they might apply to America. It is worth reading because it does offer some important insights into the development of the 21st century.

The rock group Green Day released their album, 21st Century Breakdown to critical acclaim. Billie Joe Armstrong, the lead singer explains, “The album is a snapshot of the era in which we live as we question and try to make sense of the selfish manipulation going on around us, whether it be government, religion, media or frankly any form of authority.”

This music reflects the mood and attitudes of the new generation and perhaps of the country, at least certain segments of it. America is in a crisis. Great political, social and economic challenges lay ahead. Many believe that our once proud American Dream has now turned into a nightmare. Led by selfish, materialistic, self-absorbed Boomers, the nation has degenerated into an individualistic society of wealth seekers. The country’s common good and attitude of thrift, hard work and self-reliance have been cast aside for the corporate good, immediate material satisfaction and entitlement attitude. America is no longer the land of opportunity. It is the land of corporate fascism, benefitting the few. (Quinn, 7)

**Generation Zero**

*My generation is zero
I never made it
As a working class hero
21st century breakdown
I was once lost but never was found
I think I am losing what’s left on my mind
To the 20th century deadline*

*Videogames of the tower’s fall*
Homeland security could kill us all.

Green Day—21st Century Breakdown

CHANGES IN CULTURAL ADAPTATION OVER THE PAST 60 YEARS

How has cultural adaption changed over these past many years? What are some of the causes of these changes?

Steve Allen, in his book “Vulgarians at the Gate: Trash TV and Raunch Radio” talks about how in the 1950’s television was largely administered by ladies and gentlemen and produced programs that could be viewed by the entire family. Although there has always been a market for vulgarity, he said at present that all the major media from TV to movies, and from radio to the recording business, are all eager contributors in the general collapse of standards and behavior.

Michael Medved, a best-selling author and syndicated radio talk show host, wrote a book in 1992 describing how movie producers were attacking religion and families while glorifying ugliness.” America, he said, is a very complex country and the movie business is also very complex. There are elements of the entertainment business that are now worse than ever. Consider the music business. American popular music has never been uglier, more profane, so degrading and lacking in any restraint at all, ready to promote larceny and rape at will.” These examples reveal elements within our adaptation that suggests society exhibits a lack of moral restraint and inhibition and is losing its ability to control or influence that which it finds objectionable.

A gallop poll taken in May 2000 revealed that 77% of Americans believed that our morals were weaker than 10-15 years ago. (Helium 2010)

William Bennett, former secretary of education, published a book in 1999 titled The Index of Leading Cultural Indicators. Here are a few of the statistics he presented comparing life in 1997 with 1960.

- Violent crime increased by 467 percent
- Illegitimate births increased by 461 percent
- Children living in a single household increased by more than 200 percent
- Divorce rose by 100 percent
- Teenage suicides were up by more than 100 percent
- SAT scores dropped by more than 60 percent

Next, consider the results of a survey conducted by the Rhode Island Rape Center. The survey asked 1700 students, boys and girls, between the sixth and ninth grades attending adolescent assault-awareness classes conducted in schools across the state if it was okay for a guy to force a girl to have sexual intercourse if the guy spent money on the girl.

The shocking results: 25% of the boys and 16% of the girls said yes. 47% of the girls and
60% of the boys thought it okay if they had dated for six months (James Dobson and Gary Bauer, “Children at Risk” 1990)

Americans’ scores on a commonly used creativity test, the Torrance Tests of Creative Thinking, a standardized test that’s considered a benchmark for creative thinking, fell steadily from 1990 to 2008. Researchers believe growth in the time kids spend on computers and watching TV, plus a trend in schools toward rote learning and standardized tests are one cause. (Shellenburger, 2010)

Stop Teaching Our Kids to Kill: A Call to Action Against TV, Movie and Video Violence (Crown Publishers, 1999) by David Grossman provides evidence from studies after studies about how children learn to kill from violence as entertainment in television, the movies and interactive video-games.

There are countless statistics released by the Center for Disease Control (CDC.gov) covering a range of topics from youth violence and related behaviors to school violence and bullying, from health disparities to juvenile arrests. All these statistics and their ramifications are both sobering and very troubling.

Do we treat our children so badly that, in the end, they have no means of expression except through violence?

Michael Burke summarizes this well in his essay for Helium.

Society's values appear to be dictated by “shock value” as our level of acceptance encourages the very behavior we decry as immoral and corrupt. People want and expect instant recognition and fame in today’s society and are unwilling to make a commitment or personal sacrifice to achieve it. It is far too easy to become popular or recognized in our world by calling attention to yourself by misbehaving, acting in a vulgar fashion, dressing poorly or scantily to stand out in a crowd. Using loud and profane language appears now to be the norm. Commit a crime and blame someone else for your actions and you become nationally recognized Violence, crime and sex invade our households daily through TV, the internet and the lyrics to many songs. “Reality TV” has nothing to do with reality. Professional sports appear to be more about egotistical personalities and showmanship than athleticism and competition. Pop singers are more like pop screamers and with modern technology they almost all sound the same. If you have a little talent, look good and can dance and are willing to bare most of your body, people will watch you. If you have those attributes and get arrested for DUI or drug possession, you can become a pop icon (Burke, 2010)

The causes of this shift in our cultural milieu are complex and varied. Yet, two distinct and readily discernable trends are at the center of this shift; the “dumbing down “effect and anti-
intellectualism. The former is a measurable trend and the latter an attitude that fuels the “dumbing down” process. Dumbness, to paraphrase the late senator Daniel Patrick Moynihan, has been steadily defined downward for several decades by a combination of heretofore irresistible forces. These include the triumph of video culture over print culture (all video, digital and others); a disjunction between America’s rising level of formal education and their shaky grasp of basic geography, science and history; and the fusion of anti-rationalism and anti-intellectualism. (Jacoby, 2008)

In fact, the evidence for “dumbing down” is everywhere: newspapers that once ran foreign news now feature celebrity gossip, pictures of scantily clad young ladies and football; television was replacing high-quality drama with “lifestyle” programs; bonkbusters have taken over the publishing world and pop cd’s and internet connections have taken over the libraries. In the “dumbing down” world of reality TV and asinine soaps, the masses live in a perpetual present occupied by celebrity culture, fashion, a TV culture of diminished quality and range, an idealization of mediocrity, and pop videos and brands. Speed and immediacy are the great imperatives, meaning that complex ideas are reduced to sound bites leading to the “dumbing down” of culture into nothing more than a footnote to market-dominated consumer culture and a poverty of thought and expression (Sontag, 2009)


These phenomena did not happen overnight, but are the result of decades of subtle changes occurring in small doses as a technology driven society embraced tradeoffs made available. A favorite example is the lawnmower. The push mower, powered by muscle, provided the individual with fresh air and some amount of physical exercise. Then along came the power mower, driven by an engine, eliminating part of the physical exercise; but still allowing the benefit of fresh air. When manufacturers added a seat to the power mower, it eliminated all the physical exercise. The fresh air remained. Today there is a rumba style lawn mower. You simply put it on your grass and it does the rest. When finished, remove it until the next time. Of course this option eliminated everything: exercise and fresh air. The tradeoff in all this is convenience, time savings and comfort. Human nature is such that it is almost always preferable to do things the easy way when given a choice. The problem becomes the easy way is not always the best way. All technology allows for these kinds of tradeoffs. Microwave ovens can either be a tool to assist in cooking or a substitute for it. A calculator can be a tool to assist in numerical analysis or become the panacea for determining calculations. Think about the number of people who cannot make change from a simple retail transaction without the aid of technology. Computers, cell phones and all types of technological products are either tools to be used to assist our daily efforts or the basis by which our efforts are defined and determined. It appears that very many people chose the latter and as a result convenience and comfort became a way of life. This way of life has seen convenience and comfort gradually evolve into laziness and, in some instances, an inability or unwillingness to meet the physical, mental or emotional challenges of the day. One can only wonder to what extent our obesity problems are linked to this dynamic.

There seems to be a remarkable degree of consensus on a definition of today’s social ills. Individualism is tops, closely linked to greed and the decline in community; also part of the
definition is a sense of decline in values and a deterioration of virtues such as honesty, empathy, respect and reciprocity. Family breakdown and poor parenting feature, as do the misuse of drugs and alcohol, inequality and democratic deficit. (Lasch, 2003)

SOCIAL MARKETING

Social marketing always sought to benefit the target audience and general society, not necessarily the organizations originating the messages. There have been many successful social marketing campaigns over the years based on such ideas as, “Don’t drink and drive” (MADD), “Don’t do Drugs”, “Safe Sex”, “Recycle”, “Conserve Energy”, “Smoking”, “Have Regular Medical Exams”, “Eat Healthy Foods”. Each campaign identified the social problem associated with the behavior and exhorted the viewer with reason to engage or not engage in that behavior. These campaigns took the form of public service announcements and commercial messages as well as occasional promotions with media advocacy.

What seems today to be interesting about marketing is that the idea that social marketing uses the very same principles to positively influence society that are now being used to create new social difficulties. Marketing, mainly through the use of communication, uses seductive techniques to create desire for products; at its worst, is about the manipulation of human beings.

It responds to people only inasmuch as they are consumers. Its relationship to them is based on valuing them only in so far as they are able to consume…advertising has made the values and valuing of consumption and possessing ever more and grander consumables, not necessarily with any effort, the indication of social success. Advertising emphasizes pleasure and gratification rather than restraint and repression. It has created, together with other social forces, an expectation of entitlement and an increasing intolerance of frustration and any delayed gratification that now pervades the culture. Thus it values change for change’s sake, superficial, surface and shadowy change rather than any deeper move towards maturity or integration. These are the traits of narcissism in the individual which can also be said to characterize a culture or society (R.Cronk, 2002)

Marketing itself is neutral; the manner in which it is used determines its value. It can serve to dehumanize and enslave us in rituals of crass commercialization by infantilizing us with sugary sound bites of information or humanize us with smart, sophisticated explanations of reasons why we should engage in any behavior with any product or service.

In this dynamic, we see examples of the best and worst marketing can offer. In the past, control of this dynamic rested squarely with management of organizations engaged in commerce. Today, this is no longer the case. A new dynamic has emerged; consumer generated media (CGM). The social media world has a plethora of new communication tools at its disposal; Facebook, Myspace, Linkedin, Twitter and other such social networking sites, Blogs, Twitter, You-Tube and other viral video sites and mobile apps, together with a set of powerful, Personal Digital Assistants (PDAs like IPhone, Blackberry and Droid) features that allow consumers to create and share information approaching real-time speed.
With the ability of an ever increasing narcissistic and uninformed and misinformed society to create and share messages at speeds never before experienced, it is little wonder our culture is struggling on so many fronts.

Our social problems seem to increase daily. New research reports from both NGO’s and governments reflect the results of our inability to influence or control this happenstance. Every day another perversion in social media occurs. “Sexting” defined as taking pictures of one’s genitals and sending them over one’s PDA to another was the latest trend until recently a new approach developed where now high schools and college girls are encouraged to post provocative pictures of themselves on newly formed web sites where others can vote (using 1-10 numbering system) for their choice. RateBU.com is one such site.

The creators of these sites do so with the intention of developing products that capture millions of customers (users), whose size will attract the attention of bigger players who will then buy and incorporate them into their internet sites. Google, Microsoft and others very often employ this business tactic to improve their financial positions. Unfortunately these newer sites are a symptom of the very problems discussed in this paper. They exploit the masses for their own personal gain. As a result, social marketing and social media intertwine and a new hybrid is emerges in the form of social media marketing.

This new dynamic suggests that the term social marketing, as defined above, is becoming passé except in the narrowest sense (PSA's etc, replaced by examples of consumer generated social marketing messages. By co-opting media, people can now use technology to create content and influence the consumption of culture in ways once the sole purview of traditional media.

This has resulted in the development of social media strategies by many organizations to track CGM and determine how best to counter negative content (See the You-Tebe on “United Broke my Guitar”) and to harness this new movement by enlisting consumers to participate in marketing strategy (See Charlene Li’s book on Groundswell). As a society, we are still trying to understand how this movement is evolving and what will be the likely impact(s). Right now it appears to have a life of its own with little guidance or control. Many fear the combination of a "dumb- downed” mentality spreading influence with the speed and power contained in Buzz and Viral Marketing campaigns will only continue to exacerbate our social problems. A bold response is required if society is to effectively address these issues.

NEW SOCIAL MARKETING STRATEGY

Change is inevitable and provides society with many tradeoffs; something new replaces something old. The key to successful transitions becomes the ability to understand what is lost and what is gained. In 2007, a research team led by Eda Gurel-Atay of the Lundquist School of Business of the University of Oregon, commissioned a study in which 1500 Americans were asked to rate the importance of eight social values and to identify the ones they considered the most important. The scholars then compared the results with those from similar studies in 1976 and 1986.
The values were:
1. Self-respect (“to be proud of yourself and confident in who you are”)
2. Security (“to be safe and protected from misfortune and attack”)
3. Warm relationships with others
4. A sense of accomplishment
5. Self-fulfillment
6. Being well-respected
7. A sense of belonging
8. Fun-enjoyment-excitement (“to lead a pleasurable, happy life; to experience stimulation and thrills”)

Self-respect led the list in all three studies, with a greater percentage ranking it as the most important value in each new survey: 2007, 28.8%, 1986, 23.0% and 1976, 21.1%.

Security, on the other hand, plunged in importance: 1976, 20.6%, 1986, 21.0% and in 1976, 23.1%.

Warm relationships with others steadily grew in importance from 16.2% in 1976 to 20.9% in 2007 but a sense of belonging dropped from 7.9% to a mere 3.3% in 2007. It was overtaken by fun-enjoyment-excitement doubled from 4.5% in 1976 to 9.3% in 2007.

A sense of belonging (social connectedness) appears to have steadily eroded for all age groups, both genders, all education groups and most income groups in the U.S. This seems consistent noting that “If a person looks to himself or herself as the ultimate arbiter of most things, a need for belonging ought to correspondingly diminish.” (Jacobs, 2010)

One of the many questions these results raise in how people view the relationship of self-respect to being well-respected by others? Research and common sense dictate that they are reciprocal, you cannot have self-respect if you do not respect others. They want warm relationships with others but don’t value a sense of belonging. These findings seem a bit contradictory and may provide a key to a renewed social marketing strategy.

Respect, or lack of it, appears to be at the heart of most of our social problems. Technology has been the enabler. It has allowed us to make tradeoffs. Unfortunately many of them have been at our own expense. The conveniences in our lifestyles provided by technology have led to a degree of laziness in our thinking and behavior. Expediency is efficiency, often without recourse. First, respect for tasks well done has all but diminished. Excellence has been replaced by mediocrity. It seems pervasive. Next, respect for authority and institutions have greatly diminished. Individuals and media held each in very little regard. Listen to talk radio, many TV programs and people as they refer to their bosses and spouses, the government and other institutions. Finally, all this has trickled down to people. There is often very little respect expressed among people in their daily routines. Social grace has seemingly all but disappeared. Being polite and kind to strangers is not part of our habit. People use others with impunity to further their own ends. The media displays people as idiots in commercials and sitcoms. Often there is a mean-spirited tilt to the messages. Beer commercials are often among the biggest offenders. They display women as sex objects in scantily clad attire and men behaving...
moronically toward both the women and beer. Sitcoms like “Married with Children” represent a genre of programs that do the very same thing; portray people as characterizations of people without much substance. The list of programs and media content, that may offend our sensibilities and attacks our once common social values, seems endless. Today new entries include a group of “reality” shows that seems to challenge what is reality.

One viable defense advanced by purveyors of this programming is humor. They and their defenders argue that entertainment is the goal and the content should not to be taken seriously. The one serious flaw with this argument is that humor that denigrates, ridicules and debases our basic humanity is really not funny because people are the object of laughter. This type of humor exploits our human frailties rather than celebrates them. True humor, it can be argued, is when people can laugh at our common human frailties and we can laugh together, with each other, not at the other. True humor unites us in our humanity not divides us because we are human. People deserve treatment as intelligent, caring and sensitive beings, not something less.

The television show Candid Camera may be a good example. The program would create impossible situations and target one unsuspecting person with a gag. One example is pushing a car, without an engine, into a gas station with a young attractive woman behind the wheel and asking the station attendant to check the oil while filling the gas tank. When he lifted the hood of the car and discovered no engine, the expressions on his face and the dialogue with the driver, as he pondered the situation, were indeed hilarious. Once he was made aware of the gag, he joined in on the laughter. He reacted as a part of the gag, not the victim of it.

Social Marketing needs a new definition. Because it is no longer strictly the purview of institutions, everyone engaged in social media becomes, to some extent, a social marketer. People must be made aware of this and understand the power that they have to influence our culture. Humanity should marginalize images and messages that attack and destroy our common sense of humanity so that smaller and smaller segments of our society consume them. We need to improve the rather ineffective protection afforded our children from this kind of media content.

Institutions, governments and businesses should take the lead on this effort. Any media message, before being released, should answer one question, “How does this message portray people?” All messages must take care to try and protect our essential humanity. There is positive manner in which to express even critical messages.

Bill Cosby and Steve Harvey and Oprah Winfrey have work toward addressing these issues within the black community. Carolina Lightcap, president of Disney Channels Worldwide, said that her company’s new preschool channel, Disney Junior, which is directed at children ages 2-7 and will have its debut in 2012, would shift toward programming built around teaching about social values and behavior. (Barnes, 2010) College courses in social marketing and social media strategy should teach about the human element regarding all media content. Everyone should be able to intelligently comment on how media is affecting culture.
CONCLUSION

In the Statement of Ethics, proposed by the American Marketing Association under the heading of Respect, which they define as an acknowledgement of the basic human dignity of all stakeholders, the first entry says, “Value individual differences and avoid stereotyping customers or depicting demographic groups (e.g. gender, race, sexual orientation) in a negative or dehumanizing way.”

Society’s values change with time because change is inevitable. Older generations pass on and newer ones replace them. Older values shaped by the socio-economic and technological milieu of their day are subsequently replaced by newer values shaped by their successors. And so it goes. The American Dream has been built around the idea that succeeding generation would be better off than their predecessors. The problem has been in the definition of better off: financially, socially, culturally, ethically, security and so on. All available evidence suggests that on any and all of these variables, America is not better off. Our current crop of difficulties cuts across that entire spectrum. Institutions and businesses should encourage all Americans by joining in the discussion of what is appropriate for our cultural consumption. If technology allows us the ability to create media content and disseminate it in real time to potentially millions of people, then we should be ready to engage in discussions about what it is we are creating and what affect it might have on our cultural values. Marketers and organizations that specialize in social marketing communications probably bear an extra burden of responsibility in this regard. They have the responsibility for setting the standard that will be seen, discussed and even imitated by the masses.

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TECHNOLOGY TRANSFER: PREPARING THE MARKETPLACE

THE NEXUS NEEDS OF TECHNOLOGY TRANSFER AND COMMERCIALIZATION: THE TROUBLED CASE OF SOLAR ENERGY INDUSTRY

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EXTENDED ABSTRACT

Although technology transfer and commercialization is a major concern of government and industry (Marshall 2005), circumstances needed for success are elusive. Treatments of new product development and commercialization focus on organizational and buyer needs and wants, with little attention to market structures needed for success (Mohr et al. 2005). This theoretical paper proposes a "nexus" model of key environmental factors that must come together for commercial success. The model provides a macromarketing perspective of the social, political, and economic prerequisites for successful commercialization of a new technology. To illustrate the factors, we consider the current (as of 2012) difficulties of the solar energy industry.

While the traditional view of marketing is to provide customers with what they want, customers cannot want or feel a need for a benefit they have not experienced. For a new to the world technology product to be presented to a potential buyer, certain market structural conditions must exist. We suggest that these include: 1) a developed product with demonstrable benefits; 2) an educated distribution channel; 3) favorable political-legal conditions; 4) an educated market; and 5) support from economic institutions. A product must be designed to provide a benefit to a sufficiently large number of buyers that the production and sale can be seen to have profit potential. There must be a distribution channel of marketing intermediaries with sufficient expertise to deliver, install, and service the product. This requires a mechanism for educating marketing intermediaries, who then educate buyers. There must also exist a political-legal policy framework that removes impediments to the adoption of the technology, and, at best, legitimates its adoption. Although the influence of government policy is recognized (Lackman, 2005; Marshall, 2005), this political-legal condition will be seen by some as problematic either because of a laissez-fair view of capitalism and free markets, or for fear of government policy directing technology development into sub-optimal choices. There must then be a market educated as to the potential benefits of the new technology. This puts marketing in a leadership rather than a reactive role. But, as the market develops, the marketer must adapt to the market's evolving definitions of the benefits of the technology. Finally, economic institutions must recognize the durable value of the new technology and be willing to underwrite its deployment by providing credit for purchases and by providing insurance coverage. Credit supports product
development, distribution, floor stocks, and end user purchases. These factors, or their lack, underlie the state of the solar energy industry in the United States today.

Amidst the energy crisis of the 1970’s, significant interest in solar cells for electricity developed. However, widespread solar production of electricity has been impossible until recently, due to the expense of collection devices and the inability to link solar cells to national electrical grids. Industry research has since made photovoltaic cells (PV) feasible for remote applications and increased production efficiencies have led to decreasing costs and practical applications (Efird, 2010). Today the majority of PV modules are used to supply electricity to national grids. More than 100 countries use solar PV and financial incentives by governments in countries such as Japan, Italy, Spain, Germany and France have triggered growing demand (Lorenz et al., 2008). The three leading countries in solar power (Germany, Japan, US) represent nearly 89% of worldwide PV installed capacity. Despite growing demand, the industry now resembles a classic bubble that began to burst in Fall, 2011. Several companies that received subsidies and loans from their governments have declared bankruptcy. Evergreen Solar closed its factory in January 2011. SpectraWatt, a company in N.Y., declared bankruptcy in August 2011. GE and United Technologies Corporation recently decided to scale back investments.

Applying the five nexus conditions to the situation of solar energy today, we see a lack of the structural conditions needed for the near term commercialization success of the solar energy industry. Earlier, we suggested five broad structural conditions necessary for successful technology transfer into the commercial sector. These were said to be: 1) a developed product with demonstrable benefits; 2) an educated distribution channel; 3) favorable political-legal conditions; 4) an educated market; and 5) support from economic institutions. Today solar power lacks a demonstrable personal benefit needed for widespread adoption. This is in part due to a lack of clear government policy, which, in-turn, has impeded the development of an educated distribution channel, and through it an educated market. The lack of clear government policy also creates economic uncertainty that affects credit markets needed to finance purchases for home or business. Together, these contribute to the unstable, underdeveloped market structures that underlie the slow adoption of solar technology and its uncertain future.

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A NEXUS FOR TECHNOLOGY TRANSFER AND COMMERCIALIZATION: A MARKETING EMPHASIS APPROACH

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ABSTRACT

Although the primary business apparatus used to move technology from the workbench to the commercial world has been product development, there is a better way to bring technology enhanced products to the marketplace. This article reviews a nexus of the rudimentary techniques and process for the commercialization of government developed technologies. This article concludes that the use of a pull technique provides a better solution to marketing commercialization, than the push methods used by government and government sponsored technology centers. It had been concluded a decade and a half ago that both push and pull techniques could be combined to provide a better path and quicker solution to technology commercialization. Additional studies should be performed to examine and propose better methods for moving technology to the marketplace. This article examines the marketing strategy used by NASA, one of the federal government’s successful technology development organizations.

INTRODUCTION

Technology commercialization (TC) is the process of employing the benefits of a new process or technique (a technology) in the production of a new or existing product. A product as used here is any Idea, good or service that is offered for sale to a market. Technology is the result of discovery from research and development culminating in information that has the potential to benefit the production process, improve the end product or to introduce a new or different product. The U.S. has an exemplary record in developing new product and process technologies; however their exploitation through commercialization is lacking (Badawy 1991). The ability to quickly employ new technology developments either to products or processes has been an important strategy in sustaining an international competitive advantage for the U.S. over the past four plus decades (Fronbach1993). To remain competitive in today's world market, a firm must continually introduce new, technologically advanced products (innovation), technologically enhanced existing products (continuing improvement), or an improved current system for producing the product through the application of technical knowledge to operations (process technology). Changes in the global competitive environment have reached a brisk pace with the frenzy being fueled primarily by new product and process technologies (Aaby and Discenzo 1993) the national interest refocuses towards increasing U.S. global competitiveness, the federal government is also shifting its attention away from decades of cold war pre-occupation and redirecting its efforts by sharing more of the public funded research with commercial firms (Radosevich and Kassicieh 1993). The federal government is shifting the emphasis of the public funded research and development (R&D) infrastructure, which well exceeds the capacity of
commercial organizations or consortiums in sheer size and dollar capacity, to peaceful applications (Rivers 1994). The Clinton/Gore administration’s technology policy has been in the direction increasing U.S. global competitiveness (Yahn 1993). The administration has expanded the federal government’s participation by supporting legislation to expedite and increase the transfer of technology to commercial firms (Radosevich and Kassicieh 1993).

Technology transfer is a slow process which often takes years or decades before a new technology is fully incorporated into the commercial markets. To help drive the technology toward the marketplace the federal government has instituted a process to drive commercialization of high-tech technologies towards product commercialization. Is this continual development and pushing of technologies toward commercialization that makes NASA such a conspicuous figure in that commercialization of product.

The nexus below depicts the process that an entrepreneur should follow in moving government technology from the workbench to the marketplace. The steps are necessary to ensure that the product is developed from a technology that may be due to the environment is properly aligned with consumer needs and wants. Whether the product is designed for commercial end-user or the final consumer, the process should follow the same nexus. This process does not start with a reliance on marketing principles but does heavily rely on marketing to evaluate each of the following decision nodes.

Although, government policy dictates the path a technology will take it is up to the entrepreneur to determine the process for evaluating the market potential for available technologies. The first step in government policy would be to identify the source of technology from among the multitude of government organizations that produce high-tech processes every year. Organizations such as NASA compile their annual supply of technologies in convenient packages for review by budding entrepreneurs. Technologies designed and created by NASA will
be used throughout this article as they are a leading edge and highly respected source of new technologies (NASA spinoffs 1976-2011).

**Government Policy**

Government agencies had long been mandated to demonstrate socioeconomic and quality-of-life benefits of their activities, including technology development (Novak, 1997). The federal government and NASA have established a National Technology Transfer Center at the Jesuit College in Wheeling, West Virginia. The technology center is the pathway for accessing federally funded research and available technology. The center has a free service known as Gateway where viewers can maintain personal contact with federal laboratory officials (National Technology Transfer Center, 2011). The technology center provides resources through various government agencies and their websites that offer new technologies for commercialization. The NTTC provides website links to the major technology resource centers. The center also provides various levels of assistance in understanding the technology that's available, and is applications in the marketplace. Through various publications the center provides additional understanding of available technologies and their applications.

It is through these various channels of the NTTC that entrepreneurs are able to link with available technologies that are available for development into products and commercialization. This is the beginning of the link between government technologies, potential product development and commercialization of innovative products. Although this is the starting point for an organization to identify the appropriate technology to enhance a product and increases marketability is just the beginning.

A path through this set of resources at the NTTC is to select one of the organizations that provide leading edge technology to private sector entrepreneurs. For example, the NASA tech finder assists entrepreneurs in bringing technology to the marketplace (NASA TechFinder, 2011). This is just one path available to entrepreneurs in locating leading-edge technologies.

**Technology Readiness**

Technology readiness is just another word for new product development process. New technologies go through a number of phases who should for they declared ready for application to product development. Entrepreneurs frequently run into technologies they believe would enhance their product but find that it has not yet reached readiness point. This is a decision that the technology developer/innovator make before offering the technology for commercialization. Entrepreneurs should be seeking technology that has reached the readiness level before considering applications to a product for commercial use (Marshall & Piper, 2000).

Technology readiness is the gateway for organizations to approach the NTTC for access to the research on the technology and permission to consider commercialization. Technology readiness it a process performed by the technology center researchers to ensure that the technology is stable for inclusion in commercial products. Only after exhaustive test of the technology showing is stability does the NTTC approves it for commercial applications.
Product Development

Once the technology proves to be stable and determined to have commercial applications does it receive approval from the NTTC. This approval only implies that the technology is stable and makes no warranties as to its commercial application to any one product (Federal Technology Consortium, 2011). It is the entrepreneur's task to ensure that the product derived through or with the technology has true commercial value. Often time’s firms spend laborious hours connecting the technology to enhance a product only to find that consumers find little benefit in the renewed or new product.

Market Preparation

Studies have shown that products must be fully integrated with the latest technology to be successful in the commercial marketplace. Products that meet only part expectations of the consumer often are doomed for failure and become another statistic to be discussed by business classes. It is only when the technology is completely ready and the entrepreneur has the foresight to discern a viable product and the ability to test that concept with consumers before introduction to the marketplace that makes it successful. There are instances of products being introduced to the marketplace with little or no marketing research, but they are few and far between. It is those products that had significant testing with actual consumer use that are successful in the marketplace.

So it is incumbent upon entrepreneurs to fully understand the market place and consumer needs in approaching a market with a new technology. It's the application of technology to a current or latent product opportunity or need that begins the successful lifecycle of a product.

When entrepreneurs determine that the product development process has completed cycle and the product is ready to sell. There is a working process that should be followed to ensure correct market entry. The following diagram illustrates the marketing process or the nexus on technology commercialization. To realize the benefits of product design from new technologies, entrepreneur are advised to follow a set of steps that will lead to product commercialization, or a decision that the marketplace is not ready for the new technology (Miller and Floricel, 2004).
CONCLUSION

The above data in organizational information paint a clear picture that is best for organizations to follow a path depicted by the nexus diagram. When organizations and entrepreneurs enter the technology commercialization process through a technology centers it provide a better path for absorbing a new technology into new and/or current product, thus producing commercial products that will be adopted by users and consumers. The pull technique has been found to be consistently better in bringing products to market because it attracts those innovators and doors will see the value in specific technologies and can translate that into a commercially viable product. Following the path has been found to be the most effective and efficient method for producing commercial products with new technology. Other research shows that those who stray from a consistent path generally have less success.

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CHALLENGES AND BARRIERS FOR SMALL BUSINESS SUCCESS
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EXTENDED ABSTRACT

Government sponsored industry, government sponsored universities, government sponsored research and development was the norm during the first ¾ of the past century. In order to insure national security and to increase international competitiveness of US industries, our government built strength in selected topics and in selected industries by investing heavily in selected regions of the country, as well as by investing heavily in selected universities. That is, building/subsidizing industry and initiating, from virtually nothing, the basic and applied sciences, as well as building strength in science and engineering programs by subsidizing facilities in selected regions and at selected universities.

This model used during the past century by US government has ceased to exist; A) first, owing to the enormous increase in the number of industries/universities all competing for the same pot of money, that is, demands grew beyond the available resources for government subsidy; B) and second, owing to the increased demand by global market and by the requirements imposed by world trade organizations for removal of government subsidies.

In contrast, the industries and universities outside USA take advantage of indirect government subsidies in order to enhance their global competitiveness. For two examples, the unfair control of the currency in countries such as China, and the suppression of salaries and enhanced government benefits of workers in France. Both obscure the real cost of producing goods, such as Airbus in France, both reduce the price of exported products. Such actions work against leveling the global field of competition and work against pure capitalism, none of which is discussed nor directly targeted by world trade organization.

The scope of this abstract is intentionally limited to the case of high-tech small businesses, due to lack of space and of time for discussion and, above all, to make the case easy to digest. Presently, the method by which many high-tech small businesses acquire resources are through one of the following: A) personal and family resources; B) investments, such as banks and private investors; C) Federal resources, that is through the Small Business Innovative Research (SBIR) competition, and the Small business Technology Transfer Research (STTR) competition; D) through State entrepreneurship competitions. The number of high-tech small business taking advantage of each of these cases for their operation varies from region to region as well as from state to state which depends on the available wealth in each region for the cases A, B and D, and for C and D, and depends on the relevance of the innovation and level of awareness of the small businesses about availability of funding or awareness of the relevance of the innovation. For the SBIR, STTR, and the State’s entrepreneurship initiatives example, the initial idea and the feasibility of the innovation maybe supported by SBIR phase one, and/or the innovation of an off the shelve tech transfer idea may be supported by STTR phase one as well as by each State’s entrepreneurship initiative competition.
Only a small percent of such successful SBIR phase one (I) /STTR phase one (I) are invited to propose for phase two (II) of the SBIR or for phase two (II) of STTR. Some agencies have, already, started phase three to allow applicability of the successful project, whereas the commercialization of the best of the best ideas are not supported by government.

The traditional approach by small businesses for commercialization of their products has been by borrowing money, using personal/family assets, accessing venture capitals and/or the angel investors. All these are useful tools for commercialization but none are a substitute for initiatives by Federal and State governments to compete in the global commercialization race with great ideas and maintain high-tech US small businesses globally competitive.

The lack of Federal initiatives to support or to sponsor the commercialization or the scale up production for outstanding products, for US inventor’s disruptive technology or for US disruptive innovative ideas has not helped to create new markets and has not helped to create value networks in ways that both the market and the consumer should expect. The current Federal government approach to disruptive technology has been through one of the national/government labs, rather than through new programs, Phase III, Phase IV or even Phase zero. This approach inhibits the race to commercialize and scale up the production of small businesses, and increases the tendency of most new small businesses to fall in the “valley of death” or to buy out by foreign entities, if successful.

The simple phase zero (realization of idea), phase III (Scale up feasibility) or Phase IV (race to commercialization) programs build around the same concept as SBIR and STTR, but are not necessarily based on Science and Engineering. They can grow the economy and impact global competitiveness of the nascent US high-tech small businesses by nurturing disruptive ideas and disruptive technologies to the point of commercialization.

This new model is not hard to understand by those who start high-tech small businesses and by those who have competed for the two phase innovative research/technology transfer programs. The model is appealing, since a multi-phase program supports the commercialization of disruptive ideas and technologies in natural steps of a ladder for scale up production and favors winners in the race for global leadership in high-technology. After the production scale up phase, the cost of the product is tremendously reduced. The small business may then owe the government the cost of the scale up, without having risked loss of personal and family assets in an inadequately funded process of production scale up and commercialization. An additional bargain is retention of US born high-tech ideas, rather than risking a loss of the commercialization race to foreign countries’ subsidies or ownership.
TOWARD A PHILOSOPHY OF TECHNOLOGY

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EXTENDED ABSTRACT

Since the development of science as we know it today, its ultimate purpose has been, in Francis Bacon’s expression, the elimination of the “inconveniences of man’s estate,” not science for its own sake which is a uniquely Aristotelian view. Whether science preceded technology as Heidegger (1977) suggests or technology preceded science as White (1967) suggests is moot at this point. Since the 19th century, they have formed an indissoluble unity used in the service of industry becoming the means for economics’ end of perpetual growth and increasing efficiency. While there have been many negatives that can be attributed to technological change, the sum of the achievements seem to have far exceeded the problems. This might be largely attributed to proponents of technological progress who are conditioned to see only the benefits (Postman 1993).

While no one argues for returning to pre-industrial life as is often suggested by critics of technological critics, it is argued that technological somnambulism is no longer a viable strategy for technological change. We must examine each application for both its advantages and disadvantages in a more comprehensive and humane way than offered by the prevailing technological assessment methods which typically confirm that what one wants to do is what one ought to do (Winner 1986). This suggests that technology, particularly large scale technology, has an embedded political nature through which it leads toward certain decisions and away from others. Some technologies conduce to democratic institutions and others authoritarian institutions. Some are destructive of the environment and others less so (Winner 1986). Technological choices represent political as much as economic choices.

Technologies, once accepted in society are incorporated into the mode of reproduction, and the predominant mode of reproduction in Western industrial societies is capitalism. Technologies develop around the mode of reproduction and are incorporated into it when they serve its established institutions. Within capitalism, some of these institutions are representative democracy, concentration of control in hierarchical organizations, market solutions to allocation problems, and privately held corporations operating for profits. Techniques that fit this institutional structure best will become technologies. The primary criterion through which the efficacy of a technology is judged in this institutional arrangement is its ability to deliver the “goods” as efficiently as possible (Leiss 1990).

From the collective perspective, the rationalization of politics is an issue to be dealt with. Technologies lead to the rationalized control of processes, and to the extent that greater efficiency is achieved as, for example, through bureaucratic organization, this is considered progress. If we assume that the political end is to develop and maintain institutions compatible with democratic values, then public communication regarding how individuals want to live in the expanding technological world is demanded. Thus economic wants and political wants are fundamentally different. The first regards what we want to have and the second regards who we
want to be. But just because life in modernity is less burdensome (economics) does not mean that it is more liberating (political). It cannot be assumed that the rationalization of means to achieve economic goals is liberating if the ends themselves have not been examined rationally. This is what Thoreau referred to when he described technological development as “improved means to unimproved ends.”

While humans can adapt to rationalized production and politics and call it exercising political will, the question is how to bring rationalization while maintaining democratic institutions, i.e., reconciling technology with the social life world in all of its dimensions. This means increasing both negative freedoms (reducing constraints on choices) and positive freedoms (the ability to enact the life one chooses to live). The latter does not necessarily follow naturally from the former. But with the control of the technological process in social development, the social life desired by the actors can be achieved through rational discussion predicated on knowledge of the true narrative of one’s existence. In doing so, the dialectic of potential and will can be reconciled when knowledge of the effects of technological development are understood. In this case technological progress can be directed in achieving rational ends through rationalized means.

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SERVICES MARKETING AND RETAILING

SMARTER ESCALATION OF TECHNICAL SUPPORT CALLS

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ABSTRACT

Many have experienced frustration when contacting a technical support call center because they are walked through a script that is far below their technical capability. We believe new approaches to improving these services should be explored based on existing paradigms in customer relationship management. This paper proposes an approach called smarter escalation which involves collecting information about a customer’s experience with troubleshooting, and then routing customers with a higher level of experience to an appropriate agent. Benefits of smarter escalation include various improvements in call center-related metrics and should interest a wide range of customers and companies providing technical support.

INTRODUCTION

Technical support call centers are designed to provide after-the-sale service for firms in the hardware, software, and other high-tech industries. The staff members (also known as “agents”) who handle the calls possess skill sets that vary widely from a basic troubleshooting approach that follows a script, to advanced critical thinking skills.

Numerous studies of these call centers have reported high levels of dissatisfaction with their services (Consumer Reports, 2004; Dawson, 2004b; Desmond, 2004; Gans, Koole, & Mandelbaum, 2003; Johnson, 2003; Lundquist, 2003). Callers who are experienced troubleshooters especially dislike these call centers and do everything possible to avoid them. In addition to using their best troubleshooting skills, they check the manufacturer’s FAQs, ask co-workers for help, and consult the user manuals before they call the support center.

What they’re avoiding is not just the long wait times or multi-layered menu systems. What many experienced users dislike most is dealing with Level-1 agents who have been instructed to use a troubleshooting script. A typical scenario that frustrates experienced users goes like this:
Caller: I’m having a problem with xyz…

Agent: Let’s turn off your computer, wait two minutes, and then turn it back on and see if that solves the problem.

Caller: I’ve already done that.

Agent: Please do that again for me.

The process wastes everyone’s time as the Level-1 agent attempts fixes that the caller already tried (Johnson, 2003; Lundquist, 2003; MacVittie, 2001). Only after the script has been exhausted will the Level-1 agent consider escalating the call to Level-2 where a more skilled agent begins to think critically about the problem. As described above, the tiered model, sometimes called the front-line/back-line approach, is commonly used in technical support call centers (Tourniaire & Farrell, 1997). This paper proposes improvements to the model.

The new approach, we refer to as smarter escalation, involves assessing information about a customer's troubleshooting experience and then routing those with a higher level of experience directly to a Level-2 agent. The potential benefits of smarter escalation include: (1) an increase in customer satisfaction, (2) an increase in job satisfaction for Level-1 agents, (3) a reduction in customer wait times for Level-1 and Level-2 agents, (4) an increase in the percentage of problems solved on first contact, (5) a decrease in the time it takes to solve customer problems (call duration) and, as a possible side benefit, (6) an increase in the rate of product registration.

BACKGROUND

Call centers are an important and growing part of the global economy. The Incoming Call Management Institute (ICMI, 2008) estimates that in the United States alone there are over 47,000 call centers and 2.7 million agents. Globally the growth is extensive. For example, the demand for agents in India is so great that 20% of the positions are unfilled because of a shortage of skilled labor. Business leaders should be especially interested in the success of call centers because they serve as the primary customer-facing channel for firms in many industries.

A number of efforts have been made to try and improve call centers. For an extensive review of the research on call centers including the multi-disciplinary aspects of forecasting, capacity planning, queuing, personnel scheduling, sales, and marketing, readers are referred to Aksin, Armony and Mehrota (2007). The technological side of the business has undergone considerable change over the last twenty years (Dawson, 2004a). Beginning in the 1980s, automatic call distribution (ACD) systems were popular. These systems use proprietary hardware and software for routing calls to agents based on a wide variety of criteria. By the early 1990s, due to their closed architectures, ACDs could not easily communicate with the increasingly sophisticated software applications that existed on corporate networks. Computer telephony integration (CTI) systems were developed to help solve this problem. Today, the Internet is being used to organize multiple call centers into one effectively managed whole. The near-zero
transmission costs across borders, combined with relatively low labor costs, makes locations like India attractive as call centers. More sophisticated software is also on the market, including applications that handle issues like agent management, workforce optimization, supervisor monitoring, and real-time analytics (Dawson, 2004a).

With several new technologies available for call routing, one might think that caller satisfaction levels are on the rise. Sadly, just the opposite is the case (Consumer Reports, 2004; Dawson, 2004b; Desmond, 2004; Johnson, 2003; Lundquist, 2003). It is important for business leaders to realize that while call center workers think only 2% of customers go away “not very satisfied,” in fact a disturbing 29% of customers say they were not satisfied (Dawson, 2004b). This is particularly significant since a large majority (75%) of call centers use customer satisfaction as the primary metric for determining the success of the center, above other measures like call duration and even sales (Dawson, 2004b).

Historically, most research on call center operations has equated service quality with waiting times. However, numerous studies have found that customers place a high value on other dimensions including first call resolution and perceived agent competency (Aksin, et al., 2007).

It is not the intent of this article to minimize the efforts of those who have developed hardware and software solutions for the call center industry. However, in light of the disappointing customer satisfaction reports, the authors believe that new approaches to improving technical support need to be considered.

**SMARTER ESCALATION**

Level-1 agents are relatively inexperienced workers who are generally required to use a basic Level-1 troubleshooting script. The types of problems that they can solve have been anticipated by the vendor organizations, and the solutions simply need to be retrieved and delivered with minimum modification. Given the Level-1 agents’ more limited abilities, it may even be counterproductive for them to attempt to solve problems beyond their script (Shumsky and Pinker 2003). As a more experienced customer will become easily frustrated being walked through the script, a challenge for the Level-1 agents is in knowing when to pass on a customer to the agent with more expertise without delivering the script verbatim.

The key to the new approach is to use information about customers to predict the most appropriate service level for them. *Specifically, smarter escalation involves collecting information about a customers’ troubleshooting experience, and then using that information to route customers directly to their most appropriate level of support.*

Smarter escalation is an extension of a process already used by some manufacturers. For example, if a technician in an IT department calls a computer manufacturer for support, the call is handled differently than if the same technician were to call from home regarding a product they purchased. In the former situation, the vendor knows the call is from an experienced user, so it is routed to an agent accustomed to solving problems of experienced callers. Smarter escalation applies that same reasoning to all who call for technical support.
A potential concern with this approach is that demand for the more costly Level-2 agents may grow. However, over time, we do not expect that to be the case. Our approach will result in more successful problem resolution, limiting the number of callbacks that may result without it. Fewer callbacks will actually lessen the load on the entire system (de Véricourt and Zhou 2005). The intent is not to send more users to Level-2 support agents. Rather, the intent is to identify users who are likely to require Level-2 support, and route them there as their first point of contact for more efficiency and effectiveness. The goal of smarter escalation is to provide the following benefits:

- Overall customer satisfaction with technical support should increase as a result of customers being more accurately matched to the level of technical support appropriate to their skill level. This should also result in positive outcomes for company perceptions and customer retention.

- Customer confidence in the agents’ abilities should increase for experienced customers, because they do not have to follow a Level-1 agent through a Level-1 script before being escalated to Level-2.

- Job satisfaction for agents should increase, because Level-1 agents would be appropriately matched with relatively novice users and their problems. This should also result in a lower turnover rate for Level-1 agents.

- Customer wait times for Level-1 agents should be reduced, because experienced callers will bypass them. Customer wait times for Level-2 agents will decrease as a result of bypassing the Level-1 agents. Shorter wait times should result in a lower abandonment rate (the percentage of callers who hang up or disconnect prior to answer).

- The percentage of problems solved on first contact should increase, because experienced callers and experienced agents can begin critical thinking on the problem from the first minute.

The technology for smarter escalation already exists. For example, if a Spanish speaking customer calls with a problem related to a particular software application, the system can route the caller to an agent who can both speak Spanish and has skills with the specific application. Either a CTI or an old-style ACD could be used. Both systems enable the automatic routing of calls based on the characteristics/needs of the callers and the skills of the agents. Indeed, such routing techniques have outperformed first-available-agent and first-come-first-served techniques in many situations (de Véricourt and Zhou 2005).

To implement smarter escalation using either system, the first step would be to collect information on the experience level of the customers. Once that is done, the system could be programmed to use the experience of the caller to route incoming calls to the most appropriate service level. The logic of this approach is precisely the purpose of customer relationship management systems which seek to provide the right product to the right customer based on the customer’s needs (Sun, Li and Zhou 2006).
Collecting Customer Information

This raises the question of how to assess a customer’s experience level to input into the process. To be considered experienced, customers should, at a minimum, routinely attempt to diagnose their own problems before calling technical support. This includes performing the items in a typical Level-1 script. Based on earlier studies (Desmond, 2004; Goldsborough, 2004; Snyder, 1999), as well as the authors’ experience with technical support, we suggest the following four questions as a starting point. The possible responses to each question are: Always, Sometimes, Never, and Don’t Know.

Before Calling Technical Support Do You:
- Turn the item off and back on to see if that solves the problem?
- Write down the symptoms of the problem or the exact error message if one is displayed?
- Try to recreate the problem and note the steps leading up to the problem?
- Search available FAQs for a solution?

We suggest that a customer who responds with “Always” to all four of these questions would perhaps be better matched with a Level-2 agent rather than the current default Level-1. On the other hand, a customer who responds “Never” or “Don’t Know” to all four questions would be best matched with a Level-1 agent. The authors believe this would be an excellent starting point and would significantly improve technical support call center metrics. However, beyond these two extremes, companies will want to fine tune the scoring based on their experience with the new approach.

In addition to the four questions above, companies may find it useful to add product specific questions. For example, a company’s Level-1 script could be used to develop a list of relevant questions for the customer. Also, companies may seek guidance from assessing customer service logs to look for the few most common problems that the greatest percent of customers experience. Once data are collected, either discriminate analysis or a neural network could be used to determine which customer responses best predict the need for Level-1 versus Level-2 support. Customers who are likely to require Level-2 support would be routed there as their first point of contact.

Updating company knowledge with respect to the customer can improve the success of the interaction (Sun, Li and Zhou 2006). To date, no company has reported collecting information specifically about the troubleshooting skills of their customers. This raises a question of when is the best time to collect this information. If customers are asked these questions when they first call for technical support, they may be annoyed by questions that seem unrelated to the immediate problem. We suggest it would be best to capture this information when the customers register their products. At that time, there is no reason to believe that the customers are under any unusual stress or time pressure. Alternatively, collecting one or two answers each time a customer has contact with the company (perhaps while they are on hold or when they visit the company’s website) is another strategy that may be employed.

Should the customers be told what the information is being collected for? If they are told of the plan to use the information to help better route calls to the appropriate service level, this
might serve as an incentive for them to supply the information. In fact, a well-crafted notice of how the information is to be used may result in an increase in the rate of product registration, especially among the more experienced users. On the other hand, telling customers may encourage relatively novice customers to inflate their experience levels by answering “always” to all of the questions. To address this potential problem, the Level-2 agents should be empowered to lower an experience rating, if the customer calls with a problem that could have been easily resolved at Level-1. Sending them back to a Level-1 agent immediately (rather than putting them on hold to wait) should increase the customer’s satisfaction and free up the Level-2 agent’s time for more experienced callers. By having their rating downgraded, these customers cannot easily cheat the system by repeating this process the next time that they call.

CONCLUSIONS

Companies should realize that their call centers affect how their products and corporate brands are perceived, either positively or negatively. Unfortunately, over the last few years, the trend in satisfaction with technical support has been negative (Consumer Reports, 2004; Dawson, 2004b; Desmond, 2004; Johnson, 2003). Clearly, there is a need for better approaches to technical support. In summary, because smarter escalation enables experienced users to bypass Level-1 support, the less-experienced users should have shorter wait times for that level. The Level-1 agents should be more satisfied with their jobs, because they are more appropriately matched with relatively novice users and their problems. This is important, given that the attrition rates for agents can reach 35% per year (Johnson, 2003). At the same time, experienced users should be more satisfied, because their initial contact with technical support is with a Level-2 agent who is prepared to use critical thinking from the first minute of the call.

Due to these potential benefits, the concept of smarter escalation should appeal to a large majority of consumers and providers of technical support. Although field research is needed to determine the most appropriate ways to implement the concept, the technology is readily available, and this paper suggests a variety of ways to proceed.

One thing is certain. For the foreseeable future, hardware and software products still require technical support. Companies that decide to try smarter escalation should experience an increase in both customer and employee satisfaction. That in turn should translate into greater customer retention and, ultimately, a competitive advantage.

REFERENCES


UNDERSTANDING THE IMPACT OF PRODUCT RETURN POLICIES ON CONSUMERS
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EXTENDED ABSTRACT

Retailers must design effective return policies that help limit unnecessary product returns. However, to do this, marketers must understand the influence Product Return Policies (PRPs) have on consumers - including the effect varying PRPs has on consumers. Despite the substantial impact of product returns on retailers, there has only been a limited amount of research focused in this area. Peterson and Kumar state in a 2009 article in the Journal of Marketing that, “The literature on product returns is sparse, especially in relation to analyzing individual customer product return behavior” (p. 35).

The literature on consumer-retailer returns is limited; however, the work that has been completed has given much insight into product returns from both the consumer’s and the retailer’s perspective. This paper extends the product returns literature by specifically addressing how and why consumers react to restrictive PRPs as well as how the variation between and within retailers’ PRPs affects consumers. Building on the recent work on PRPs and the theory of psychological reactance, we develop a conceptual model and propositions that offer insight into consumers’ responses to PRPs.

We suggest that control, or lack thereof, is a major principal underlying consumers’ responses to restrictive PRPs. “Control” is defined as the power to direct or determine. Brehm (1966) suggests a non-generalized conception of control in his theory of psychological reactance and concludes that the motivation to control is specific to the situation. According to Brehm's theory, when individuals expect to have control over a behavior and this control is threatened, psychological reactance (control motivation) is aroused. Psychological reactance is a motivational state that has energizing and behavior-directing properties. The theory predicts that psychological reactance arousal leads to negative emotions, negative attitudes and the direct/indirect reassertion of control.

The key differentiating factor between Brehm’s theory and the generalized theories of control is that the theory of psychological reactance is situation specific: consumers do not expect to control everything, but rather they expect to have control in certain situations. Brehm (1966) also asserts that only when this expectation exists, which is acquired through experience, formal laws and agreements, do individuals experience the motivation to control.

We employ the theory of psychological reactance to explain consumers’ reactions to reductions in control caused by restrictive RRP s. Return behavior control is defined here as the degree of control that consumers have in the product return process. Our conceptual model of the impact restrictive PRPs have on the consumers’ reactance is displayed in Figure 1. This
model suggests that as consumers’ return behavior control decreases reactance is aroused which leads to negative emotion, negative attitude and retailer avoidance. However the relationship between return behavior control and reactance is moderated by consumers’ expectation of control.

Figure 1. Model of the Impact of Restrictive PRPs

Brehm and Brehm (1981) define the expectation of control as having the perception that one can affect the probability of the occurrence of a specific behavior. They suggest that individuals will only experience reactance if they view themselves as having control over the behavior under question. The necessity of having an expectation of control for reactance to occur has been empirically tested and supported in the literature (Jones and Brehm 1970; Hammock and Brehm 1966).

Many retailers print their return policies on the back of their receipts and post their policies at their service desks or on their websites. Thus, during the initial purchase with the retailer or even subsequent purchases, the consumer may not be aware of the retailer’s PRP until she either considers returning a product and reads the back of the receipt or attempts to return the product in person. This observation is supported by a recent survey which found that 38% of online shoppers and 46% of in-store shoppers do not review the retailer’s PRP prior to purchase (Ignelzi 2010). In these situations, consumers likely rely on either their direct or indirect experience with that specific retailer or other similar retailers to determine their return expectations because, according to Brehm (1966), the prior experience of control creates the expectation of control. Hence, consumers who have experienced a less-restrictive PRP from that specific retailer or from similar retailers may begin to expect less-restrictive PRPs. In these situations, restrictive PRPs will likely arouse high levels of reactance. Similarly, consumers who have experienced highly restrictive PRPs either directly or indirectly may begin to expect highly restrictive PRPs. In these situations, restrictive return policies should not arouse as much reactance.

The situations stated above assume that the consumer is not aware of the retailer’s PRP. In situations where the retailer has made the consumer aware of the PRP prior to purchase, consumers would likely not rely on previous experience to determine their expectation of control. They would understand the level of control they will have over their return behavior because the retailer informed them of the policy thus setting their expectations. Hence, high levels of reactance should not be aroused when consumers are informed of the PRP prior to purchase.
Our conceptual model and supporting propositions show that future consumer approach or avoidance behavior toward a retailer is influenced by consumers’ expectations of product return control. From a managerial point-of-view, retailers should realize that consumers’ expectation of control determines their reaction to the retailer’s PRP. If consumers expect a certain level of control and this control is taken away by the retailer, consumer will experience higher levels of reactance once the return is attempted and the negative outcomes associated with reactance including negative emotions, negative attitudes, and avoidance behavior. This can even result in retribution toward the retailer in the form of “fraudulent” consumer behavior; see for example Ülkü, Dailey and Yayla-Küllü (2011). However, these negative outcomes may be mitigated by ensuring consumers’ knowledge of the restrictiveness of the PRP prior to purchase.

REFERENCES


ATTITUDES TOWARD DONATIONS OF USED CLOTHING - IMPLICATIONS FOR THRIFT STORES
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ABSTRACT
The focus of this research is on disposition attitudes and behavior of college students with respect to used clothing and implications for thrift stores. Survey results from 221 college students in Tennessee suggest that college students are motivated to donate used clothing to thrift stores and help charitable causes. However, perceived inconvenience associated with donating used clothing has a negative impact on their behavioral intentions. Thrift stores should therefore have targeted initiatives to collect used clothing donations and compete effectively with other for-profit resale stores.

INTRODUCTION
The resale sector in the retailing industry has witnessed significant growth in the last few years. This sector is comprised of several thousand resale, consignment, and thrift stores in the United States. The growth in this sector is linked to various consumer activities that are included under consumer disposition behavior (Jacoby, Berning, & Dietvorst, 1977). The focus of this research is on examining disposition behavior of used clothing by college students and implications for thrift stores.

College students represent significant potential as a source for used clothing (Walter, 2008). The demand for used clothing has increased the options for college students looking to get rid of their used clothing. Fashion trends and relatively lower prices for trendy apparel, contribute to greater rates of obsolescence in clothing in this group. A survey is used to assess college students’ disposition behavior and attitudes. The results of this study will have implications on how resale stores can market to college students to garner clothing donations.

BACKGROUND
The Association of Resale Professionals categorizes three types of stores involved in selling used merchandise: thrift stores, resale stores, and consignment stores. Thrift stores sell used merchandise to raise money to fund charitable organization and/or causes. These are typically run by not-for-profit organizations. These range from the several thousand stores run by Goodwill Industries and Salvation Army to individual stores run by smaller charitable organizations. A resale store typically buys merchandise outright from individuals and re-sells it to the general public. These for-profit stores may have a single location or have multiple locations, such as Buffalo Exchange and Plato’s Closet. In recent years, companies like Buffalo
Exchange have seen their revenues significantly increase. A consignment shop accepts merchandise on a consignment basis, paying the owners of the merchandise a percentage when and if the items are sold.

**Disposition of clothing**

Consumer disposition includes decisions taken by consumers in the context of getting rid of products. Jacoby et al (1977) proposed a comprehensive taxonomy of different types of decisions consumers may take while disposing off goods. Common ways of disposing clothing items are donating to charity, giving away to family or friends, selling through second-hand shops or eBay, and throwing away into rubbish bins (Domina and Koch, 1999; Birtwistle and Moore, 2006). Research has shown that altruistic concern is the driving motivation to donate to thrift stores and help charitable organizations. Giving away to family and friends is also a common method of clothing disposal (Birtwistle and Moore, 2006).

Trends in fashion, especially low cost “fast fashion” clothing (e.g., H&M, Forever 21) targeted at young adults have shortened the life cycle of fashionable clothing (Bianchi & Birtwistle, 2010). Resale stores like Buffalo Exchange provide an attractive venue for college students to dispose their gently used clothes and get money or store credit in exchange. Economic motivation to dispose used clothing via resale stores or channels such as eBay or Craig’s List is more widespread than in the past. The growing popularity of these channels for clothing disposal can potentially reduce the supply of used clothing to thrift stores. Thrift stores have to compete with other thrift stores as well to compete for donations of used merchandise (Hibbert, Horne, & Tagg 2005).

This study focuses on altruistic motivation, convenience, prior donation, and gender as predictors of behavior intention to donate used clothes to thrift stores. Research in recycling has found that recycling behaviors are related to convenience and accessibility of recycling options (Folz 1991). Among college students, access to convenient options to dispose used clothing would likely have a positive impact on their behavior. Conversely, difficulty and inconvenience perceived in donating used clothing to thrift stores relative to other options such as throwing away in trash would be negatively associated with behavioral intentions to donate to thrift stores. Altruistic motivation of helping a charitable organization with donations of used clothing would be positively associated with intentions to donate to thrift stores. To summarize, the focus of this study is to examine the effect of following factors on intention to donate to thrift stores:

- perceived inconveniences associated with donating used clothes.
- desire to help a charitable organization with used clothing donations.
- past donations.
- age and gender.

**METHOD**

Participants in this study were 221 students (51% male and 49% female) at a university campus in Tennessee. They responded to a short survey that focused on attitudes and behaviors with respect to disposal of used clothing, and some basic demographic questions. Respondents
indicated on a 5-point scale (1 = “not at all likely” and 5 = “very likely”) how likely they were to discard their unwanted clothes in good condition with the following options: throw in trash, give to friend, take to Plato or similar store for cash or exchange, sell (e.g., Ebay, Craig’s List), and donate to a charitable cause. They also indicated their level of agreement or disagreement on a 5-point scale (1 = “strongly disagree” and 5 = “strongly agree”) for attitudinal statements about donating used clothing.

RESULTS

The mean age of the respondents was 20 years (S.D. = 2.2). About 44% had donated used clothing in the last six months. About 38% had been to resale stores like Plato’s Closet that provided cash or store credit for used clothes. A cross-tabulation revealed that those who did not donate also were unlikely to go to resale stores or go to a resale store to sell or exchange used clothes (chi-square = 31.88; p < .001).

Intention to dispose used clothing through donations (mean = 3.4; S.D. = 1.4) or giving to friends (mean = 3.5; S.D. = 1.3) was significantly greater than selling in a resale store (mean =2.7), selling through eBay (mean = 2.4), or throwing used clothes in trash (mean = 2.0). Paired-sample t-tests (p < .001) were used.

A linear regression was run with intention to donate as the dependent variable. The independent variables were age, gender, whether donated in the past six months, attitude that donations should help a charitable organization, and inconvenience associated with donating. Inconvenience associated with donating was calculated by taking the mean on three attitudinal statements (“Donating unwanted clothes to a charitable organization is time-consuming,” “It is easier to throw away used unwanted clothes than look around for a place to donate these clothes,” and “Donating unwanted clothes is convenient for me (reverse-coded).” The Cronbach Alpha for the 3-item scale of .68. Given the exploratory nature of this study, it was deemed acceptable.

The regression model was significant (p < .001; R²=.25). Gender had a significant association with intentions to donate. Females were more likely than males to donate used clothing to thrift stores (standardized beta = .31; p <.05). Although most respondents were under 23 years, age had a positive relationship to donation intentions. Older respondents were more likely than younger respondents to donate to thrift stores (standardized beta = .13; p <.05). Previous donation behavior was also positively linked to donation intentions (standardized beta = .14; p <.05). As expected, donations should help a charitable organization was positively associated with intentions to donate (standardized beta = .17; p <.05), while inconveniences associated with donating were negatively associated with intentions to donate to thrift stores (standardized beta = -.16; p <.05).

DISCUSSION

This study examined behavioral intentions about donating used clothing to charitable organizations. The data from this sample suggests that students are more likely to give to friends and charity, than sell it or throw in trash. This exploratory study suggests that a significant
number of college students may not be donating because it may be inconvenient and time-consuming. Thrift stores should conduct donation drives in college campuses and highlight the charitable causes that would be supported through those donations.

Thrift stores should target college students and make efforts to facilitate easy donations. College students represent an important category of donors of used clothing. Trends in fashion industry have influenced more frequent purchasing of clothing items by younger consumers and consequently increased the availability of used clothing. Thrift stores have an opportunity to appeal to college students’ altruistic side to get donations that potentially may end up in for-profit resale stores. Gender had a very significant effect on intentions to donate. Younger women are more likely to donate used clothes. They also are more likely to go through their closets and find clothes that have gone out of fashion.

The study results may have been influenced by a social desirability bias. Future studies should explore indirect questioning to understand behaviors relating to donation and recycling (Fisher 1993). A more diverse sample would be needed to increase validity of the results. This sample was predominantly African-American (86%). Finally, environmental concerns of the sample and the effect of these concerns on disposal of used clothes were not examined. The link between environmental concerns and clothing disposition has been examined in previous research (e.g., Shim, 1995).

REFERENCES


CRITICAL THINKING IN MARKETING: USING IN-CLASS DEBATES
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EXTENDED ABSTRACT

Nosich (2009), in his text “Learning to Think Things Critically: A Guide to Critical Thinking across the Curriculum,” argues that critical thinking applies to all disciplines, including marketing. While there is no one universally accepted definition of critical thinking, one popular definition that is applicable to marketing is by Ennis (1987) that ties critical thinking to better decision making (Nosich, 2009). The importance of critical thinking in marketing is well documented by several researchers (Capella and Robin, 1986; Catterall, Maclaran, and Stevens, 2002; Easton, 2002). This is because critical thinking has shown to help students in analyzing complex issues, synthesizing the information, checking the validity of assumptions, look at alternatives, and ultimately making better marketing decisions (Macchiette and Roy, 2001; Smith, 2003; Roy and Macchiette, 2005).

Bloom’s Taxonomy differentiates lower-level learning (i.e., cognitive processing) from higher-level learning (i.e., thinking) occurs when students are able to engage in the analysis, synthesis, and evaluation of concepts within their discipline (Roy and Macchiette, 2005). While the case study method, popularized by Harvard Business School, is one way many marketing professors are facilitating higher level learning, several researchers argue that classroom debating on controversial issues can be equally effective (Macchiette and Roy, 2001; Smith, 2003; Roy and Macchiette, 2005; Kennedy, 2009).

Debating is the process of considering multiple viewpoints and arriving at a conclusion (Kennedy, 2009). Debating, as a teaching pedagogy, dates back over 2000 years (Snider and Schnurer, 2002). Since then, numerous academic have validated the use of debates in improving critical thinking. For example, Rashtchi and Sadraeimanesh (2011), in an experimental study where one section debated and the other did not, demonstrated that classroom debates were useful in enhancing critical thinking among students. Besides improving critical thinking skills, debates help debaters improve their communication skills (a skill that is vital in today’s business environment). While enhancing critical thinking and communication skills of the debaters, debates have additional benefits. The listeners and/or audience have to evaluate competing viewpoints (thereby engaging in higher-level learning). Additionally, debates actively engage the students by placing the responsibility of learning the material on the students, thereby dramatically changing the classroom environment from one of passive learning environment to one of active learning (Snider and Schnurer, 2002).
As stated above, in-class debates are a highly effective means of examining controversial topics in marketing and enhancing student’s ability to think critically. Please find below two recent issues/topics that we will debate in class.

- **Kellogg** is being criticized for stating in bold lettering on the front of Cocoa Krispies cereal boxes: “Now helps support your child's IMMUNITY.” Kellogg argues they developed this product in response to parents expressing a need for more positive nutrition, thereby building their immunity. Critics argue that such statements are misleading and cannot be substantiated with scientific evidence.

- Due to significant drop in revenues, both federal and state legislators are debating taxing sodas and other sugar drinks. The rise in obesity is one of the arguments given for this “new” tax. Critics argue that such a tax would hurt the poor and expand government’s role.

On the day the assignment is given, all students are asked two simple questions: (1) on a scale of 1-5 where 1 is “not very knowledgeable” and 5 is “very knowledgeable” please rate your knowledge of both the above issues; (2) On a scale of 1-5 where 1 is “strongly disagree” and 5 is “strongly agree” please express your level of agreement on both the above issue.

Please come prepared to defend your position on each of the topics stated above. In order to prepare for the debate, you may tap into any information source available (library, internet, friends, marketers, etc.). While you do not know which position you will have to defend, which topic you will get, and who will be your debate team members, you need to be prepared for both the topics and for both positions.

On the date of the debate, I will “randomly” create four teams (of 2-3 students) and ask them to defend their position (i.e., for or against). Each team will be given 10 minutes to exchange ideas and to explain to other students in the group their main arguments, rationales, and strategies to be used in the forthcoming debate. Teams will have to argue their side of the issue followed by an open-class discussion of the topic. The rules for the debate will follow the following format. You may use any notes you create, but no audio visual will be allowed. Everyone on the team must make at least two points supporting the team’s position. Each team will initially have 3 minutes to present their case. Then both teams will have 2 minutes to respond to their opponents. Each team will take up to 2 questions each from the audience. The students who are not debating the topic will determine the winner. The teams will be evaluated on a win-loss (i.e., win=1 and loss=0) scale. After adding up all the points, the team(s) that wins the debate will receive a 100 and the losing team an 80. In case of a tie, both teams will get a 90.

After the debate and class discussion, students are asked to “re-state” their views on the same two questions (i.e., their knowledge and position on each of the issues). This information could be used to compare their responses (i.e., pre-post debate difference). If some students change their views and express greater understanding of the issue, further discussion can center on what motivated the changes. During class discussion, the professor may verbalize his/her thinking with regard to key issues, criteria, and analysis of the topic. It is important, however, that the professor refrain from presenting his/her view as the “right” view. Students must
perceive the professor as a facilitator (i.e., someone who assists them with the clarification and definition of issues).

While any current controversial topic related to marketing can be used for in-class debating, the text “Taking Sides: Clashing Views on Controversial Issues in Marketing” can be helpful in identifying debatable issues (Macchiette and Roy, 2001). Additional sample debate topic might include the following:

- Should marketers target vulnerable groups?
- Should government intervene in a capitalist economy?
- Is the world a victim of American cultural imperialism?
- Is America dominated by big business?
- Should congress allow the buying and selling of human organs?

REFERENCES


STUDENT PAPERS II

A RELATIONSHIP BETWEEN CULTURAL IMPACT AND INFLUENCE OF SOCIAL MEDIA MARKETING ON CONSUMER

Ye Eun An, Berry College
Nancy D. Albers-Miller, Berry College

EXTENDED ABSTRACT

The objective of this research is to examine the relationship between cultural impacts including individualism/collectivism and influence of social media marketing on individuals. With the growth of social media, a great number of marketing messages are transmitted through various Internet-based channels including social webs by peers. Social networks create platforms that connect people together, and social media influences people to produce and share content with others and helps architecting frameworks for people’s participation (Meadows-Klue, 2008). With this trend, social web is rapidly becoming the most important marketing medium (Weber, 2009). As social media marketing becomes more influential in a global market setting, it is necessary to understand the influence of social media marketing on individuals in different cultures. To help people understand, culture and individual’s behavior, individualism/collectivism, the influence of social networks, and the influence of social media marketing are discussed in the paper. Based on the comparison of American consumers and Korean consumers, this research will provide marketers an understanding of social media marketing with cultural differences to help them to make a better social media marketing strategy in the global market.
STANDARDIZED NUTRITION LABELS: THE IMPACT ON CONSUMER COMPREHENSION

Caitlyn A. Miller, Berry College
Nancy D. Albers-Miller, Berry College

EXTENDED ABSTRACT

Many health related problems, including obesity, diabetes, and heart disease, had connections to diet. Poor training about food choice starts at a very young age (Taylor and Albers-Miller 2006; Albers-Miller and Miller 2005, 2009). Nutrition labels are potential an important source of information for consumers, but Miller and Albers-Miller (2011) found that the current system of nutrition labeling in the US is difficult for consumers to use and understand. Albers-Miller and Miller (2009) found that foods in Europe were nutritionally better than similar and identical products sold in the United States. In their content analysis of food labels between comparable foods sold in the United States and Europe they discovered different labeling requirements. The lack of standardization of serving sizes in the United States creates potential problems for consumers. In Europe, all containers must list the nutrition content for a single serving and must also list all nutritional information for a standardized 100 gram amount (Albers-Miller and Miller 2009).

In the United States, serving sizes are based on guidelines for a Reference Amount Customarily Consumed (RACC) (FDA 2009). The FDA has established RACCs for 139 food product categories which are supposed to represent the actually amount of food customarily consumed at one eating occasion by a diverse population group (FDA 2009). The RACCs are considered to be guidelines and not requirements (Electronic Code of Federal Regulations 2009). Additionally, even though labeling claims are “strictly defined by the government” (Kellogg’s Nutrition), the loopholes in the laws leave a great deal of flexibility for food companies to “hide” undesirable ingredients.

The federal government ties the reporting of trans fats (which come from partially hydrogenated oils), to the serving size selected by the producer:

Trans fat content must be expressed as grams per serving to the nearest 0.5-gram increment below 5 grams and to the nearest gram above 5 grams. If a serving contains less than 0.5 gram, the content, when declared, must be expressed as "0 g." (FDA 2009)

If a product contains partially hydrogenated oils, a manufacturer can legally “hide” the trans fats in the nutrition label and claim “Zero Trans Fats” by selecting a serving size small enough that the amount of trans fats per serving is less than 0.5 grams.

The purpose of this study is experimentally test the effectiveness of standardized food labels on US consumers. Additionally, this study examines the degree to which uncovering trans fats with a standardized label helps increase consumer knowledge. Managerial and public policy implications are provided.
SELECTED REFERENCES


IMPORTANCE OF QUALIFICATIONS WITHIN PARTICULAR GOLF INDUSTRIES: A COMPARISON OF BECOMING A GOLF COURSE PRO AND GRADUATE ASSISTANT COLLEGE COACH

John C. Hall, Berry College
Nancy D. Albers-Miller, Berry College

EXTENDED ABSTRACT

The golf industry is one of the most popular industries in the world (Kimes and Wirts 2003). The golf industry continues to grow today even after decades and even centuries have passed with the sport staying strong. Today, a high majority of public and private and everything in between golf courses have head professionals. But aside from head golf professionals there is another popular job within the golf industry. That job is the graduate assistant coach (GAC) and now numerous colleges and universities, at all levels, have graduate assistant coaches. These are two positions many aspire for. Many graduate assistant coaches go on to become head coaches and many times this is the primary way to becoming a head coach. On the other side of the industry, many head professionals go on to nicer and better courses thus enhancing their career as well. This research will be conducted to show what job qualifications are most important and which are least important when golf courses and schools hire head professionals and GACs respectively.

Previous literature has not addressed these two fields specifically in the golf industry. Literature before this has only addressed the financial standpoint of the golf industry as well as hiring qualifications and their significance within the assistant superintendent position. The qualifications that will be researched through an online survey include previous work experience, golfer’s ability (handicap), appearance of applicant and level of education received. The following proposal gives validation to this research and explains in detail how the research will be conducted.

This research was conducted using online Conjoint Analysis profiles examining the perceptions of skills and training that hiring decision makers use in their selection process. Conjoint Analysis allows for a comparison of these skills and experiences with and between respondents. Implications for managers are provided.
THE SOLAR SUPPLY CHAIN AND MARKET DRIVER ANALYSIS
Nicholas Martinez, Texas A&M University
Krishna Patwari, Texas A&M University

ABSTRACT
The photovoltaic market in the United States is in its growth stage and industry participants are facing a multitude of challenges in reaching the consumer markets. This study aims to explore the evolution of the photovoltaic supply chain in the United States and the drivers which foster growth of the solar market. The study will gather knowledge on the growth of the solar market and the roles of different firms in the supply chain as the solar market moves toward maturity. Based on different drivers including, but not limited to, government incentives, electricity prices, and component prices, the study will build a methodology to conduct a solar market potential analysis for each state. During this process, the study aims to interpret the trends in the supply chain and assess the impact of these trends on the solar market.

INTRODUCTION
The photovoltaic (PV) market in the United States has shown substantial growth in recent years. The United States has risen to the top four in cumulative installed megawatt (MW) capacity of the world behind Germany, Italy, and Japan (Despotou 2010). During the economic recession, the installation base for solar grew from 508 MW in 2007 to more than 2200 MW in 2010 (Stevens 2009). Recent projections foresee the market more than doubling by 2014 (Stevens 2009). Multiple start-up firms emerged due to the increased availability of funding to entrepreneurs and small to medium sized enterprises (Causey 2011). This growth opportunity coupled with the economic downturn spawned companies that were not entirely familiar with solar energy to enter the market (Jubinsky 2009). The unfamiliarity of the market has caused a non-traditional supply chain as firms are targeting the end user in an effort to increase their market share.

Firms are attempting to integrate the supply chain in order to sustain in the solar market (Maslin 2008). The study aims to dive deeper and analyze the to-go market strategies and business models that companies are undertaking in order to keep up with the projected growth and analyze their validity with the foreseen trends.
Solar energy is indisputably a sustainable energy form for the United States in the future and its success correlates with its cost to the customer. Recent developments in states such as Colorado and California have ingrained the thought of solar installations in many home owners and industrial firms. Many drivers have resulted in strengthening this confidence amongst consumers. Some of these are government incentives, overseas demand, technological advances which increase the efficiency of panels, and more streamlined installation processes (Shah 2009). Some intangible drivers are the increased concern for greener technologies amongst potential consumers.

Regardless of the fluff, from an economic standpoint, it boils down to the total cost of ownership of the clean technology and its return on investment in comparison to traditional sources of energy (Molavi 2011). A combination of the cost of solar components, conventional electricity prices, installation costs and purchasing schemes impact the buying decision. Government regulations, both federal and state, influence each of these costs directly or indirectly. Some factors such as electricity costs can be related to personal disposable income that corresponds to the wellness of the economy, which again is an innate government agenda.

MARKET ENVIRONMENT

Market Snapshot

The photovoltaic market in the United States is expected to more than double by 2014 and become one of the leaders in global market share (Stevens 2009). Multiple market drivers include, but are not limited to, government incentives or regulations, the decreasing price of system components, increasing electricity rates, and the availability of innovative financing methods that increase the return on investment (Molavi 2011). These drivers are depicted in Figure 1 and will be discussed in depth later into the study.

![Figure 1: Market Drivers](image)

The solar market is fundamentally divided into 3 segments (Shiao 2010). The stand-alone generation installations are defined as utility-scale projects and usually range from one to hundreds of megawatts in size. The installations that use distributed generation from the grid can be broken up into residential and industrial or commercial segments by size and customer type as
shown in Figure 2.

As Figure 3 illustrates, the photovoltaic market in the United States has shown exponential growth in the recent years. The residential market segment is currently 32% of the market share (Shiao 2010). This segment is projected to maintain a steady growth rate in the coming years as the consumer confidence grows in addition to decreasing panel prices and growing ‘green’ sentiment. The commercial or non-residential market represents 52% of the market and is projected to grow substantially in the coming years mainly due to financing methods and the initiative to remain sustainable into the future (Shiao 2010). Utility currently has 16% of the market, however, it is projected to grow the most in the next 5 years and possibly overtake the commercial market due in part to state renewable portfolio standards (Shiao 2010). Due the utility market’s difference in nature of reaching the end user, this study will focus on the residential and commercial segments.

This adoption has only occurred in a select region of states. States such as California and New Jersey have been at the forefront of fostering solar energy adoption. They have enacted aggressive renewable portfolio standards and multiple financial incentives such as rebates and tax credits to lower the upfront cost on the solar components required for the installation for various segments. These regulations and financial incentives have benefited the market due to
the increase in investment return for customers. The top 10 states in installed capacity make up the vast majority of installations in the current market as depicted in Figure 4 (Shiao 2010).

![Figure 4: Top 10 States Cumulative Capacity](image)

**Photovoltaic Value Chain**

As the market continues to grow and reach its stage of maturity, a multitude of companies have emerged to address this growth opportunity. The photovoltaic industry is functionally divided into two different segments: Upstream and Downstream. The supply chain includes module manufacturers, engineering, procurement and construction (EPC) firms, distributors, contractors, and integrators. The upstream segment is comprised of raw material procurement and developing wafers and cells. It also includes designing, testing, and manufacturing photovoltaic modules. The downstream segment consists of project development, distribution, and installation to the end customer. The integrators are firms that provide their own products and install directly to the end user without using a channel of distribution. The study focuses on the downstream segment and how these firms get to market. The value chain is illustrated in the figure below.

![Figure 5: Photovoltaic Value Chain](image)

**Product Life Cycle and Diffusions of Innovation**

The product life cycle is a normative and descriptive model for the life of products in general. Individual products experience their own variations and may have longer segments in the curve or a longer curve altogether (Rogers 1995). The product life cycle’s importance to marketing decision makers helps identify strategies for presenting the product (Rogers 1995) and aid management in making appropriate business decisions. The stages of the product life cycle are Development, Introduction, Growth, Maturity, and Decline. Table 1 describes the basic
characteristics of the product in each stage.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Development</th>
<th>Introduction</th>
<th>Growth</th>
<th>Maturity</th>
<th>Decline</th>
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<td>Competing with</td>
<td>Reduced competition</td>
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<td></td>
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<td>alternatives</td>
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<td>Decline with volume</td>
<td>Lowest point</td>
<td>Rise as volume declines</td>
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<td>Intense</td>
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<td>Personalized and informative</td>
<td>Need and satisfying properties</td>
<td>Competition and repeat purchasing</td>
<td>Reminding</td>
</tr>
</tbody>
</table>

Table 1: Product Life Cycle Characteristics

As these stages pass over time, customers can be classified into categories by the diffusion of innovations theory (Rogers 1995). This theory proposes that as a new product reaches market and matures over time that the customer’s perceptions change and suitable strategies must be implemented to reach the residential and commercial customer segments (Rogers 1995). The classifications include innovators, early adopters, early majority, late majority, and laggards. In parallel to the product life cycle, the theory’s classifications can be addressed at certain phases of the product life cycle (Rogers 1995). It is important to note that different customer segments differ with the pace of adaption but there is an inherent relationship between them. This is shown in Figure 6.

The product development phase begins when a company finds and develops a new product idea (Golder 2003). A product is usually undergoing several changes involving a lot of money and time. The companies involved in this stage will use a lot of its resources on research and development. During this phase, the company’s sales are zero and revenues are negative (Golder 2003). Innovators and technology enthusiasts will be targeted in this stage of the product.
life cycle to aide in design and preliminary marketing approaches.

The introduction phase is when the product is launched. This phase can be described as high expenditures with little revenue recognition to the company. These expenditures include aspects such as targeted advertising and increasing product availability (Golder 2003). The number of companies in the industry is small but growing fast and the market is still relatively small. A company must target the early adopters who want the new technology to be seen as leaders by their peers. The early adopters are estimated as 13.5% of the population (Rogers 1995). These people tend to be younger in age and risk-takers who want to be seen as trend setters to peers. The commercial equivalent demographic is firms which identify or have capacity to experiment with such technology.

Once the product enters the growth phase more people are apt to purchase and knowledge is starting to spread about the product. This phase is characterized by increasing profits and a large amount of firms in the industry (Rogers 1995). The investment is still high but the firms start to see a growth in margins. During this phase, the early majority should be the target segment for most companies. According to the diffusion of innovations, the early majority makes up roughly 34% of the population (Rogers 1995).

After the product has experienced growth, it then enters the maturity phase of the product life cycle. At this time the late majority of customers will begin to purchase the new technology or product. The late majority is estimated to be roughly 34% of the population according to the diffusion of innovations. In the growth phase, the product’s prices are stable and the companies that remain are experiencing higher profits than the previous phases. The transition from the growth phase to maturity elicits a multitude of challenges to the industry. Consolidation will occur to a certain degree as companies cannot adapt to the changing market environment (Golder 2003).

Once the market is saturated the decline phase begins. At this time the laggards will consider purchasing the product but are more conservative and resistant to change. The advertising will be limited and most efforts in the industry will be towards reducing costs and increasing technical support on previously sold products. Companies will have to decide on outsourcing in the industry or leave the market entirely.

The product life cycle’s characteristics are in parallel with the growth of the residential and commercial photovoltaic market. This has been made evident by the price fluctuation in the market and the emergence of barriers to entry for industry participants. This study hypothesizes that, as the market follows these trends, it will reach a maturity phase within the next five to ten years. As this occurs, the strategies that companies form will change in order to better serve the market and reduce inefficiencies in the supply chain.

PHOTOVOLTAIC SUPPLY CHAIN EVOLUTION

As the market continues to grow across the United States, market players are positioning themselves to manage the pace of growth and expand into the market. Using the product life cycle and diffusions of innovation theory, this study will outline the evolution of the photovoltaic
downstream supply chain and its changes as the market progresses into the future. The supply chain’s evolution can be defined into First, Second, and Third Generation. These generations depict different times for the solar industry and the strategies that companies put forth to reach the market. As the industry goes through its life cycle, the nature of the competition will shift (Porter 1980). The photovoltaic supply chain evolution can be characterized with the product life cycle as in Figure 7.

**First Generation Supply Chain**

The PV market when it first began to emerge in the United States was unorganized, and the few players worked mostly regional and off the grid. PV was not held high in public sentiment because of the high product and installation cost, and there were only a few states where there was any growth (Shah 2009). This time period up to the early part of the millennium is defined as the ‘First Generation’.

The players included manufacturers, local EPC firms, and solar niche contractors. In the first generation, manufacturers were new to the market and as a result had to go direct to the end customer using an internal project development arm to increase market share (Frantzis 2008). This gave the manufacturers the proximity to understand the needs of the customer. Regional and local EPC firms were prominent but still very few were prepared for the new specialization. They would procure products from the manufacturer and reach a very small installed base in the residential and commercial segments. As the market began to expand, solar specific contractors emerged to address the growing installations and reach an array of customer segments due to the extension of federal incentives and decrease of component pricing (Blakely 1981). They partnered with EPC firms and manufacturers in reaching the end customer who couldn’t undertake the growing task themselves. Figure 8 illustrates the First Generation supply chain.
Second Generation Supply Chain

The market has become an emerging industry with characteristics such as strategic uncertainty, high initial costs but steep cost reduction, first-time buyers, as well as being subsidy driven (Porter 1980). As the contractor base and market expanded, there arose a need for structured distribution. Many contractors were electricians who were familiar with distributors and wanted the support that distribution had to offer. Regional solar distributors began to emerge and supply these contractors with product inventory and competitive pricing. This period is referred to as the ‘Second Generation’. Regional specialized solar distributors began to grow and merge with one another and, in parallel, the local EPC firms began to merge with contractors and become regional integrators. This first stage of the Second Generation is modeled below.
Due to the expansion of general and electrical contractors in the market, and a few motivated by the slow-down of the economy, large electrical distributors began to move into the solar market during the later phase of the second generation. The electrical distributor has synergy with the electrical market and also has the financial strength to compete with solar niche distributors.

Presently, the solar market is considered by many to be ‘the wild west’. Manufacturers, integrators, and contractors are all competing to reach the end customer segments with very little channel discipline. Electrical distributors, the new-comers in the industry with little limited expertise in the solar market have grabbed a sizable share of the market in competition with the niche distributors. This fragmentation as it pertains to the supply chain includes low overall entry barriers, erratic sales fluctuations, little to no advantages of size in dealing with suppliers, diverse market needs, and newness. In addition, given the abundance of off-shore players seeking a part of the growing market and the high degree of price fluctuation, an industry wide shake-up is imminent. We have already seen instances of this with the closure of multiple manufacturing facilities across the United States. These closures may build a negative perception of photovoltaic energy. However, these incidents may be mainly due to the growing pains of any new and emerging industry and will eventually benefit the market in the long run. We see this market as a prime opportunity for electrical distributors to play a prominent role in growing the industry. A model illustrating the current supply chain is presented below in Figure 10.

Discontinuation of Feed-in-Tariff (FIT) programs in Europe and large subsidies to promote PV production in China has created an oversupply of panels in the market. It is currently estimated that about 450 worldwide PV manufacturers exist; 400 of which are from China. With this oversupply of off-shore panels, prices have been driven to record lows, which in turn, have put pressure on manufacturer and distributor margins. Consolidation of the players has begun to occur as the market inches towards maturity. This has put a degree of doubt into many companies.
pertaining to the success of the industry as a whole. However, the electrical distributors are positioned to help manufacturers achieve economies of scale and also provide some insight into forecasting the market through their partnership.

If a tariff is imposed on Chinese PV manufacturers to protect the American module manufacturers as indicated in recent news events, it would bring dramatic changes once again. This tariff has the potential to stabilize the market price and allow for competition based on value added services as opposed to price alone. On the other hand, raising the price of an already higher cost product may turn away some potential consumers. In a turbulent economy, consumers are constantly hunting for lower prices in order to decrease total spend but this approach may not be sustainable for the longevity of the PV industry. The idea of waiting on the sidelines for the next wave of cheaper panels may have hurt some of the businesses operating in this concept, but distributors can use their value service offerings to offset this impact in the long run.

The incentives and regulations, which help drive the industry, deviate from state to state at municipal and local levels making it hard to calculate the return on investment for consumers (Barbose 2011). There is a large degree of uncertainty as to which state markets will flourish, especially if the funding is weakened at various levels. On the other hand, a government incentive such as the federal investment tax credit of 30% has proven beneficial to the PV market and isn’t set to expire until 2016. However, the Treasury Grant 1603 program in lieu of the tax credit is set to expire at the end of this year. The possible discontinuance of these incentives boasts new challenges to the market that many will have to face. Installers and distributors will have to acquire or form new types of financing and offer various forms of credit terms to foster growth in certain areas.

Third Generation Supply Chain

As the market reaches a level of maturity, consolidation of the players will likely begin to occur due to high mobility barriers (Porter 1980). Firms that saw early growth but are unable to adapt to market conditions will collapse or be acquired by larger firms. The installation base will have grown so vast that manufacturers going direct to the end customer will not be able to keep up with changing logistical and other distribution needs. The manufacturer will be forced to follow a more traditional approach and partner with distributors to increase volume and manage logistics across the United States. As this occurs, the price levels will begin to stabilize as the supply of modules begin to equal the demand. Vendor selection begins to emerge as a major issue for the distributors due to the thinning of the market place. Firms will have to have a qualified and long-lasting relationship to be able to stay in the market. This transition to a consolidated market forms the emergence of the ‘Third Generation’. This supply chain is depicted below in Figure 11.
When the market reaches full maturity, there will only be a few players left to reap the benefits. Rather than the market being driven by incentives and tax credits, it will be driven by service offerings and financing models that firms put forth (Porter 1980). The local contractors with the most expertise and intimate services will be prominent in the residential and small commercial segments while the integrators will pursue the larger scale projects such as utility and industrial scale applications. The solar niche distributors will be acquired by one another or by traditional electrical distributors to form national distribution networks that will better serve the customer base. EPC firms or integrators may still handle utility scale projects (depending on the location and many other externalities).

Since the state markets are so diverse and fragmented, it will take longer for some states to mature than others. The states that adopted solar the earliest, such as California and New Jersey, will reach maturity far sooner than states lacking the incentive and regulatory base. The state’s market potential analysis will be discussed further in the study.

Market Strategies as Supply Chain Evolves

Almost every player in the supply chain is going to face a multitude of obstacles to stay in the market and must be able to best position themselves for longevity in the supply chain. Formulation of the strategy in emerging industries must be able to deal with the uncertainty and risk during this period of the industry’s development. Companies in the photovoltaic supply chain have taken on many forms of integration to increase their market share (Maslin 2011). The industry will have to standardize diverse market needs. This approach will succeed in the short term. However, in the long term this strategy will probably have to be refined. Some ways to cope with the industry fragmentation as discussed below include increasing the value added and specializing by customer types or by geographic areas (Porter 1980). Porter also suggests such strategies as shaping the industry structure, changing the role of suppliers and channels, and shifting the mobility barrier to compete in an emerging industry.

Manufacturers should focus on achieving economies of scale with the best design practices and a establishing a known brand name. Many of these manufacturers are of European
or Chinese origin and will need to be able to account for the industry structure and variability of the market from state to state and region to region. As the market matures, manufacturers should consider utilizing electrical distribution channels to reach the residential and commercial customer segments. Electrical distributors have synergy in these customer segments and already have relationships with electricians needed to sustain growth of the niche business. This method has been utilized through recent partnerships by multiple companies seen in industry headlines. This approach can increase volume for the manufacturer while also allowing the firm to better logistically serve the market from coast to coast. The industry partnerships that follow could also foster marketing opportunities that can further push solar energy into the mainstream.

National distributors with a local presence and expertise will have to choose between either forming partnerships with niche players or expanding their service offering internally. Distributors should seek a more intimate design approach and offer training courses in an attempt to become the installer’s knowledge source in the solar field. Many forms of innovative financing will come from the distributors in order to expand their customer base. Electrical distributors will need to be able to make complex proposals that bundle energy efficient products with solar products to offer a holistic energy service solution (Yudelson 2009). This approach will help the installer provide the end customer with the greatest energy reduction. The largest distributors may be able to take on an integrator role for the large scale projects and oversee the process from design and procurement to financing then installation.

Regional distributors are feasibly positioned to serve markets that have not matured. They can offer the pricing and credit terms that contractors seek from distributors in order to foster growth. The norm for the regional distributors will reasonably remain in the smaller scale installs. If the incentive or regulatory base gives for an expansion in these markets, these distributors will probably be required to form alliances with national players or even pushed out by the financially stronger firms with better pricing.

Solar contractors will most likely have to move out of the niche and attempt to offer a total sustainability package for the end customer. Contractors with a vast portfolio of projects and valuable partnerships will be able to prosper in almost any market, regardless of its maturity. Integrators may only be prominent in niche areas across the United States. These firms may be required only on the largest scale projects in a mature market. They will most likely have to compete directly with the integrated distributors or be forced to form a partnership to keep their market share.

There is going to be an extent of difficulty in managing the change within the industry as different state markets begin to emerge and mature over time in the United States. Firms need to be agile in positioning themselves acquire a niche and competitive advantage in the industry. Though the market appears to go direct, it seems to be moving towards a traditional distribution focused supply chain.

**STATE MARKET ANALYSIS**

As mentioned earlier, the adoption of solar energy hinges on many key drivers. Some of these drivers drive down the cost of solar electricity which in turn increases the return on
investment for potential customers. Many state and local governments have enacted regulations and monetary incentives to spur the solar market in their respective region (Molavi 2011). The federal government has enacted an investment tax credit of thirty percent towards photovoltaic energy as well as grant program in lieu of the tax credit which helps customers by giving them the capital up front (Bernier 2011). This has helped spur the market in the United States but would not be as successful if not for the help of state regulations. Several such technological products have relied on government support for its success.

The drivers that are assessed in this study include both monetary incentives and state regulations for each area. The monetary incentives include dollar per watt rebates, tax credits, and loan programs. These incentives can either be through a state funded program or through a regional utility that supports PV energy. The regulations that states put forth to adopt solar energy include renewable portfolio standards (RPS), the availability of net metering, and the availability of unique financing options such as a power purchase agreement (PPA) or property assessed clean energy (PACE).

The installed cost of a photovoltaic system has declined dramatically in the recent years (Barbose 2011). Components of the PV system include the solar panel (module), inverter, mounting, and the wires or balance of system components. Recently the module prices have experienced a dramatic decline due to an oversupply in the U.S. industry and decreased demand due to decreased incentives from European countries such as Spain and Germany (Kim 2011).

This study will attempt to quantify the key drivers that states have enacted and assess their potential as these drivers are presented to market. The rankings will be presented on a one to four scale. A grade of four indicates the highest potential for a solar market while a grade of one indicates the worst potential for a solar market. Through this process, it will become clearer which states are pursuing photovoltaic energy as the early adopters, early majority, late majority or laggards. The ranking and relative criteria are illustrated below in Table 3.

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<thead>
<tr>
<th>Score</th>
<th>Relative Ranking of Applicable States</th>
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<tr>
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<td>Top 30%</td>
<td>Early Adopters</td>
<td>Leading Market</td>
</tr>
<tr>
<td>3</td>
<td>41-70%</td>
<td>Early Majority</td>
<td>Emerging Market</td>
</tr>
<tr>
<td>2</td>
<td>21-40%</td>
<td>Late Majority</td>
<td>Lagging Market</td>
</tr>
<tr>
<td>1</td>
<td>Bottom 20%</td>
<td>Laggards</td>
<td>Little to No Market</td>
</tr>
</tbody>
</table>

Table 2: State Ranking Description

Monetary Incentives

Monetary incentives include rebates, performance-based payments, tax credits, and loan programs. Some of these incentives are available through a state program but the vast majority is available through utility and local programs. The electricity rate that customers are already paying has also been identified as a key driver to the adoption of photovoltaic energy. This study will quantify the incentive amounts and average them against the average installation cost and size for each type of system in order to identify the actual savings towards each type of system. The average and size and cost are defined below in Table 4.
Table 3: Average Installation Size and Cost by Customer Segment (Shiao 2010)

A rebate, as it pertains to the photovoltaic industry, is an up-front payment administered by the state or a utility in a dollar per watt installed scale (Barbose 2011). In order to quantify the rebates in a holistic approach, the study attempts to identify the source of the rebate, the applicable customer segments, the dollar amount, the amount of funding required, and the expiration date. Table 3 is a sample table used for an Arizona rebate program. Please note that not all of the rebates are depicted in this table.

<table>
<thead>
<tr>
<th>Customer Segment</th>
<th>Average Size</th>
<th>Average Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>5 kW</td>
<td>$33,000</td>
</tr>
<tr>
<td>Lite Commercial</td>
<td>25 kW</td>
<td>$142,500</td>
</tr>
<tr>
<td>Large Commercial or Industrial</td>
<td>75 kW</td>
<td>$427,500</td>
</tr>
</tbody>
</table>

Table 4: Sample State Rebate Table

The savings from each rebate program are then averaged together to give the state a final dollar amount which are used to give the state a grade to be used for further analysis. There is a degree of error in the state calculations due to the differing number of utilities offering the rebates as well as the amount of funding used in each rebate program. The table below depicts the states with the top 10 rebate programs as they pertain to each customer segment.

<table>
<thead>
<tr>
<th>State</th>
<th>Level</th>
<th>Name</th>
<th>Sectors</th>
<th>Size</th>
<th>Amount ($/W)</th>
<th>Max</th>
<th>Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ</td>
<td>Utility</td>
<td>APS Incentive Program</td>
<td>Residential (On-Grid)</td>
<td>$1/W</td>
<td>50% of cost or $75,000</td>
<td>Yearly allocation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Residential (Off-Grid)</td>
<td>$2/W</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Commercial (On-Grid)</td>
<td>&lt;30kW</td>
<td>$1.75/W</td>
<td>50% of cost or $75,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Commercial (Off-Grid)</td>
<td>&gt;30kW</td>
<td>$1.35/W</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Top 10 Rebate Packages by Customer Segment

A tax credit can be given in various forms. The most common credits given to the photovoltaic market pertain to either the overall cost of the installation, the sales tax, or the property tax (Vanega 2011). These credits are usually peaked at certain percentage of cost and
help foster the adoption to the most tax savvy of customers who use the tax break (Molavi 2011). A table depicting the rankings of each state as it pertains to the type of credit and the customer segment is shown below.

<table>
<thead>
<tr>
<th>Residential Tax Credit</th>
<th>Commercial Tax Credit</th>
<th>Sales Tax Credit</th>
<th>Property Tax Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louisiana</td>
<td>Oregon</td>
<td>Arizona</td>
<td>Colorado</td>
</tr>
<tr>
<td>Idaho</td>
<td>Montana</td>
<td>Colorado</td>
<td>New York</td>
</tr>
<tr>
<td>Georgia</td>
<td>Hawaii</td>
<td>Idaho</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Hawaii</td>
<td>North Carolina</td>
<td>Florida</td>
<td>Minnesota</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Vermont</td>
<td>New York</td>
<td>Maryland</td>
</tr>
<tr>
<td>West Virginia</td>
<td>South Carolina</td>
<td>Massachusetts</td>
<td>Connecticut</td>
</tr>
<tr>
<td>New York</td>
<td>Arizona</td>
<td>Minnesota</td>
<td>Iowa</td>
</tr>
<tr>
<td>South Carolina</td>
<td>Utah</td>
<td>Kentucky</td>
<td>Nevada</td>
</tr>
<tr>
<td>Arizona</td>
<td>New Mexico</td>
<td>Maryland</td>
<td>Michigan</td>
</tr>
<tr>
<td>Utah</td>
<td>Texas</td>
<td>Connecticut</td>
<td>Oregon</td>
</tr>
</tbody>
</table>

Table 6: Top 10 State Tax Credit Programs

The loan programs that states offer vary in a multitude of ways. A loan is based on the amount applicable towards each customer segment, the amount of funding the program requires, interest rates charged and time it takes to pay back the loan. The following states have the largest amount of funding and the most efficient payback times that help increase the return on investment for various customers.

<table>
<thead>
<tr>
<th>Residential Loan</th>
<th>Commercial Loan</th>
<th>Residential Loan</th>
<th>Commercial Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii</td>
<td>Illinois</td>
<td>South Carolina</td>
<td>Arkansas</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Texas</td>
<td>Washington</td>
<td>Hawaii</td>
</tr>
<tr>
<td>Oregon</td>
<td>Pennsylvania</td>
<td>California</td>
<td>Delaware</td>
</tr>
<tr>
<td>Ohio</td>
<td>Tennessee</td>
<td>Texas</td>
<td>Iowa</td>
</tr>
<tr>
<td>Connecticut</td>
<td>Michigan</td>
<td>Kansas</td>
<td>Missouri</td>
</tr>
</tbody>
</table>

Table 7: Top 10 State Loan Programs

A performance-based incentive (PBI) is a dollar per kilowatt-hour (kWh) payment based on the amount of energy the photovoltaic system generates in a given time period (Hunter 2011). These are usually administered by a utility and help the consumer directly save on their energy bill. A table depicting the highest PBI amounts is shown below.

<table>
<thead>
<tr>
<th>Performance Based Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
</tr>
<tr>
<td>Michigan</td>
</tr>
<tr>
<td>Iowa</td>
</tr>
<tr>
<td>California</td>
</tr>
</tbody>
</table>
Table 8: Top 10 Performance Based Incentives

<table>
<thead>
<tr>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC</td>
</tr>
<tr>
<td>Maryland</td>
</tr>
<tr>
<td>Oregon</td>
</tr>
<tr>
<td>Delaware</td>
</tr>
<tr>
<td>Ohio</td>
</tr>
<tr>
<td>Alaska</td>
</tr>
</tbody>
</table>

Table 9: States with REC Markets

<table>
<thead>
<tr>
<th>REC Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
</tr>
<tr>
<td>New Jersey</td>
</tr>
<tr>
<td>Kentucky</td>
</tr>
<tr>
<td>DC</td>
</tr>
<tr>
<td>West Virginia</td>
</tr>
<tr>
<td>Massachusetts</td>
</tr>
<tr>
<td>Delaware</td>
</tr>
<tr>
<td>Michigan</td>
</tr>
<tr>
<td>Indiana</td>
</tr>
<tr>
<td>Maryland</td>
</tr>
<tr>
<td>Illinois</td>
</tr>
<tr>
<td>Ohio</td>
</tr>
<tr>
<td>Virginia</td>
</tr>
</tbody>
</table>

**Regulatory Incentives**

Regulatory incentives include mandates and standards that states enact to ensure the adoption of photovoltaic energy. These include renewable portfolio standards, renewable energy credit markets, the availability of finance programs, and the availability of net metering.

A PPA is a hybrid form of finance that has emerged recently for the solar industry. What a PPA allows the customer to do is achieve immediate savings on their electricity bill by paying for the solar energy produced as opposed to the solar products themselves (Frantzis 2008). The installer, in turn, will own the photovoltaic system which allows them to receive the incentives and act as a solar energy provider to the customer. These agreements will vary in length but have still proven to be a key component in reducing the up-front cost of photovoltaic energy. PACE is a form of financing that is enacted through local and municipal levels. The customer will not have to pay for the solar components themselves but instead will have to pay an increase in property taxes for the home (Hunter 2011). Currently, 19 states allow a form of PPA while 25 states have allowed PACE financing (Vanega 2011).

RPS standard is a goal that a state puts forth to ensure a certain amount of energy to be produced by renewable sources (Maslin 2008). Some states have also carved a solar niche out of the RPS and have required of percentage to be used specifically from photovoltaic energy (Hunter 2011). A fraction of these states have enacted a Renewable Energy Credit (REC) market (Hunter 2011). These states use renewable energy credits to symbolize ownership of energy being produced by renewable sources and are used to count towards a state’s renewable portfolio standard. These RECs are traded and sold in an open market to further incentivize the adoption of solar energy. Currently, 36 states have enacted a renewable portfolio standard (Vanega 2011). The most aggressive of these include California and Hawaii with 33% and 40% requirements for renewable energy. There are 21 states which have solar specific renewable portfolio standards, of these 21, only 13 states have available REC markets (Vanega 2011). These states are shown below.
Using the quantified monetary incentives as well as the regulations that each state has put forth, this study uses a grading scale in order to depict which states are the early adopters of photovoltaic energy and which states are the laggards in the market.

Criteria used to calculate the market analysis that was not a driver discussed earlier include the historical installation data for each state. The purpose of this is to take into the account the historical market of the state and the adoption of renewable energy. Table 9 depicts the amount of weight given to each driver as they are applied to score.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
<th>Driver</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>MW Capacity</td>
<td>23</td>
<td>2010</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cumulative</td>
<td>13</td>
</tr>
<tr>
<td>Federal Funding</td>
<td>2</td>
<td>RPS</td>
<td>4</td>
</tr>
<tr>
<td>State Regulations</td>
<td>20</td>
<td>Solar RPS</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MW 2015</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net Meter</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PACE</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PPA</td>
<td>4</td>
</tr>
<tr>
<td>State Incentives</td>
<td>50</td>
<td>Electricity Price (cents/kWh)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rebate: Residential (5 kW)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rebate: Small Commercial (25 kW)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rebate: Large Commercial (75 kW)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Performance - Based Payment (cents/kWh)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tax Credit Residential</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tax Credit Commercial</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loan: Residential</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loan: Commercial</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SREC Market</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sales Tax Exemption</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Property Tax Exemption</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 10: State Market Ranking Methodology

As discussed earlier, the states receive a grade of 1-4 depending on their relative effectiveness and incentive amount as compared to other states. The final rankings for the states’ current markets are shown below in Table 10.

<table>
<thead>
<tr>
<th>Leading</th>
<th>Emerging</th>
<th>Lagging</th>
<th>Little Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>Florida</td>
<td>Iowa</td>
<td>West Virginia</td>
</tr>
<tr>
<td>Arizona</td>
<td>Connecticut</td>
<td>Maine</td>
<td>Missouri</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Michigan</td>
<td>Tennessee</td>
<td>Kentucky</td>
</tr>
<tr>
<td>California</td>
<td>Hawaii</td>
<td>Georgia</td>
<td>Arkansas</td>
</tr>
</tbody>
</table>
Table 11: Final State Market Classification

<table>
<thead>
<tr>
<th>Nevada</th>
<th>North Carolina</th>
<th>Rhode Island</th>
<th>Nebraska</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>Minnesota</td>
<td>Alaska</td>
<td>South Dakota</td>
</tr>
<tr>
<td>Texas</td>
<td>Utah</td>
<td>Indiana</td>
<td>Wyoming</td>
</tr>
<tr>
<td>Delaware</td>
<td>Ohio</td>
<td>Idaho</td>
<td>Oklahoma</td>
</tr>
<tr>
<td>Illinois</td>
<td>New Hampshire</td>
<td>Kansas</td>
<td>North Dakota</td>
</tr>
<tr>
<td>Maryland</td>
<td>New Mexico</td>
<td>Montana</td>
<td>Alabama</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Washington</td>
<td>Louisiana</td>
<td></td>
</tr>
<tr>
<td>New Jersey</td>
<td>Mississippi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorado</td>
<td>Wisconsin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC</td>
<td>Virginia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vermont</td>
<td>South Carolina</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CONCLUSION

In recent years, the photovoltaic industry has shown substantial growth in comparison to other sectors in the United States. This growth opportunity has spawned a multitude of firms to enter the market searching a new stream of revenue. These firms have various to-go market strategies that as discussed in the study. The current supply chain is defined as the Second Generation of growth as it pertains to the product life cycle. Once the market matures and solar has become a commodity, the industry will then move into the Third Generation supply chain. Since the state markets are so fragmented and diverse, this supply chain will emerge in the leading markets first and spread as the remaining states reach maturity. An understanding of the demands as driven by the end user and its impact to the roles of the downstream members is important.

The solar market is driven by many key drivers such as monetary and regulatory incentives, electricity prices, and the availability of innovative finance methods. This study quantified these drivers to determine which states have the most mature and thriving markets. Such calculations enhance decision making for businesses to estimate growth in a market driven by incentives and subside as the product matures.

The growth of solar as well as other renewable technologies has been positive in the United States as a whole. The issues that the industry faces today are uncertainty of key incentives and the dwindling amount of capital available to invest in photovoltaic components. These problems give an uncertain long-term outlook on the photovoltaic market, but for the short term this industry has been proven as a growth engine. Downstream members have to be equipped during this uncertainty.

REFERENCES


LOGISTICS IN THE OIL AND GAS INDUSTRY
Cristina Herrera, Texas A&M University
Krishna Patwari, Texas A&M University

ABSTRACT
The supply chain challenges that the Oil and Gas industry faces in material logistics have enlarged in the last few decades because of increased hydro-carbon demand. Many reasons justify the challenges such as exploration activities which have moved to remote locations increasing distances from supply houses and refineries, escalating logistics costs. Mammoth costs of material unavailability drive the inefficiencies largely. The objectives of the study is to discover the logistics needs of oil and gas companies, the motivation, benefits and the requirements of outsourcing logistics. Third party logistics companies can provide their expertise in logistics best practices to help oil and gas companies manage their logistics activities more efficiently and help them control their logistics costs.

INTRODUCTION
In the last few decades, supply chain management has increased its importance due primarily to the growth of business globalization and the intense competition in every industry. Companies have focused their efforts on making supply chain more efficient to decrease costs, sustain profitability and develop a competitive advantage. Logistics is defined by the Council of Logistics Management as “that part of the supply chain process that plans implements and controls the efficient flow and storage of goods, services, and related information from the point of origin to the point of consumption in order to meet customers’ requirements”. For this reason, logistics plays an important role in the attempt of running the supply chain efficiently.

Supply chain management in the Oil and Gas industry is characterized for being very complex and difficult to integrate. In addition, the growth of the demand of hydrocarbons, the globalization of the industry and the discoveries of oil in remote locations has made the management of the supply chain even more challenging. The major problems in the oil and gas supply chain deal with logistics. Longer distances between oilfields and refineries have caused an increase in lead times for materials and high variability in transportation times. Oil and Gas companies have been forced to keep a larger safety stock to prevent a shutdown of operations in case of a disruption in the supply chain. Higher safety and in-transit inventories along with the increase in transportation expenditure have escalated logistics costs.

The oil and gas industry has a vast area of improvement for a more efficient and less costly supply chain management. Some oil and gas companies have recurred to outsource all or part of their logistics activities to a third party. Third party logistics (3PLs) companies have an opportunity to provide their expertise in logistics to integrate the supply chain in this industry. Partnering with a 3PL to manage the logistics activities can help oil and gas companies share some risks as well as save money by having a more efficient and reliable supply chain.
The study aims to identify the logistics challenges that the industry is facing and outline the requirements and motivators for outsourcing logistics to a third party. The organization of the paper is as follows. First, the study discusses the structure of the oil and gas industry supply chain, and identifies the different segments and players in the industry. Then, the industry will be studied to analyze its future growth potential and change in the different segment and the necessary logistics needs. After having clearly defined the supply chain and the oil and gas industry outlook, the challenges in supply chain will be discussed. The outsourcing trends in logistics and its implications for third party logistics companies are then discussed. At the end, suggested solutions to improve supply chain management in this industry and the benefits of outsourcing logistics will be outlined.

THE OIL AND GAS INDUSTRY SUPPLY CHAIN

To comprehend the challenges in the Oil and Gas industry it is important to inspect the structure of the supply chain. The supply chain is functionally divided into three different segments: Upstream, Midstream and Downstream. The Upstream segment comprises the exploration and production of oil and gas. The Midstream segment includes the trading and transportation from the wells to the refineries or utilities plants. The Downstream segment consists of refining, marketing and delivery to the end customer (Inkpen 2010). Figure 1 shows the flow of the supply chain in the oil and gas industry and its different segments.

![Figure 1. Oil and Gas Supply Chain Segments (Adapted from The Global Oil and Gas Industry – 2010)](image)

The division of the industry into three different segments (Upstream, Midstream and Downstream) along with the number of different players in this industry results in the complexity of the supply chain. The players include integrated operators, independent oil companies, engineering, procurement and construction (EPC) companies, oilfield service companies, manufacturers and distributors. The following definitions describe their role:
**Integrated operator**: Companies that have integrated operations throughout the supply chain and have license for the oil and gas rights to acreage and take direct legal responsibility for exploiting them. For example: BP, Shell, Exxon, and Chevron.

**Independent oil companies**: Non-integrated companies that do most of their business in the exploration and production segment of the industry. For example: Anadarko Petroleum and Plains Exploration and Production.

**Engineering, Procurement and Construction (EPC) companies**: Offer turnkey solutions to upstream and downstream operators with Engineering, Procurement and Construction projects (EPC). For example: Technip and KBR.

**Oilfield service companies**: Companies which contract directly with the operators to arrange and provide services. They take responsibility for dealing with most aspects of field operations. For example: Schlumberger, Baker Hughes, and Halliburton.

**Manufacturers**: Companies that manufacture equipment and products used in Oil and Gas industry. For example: FMCTI, Bosch Rexroth, and Cameron.

**Distributors**: Suppliers fall into two categories: (1) Those which supply basic items such as nuts, bolts and delivery services. (2) Those which supply highly specialized products and services. They deal directly with contractors and, in many cases, directly with operators. For example: McJunkin Red Man, Wilson.

Since each participant plays a crucial role and supports the others, the material and information flow gets extremely convoluted.

**THE OIL AND GAS INDUSTRY OUTLOOK**

The energy consumption of the world is expected to grow by more than two-thirds of today by 2030. Fossil fuels will account for more than 90% of energy consumption (Dorian 2005). The predicted amount of the investment needed to meet the world’s energy needs through 2030 is about $16 trillion, from which approximately $200 billion per year will be in the oil and gas industry (Dorian 2005). In 2003, ExxonMobil invested about $100 billion in property, plant and equipment; 55% in the upstream segment, 40% in the downstream and chemicals segments, and 5% on discontinued operations (ExxonMobil Financial & Operating Review, 2003). The industry is investing substantial sums because of the oil demand growth, increasing the movement of equipment and materials as well as the need of proper management of these capital investments (Heath 2005).

The upstream drilling and production segment is expected to grow in the next five years owing mainly to the increasing oil demand and the subsequent recent discoveries of oil and natural gas deposits. This segment is highly fragmented since only a small percentage of the market share is composed of a few major integrated operators and the rest is made up of smaller independent oil companies (Molovi 2011). Though the segment operates on a substantial profit margin, economic cycles force firms to close unprofitable wells, which are operationally unprofitable. Hence any logistics inefficiency which is overlooked translates into a competitive advantage if discovered and improved upon.

On the other hand, the downstream refining segment is expected to experience marginal annual growth in the United States. Existing capacity will suffice to meet short-term demand.
Capital expenditures have been driven to meet stricter environmental regulations rather than expanding capacity. The number of refineries in the U.S has steadily decline from 195 in 1987 to 141 in 2009 mostly due to low profit margins (Inkpen 2010). Operating on a smaller profit margin, this segment is in need of continuous technology and process innovation to improve their bottom line (Inkpen 2010). Planning of efficient logistics is a key opportunity to minimize costs without affecting product quality and delivery of service (Sear 1993). To counter the cyclical nature and create a better outlook for their shareholders, firms have to discover methods to convert fixed expenses to variable expenses. Table 1 present the future growth in the US of each segment and proves that the downstream refining segment operates in a lower profit margin in comparison to the upstream drilling and exploration activities.

<table>
<thead>
<tr>
<th>Industry Segment</th>
<th>Revenue</th>
<th>Annual Growth</th>
<th>Profit</th>
<th>Profit Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006-2011</td>
<td>2011-2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drilling and Exploration</td>
<td>$329.9bn</td>
<td>3.10%</td>
<td>5.50%</td>
<td>$158.4bn</td>
</tr>
<tr>
<td>Refining</td>
<td>$698.9bn</td>
<td>4.60%</td>
<td>3.10%</td>
<td>$90.9bn</td>
</tr>
</tbody>
</table>

Table 1. US Oil and Gas Market Outlook (IBIS World Report 2011)

**METHODOLOGY**

The study includes literature review from academic and industry specific journals, marketing supplements and industry specific interviews. To understand the needs of the various supply chain members several participants were surveyed from different companies in the Oil and Gas industry dealing with supply chain operations. Before the survey was finalized, similar professionals were interviewed by phone and face to face to verify its appropriateness.

The following tables show the number of surveyed participants of each type of company from the 42 responses. Table 2 represents the number of respondents divided into the supply chain segment in which their company does business. Table 3 denotes the number of respondents classified by the type of company as defined earlier.

<table>
<thead>
<tr>
<th>Supply Chain Segment</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream</td>
<td>38</td>
</tr>
<tr>
<td>Midstream</td>
<td>20</td>
</tr>
<tr>
<td>Downstream</td>
<td>23</td>
</tr>
</tbody>
</table>

Table 2. Survey Responses Supply Chain Segment

<table>
<thead>
<tr>
<th>Type of Company</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Operator</td>
<td>12</td>
</tr>
<tr>
<td>Oilfield Services</td>
<td>6</td>
</tr>
<tr>
<td>Independent Oil Company</td>
<td>5</td>
</tr>
<tr>
<td>EPC</td>
<td>8</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>7</td>
</tr>
<tr>
<td>Distributor</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 3. Survey Responses Type of Company
The Questionnaire used in the interviews included questions that helped identify the supply chain challenges that oil and gas companies are facing as well as their logistics needs and their motivators to outsource these services. The structure of the questionnaire is as follows. The first section included questions to classify the respondents by certain criteria, such as industry segment, type of company and size. The second section involved questions to understand the material movement and their current logistics practices. Then, the questions required the respondents to outline the requirements, motivators and discouragements for outsourcing. The fourth section included questions about transportation and warehouse management. Lastly, questions about third party logistics providers (3PL) selection and key performance indicators (KPI) were asked.

There were a varying number of respondents from different customer types which may have skewed the results in favor of the type of companies with a majority of respondents. For example there were only a few responses from the distributors. To capture the most accurate comparisons an average number of responses by types of companies were measured for some questions. In addition, there was some confusion from respondents when choosing the supply chain segment in which their company was involved. Some respondents answered this question regarding to his or her job title instead of their company’s business. Additionally, the options were not limited to a single segment of the supply chain. Thus Table 2 shows from the responses were from individual firms slanting towards upstream firms. The study does not compare supply chain characteristics by this classification.

**SUPPLY CHAIN CHALLENGES**

As mentioned before, the supply chain in the oil and gas industry is very complex and challenging. The oil and gas industry players need supply chain innovation to keep up with the pace of the growth of demand for the oil and gas products. The lack of flexibility in the supply chain mainly caused by the production capabilities of suppliers, long transportation lead times and the limitations of modes of transportation makes very difficult to use integrated planning across the supply chain (Hussain 2006). Moreover, a shutdown of operations, either for maintenance or failure, is very costly for two main reasons: Production losses and the limited amount of money that companies have to invest in working capital for production equipment. In addition, the interdependence of the industry connects a failure in one end of the supply chain affects other areas with delays and costs. For this reason, there is a need to align and manage the exploration and production functions of an oil company in a more integrated, planned manner (Chima 2007).

The discovery of fields in remote locations, the growing offshore and deep water exploration and globalization of the industry has led to unique supply chain challenges that need to be addressed. The development of operations in these challenging environments has made it more difficult to integrate the supply chain. Consequently, the distance between supply chain partners has increased leading to higher transportation costs and longer lead times (Hussain 2006). Extensive distances proportionally have increased in-transit inventory and inventory carrying costs since companies have to store a greater amount of safety stock at the final location (Hussain 2006). In addition, they cause high variability of transportation times that can hurt the
service level of suppliers and safety stock costs for the final customers or worse, shutdown operations (Hussain 2006). For this reason, 39% of the survey respondents are forced to expedite their shipments 25% or more of the times leading to inefficient transportation management with a larger number of Less Than Truck (LTL) shipping (60%) versus Full Truckload (40%).

According to the survey responses, inventory management is the biggest challenge they face. Inventory management entails “holding inventory to meet customer needs while keeping inventory costs at a reasonable level to produce a profit for the firm” (Mercado 2007). The inventory surplus in the industry is approximately $10 billion which shows the need of best practices in inventory management, redeployment and disposition (Heath 2005). It is estimated that the average book value of surplus inventory of major integrated oil companies was $817 million. The annual cost to carry that surplus inventory is 25% from which 17-18% is the cost of money. Therefore, with a hard cost of 7-8% annually it results in $57 million expense per year (Heath 2005). One of the reasons for this inventory surplus is that oil and gas companies hold higher safety stock of materials and maintenance, repair and operations (MRO) products because a stock-out will oblige them to shut down operations incurring a significant costs. In addition, firms may not completely trust the delivery reliability of their suppliers. Therefore inventory and inventory carrying costs are a substantial, poorly controlled expense.

The globalization of the industry increased the need for accurate tracking, traceability and visibility. The rigid environment and product features make it difficult to implement track and trace technology like RFID (Radio Frequency Identification) on every shipment or product. The information technology (IT) system should be able to provide inventory visibility within the supply chain since is necessary for the higher up time of rigs and refineries.

Visibility plays a critical role especially as safety and compliance has become a priority for the industry. Supply chain visibility helps companies develop a competitive advantage by identifying the best segments, distribution channels and value chain configurations (Camerinelli 2005) Oil and Gas companies handle a great deal of hazardous products and critical parts/equipment, and the user increasingly needs to document the origin and the flow. The difficulty in inventory visibility contributes to low inventory turns and redundant inventories present with different supply chain members. In several instances, the firms are unaware of the inventory or its location especially for spares as usage is infrequent. Figure 2 present the major supply chain challenges by the different types of oil and gas companies face.
Supply chain reliability is of utmost concern to the industry. The associated costs with a supply chain disruption as well as safety distresses and lack of visibility have increased the importance of reliability. Criticality associated in the oil and gas industry resupply is very high. The failure of a company and its partners to perform its tasks successfully often ends with expensive shutdown or worse. A reliable supply chain can avoid detrimental situation in case of a failure or incident, they have the ability to act fast and save money. The increased number of reliability requirements in the industry has made it very difficult for a firm to do it all. A third party can provide their expertise in supply chain management and increase supply chain reliability by decreasing the risk of failures.

### OUTSOURCING LOGISTICS IN THE OIL AND GAS INDUSTRY

In the effort of lowering costs and becoming more efficient, companies have relied on third parties and have outsourced non-core activities and processes (Aas 2008). Many companies have relied on third party logistics providers (3PLs) to handle their logistics activities in a more efficient manner (Aas 2008).

Outsourcing is not a new concept in the oil and gas industry. Oil and Gas companies have outsourced non-core but critical activities since the industry’s origins (Heath 2005). Sharp-Hughes Tool Co, Halliburton, and Schlumberger are just a few examples of companies that were born thanks to the industry’s continuous outsourcing practices striving innovation (Heath 2005). Some of the reasons why Oil and Gas companies outsource include the shortage or unwillingness to spend internal resources on these non-core activities. These companies also recognize that the service could be provided by third parties with a knowledge on best practices and that can leverage the costs of providing those services (Heath 2005).
Outsourcing logistics can benefit the companies by reducing and controlling costs, releasing up investment dollars and providing additional resources and functions. Moreover, third parties can help companies gain control over a difficult function and concentrate on their core business (Heath 2005). Other benefits include flexible infrastructure, access to new channels and risk management.

The results of the 2010 15th Annual 3PL study performed by Capgemini Consulting firm suggested that the total logistics expenditure which includes transportation, distributions, warehousing and value-added services is an average 11% of the sales revenues of companies (Langley and Capgemini 2010). An average of 42% of the total logistics expense is outsourced worldwide, while in North America is 35% (Langley and Capgemini 2010). From the average total logistics expenditure outsourced 41% accounts for transportation and 39% for warehouse operations (Langley and Capgemini 2010). To approximate future outsourcing outlook in the oil and gas industry, these results were adapted to estimate the oil and gas industry’s 3PL market outlook. Table 4 shows these results. It is important to point out that calculations utilize the average percentages across industries.

<table>
<thead>
<tr>
<th>Industry Segment</th>
<th>Drilling and Exploration</th>
<th>Refining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$329.9bn</td>
<td>$698.9bn</td>
</tr>
<tr>
<td>Average Total Logistic Expenditure</td>
<td>$36.29bn</td>
<td>$76.88bn</td>
</tr>
<tr>
<td>ATLE (11% of Revenue*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Total Logistics Expenditure</td>
<td>$12.70bn</td>
<td>$26.91bn</td>
</tr>
<tr>
<td>Outsourced (ATLEO) (35% of ATLE*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Transportation Expenditure</td>
<td>$5.21bn</td>
<td>$11.03bn</td>
</tr>
<tr>
<td>Outsourced (41% of ATLEO*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Warehouse Expenditure Outsourced</td>
<td>$4.95bn</td>
<td>$10.49bn</td>
</tr>
<tr>
<td>ATMEO (39% of ATLEO*)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4. US Future Outsourcing Outlook in the Oil and Gas Industry, *Langley and Capgemini 2010

The survey included questions to understand the outsourcing practices of oil and gas industry and their requirements for outsourcing. Oil and gas companies were asked to identify the logistics aspects that are most likely to be outsourced. Transportation is the top aspect that oil and gas industries are most likely to outsource, followed by warehouse management, yard and dock management, and track and trace. These findings are reinforced by the 2010 Annual 3PL study results. Outsourcing transportation is heavily favored by several companies as they perceive it is the core competency of the 3PL’s. Liability with transporting hazardous chemicals deter firms in the oil and gas to take the task themselves. Figure 3 and Table 5 shows the supply chain functions most likely to be outsourced by total responses and the type of company respectively. Aspects of functions by company type are ranked based on the number of responses.
In order to understand why companies in the oil and gas industry look into outsourcing logistics, the survey asked the companies to identify the main motivators to outsource. The results showed cost reduction as the top motivator. This probably is due to the concerns that companies have in improving the bottom line and to the small profit margin they operate in, principally the downstream segment. The second motivator identified was compliance. Since safety concerns have increased recently, companies are looking for partners willing to share some risks and bring expertise to the table. The third motivator is flexibility. As mentioned before, the supply chain in this industry is highly inflexible. In order to make the supply chain more efficient, they are seeking companies that can provide them with flexibility to operate in this fluid environment. Not being logistics a core competency is the fourth motivator to outsource. It allows companies focus entirely in their core activities without wasting resources in non-core activities. The last ranked motivator was operation efficiency. Table 6 compares the motivation for outsourcing across different industries (Gartner 2010) with the motivation for the oil and gas industry only (Survey).
Motivators for Outsourcing

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Across Industries*</th>
<th>Oil and Gas Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cost Savings</td>
<td>Cost Reduction</td>
</tr>
<tr>
<td>2</td>
<td>Access to functional expertise</td>
<td>Compliance</td>
</tr>
<tr>
<td>3</td>
<td>Flexibility in operations</td>
<td>Flexibility</td>
</tr>
<tr>
<td>4</td>
<td>Access to technical expertise</td>
<td>Not a core competency</td>
</tr>
<tr>
<td>5</td>
<td>Area is not a core focus</td>
<td>Operation efficiency</td>
</tr>
</tbody>
</table>

Table 6. Motivators for Outsourcing: Across Industries vs. Oil and Gas
*Source: Supply Chain Services Survey Highlight Analytics and Planning as a Major Pain Point by Gartner, Inc.

Subsequently, companies were asked to list the requirements they consider when selecting a third party for logistic activities. Safety is the top requirement for a 3PL to do business in the oil and gas industry. This is principally due to the high criticality of products that are involved in the process and the recent incidents such as oil spills. Safety requirements include having an impeccable safety record and strict safety regulations. The second requirement is experience. The industry strongly believes it requires experienced partners that understand the logistics the complexity of the logistics and other attributes that effect such decisions. The third requirement is service. In other words, a 3PL should have outstanding service levels since responsiveness can be crucial in times of crisis. The fourth requirement companies consider when outsourcing logistics is cost. Cost reduction being the top motivator reinforces the requirement of low cost for outsourcing logistics. Though cost is an important driver to outsource it is not necessarily a reason to select the 3PL form. Financial Stability is next requirement concerning a 3PL since the sourcing cost associated with the process of outsourcing is high and much is invested with the firm. The last two requirements are brand and culture.

The participants of the study also classified the critical success factors to outsource warehousing operations and transportation in the oil and gas industry. Table 7 lists some examples of critical success factors for warehousing and transportation ranked as high, very high, and critical. Critical is the most important factor to consider.

<table>
<thead>
<tr>
<th>Warehousing</th>
<th>Very High</th>
<th>Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Transition Plan</td>
<td>Number of in-house or contracted drayage carriers</td>
<td>Performance Metrics</td>
</tr>
<tr>
<td>Management of container yard (IT system, physical yard checks)</td>
<td>EDI Transmission</td>
<td>IT System (SAP)</td>
</tr>
<tr>
<td>Warehouse Network Structure</td>
<td>Involvement in bankruptcy or reorganization proceedings</td>
<td>Sq. footage available in a region</td>
</tr>
<tr>
<td>OSHA Recordable Rate</td>
<td>Number of shipments in FEUs</td>
<td>Container storage capacity in FEUs</td>
</tr>
</tbody>
</table>
Transportation

<table>
<thead>
<tr>
<th>High</th>
<th>Very High</th>
<th>Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company History</td>
<td>Oil and Gas Specific Services</td>
<td>Locations</td>
</tr>
<tr>
<td>Warehouse</td>
<td>Freight Forwarding</td>
<td>Industries Served (Oil and Gas vertical)</td>
</tr>
<tr>
<td>Value-Added Services</td>
<td>Web-based IT Services</td>
<td>Core Competencies</td>
</tr>
<tr>
<td>Customs Clearance</td>
<td>Company Strategy &amp; Structure</td>
<td></td>
</tr>
<tr>
<td>EDI Capability</td>
<td>Financial Statements</td>
<td>Modes of Transportation</td>
</tr>
<tr>
<td>Transportation</td>
<td>KPIs</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Table 7. Critical Success Factors in Outsourcing Logistics in the Oil and Gas Industry

On the other hand, the discouragements that oil and gas companies face toward outsourcing were also identified by the survey respondents. The number one discouragement for outsourcing logistics is losing control. Most of the oil and gas companies do not want to give the control of the materials and their movement, mainly because of the liability associated with safety concerns. In order to overcome this obstacle, third party logistics companies should look into building strong relationships based on trust and experience. The second and third discouragements are that companies do not see a visible cost reduction and operation efficiency improvement. Therefore, companies do not see the reason to go through the process of outsourcing and prefer to do things in-house. Discouragement number four is the criticality of the products that oil and gas companies handle and the risks associated with it. Companies fear that they will need to increase their efforts to control the handling of these products which translates to additional costs. The fifth reason why companies do not want to outsource is because they believe their Customer Service Level will be damaged with an extra party involved in the process. The sixth discouragement is that companies believe logistics is part of their core competency. The last discouragement is the fear of failure, losing money in an unsuccessful supply chain.

CONCLUSION

The complexity of the supply chain in the oil and gas industry due to current business trends such as globalization which has intensified the focus on logistics to minimize cost and risks. The associated costs with logistics are huge. These costs can be controlled better with the help of a third party logistics company who can provide their expertise to oil and gas companies. Currently, the supply chain in the oil and gas industry has a vast area of improvement. This is a big opportunity for 3PLs to gain more business in this industry by developing or improving their services to meet the unique requirements of oil and gas companies.

This study provides oil and gas companies as well as third party logistics companies an understanding of the current outsourcing practices in this industry. In addition, it provides a good overview of what the needs of oil and gas companies which helps third party logistics companies improve their offerings.
REFERENCES


COORDINATION IN MULTI-PLAYER ENVIRONMENT
Himanshu Thapa, Texas A&M University
U.V. Manoj, Texas A&M University

ABSTRACT
In this research we study a system in which multiple manufacturers outsource a portion of their jobs to the third party contractors. The due dates for jobs are known and different for each manufacturer. Optimal allocation of jobs to contractors’ windows must be made such that overall system cost is minimized. We analyze the problem under a scenario when there is a centralized decision maker (CDM) who helps in the coordination of the system. Mixed Integer Programming is formulated by analyzing it as classical assignment problem with side constraints. We proposed a backward recursive Dynamic Algorithm to obtain near optimal solution in polynomial time and greedy improvement heuristic to obtain good solution quickly. Our results show that Dynamic Programming and Pair Wise Exchange heuristic approach can effectively solve the problem faster and provide near optimal solutions to large data set problems.

INTRODUCTION
In a multi agent environment, individual optimization of an agent’s goals often leads to suboptimal solutions. This multi-agent system can be seen in manufacturing and computing environment. In a manufacturing environment, organizations subcontract certain jobs to third party contractors (3P) in order to minimize the production cost. Grid computing, where the jobs from several different sources compete for the resources of 3Ps’ are another example for this scenario. An optimal allocation of a job is said to be done when an outsourcing agent’s job is scheduled in its preferred production window at the 3P. Sometimes, a centralized decision maker (CDM) can schedule the jobs, for the manufacturers much efficiently than in a system where there isn’t one. However, the system configurations under which a centralized decision making is optimal need to be examined. We consider a multiple manufacturer scenario and certain jobs from each of these manufacturers are outsourced to 3P manufacturing firms (contractor from now on). Each contractor has a finite production period, in which the outsourced jobs from the manufacturers are processed. Each production period is further divided into windows and each window has its own booking costs. The booking costs of two windows of the same contractor or different contractors need not necessarily be the same. 3Ps offering differentiated rates for time windows are quite common in the market place. For example, Semiconductor Product Analysis and Design Enhancement (SPADE) center (HKUST, 2009) services equipment such as Focused Ion Beam, Emission Microscope, ESD Tester, Backside Preparation System, Laser Cutting System, Probe Station, etc., of various semiconductor companies. They follow a differentiated booking cost schedule. The company announces its availability of production windows three weeks in advance to allow the semiconductor companies to book the available time slots.
In a decentralized system where each player tries to maximize its objective, conflict arises as these players (manufacturers and contractors) compete for the common resource (window period of contractor) – the result is higher system cost. Information sharing among the players is essential for coordinated decision making in supply chain. For example, Exostar (LLC, 2009) and Boeing together build a Business-to-Business supplier network hub for communication between Boeing and its suppliers on the 787 Dreamliner project and different suppliers work on the design, production, assembly and testing of major components of the aircraft. The portal provided information on the component details and shop floor information of the suppliers to the Boeing Company. This portal supports the two-way transfer of information among multiple partners. “Outsourced Partner Network” from E2Open Inc. (E2open, 2000) is another network based system that shares information and connects different players in the supply chain. The visibility gained by information sharing has resulted in reduced cycle time and overall cost.

We provide a mixed integer program model in this research to find the optimal job assignments. Our model behaves as Centralized Decision Maker to find efficient allocation of jobs to reduce system cost. However, we assume that CDM helps the agents to provide information at the beginning of the period. It helps in sharing of information. In the absence of a CDM, the individual agents will try to optimize its production schedule without considering other agent needs. In such a scenario, there will be competition for the contractor production window. Hence, the individual agent may have to pay a premium to schedule its job at its preferred window or some jobs may not get schedule at all. In our research, we assume all the information is available at the beginning of the period implying the presence of CDM. Further we claim that the problem is NP hard in strong sense and is special case of knapsack problem which is NP Complete. We provide efficient heuristics to obtain good solutions in reasonable amount of time. The heuristic is a Dynamic Programming with a jobs interchange module. Obtaining a good solution allows the manufacturer for a more disciplined spend, shorter lead times for orders, and less wasted inventory of raw materials and finished product.

**LITERATURE REVIEW**

In a multi-agent scheduling problem, different players, each with its own set of jobs and objectives, compete for common resources. Usually there exist conflicts over resource allocation and utilization. Researchers adopt different solution methodologies for multi-agent scheduling problems. (Davis and Smith, 1983) introduced the concept of task decomposition method to arrive at a cooperative solution in a decentralized problem setting. (Walsh and Wellman, 2003) uses iterative market protocol to solve the task decomposition model. (Shao et al., 2007) use the market approach CONTRACT NET protocol to solve multi-agent framework scheduling to handle decentralized supply chain problem in a flexible manufacturing cell. In their problem job agents and resource agents act as buyers and sellers. They introduce the bidding mechanism for dynamic scheduling consisting of multiple non-identical workstations.

Application of distributed problem solving methods in shop-floor organizations are introduced by (Tharumarajah and Bemelman, 1998). The methodology reviews negotiations and behavior- based methods for scheduling and coordinating distributed entities within both
hierarchical (Containing multiple levels, where a higher level coordinator position exists, Smith et al., 1988, Lassila et al., 1990) and heterarchical (Where the machines themselves directly resolve the conflicts and carry out coordination, Sycara et al., 1991) control structures. Distributed problem solving methods have been used to reduce the cost of procurement before, during and after the transaction.

Congestion games can be used to model coordination and pricing issues among players. It follows the cooperative game theory concept introduced by (Rosenthal, 1973). Pricing issues in a decentralized factory environment are studied by (Papadimitriou, 2001). (Walsh, 2001) Study different mechanisms to obtain the equilibrium among players in the supply chain.

The study of cooperative sequencing in a single machine is done by (Calleja et al., 2004). In their setting each player has multiple jobs to process. (Calleja et al., 2004) uses the same sequencing games introduced by (Curiel et al., 1989)(Aydinliyim, 2007) uses cooperative sequencing games in a production planning setting, where the third-party capacity is modeled as non-contiguous manufacturing windows with limited capacity. They consider a multi-objective function which is the sum of the work-in-process (WIP) costs plus the booking costs of the manufacturing windows.

Various scheduling models have been proposed in the literature in the context of cooperative games. (Tijis et al., 1984) propose a permutation game model, a generalization of the assignment game of (Shapley and Shubik, 1969). Interested readers may refer to cooperative scheduling models surveyed in (Borm et al., 2002) and (Curiel et al., 2002). It could be argued that the dominant players in supply chain may not cooperate with others when making decisions. (Bukchin and Hanany, 2007) evaluate the inefficiencies due to competition among decision makers. They show that the centralized solution need not necessarily be an equilibrium solution.

We also looked into dynamic programming approach to our problem using methods in (Lawler and Moore, 1969). There has been studies of new dynamic programming algorithm for the parallel machines total weighted completion by (Webster and Azizoglu, 2001b) followed by scheduling with family setup (Webster and Azizoglu, 2001a).

**PROBLEM DESCRIPTION**

We use following notations in our problem description:

- \( p_{j,m} \): Processing time of job \( j \in J \) for manufacturer \( m \in M \)
- \( d_{j,m} \): Due date of job \( j \in J \) for manufacturer \( m \in M \)
- \( \lambda_{n,w} \): Booking Cost of the \( k \) window of contractor \( n \)
- \( S_{n,w} \): Starting time of Window Period
- \( E_{n,w} \): Ending time of Window Period

Each manufacturer \( m \) has a set of jobs that needs to be processed; denoted by \( (J_m) \). These job set can either be completely outsourced or part of it can be processed in-house. The contractor \( n \) has \( w \) window periods; each of them can take only single job to process. Each window period has booking cost \( \lambda_{n,w} \). The job processed in a window period is subjected to the...
precedence constraints and the time availability of the window period. The booking costs of any contractor, follow the relationship $\lambda_{n,w} \geq \lambda_{n,w+1}$, $w = 1, 2, \ldots, w - 1$.

We assume that the first production window of all contractors open at the same time. The outsourcing jobs from manufacturers have higher in-house production cost. The allocations of jobs to windows are subject to availability and due date constraint.

**MIXED INTEGER PROGRAMMING FORMULATION**

Our problem is

We formulated an assignment problem with objective of minimizing total outsourcing cost by considering all the manufacturer jobs in a set $j = \{1..J\}$ and all the contractor windows in a set $i = \{1..W\}$ with the restriction of same number of windows as number of jobs [$J = W$]. Without losing valuable information, and for the ease of information, we have omitted the information of the contractor and the manufacturers from the time window and job index respectively. Below is the (M) MIP model in following form:

\[
\begin{align*}
(O) : \min & \sum_j \sum_i p_j \lambda_{i,j} \\
\text{S.T} & \sum_i x_{i,j} = 1 \quad \forall j \\
& \sum_j x_{i,j} = 1 \quad \forall i \\
& s_j + p_j \leq d_j \quad \forall j \\
& s_j \geq S_i x_{i,j} \quad \forall j \\
& s_j + p_j \leq E_i x_{i,j} \quad \forall j \\
& s_j \in (0,1,\ldots), x_{i,j} = (0,1)
\end{align*}
\]

(O) Provides us the optimal solution to the complete problem without giving equal preference to all the manufacturers, hence providing us with non-equilibrium condition. The above MIP is NP-hard, it can easily be shown that a special case of knapsack problem can be reduced to an instance of our problem.

Our model strictly allocates single jobs to every window in each time period horizon. Hence, there is a need of at least single job that can be assigned to individual window. Hence, we make claim 1 and 2:

**Claim 1**: For each window period $T_i$, there exists at least $n$ jobs (where $n$ is number of contractors for each time period $T_i$) satisfying $d_j \leq E_{wi}$. Otherwise, some jobs would violate the due date constraints.

**Claim 2**: Manufacturer $m$ with job $j$ cannot be allocated to window period $T_i$ ($i = w$) if $p_{j,m} \geq (d_{j,m} - S_{n,w})$ even though the due date is more than start time of window period $T_i$.

Under optimal conditions, if, $a_n$ contains the job indices that are assigned to contractor $n$ then $P_n = \sum \{p_w: w \in a_n\}$ giving total processing time of jobs assigned to contractor $n$ and $b_n$
Claim 3: For general outsourcing cost function, there exists an optimal schedule in which the sum of the processing times of the jobs assigned to different contractors follows:

\[
\text{Max } \{P_1/b_1, P_2/b_2, \ldots, P_n/b_n\} \text{ where allocation sequence is based on LPT rule on } P_n.
\]

Claim 4: In optimality, the job has to be processed in the least cost window such that \(P_i\) is assigned to \(\min\{w_i \lambda_{nw}\}\) \(\forall\ n, w\) where weights of individual jobs are calculated based on following \(w_j = \left\{\frac{(E_i - 1 + P_j)}{D_j}\right\}\)

Claim 5: If all the jobs of different manufacturers have same processing times then optimal solution is obtained by EDD (Earliest Due Date) rule.

In addition, problem under relaxed side constraint might provide us with lower bound to the original problem. Our problem with relaxed due date constraint allows manufacturing jobs to be assigned to any contractor’s window. Hence, we claim the following:

Claim 6: Given all jobs with large due dates \((d_j \geq E_W)\), where \(E_W\) is the end time of last window. Then, the lower bound can be obtained by following LPT (Longest Processing Time) rule of allocating longest processing times job to lowest cost windows.

Proof: Consider a set of jobs from all manufacturers \(j \in J\) and windows from all contractors \(w \in W\) having \((J = W)\) arranged by LPT such that \(p_1 > p_2 > \ldots > p_k > \ldots > p_j\). Then lower bound is \(\sum \min \left\{p_k \lambda_k\right\}\) where \(\lambda_k < \lambda_{k-1}\) for all \(j \in J\).

DYNAMIC PROGRAMMING (BACKWARD RECURSIVE ALGORITHM)

\[\sum_{j=1}^{n} P_j D_j \sum_{i=1}^{m} p_j \lambda_i.\]

It is noted that our problem is \(P_m, D_m||\sum_{j=1}^{n} P_j \lambda_i.\) is NP-hard in strong sense. We attempt to find the polynomial-time optimization algorithm for criteria \(\sum_{j=1}^{n} P_j \lambda_i.\)

Let \(f(j, t_1, \ldots, t_n)\) denote the minimum total outsourcing cost for scheduling job 1 through \(j\) where \(t_n\) defines the number of window occupied in contractor \(n\). The jobs are ordered based on descending order of \(p_j\).

Initial Conditions:

\[
f(0, t_1, \ldots, t_n) = 0, \quad f(j, t_1, \ldots, t_n) = +\infty, \quad t_i < 0 \quad \forall i \in n
\]
Optimal Value is obtained for \( \min \{ f (J, t_1, t_2, ..., t_n) \mid \sum \{ t_i \} = T \} \). There are \( O (JT^m) \) states in this dynamic program, and each state is evaluated in \( O (n) \) operations. The time complexity of this dynamic program is \( O (nJT^m) \). Using MATLAB 7.6.0 (R2008a), we solve dynamic programming by first obtaining the values of \( \beta_i \). We define a job set \( \beta_i \) which satisfies \( d_j \leq E_{wi} \). \( |\beta_i| \geq n \). We use greedy heuristic of DP to allocate jobs of \( \beta_i \) to each window and carry backward the remaining jobs to previous period \( \beta_{i-1} \).

Under observation, DP provides significant gap from optimal for large data sets due to strict allocation of jobs in stage time periods. Hence, we looked into improving the solution of DP to reach near optimal solution without compromising on computation time.

**IMPROVEMENT HEURISTIC – PAIRWISE EXCHANGE**

DP provides starting solution for the improvement heuristic. We consider pairwise exchange of jobs between stages (time period) as better approach to obtain near optimal solution. We looked into neighboring time period for possible job exchanges with objective of minimizing the outsourcing cost for each time period.

Our Improvement heuristic is efficient by finding the bottleneck time period first with maximum outsourcing cost. Pairwise exchange of jobs from neighboring time periods are carried out to minimize the cost. We follow simple sorting process explained in our flow chart given in figure 1 to make only possible job exchanges which results into minimization of total outsourcing cost.

The heuristic starts with the DP algorithm solution and runs the iteration until the required optimal gap reaches 1.5%. The computational time and improved solutions are discussed in next section.

**COMPUTATIONAL RESULTS**

We study large problem instances to analyze our DP algorithm and improvement heuristic. The data set is obtained from a uniform distribution for processing times and predefined function for obtaining due dates. Each instance has 10 contractors with 100 window periods, total of 1000 jobs. We have \( U (1, 10) \) and \( \alpha = (250x + 100) \) and \( \beta = 0.2 \) where \( x \) is from 0 to 1. Due date is obtained by using \( \max \{ \alpha * pj/100, (1 - \beta)*\alpha * pj/100 \} \). As mentioned above, we calculate the beta set for each time period to solve for DP algorithm. The computational times are calculated in seconds.
Figure 1: The Sorting algorithm
Table 1: 10 Instances of a large size Problem with Solutions

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>1</td>
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<td>5788</td>
<td>2292778</td>
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<td>2063123</td>
<td>23.34</td>
<td>1.5382%</td>
</tr>
<tr>
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<td>1,000</td>
<td>1969027</td>
<td>8706</td>
<td>2204598</td>
<td>0.025</td>
<td>2004002</td>
<td>20.01</td>
<td>1.7763%</td>
</tr>
<tr>
<td>3</td>
<td>1,000</td>
<td>2450201</td>
<td>5823</td>
<td>2787412</td>
<td>0.024</td>
<td>2491298</td>
<td>25.31</td>
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</tr>
<tr>
<td>4</td>
<td>1,000</td>
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<td>5871</td>
<td>2381560</td>
<td>0.025</td>
<td>2552879</td>
<td>28.31</td>
<td>1.2133%</td>
</tr>
<tr>
<td>5</td>
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<td>2436479</td>
<td>5885</td>
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<td>2500263</td>
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</tr>
<tr>
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<tr>
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<td>5881</td>
<td>2569983</td>
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<tr>
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<tr>
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<td>0.025</td>
<td>2302195</td>
<td>36.50</td>
<td>0.5363%</td>
</tr>
</tbody>
</table>

The average gap from optimal was found to be 1.6743%. The average MIP time to solve 1,000 jobs was 1.7 hours (6130 seconds) whereas improvement heuristic average computational time was found to be 26.2 seconds.

CONCLUSION AND FUTURE WORK

In this paper, we presented a formulation for job allocation to window periods with strict due date constraint. We solved large data sets instances for developed MIP using Xpress-MP and have shown that coordination is achieved by information sharing among manufacturers and contractors. The players provide all the information to the Centralized Decision Maker. If each manufacturer tries to minimize its cost individually, a suboptimal solution will be obtained. Reason being conflicting objectives of manufacturers and 3P contractors. MIP tries to equitably distribute the manufacturers’ jobs among contractors to benefit the entire system resulting in system equilibrium. It may happen that the cost benefit of players improves from previous models resulting in reduction of overall system cost. This allows players to move towards equilibrium resulting in coordination. The problem is NP-hard. It takes considerable amount of time to solve real life problems. Hence, we followed a Dynamic Programming approach with improvement heuristic to obtain solution in polynomial time. Using MATLAB and Xpress-MP, our computational results show drastic improvements in time with reduced gap from optimal solution.

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GLOBAL SOURCING – PROCUREMENT DURING AN ECONOMIC CRISIS

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ABSTRACT

This paper analyzes international procurement, in an effort to determine suggested best practices, particularly during an economic downturn. Specifically, the recent recession and its effects on common procurement practices for manufacturers and distributors are discussed. This paper attempts to explore the best practices on global sourcing through multiple sources including the extant supply chain management literature and industry case studies and interviews. Discovered best practices conclude the paper.

INTRODUCTION

The Bureau of Economic Analysis recorded that an upward change in Real GDP started to decrease beginning in 2006. As demand began to decrease and credit was not so easy to come by, the recession began and the change in GDP became negative by 2.6% in 2009 (econedlink, 2011). In the supply chain, costs rose and the flow of materials and products slowed drastically. Particularly affected by these changes are the manufacturers. The Bureau of Labor Statistics recorded sudden increase in unemployment rate from 4.7 percent in Jan 2007 to 9.7 percent in Aug 2009. From December 2007 to December 2008 mass layoffs increased by 100.22% in the manufacturing sector. One theory behind this drastic change is that of the bullwhip effect (BWE). The BWE occurs with “the amplification of demand variation through a supply chain” (Dooley et. al, 2010). As demand decreased with the recession, retailers, being closest to the customers, reacted first, but still slowly. Unable to predict the discrepancies in demand, variation will increase exponentially throughout the supply chain. The BWE leads to uncertainty, increased inventory and thus increased costs. As the BWE proceeds up the supply chain, the manufacturer, being farthest from the customer demand, tends to see the worst effects. Manufacturers are slowest to respond to the demand variations and thus tend to overreact when “actual” demand reaches them, which in turn hurts their inventory performance even more.

This crisis time put pressure on the industries to cut the cost and manage supply chain efficiently in order to maintain profit in spite of low demand. The uncertainty in the market made many companies to reconsider their policies in order to sustain business during recession. To counteract the BWE, manufacturers attempt to reduce costs, and can do so through outsourcing (Dooley et al., 2010). Within the “past 20 years” (Chakraborty and Remington, 2005), global outsourcing has become popular in an effort to decrease costs while simultaneously improving quality. Most global automakers have invested heavily in the past decade to improve their global sourcing / supplier management system for alignment with their product development and production (Pang, 2010). In another example, international metal producing giant Alcoa Inc.
implemented a plan in 2009 to increase their global sourcing strategies in an attempt to counteract the recession. Though a US based company, Alcoa began purchasing raw materials from alternative countries, and ended up saving over 20% on commodity costs. Is this possible in various industries? Should other manufacturers follow in Alcoa’s non-traditional footsteps?

During the recession of 2008-09, numerous businesses have resorted to bankruptcy because they couldn’t survive the high costs and diminished demand. The impact on the manufacturing sector has been particularly acute. Between 2007 and 2008, consumer demand for manufactured products decreased 3.2 percent. 136 U.S. publicly traded companies filed for bankruptcy in 2008, up 74 percent from 2007 (Associate Press, 2009). But for those firms who have maintained business, how has the recession affected them? How do those in the supply chain manage to add value, increase sales and decrease costs in such a critical time for businesses? Particularly in manufacturing, one interesting aspect of this phenomenon is that of procurement. Operations managers are expected to make the best possible decisions to reduce overall cost. How can one buy in such an economy? This study looks at the effects of the economic downturn on the supply chain, and how to counteract it. Mainly, due to the rising interest in “offshoring,” is going global efficient, and, if so, for whom? Therefore, the objective of this paper is to determine best practices for international procurement, especially in a tough economy, based on analyzed data. This study will contribute to purchasing decisions and provide a foundation for conducting international business effectively.

The remainder of the paper is organized as follows. In section 2, we provide a review of current supply chain management (SCM) literature on global sourcing. Section 3 evaluates current industries that source internationally and case study of industry. Section 4 discusses the outcomes in detail, with an ideal framework for choosing a supplier. Section 5 draws the paper to a close.

ACADEMIC PERSPECTIVE ON GLOBAL SOURCING

In this section we discuss the academic perspective on global sourcing based on the current supply chain management literature. Global sourcing is the efficient tool in Supply Chain Management. A lot of research has been done in past few years on global sourcing. Although there are differences among the researcher over effectiveness of global sourcing, it is not a denying fact that global sourcing is becoming more and more popular SCM tool to get a competitive edge in market. Under increasing pressures to reduce costs, companies have shifted, and continue to shift, sourcing from local suppliers to low cost country-based suppliers. The economic recession showed little evidence of reversing this trend; in fact, it is likely to increase the pressure to source globally (Hultman et. al, 2011).

In this section, benefits and risks of global sourcing as found in literature are discussed. It also includes example of Japanese supply chain management in recession.

Global sourcing and it’s benefits

Despite many success stories of cost reduction through this innovative method, it is important to analyze why a company should go global. Why not focus reduction efforts internally? As mentioned by Holweg et. al (2011), companies chooses to go global mainly for
cheaper resources and the intensification of international competition, establishing a presence in new markets and obtain access to distinctive resources. Lower cost than domestic supplier is one of the main driving force for international procurement. Particularly in labor intensive industries, it is much cheaper to attain some components from another country with inexpensive labor rates. This is highly effective tool in bad economy as it gives competitive edge in terms of prize. In the automotive industry for example, migration of US manufacturer to Mexico, European manufacturer to Eastern Europe helped them to harness the lower labor cost while incurring only a limited penalty on logistics and coordination cost (Hong and Holweg, 2005).

In many cases, international sourcing can not only decrease costs, but will also expand that organizations market. The company that chooses to engage in business globally has a better chance of making presence in foreign country thereby increasing customer base (Nassimbeni, 2006). These days, the marketplace has become more and more internationalized due to the ease of the internet, e-business, and other variables. Thus, in order to remain competitive, it is imperative that businesses as least evaluate their global potential.

The procurement role is being progressively realized as a vital aspect of supply chain management and thus international tactics should be thoroughly considered in this area. Purchasing overseas can be used as a competitive weapon, particularly to survive in a tough economy when demand is low. A rising concern is the fact that often times “domestic suppliers alone may not be able to meet the needs” (Herbig and O’Hara, 1996) of their customers. Therefore buying abroad can become necessary to meet these needs, while keeping costs low and quality and customer satisfaction high. Besides this, introducing global supplier introduces competition to existing domestic supplier who in turn will try to give better deal in order to remain in business.

Additionally, technology acts as a “double-sided sword” (Herbig and O’Hara, 1996) that can be used defensively against international competition, as well as offensively to increase market share. Keeping up with today’s technological advances is imperative for continuous improvement in product design and functionality. It is very difficult for company to be technologically sound in all area. Thus a buyer company can benefit from technology available global supplier. When the supplier is more involved in product design early on, they are able to push the product to market introduction sooner, thus reducing new product cycle times. In regards to emerging technology worldwide, outsourcing components to produce finished goods locally is the leading strategy to maintain such an advantage. Global sourcing can also enhance flexibility in manufacturing. As technology increases, so do expectations of capacity. International procurement gives advantage of choosing supplier matching the quality and capacity requirements. Sourcing is consequently being sent offshore in the hopes of engaging with suppliers who offer optimal capabilities. Products frequently require specific technological features that may be only available overseas.

With growing scholarly and executive attention over the past couple of decades, sourcing and supply chain management has been shown to play a significant role in achieving competitiveness (Gadde and Håkansson, 1994). In general, outsourcing globally poses many advantages, mostly to decrease production costs when opting for survival in a difficult economy. Additionally, there are also many long term benefits which are often underestimated such as increased quality and ease of doing business.
Risks in global sourcing

The decision to buy internationally can likewise be met with much debate. One of the major issues to consider is communication, which is crucial within any supplier relationship in order to maintain a productive and efficient supply chain. There are problems associated with exchange rate fluctuations, standardized terms, language differences, among other various details that must never be overlooked. Besides this, various risks involved in global supply are quality problems, longer lead time, safety issues, supply disruption due to poor infrastructure (Christopher et. al, 2011). Geographical distances not only increase transportation costs but also complicate decision-making because inventory tends to increase due to longer lead times in the supply chain (Golini and Kalchschmidt, 2011).

Sourcing can be greatly affected by political policies of supplier nation. However these cultural impacts can be reduced by joint ventures and training staff properly (Thomson and Kemp, 2005). It is essential that each firm communicate effectively about each party’s expectations relative to doing business. Without which, many costly and drastic complications are due to arise. Participating in such extensive communication can also be somewhat costly, though necessary to participate in international business. Though indispensable, keeping in touch often requires overseas travel which can also be expensive. Ideally these costs exist mainly in the short term, and decrease over time or become manageable as processes become more standardized.

Recently, Steinle and Schiele (2008) analyzed the limits to global sourcing. They argued that global sourcing does not result in improved competitiveness due to problems of being a preferred customer in a foreign environment i.e. strategic supplier prefer firms in the same regions than foreign customers. Global Sourcing is greatly affected by the dynamics of buyer-supplier relationship. It is imperative to maintain healthy relation for business (Sheth and Sharma, 1997).

Government perspective on global sourcing

It seems as though the main argument against international sourcing is that it leads to the elimination of hard working American jobs, as well as the deterioration of wages. However if a company won’t survive, supplier will not be having any business. This will result in making economic situation even worse. During such a terrible recession, keeping one’s income is essential to survival. Despite the legitimacy of such a concern, studies have found that partaking in global sourcing can actually improve the USA’s employment problems, given some specifications. Although outsourcing eliminates employment, it also creates more work in the strategic activities that remain. In labor-intensive industries specifically, it is much cheaper to manufacture components abroad. While these labor costs decrease, more jobs than were lost are created to manage the now global supply chain. Thus, overall productivity eventually increases. Changes in wages depend on the nature of the industry, but by offshoring in “a labor-intensive industry in a capital-abundant country” (Arndt, 1997), as productivity increases so does GDP and thus wages will increase as well. Therefore, when a firm decides to outsource internationally job losses will occur in the short-run. However, in the long-run employment will move to either
another industry or to a white collar career in the same industry, which usually provides better wages. As company will start to expand, more and more manpower will be required to handle global supply chain which will ultimately increase the jobs.

Japanese supply chain management during 1991 recession

This section deal with a study over recession and how it impacted the Japanese supply chain as described in Lamming and Richards (2000). Japanese focused their supply chain on a strict “customer-dominated” relationship, where the supplier obeys the customer. In 1991, limited demand and deficiencies in labor led to a “deep recession.” There was an immediate need for cost reduction. Japanese firms started to put pressure on supplier however it was not very useful. Thus, firms began to re-evaluate their suppliers, and considered international supply. The strict ties between players in the supply chain began to “weaken in the recession.” Once the recession had done its damage, international outsourcing became a viable option for many firms. However, despite the aftermath, no drastic changes were made in Japanese supply chain relationships. Customer domination still prevailed, though there has been some shift to more open competition, much like Western strategies. Ultimately, the Japanese learned that “customers and suppliers will go through the recession together, recognizing that not everyone will survive, nor has a right to do so.” Despite 50 years of “corporate structures and standardized procedures,” a trend is leaning towards more “open, disorganized competition.”

INDUSTRY PERSPECTIVE ON GLOBAL SOURCING

With the continuous growing competition and bad economy, industry is seeking the new strategies to sustain the business. It is unarguable fact that industry is considering global sourcing as a tool not only to maintain but also to expand business. Hence, after discussing various aspects of global sourcing available in literature, it is equally important to study what is view of industry on global sourcing and to what level it is effective for them. This section is elaborating global sourcing in industry by studying two cases.

Case I: Global sourcing at a large electrical distributor

This case study is mainly done to study what is managerial view on global sourcing by interviewing procurement team of a company which is considered to be a leader in electrical distribution. It focuses light on company’s policy regarding sourcing. Following are the questions asked and its answer given by the procurement manager at the company.

1. How has the economic downturn affected your company, specifically procurement?
   According to the procurement team, before the recession production was high. Manufacturers kept on supplying generously to the distributor, until things went south. Layoffs occurred, and thus production decreased. However, now as the economy improves, they are seeing longer lead times because manufacturers are “still producing like they did when times were bad.” As of procurement, it was reported that there has not been a large drop within the last year. Though it was noted that within the past ten years, there has definitely been a great turn for US based companies to send manufacturing overseas.

2. Does this electrical distributor participate in global sourcing? If so, why?
The procurement team explained that most of their purchasing is done domestically. They prefer to keep business local due to the amount of government projects in which they are involved. For example, a project for a school with a stimulus plan will have products produced in America. Additionally, another large reason for outsourcing overseas is the demands for higher pay from unions. There are no union fees outside of the US, which reduces costs greatly. The team also mentioned that their company began with a major U.S. based OEM for electrical, energy and other industrial products who practices reverse auctioning. Under this procedure, vendors are expected to push prices down. Thus in order to decrease costs to qualify for bids, a common solution is to produce abroad. The distributor has maintained this practice despite their separation from the OEM.

3. How does an electrical distributor procure overseas business?

The distributor’s parent company is actually based in France. The USA based facility is only one section of this immense corporation along with locations in Asia, the Middle East as well as South America. Procurement pointed out, though, that these entities would not purchase from other internal facilities but would rather purchase locally. Still they have connections all over the world. With a company as large as the parent company, distribution centers are numerous and as mentioned worldwide. Therefore variation in price is substantial but the centers are guaranteed a rebate at the end of the year.

4. What best practices would you recommend for global procurement?

The procurement team stresses that it is not always the “best option” to go overseas. They advised to start domestically if possible though it is sometimes necessary to go global. It is a preference to stay local because of issues with tariffs, work ethics, lead times and other factors that cannot be controlled when business is shifted overseas. They also recommended focusing on the quality and safety of products produced abroad. This electrical distributor outsources mostly commodities such as fasteners, nuts, bolts, etc. These products particularly aren’t flammable or explosive and in general don’t pose a safety hazard. Most items with trademarks or those that require testing are kept domestic.

The team emphasizes that their company wants to provide whatever customers want whenever they want it and hence represent many manufacturers. However, in tough economic times, it is undesirable to be responsible for so much inventory when sales are not proportional. In other words if top line sales decrease, so should inventory which is something they constantly monitor. In reference to the bullwhip effect, the team explains high lead times due to the low production rate of manufacturers at this time. However, they feel that they are more prepared for these lead times. They advise, most of all, the importance of improving relationships with vendors, especially now and to give precedence to the major players in the market.

Case II- Global Sourcing Development at a Large Retailer

In this section we briefly describe the IKEA case study presented in Hultman et. al (2011). The aim of this section is to study the strategic decisions taken by IKEA which made them successful. IKEA is a home furnishing retailer founded in 1943 in Sweden. It is a privately held, international home products company that designs and sells ready-to-assemble furniture such as beds and desks, appliances and home accessories. IKEA has been great successful story in carrying out Global Sourcing. Following example exemplifies how IKEA along with Sapa
Profiler implemented global sourcing of tempered glass which is critical part of PAX Wardrobe System. It explains how IKEA shifted from local sources to global sources in order to maintain low cost.

Challenges faced

In case of PAX Wardrobe System, tempered glass is critical part as it shares significant cost of total cost and transportation of it is difficult being fragile and heavy. In 2003, these glasses were supplied by single Swedish supplier. However as the demand increased, supplier was not able to meet up with demand. The second issue with the supplier was lack of willingness to supply tempered glass at a lower cost (Hultman et al., 2011).

Global sourcing strategies at IKEA

The challenge faced for supply of tempered glass pushed forward IKEA and Sapa Profiler (Supplier of sliding door to PAX) to see possibility of sourcing glass from China in 2005. China being low labor cost country than European countries provided tempered glasses at lower cost than Swedish supplier. This helped IKEA to maintain low benchmark value for PAX Wardrobe Systems. In 2008, second Chinese supplier was introduced for tempered glass supply. By 2009, tempered glass is completely sourced from China as second Swedish supplier also phased out (Hultman et al., 2011).

PAX Wardrobe System is just one example of global sourcing strategy of IKEA. In 2009, IKEA had around 1400 suppliers in 54 countries. IKEA has a wide range of supplier from European countries Denmark, Poland, Czechoslovakia, Rumania, Hungary etc. along with Asian country China. Formation of supplier relationship with Poland and countries from Eastern Europe; and China helped IKEA to be a low cost alternative in furnishing. It helped them to develop strong position in the market (Hultman and Hertz, 2009).

The Swedish firm saw profits surge 11 per cent in 2009 despite the global recession. Its profits rose from $2.61billion to $3billion in 2008, with an incredible 21.85 billion sales across the 12 months (Dailymail, 2010). IKEA has been successful because they implemented global sourcing tactics much earlier. This helped them to maintain lower cost as they tapped the low labor cost market for sourcing across the world. Earlier implementation of global sourcing not only helped them to sustain in recession but also make profit despite economic downturn.

SUMMARY OF FINDINGS AND RECOMMENDED BEST PRACTICES

Summarizing the research, global sourcing is an effective mean to get a competitive edge in market even though there are various risks involved in global sourcing. However, it is not good to source globally every time considering job loss. If implemented systematically and managed properly, it is excellent tool to maintain business in bad situations such as recession. Various industries like automobile, retail etc. have already implemented global sourcing successfully. For example, in production of American car, only 37% of the production value is generated in the U.S, rest all is outsourced internationally (Antràs and Helpman, 2004). But still, it is not viable option all the time. Industries are considering global sourcing as a strategy to survive especially in recession.
Based on literature and industry review, best practices for global sourcing can be recommended. It has been suggested that “a firm should concentrate on business activities where they possess superior talent and knowledge. All other activities are candidates for outsourcing (Chakraborty and Remington, 2005). Therefore, efforts should be mainly focused on those most important aspects of business with those tedious ‘nuts and bolts’ products to be produced internationally. Labor-intensive practices specifically can be outsourced cheaply. Following factors are important to manage and reap the benefits of global sourcing during recession.

**Preparation for bad situation**

Firms should be well aware of the option to conduct purchasing abroad and have established relationships when the need arises. Had the Japanese, for example, been aware of the potential downfall of their economy, they may have had less drastic effects. After Japan earthquake in 2011, Mazda had to stop the production due to the part shortage even though company had no plant in affected zone (Schepp D, 2011). If there were option of global supplier, such problem wouldn’t be there or rather it would be less severe.

**The importance of relationships**

Company should form a healthy and trustworthy relationship with global supplier. It is difficult for any firm to excel in all parts of the Business. To enhance in non-core competency areas, firms should form collaborative relationship with strategic supplier (Sheth and Sharma 1997). MasterCard expresses the importance of managing supplier relationships in order to direct their spending to “preferred suppliers.”

International purchasing requires “improved supplier relations, long-term contracts, and firm commitment plans,” (Giunipero and Moncska, 1997). It is easier to implement strategies if firms have good relationship and effective communication with supplier. Due to the importance of such a relationship and the resulting dependence, it is vital that manufacturers choose the right supplier, international or not.

**Systematic approach for global sourcing**

Company should set up a process for strategic purchasing when firm is moving from local to global supplier. The procedure of buying abroad needs to be “studied more from a planning view than from an operational or transactional viewpoint,” (Giunipero and Monczka, 1997). It is extremely important that firms employ purchasers with necessary experience to perform well, especially when considering foreign suppliers. In case of international procurement, it is essential to begin with a transactional process. At this stage, specific performance goals should be set for measureable results, according to MasterCard. Existing procurement processes should be re-evaluated and restructured to integrate global practices. Once these techniques are established, partners can be selected.

**Supplier selection criterion**
A pre-evaluation of suppliers, particularly global ones, must take place before any exchange in order to maintain the correct business objectives. MasterCard suggests performing this kind of analysis in order to “develop a business case, set goals and target areas for process change.” Firms must consider cultural factors, buying style, “corporate objectives, policies, procedures and structure” (Herbig and O’Hara, 1996) when selecting. Besides this, total landed cost, product quality, logistical capability, location, trade regulations, finances, time to market, value-added services, communication, compliance of labor laws and humanitarian employee treatment are important factors that are to be considered while selecting supplier (Kumar et al., 2011). Firms should evaluate which criteria are most important and which should be carefully considered when dealing with international organizations. Then these conditions can be applied to the appropriate selection process.

Forming a partnership with international suppliers is a thorough process. To reiterate, it is not recommended that companies focus their entire procurement strategy on global supply. It is important, however, that they should be aware that it exists and spend the time considering it as a lower cost option. Though long and in depth, it is absolutely necessary to find the right supplier when sourcing abroad in order to reduce possible risks.

CONCLUSIONS

In conclusion, this paper focuses on learning proper procurement procedures, predominantly in the time of a recession. After analyzing international procurement itself as well as examples of those who have implemented the practice, it can be determined that preparation is extremely important. Company should keep option to go global if required and perform an evaluation to check global sourcing is profitable or not.

Purchasing overseas can incidentally reduce costs and if done properly improve efficiency. This process for manufacturers is preferred for labor-intensive components, which can be cheaper when produced internationally. However company going global should reposition their labor in supply chain to minimize job loss. If the choice is made to procure internationally, it is important to choose the right supplier and ultimately the right relationship. Much time should be spent predominantly in the planning stages of this procedure.

All in all, international market penetration is inevitable over time. Major threats such as job loss are associated, but with proper planning and implementation these risks can be avoided. Global Sourcing is a tool which if used properly can be highly effective. Manufacturers entering into international business will cut costs, improve efficiency and maintain a competitive edge. Thus, to avoid the dark downfall we’ve seen in the past few years during the 2008 recession, global procurement should be deeply consider.

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IN-SEASON TRANSSHIPMENTS

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EXTENDED ABSTRACT

A common method of inventory sharing among independent retailers is retailer-to-retailer trade, called transshipment. In transshipment-based inventory sharing, a retailer with sufficient inventory may be willing to sell her inventory to a stocked-out retailer. This allows a retailer to satisfy demand through other retailers without frequent shipments from the generally distant manufacturer.

Independent retailers may decline to send transshipments because they tend to see each other as competitors. The belief that an unsatisfied customer at a stocked-out retailer may buy from another retailer fuels competition among retailers. Customer overflow to another retailer may happen when a stocked-out retailer, whose transshipment request is denied, cannot satisfy a customer demand. While the unwillingness of customers to wait motivates a stocked-out retailer to request a transshipment, the possibility of customer overflow motivates retailers with on-hand inventory to reject the request. Transshipments provide a retailer with the option of accessing other retailers’ inventories and markets. They are real options with which retailers hedge against risks of both stock-outs and leftover inventory.

At the beginning of the season, each retailer places an order to a manufacturer (supplier). During the season, if a retailer stocks out when a customer demand occurs, he (requesting retailer) places a transshipment request to another (requested) retailer. If she (requested retailer) accepts the request, the unit is transshipped after charging a transshipment price to him. Otherwise, the unsatisfied customer leaves the requesting retailer and may visit the requested retailer with a customer overflow probability. Therefore, a requested retailer may be willing to transship depending on the transshipment price, the expected revenue from a possible customer overflow, and the likelihood of selling the requested unit before the end of the season.

We aim to provide easily implementable transshipment, ordering and transshipment price policies for a decentralized retailer system where transshipments can potentially be made immediately after each demand arrival and unsatisfied customers may visit another retailer to satisfy their demands. Allowing a transshipment after each demand arrival is an important aspect of modeling reality as each customer wants to know the availability of the product, either directly from stock or by transshipment upon his/her visit to the store. In practice, a transshipment is requested to meet a demand immediately after the realization of the corresponding demand. Such transshipments are called in-season transshipments.

Besides bringing in more realism to models, each in-season transshipment can be accepted/rejected separately, which provides retailers with a flexible transshipment policy. A high (respectively, low) level of future demand can lead to rejection (respectively, acceptance) of a transshipment request. In a conceivable scenario, a requested retailer can accept a transshipment today and reject another tomorrow if the expected future demand per remaining
period increases from today to tomorrow. The opposite is conceivable as well. Reject a transshipment request today and accept another one tomorrow if the expected future demand per remaining period decreases from today to tomorrow. Presence of such scenarios illustrates the flexibility of an in-season transshipment policy. Such a policy is an attractive alternative to extreme policies such as pure competition with no inventory sharing and pure cooperation with complete sharing. Many independent retailers do not want to commit to extreme transshipment policies and prefer flexibility in deciding whether to accept a transshipment request. Our models can provide this flexibility by delegating the acceptance decision to the requested retailer who bases that decision on the current time and inventory levels.

Through a preliminary analysis, we can show that retailers’ optimal transshipment policies can be characterized by dynamic inventory holdback levels. Namely, a requested retailer holds her inventory back and does not share it if her current inventory level is below the current inventory holdback level. Current inventory level depends on the size of the order placed at the beginning of the season while holdback levels depend on transshipment prices. For given order quantities and transshipment prices, retailers would use the associated holdback levels to separately accept/reject each transshipment request in a season.

Retailers usually order from manufacturers at about the same time without exactly knowing the other’s order quantity. If retailers have absolutely no information about other retailers’ order quantity, a Nash game framework may be used to find an order equilibrium. Profits under in-season transshipments cannot be expressed in a close form, so characterization of the order equilibrium is challenging.

Retailers can negotiate transshipment prices before or during ordering from manufacturers. At first glance, a retailer may opt for a high transshipment price. But this is not necessarily a good choice. If this retailer charges a high price, the other retailer prefers to order more to not pay the high price and hence rarely stocks out. Then there will be a few transshipments and the retailer charging the high price does not really benefit from it. We plan to discuss pre-season and in-season transshipment pricenegotiation frameworks and investigate if the pre-season prices are consistent with in-season prices. Moreover, we also present coordinating transshipment prices, which achieve the centralized profit in the decentralized context.

The aim of this workshop is to systematically investigate different sequence of events, pre season and in-season negotiations, different retailer negotiation powers, and different levels of information available to retailers to discuss: i) an optimal in-season transshipment policy, ii) an order equilibrium, iii) negotiated transshipment prices, and iv) coordinating transshipment prices.

Practice

Challenges in inventory management grow as customers are less tolerant to waiting when stock-outs occur. In a study of 71,000 customers, Corsten and Gruen (2004) found that customers lose patience with stock-outs and they overflow to other retailers. Verbeke et al. (1998) mention that 34% of customers overflow when Coca Cola is out-of-stock. To avoid lost sales, retailers transship inventory among each other. Transshipments are reported in retail industries such as

According to Stalk et al. (1997), U.S. car dealers satisfy up to 18% of their new vehicle customer demand by locating vehicles at another dealer. Time-based competition and higher demand variability have the potential to expedite adoption of transshipments (Harris 2007). In addition, the use of less-than-truckload carriers and enterprise resource planning software facilitate transshipments. For example, car manufacturers provide intranet systems connecting their dealers for information exchange (Zhao and Atkins 2009).

Car dealers provide a good motivating example. These dealers are often independently owned and operated. However, dealers take the manufacturer’s recommendations into account and make every attempt to apply them. For example, we have heard a dealer salesperson jokingly say that he has two bosses: the owner of the dealer and the manufacturer. Strengthening this perception is the recent dealer elimination programs of U.S. car manufacturers, which further reduce a dealer’s power against the manufacturer. Dealer elimination programs, such as that of G.M. (Restructuring Plan 2009) started with the drop in U.S. vehicle sales, which were 17.4 million in 2005 and 10.6 million in 2009 (WardsAuto.com 2010). A strategy that manufacturers can pursue is to suggest transshipments to remaining dealers to avoid lost sales even with a low level of on-hand car inventory.

Another reason why transshipments are appropriate for car dealers is that the transportation cost of a car is relatively small with respect to the price of the car. This makes transshipment a viable alternative to meet customer demand, especially for non-standard car options. The car transportation cost is a few hundred dollars and can even be cheaper for dealers who use transportation services frequently.

We interviewed a European car dealer in Dallas (Schunck 2009). This dealer requests transshipments from other dealers in North America and accepts requests from dealers that are operating in markets sufficiently distant from Dallas. The dealer orders cars from the manufacturer and can exchange them with other dealers before cars are offloaded at U.S. harbors. This is a special case of transshipment where the transportation cost is zero. According to this dealer, the manufacturer recommends dealers to charge as low a price as possible for transshipments. Often this price turns out to be the invoice value (wholesale price) that the dealer pays to the manufacturer. This favors the requesting dealer (retailer).

In a medical nutrition supply chain (Mason 2009), competing distributors set “the transshipment price equal to the sale price”, by ignoring the relatively small transportation cost. This case with transshipment price equal to sale (market) price is quite different than the case of car dealers who pay only the wholesale price for transshipped cars. We can speculate that the requested distributor (retailer) has the pricing power in the medical nutrition supply chain while the receiving car dealer has the power—arguably transferred from the manufacturer. We shall call these cases, respectively, as the cases of omnipotent requested retailer and omnipotent requesting retailer.
Both omnipotent requested and requesting retailers can be found in practice. If the demand exceeds supply in an industry, inventory is scarce and important. In this case, the inventory-holding requested retailer has more negotiation power than the requesting retailer. If the supply exceeds demand, demand is scarce. Then the demand-holding requesting retailer has more negotiation power. In short, scarcity of a resource empowers the owner of the resource. When applied to demand scarcity, this principle makes the requesting retailer powerful. The same principle makes the requested retailer powerful when inventory is scarce.

Recently, many industries are experiencing over-supply, which can be argued to be a result of the economic downturn. For example, after the Circuit City’s bankruptcy, BestBuys CEO commented: “Since mid-September, rapid, seismic changes in consumer behavior have created the most difficult climate we have ever seen” (Barris 2008). Such a demand drop makes each demand realization extremely important to retailers and in turn empowers the requesting retailer.

Despite the technologies and trends that facilitate transshipments, limited to a choice between complete sharing and no sharing, independent retailers often opt for no sharing. A no sharing policy, which can harm a customer-centric image of a company, is hardly ever announced to the public. Nevertheless some customers realize the unwillingness of a retailer to use transshipments. Complaints.com lists entries by customers who were disappointed when sold out products were not transshipped from another retailer. For example, after a hardware store quoted a delivery time of two weeks for a dishwasher replacement part, the customer’s request to have the part transshipped from another store was rejected. A mattress store directed a customer to another mattress store to pick up a box-spring rather than transshipping it. A customer bought a replacement hard drive from a particular store of an electronics chain and asked for it to be transshipped from another store for faster delivery, but the request was rejected. On another board (Urbansemiotic.com 2010), a customer complains about a no-sharing policy: “Some stores in New York do so much business you can’t even have them order another shirt from another store. It’s frustrating.”

We aim to present optimal transshipments as an alternative to complete sharing and no sharing. It has the potential to increase transshipments among retailers without direct interference of a third party (manufacturer). Although many manufacturers benefit from cooperation among their retailers through transshipments, many cannot or do not impose any rules on transshipment activities, such as transshipment price. Manufacturers tend not to meddle in the affairs of large dealers. For example, Caterpillar states that “in relationships with . . . dealers . . . , we avoid arrangements that restrict our ability to compete with others. We sustain our outstanding relationships with them through trust, communication, and shared rewards” (Cat.com 2010). Car dealers in the U.S. are protected by franchise laws, which limit the power of a manufacturer on the dealer (Higashiyama 2009). We present coordination mechanisms that would not be perceived as a manufacturer’s encroachments by retailers. This should significantly enhance the implementability of transshipments and coordinating mechanisms in practice.
USING AN OPEN-SOURCE ERP TO TEACH BUSINESS PROCESS INTEGRATION

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ABSTRACT

The field of supply chain management (SCM) has changed greatly and rapidly since the advent of enterprise systems. To keep its curriculum current and relevant, educators in SCM has struggled to find ways to bring in new and advanced technology into the classroom teaching. Yet, with many universities currently facing budget crunch, it becomes even more difficult to obtain the funding needed for the purchase and maintenance of any instructional technology. This workshop offers one approach that may help to address this challenge. The approach is to adopt and use open-source solutions for teaching enhancement. Specifically, this proposed workshop will focus on the case in which an open-source ERP is selected, installed, implemented, and used successfully in teaching business process integration in an IS course.

The purpose of the proposed workshop is to share with the audience an actual experience that the presenters have gone through in adopting and using open-source software. The presentation will be organized into three parts as follow:

Part 1: Introduce an open-source ERP called xTuple
- Overview on open-source software with a focus on open-source ERP applications,
- Provide the rationale for selecting xTuple,
- Describe the process of setting up xTuple,

Part 2: Teach with xTuple
- Share the challenges in the process of developing teaching materials,
- Demonstrate a teaching case in which xTuple is used to support the entire business cycle from generating sales order to manufacturing products, from purchasing parts to shipment, from making payment to clearing vouchers,

Part 3: Reflect on the experience and lessons learned.

Audience can learn about the potentials of open-source ERP from this presentation and can take away some knowledge and useful tips in setting up a similar system at their own site.
CREATING SUSTAINABLE COMPETITIVE ADVANTAGE IN MARKETING: IT PERSPECTIVES

I.T. SMALL BUSINESS COMPETING IN A HIGHLY CONCENTRATED ENVIRONMENT: GOING BACK TO MARKETING BASICS IN THE U.S. AEROSPACE INDUSTRY

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EXTENDED ABSTRACT

This paper presents a case study about how a small Information Technology (IT) company (Co), could penetrate the U.S. Aerospace industry, applying basic marketing concepts oriented to create intangible values to sustain its business success, as suggested by Villalonga (2004). Co is now an industry leader provider of automatic tool and asset management solutions based on ID technologies such as RFID (radio frequency identification) and other proprietary and patented technologies. Military and commercial aerospace related organizations use Co’s technology to automate tools and assets management processes on military bases, manufacturing facilities, and maintenance shops.

Co’s Background: It was founded in 2004, starting operations with less than 10 employees. It was established in Monterrey, Mexico, with the idea to offer innovative and unique hardware and software solutions based on RFID and other identification technologies generating real perceived value by its target market in the same country.

From 2004 to 2006 Co gained experience and developed know how on research and development (R&D) processes and implementation of IT solutions. In 2006 Co was awarded by the Mexican Federal Government to be involved in the Technology business acceleration (Techba) program formed in conjunction with University of Texas in Austin, TX., which supports small Mexicans IT companies to open the U.S. market.

Once in the U.S. and after analyzing the industry in this territory, Co faced a very important and strategic question: What is the right sustainable business strategy to enter and successfully compete as small IT foreign company with limited amount of human and financial resources in the US highly concentrated environment / market? The answer was simple, go back to marketing basics concentrating in the creation of intangible values to penetrate and sustain the competitive advantage in the short and long run and, thus, to increase Co’s market value, as suggested by several business strategy and marketing scholars.

The Aerospace Industry Analysis in the U.S.: After conducting a market research (in-depth interviews, observation of aircraft maintenance and manufacturing processes, and secondary
Co found a very attractive niche market and good business opportunity to offer solutions to prevent foreign object damage (F.O.D.), which is a damage caused by tools used in maintenance and manufacturing facilities in this industry. However, at that time in 2006, market share in the tool and asset management solutions business was highly concentrated in 2 competitors: One of them was (an still is) a tool manufacturer with 90 years in business, generating more than $2.4 B in annual revenues and, the other one was a successful RFID solution provider with more than 20 years in business generating more than $80 M in annual revenues (recently acquired by a large tool manufacturing firm that generates more than $8 B in annual revenues).

**The marketing strategy:** Considering the findings of the industry analysis, Co went back to marketing basics to define its business strategy oriented to create intangible values, also suggested by researchers in specific areas. The strategy considered the following key concepts:

1. Focus 100% to just one target market segment, the U.S. Air Force (USAF). Specifically, it was a base near Co’s facilities in Texas. The reason of targeting this segment was founded on the understanding that the rest of the industry worldwide follows USAF’s best practices.

2. Introduction of unique new product/solution development through innovation and creativity (Cho and Pucik, 2005): This strategy was based on TRIZ (Russian acronym for "Theory of Solving Problems Inventively") methodology, the knowledge on RFID gained during the first years of Co’s operation in Mexico, and improving R&D team capabilities such as talent, flexibility to react according to the time to market, mindset 100% customer oriented, team work, and leadership.

3. Honest promotion oriented to create brand value (Joshi & Hanssens, 2010): Setting the right expectations through clear, honest, constant and on time communication with customer to start building brand value and positioning it as “trustable”.

4. Strategic marketing alliances and distribution networks (Swaminathan and Moorman, 2009): Co concentrated to develop a value added reseller (VAR) program by partnering companies with unique experience in the market that really aggregate value to Co solutions, with good reputation and a large customer database in the aviation industry.

5. Perceived value oriented pricing strategy (Zeithaml, 1988): Co’s strategy was and has been not to compete with low price, but a price that allows customer to find a real and attractive Return on Investment (ROI) based on perceived benefits and measured results (hard data) by using Co’s unique solutions and, at the same time, to maximize Co’s net profit.

6. Technical support service 100% oriented to customer satisfaction (Fornell et al., 2006): Oriented to exceed customer, VAR and employee’s (internal customer) expectations vs. their perceptions in different dimensions of the service such as tangibility, reliability, empathy, responsiveness and assurance.

7. Monitoring key metrics (Lehmann, D. R. 2004) such as customer satisfaction, customer retention (loyalty), market share based on revenues, company market value and share of value (Cook, 2003) and, the risk adjusted differential, RAD (Gomez-Macfarland, 2009).

**The Results:** After 5 years of operation Co has obtained 5 granted patents and more than 18 more pending that have allowed Co to create unique solutions. Co has retained the USAF as a customer for 4 years with 100% customer satisfaction. Also, USAF as a satisfied customer and the partnership with key players (VAR’s) in the industry have helped Co’s brand positioning in the private segment of the aerospace industry, leading to a customer footprint growth. Pricing strategy based on customer perceived value and attractive ROI for the customer has resulted in the maximization of revenue per solution. All these results have driven a sustained growth of Co’s market value in more than 300% in less than 5 years.

**The Conclusions:** 1. Real intangible value creation is not only the most difficult value for a
competitor to duplicate, but it helps a small (and large) business to penetrate a very competitive and highly concentrated market and, in the long run, to sustain a firm success. 2. Marketing researchers’ findings really contribute to and work for marketing strategist in a real business world.

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MARKETING PROGRAM CREATIVITY IN HIGH TECHNOLOGY VENTURES

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EXTENDED ABSTRACT

The market orientation literature has witnessed a theoretical ‘shakeout’ in recent years. The plethora of studies reporting direct relationships between market orientation and performance outcomes at the group, firm and network levels have been overlaid by an array of empirical work testing this relationship through moderated and mediated means. Since market orientation has now ‘come of age’ following the seminal insights reported in the Journal of Marketing in 1990, the ubiquity of its supporters is now less apparent while critics have gained their voice. Hamel and Prahalad (1994) pioneered the criticism by suggesting that market orientation results in the ‘tyranny of the served market’. Christensen and Bower (1996) identified that customers’ excessive power can frequently lead to the failure of business models. Others claimed that market orientation and innovation can be paradoxical while Atuahene-Gima and Ko (2001) contended that organizations pay a high cost for being reactive in market orientation. The synthesis of many of these criticisms can be distilled to a key tenet: market orientation introduces customer myopia within the firm. In sum, market orientation and its behavioural and economic outcomes need to be considered within a broader network to allow a greater understanding of the relationship between market orientation and performance.

This study contributes to the literature by developing and testing a differential learning model of new product ventures and their outcomes. We contend that market orientation is a form of adaptive learning whereby information is generated from an organization’s environment, which is in turn, distributed and interpreted by the actors within the organization and, finally, an organizational response is executed. This form of recursive, cyclic process should be complemented with a deeper form of learning to derive generative outcomes. We characterize this as generative learning.

We propose that learning behaviors facilitate the marketing program creativity of new product ventures which, in turn, leads to performance gains. We examine novel interrelations among types of learning and marketing program creativity. Finally, we test the moderating effects of venture types on the links between creativity and new venture performance.

We chose to investigate creativity rather than innovation because it is less theoretically esoteric and is considered to precede innovation as an organizational process. Creativity has been characterized as the development of ideas concerning products, practices, services, or procedures that are novel and potentially useful to an organization (Amabile 1996). Creative ideas can range from minor adaptations to radical breakthroughs (Mumford and Gustafson 1988). We apply the concept of creativity to the marketing program level by defining marketing program creativity as the extent to which the actions taken to market a product represent a meaningful difference from marketing practices in the product category (Andrews and Smith...
Similarly, Roberson and Gatignon (1986) suggested that the marketing program must be creatively designed and managed during the new product development process to achieve the effective dissemination and rapid penetration of products.

The study empirically tests assertions using a sample of 187 high-technology new product ventures in Mexico. The results show interesting patterns of significant relationships between the two creativity dimensions (i.e., novelty and meaningfulness) and performance. The findings support that market-based learning is linked positively to marketing program meaningfulness, while generative learning is linked positively to marketing program novelty. Market-based learning is positively associated with generative learning. Moreover, the venture type (i.e., independent or corporate) conditions the performance relevance of novelty, but not meaningfulness.

We build upon the work of Im and Workman (2004) and explicitly make five distinctive contributions to the literature: (i) we present a learning-creativity framework based on learning theory and information processing theory; (ii) we focus on creativity while many other researchers have examined innovation in developing the learning-innovation thesis; (iii) we investigate the marketing program as the focal unit of analysis to examine the creative departures of firms adopting marketing routines and ‘theory-in-use’; (iv) we identify support for a differential learning hypothesis indicating that the learning-creativity relationship is more complex than has yet been appreciated; and (v) we adopt the new venture level within Mexican high technology organizations in order to empirically test the relationships.

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A COMPETITIVE ADVANTAGE THROUGH IT/BUSINESS ALIGNMENT
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EXTENDED ABSTRACT

Addressing the dilemma of IT/Business alignment is an extremely important area to investigate. IT/Business Alignment is considered as a main important issue in order to harmonize IT strategic goals with organizational goals (Tapscott & Caton, 1993). Research over the past three decades has consistently found that the IT-business alignment is widespread and persistent. Another reason is the empirical evidence showing a relationship between the dimensions of "IT/Business alignment" with the dimension of “competitive advantages”. Recent studies have found a positive correlation between high levels of IT/Business alignment and high levels of Competitive Advantage for Businesses (Luftman, 2008). These findings add credence to the importance of achieving a high level of maturity in the IT/Business alignment.

For nearly three decades, professionals, academics, consultants and research departments have identified the lack of alignment as an opportunity for researches who have proposed different alignment models and methodologies. Researchers have proposed different alignment models and methodologies (Hu and Huang, 2005; Duffy, 2002; Marchand, Kettinger and Rollins, 2001; Bergeron, Raymond and Rivard, 2001; Maes, Rijsenbrij, Truijens and Gondola, 2000; Reich and Benbasat, 1996, 2000; Tallon and Kraemer, 1998; Teo and King, 1996, 1997; Luftman, 2000; Henderson and Venkatraman, 1993) to help solve this riddle.

Strategic alignment focuses on the activities that management performs to achieve cohesive goals across the IT and other functional organizations (e.g., marketing, H/R, manufacturing, finance). Therefore, alignment has to addresses both how IT is in harmony with the business, and how the business should, or could be in harmony with IT.

So the research question should be, is it important to get IT/Business alignment? Now, once this is clarified, here comes the next question, how can organizations get the IT/Business alignment? To answer this question a lot of people are turning to see “the promise of ITIL (Information technology infrastructure Library) framework” which ensures that when it is used, the IT organizations can align, integrate, fusion, link or harmonize its IT organizations with their businesses. ITIL was first released to the public in the late eighties and was created by the Central Computer and Telecommunications Agency (CCTA), an office of the British government, and as such was and still is vendor-neutral (Best Management Practice, 2009). The last edition of ITIL books was consistently improved and released by the cabinet office on July 29th, 2011.

This statement seems to be logical but it is characterized by limited quantitative and/or qualitative validity and has not reached a real conclusion to clearly and precisely explain how through ITIL IT Organizations can achieve the long awaited alignment with the business. After all how can a framework state this if there is no a single business around the world who can confirm that through ITIL they have the IT/Business alignment and if other businesses around the world adopt ITIL they will have it too.
In order to analyze more precisely this situation, this research has been conducted for almost 5 years with the main objective to find if there is any kind of correlation between the maturity of some ITIL processes and the maturity of the alignment dimensions considered as part of the alignment phenomenon.

To assess the ITIL variables the research is based on ITIL theory, the variables considered are:

The process of Financial Management for IT Services enables an IT service provider to play a strategic role in the business. It helps to quantify IT’s value and contributions, and quantifies the business opportunities that IT services enable. Financial management provides the business and IT with the quantification, in financial terms, of the value of IT services, the value of the assets used to provide those services, and the qualification of operational forecasting (Cabinet Office, 2011).

The process of Service Level Management is responsible for agreeing and documenting service level targets and responsibilities within SLAs and service level requirements (SLRs) for every service and related activity within IT. If these targets are appropriate and accurately reflect the requirements of the business, then the service delivered by the service providers will align with business requirements and meet the expectations of the customers and users in terms of service quality (Cabinet Office, 2011).

The process of Availability Management is responsible to ensure that the level of availability delivered in all IT services meets the agreed availability needs and/or service level targets in a cost-effective and timely manner. Availability management is concerned with meeting both the current and future availability needs of the business (Cabinet Office, 2011).

The process of IT Service Continuity Management supports the overall business continuity management (BCM) process by ensuring that, by managing the risks that could seriously affect IT services, the IT service provider can always provide minimum agreed business continuity-related service levels (Cabinet Office, 2011).

The process of Capacity Management ensures that the capacity of IT services and the IT infrastructure meets the agreed capacity and performance-related requirements in a cost-effective and timely manner. Capacity management is concerned with meeting both the current and future capacity and performance needs of the business (Cabinet Office, 2011).

The process of Incident Management is in charge to restore normal service operation as quickly as possible and minimize the adverse impact on business operations, thus ensuring that agreed levels of service quality are maintained (Cabinet Office, 2011).
The process of Problem Management manages the lifecycle of all problems from first identification through further investigation, documentation and eventual removal. Problem management seeks to minimize the adverse impact of incidents and problems on the business that are caused by underlying errors within the IT Infrastructure, and to proactively prevent recurrence of incidents related to these errors (Cabinet Office, 2011).

The process of Change Management gets the control of the lifecycle of all changes, enabling beneficial changes to be made with minimum disruption to IT services (Cabinet Office, 2011).

The process of Release & Deployment Management plans, schedule and control the build, test and deployment of releases, and to deliver new functionality required by the business while protecting the integrity of existing services (Cabinet Office, 2011).

The process of Service Asset & Configuration Management ensures that the assets required to deliver services are properly controlled, and that accurate and reliable information about those assets is available when and where it is needed. This information includes details of how the assets have been configured and the relationships between assets (Cabinet Office, 2011).

The function of Service Desk is a vitally important part of an IT organization and should be the single point of contact for IT users on a day-by-day basis. It not only handles incidents, escalates incidents to problem management staff, manages service requests and answers questions, it may also provide an interface for other activities such as customer change requests, maintenance contracts, software licenses, service asset and configuration management, availability management, financial management for IT services, and IT service continuity management (Cabinet Office, 2011).

To assess the alignment variable the research is based on (Luftman’s, 2006) strategic alignment model. This model was adopted and adapted to the context of this research, the main dimensions considered for alignment variable are: 1. Communications Maturity; 2. Business Value Measurements Maturity; 3. Governance Maturity; 4. Business Relationship Management Maturity; 5. Technology Scope Maturity; 6. Skills Maturity.

Communications Maturity is the effective exchange of ideas and a clear understanding of what it takes to ensure successful strategies are high on the list of enablers and inhibitors to alignment.

Business Value Measurements Maturity is necessary when too many IT organizations cannot demonstrate their value to the business in terms that the business understands. Frequently, business and IT metrics of value differ. A balanced “dashboard” that demonstrates the value of IT in terms of contribution to the Business is needed.

Governance Maturity takes the considerations for IT governance that includes how the authority for resources, risk, conflict resolution, and responsibility for IT is shared among business partners, IT management and service providers. Project selection and prioritization issues are included here. Ensuring that the appropriate business and IT participants formally
discuss and review the priorities and allocation of IT resources is among the most important enablers or inhibitors of alignment.

**Business Relationship Management Maturity** considers the relationship that exists among the business and IT organizations is another criterion that ranks high among the enablers and inhibitors of alignment (Luftman, 2008). Giving the IT function the opportunity to have an equal role in defining business strategies is obviously important. However, how each organization perceives the contribution of the other, the trust that develops among the participants, ensuring appropriate business sponsors and champions of IT endeavors, and the sharing of risks and rewards are all major contributors to mature alignment.

**Technology Scope Maturity** this set of criteria assesses the extent to which IT is able to:
1) Go beyond the back office and the front office of the organization; 2) Assume a role supporting a flexible infrastructure that is transparent to all business partners and customers; 3) Evaluate and apply emerging technologies effectively through services; 4) Enable or drive business processes and strategies as a true standard; 5) Provide customizable services to customer needs.

**Skills Maturity** encompasses all IT human resource considerations, such as how to hire and fire, motivate, train and educate, and culture. Going beyond the traditional considerations such as training, salary, performance, feedback and career opportunities.

Due that the main objective of this article is just to get an overview of how to address the introduction questions this paper just mention the most important issues considered to conduct this research.

**RESEARCH METHOD**

To provide a representation of each organization’s alignment maturity level at the time of the study, a cross-sectional design was employed utilizing 12 survey assessment instruments that were developed based on ITIL theory and Strategic Alignment Model.

**INSTRUMENT DEVELOPMENT**

The alignment instrument were developed using Likert items for the scales to be able to measure maturity levels (do not confuse this with CMM model). To assess the maturity of each variable all of the ITIL instruments were developed using nominal scales and each item were assessed on a dichotomous scale (do not confuse this with CMM model). The ITIL processes were operationalized as independent variables and the alignment model operationalized as dependent variable through a congruence matrix.

**PILOT TESTS OF THE QUESTIONNAIRES**

To determine whether the instruments demonstrated acceptable reliability a pilot test was administered first to 15 IT and business executives within three different businesses, revealing that all items were not interpreted as intended, so there were some changes to the instruments.
and then administered to another 12 IT and business executives, this time all items were interpreted as intended, resulting in no changes to the final questionnaires. All the ITIL and Alignment questionnaires were submitted to Cronbach’s alpha tests to be sure that the instruments were reliable.

DATA COLLECTION

These results just consider the first analysis to the data, this time it includes around 425 ITIL and Alignment questionnaires in 9 organizations (Telecommunications, Outsourcing, Financial Services, Government) across 4 Latin American Countries.

RESULTS

In order to get a right interpretation of the results and that they were able to differentiate maturity levels among organizations with a positive correlation between variables, descriptive statistic with cross tables, Chi square for goodness of fit and Fisher tests were used.

FINDINGS

IT Organizations that shows a higher maturity in Financial Management process shows a strong correlation with Businesses that have a higher maturity levels in Business Value, Government and Communication dimensions respectively.

IT Organizations that shows a higher maturity in Service Level Management process shows a strong correlation with Businesses that have a higher maturity levels in Business Value, Government, Business Relationship Management and Communication dimensions respectively.

IT Organizations that shows a higher maturity in Availability Management process shows a strong correlation with Businesses that have a higher maturity levels in Business Value, Technology Scope and Government dimensions respectively.

IT Organizations that shows a higher maturity in IT Service Continuity Management process shows a strong correlation with Businesses that have a higher maturity levels in Business Value, Government and Technology Scope dimensions respectively.

IT Organizations that shows a higher maturity in Capacity Management process shows a strong correlation with Businesses that have a higher maturity levels in Technology Scope, Government and Business Value dimensions respectively.

IT Organizations that shows a higher maturity in Incident Management process shows a strong correlation with Businesses that have a higher maturity levels in Communication and Business Value dimensions respectively.

IT Organizations that shows a higher maturity in Problem Management process shows a strong correlation with Businesses that have a higher maturity levels in Technology Scope and
Business Value dimensions respectively.

IT Organizations that shows a higher maturity in Change Management process shows a strong correlation with Businesses that have a higher maturity levels in Business Value, Government and Technology Scope dimensions respectively.

IT Organizations that shows a higher maturity in Release and Deployment Management process shows a strong correlation with Businesses that have a higher maturity levels in Technology Scope, Communication and Business Value dimensions respectively.

IT Organizations that shows a higher maturity in Service Asset and Configuration Management process shows a strong correlation with Businesses that have a higher maturity levels in Government and Technology Scope dimensions respectively.

IT Organizations that shows a higher maturity in Service Desk function shows a strong correlation with Businesses that have a higher maturity levels in Communication, Business Value and Business Relationship Management dimensions respectively.

Based on these results, the answer to the question, is it true that ITIL processes have an influence in IT/Business alignment? What this research has found is that some ITIL processes have shown that have a strong correlation in some alignment dimensions (but not in all of the alignment dimensions).
SPECIAL TOPICS IN MARKETING

CD OR NOT CD: THE MEDIA PREFERENCES OF CLASSICAL MUSIC CONSUMERS

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EXTENDED ABSTRACT

Advances in sound engineering and technology have drastically changed both the packaging format (album, cassette tape, compact disc, etc.) and delivery system (playback equipment) of prerecorded music. Despite these technology-inspired product shifts, consumers of prerecorded music, especially those who favor classical music, have repeatedly shown themselves to be more than willing to adapt in order to enjoy their favorite recordings. However, the latest repackaging trend, which moves away from the tangible, physical product (compact discs or CDs) towards the non-tangible virtual product (digitally downloaded files), although designed to meet long-standing consumer demands for purchase convenience, sound quality, simplified storage, may be contributing to the loss of a significant portion of manufacturers’, suppliers’, and sellers’ faithful market.

Nielsen/SoundScan reported that sales of classical music CDs for the first half of the 2011 fiscal year showed a 13% increase over the same time period. This gain took place in spite of a decades-long deterioration in compact disc sales (Christman 2011; Ginell 2011). This double-digit surge conflicts with the increasing acceptance and standardization of downloadable digital files as the primary media format of prerecorded music. Digital prerecorded music

Although classical music is the focus of some marketing research (Dubé, Chebat, and Morin 1995; Rolston and Di Benedetto 2002), most existing studies concentrate on the genre itself, as opposed to packaging or delivery format. The purpose of this exploratory study is to fill a gap in the existing literature related to media preferences (operationalized here as listening and buying behaviors) of classical music consumers regarding both compact discs and downloadable digital files. This research extend the application of several academic theories traditionally applied to organizational behavior, including Beal, Bohlen, and Rogers’ (1957) technological adoption lifecycle, Anderson’s (2004) long tail theory and its applications for online retailing, and Davis’ (1989) landmark technology acceptance model to individual consumer behavior.

A beginning, exploratory study is believed to be necessary in order to determine why classical music consumers are adopting prerecorded music differently from the norm. This

research project provides such an overview, and is needed before engaging in research regarding. Further, it provides a basis for determining ways to modify and potentially optimize their technological adopting preferences. it furthers enhances the existing literature regarding consumer behavior, decision-making influencers, and technology adoption.

REFERENCES

IMPERATIVE FOR GREEN MARKETING IN INDIA: A CONCEPTUAL RESEARCH OF BELIEFS AND ATTITUDES OF BUSINESS STUDENTS

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ABSTRACT

Literature states that environmental concern has increased over the last decades. Business and marketing take a green approach due to strategic compulsions. There is a gap in the literature pertaining to the greening of business and marketing in India. Moreover, research is largely silent on environmental concern of future business and marketing managers, namely business students. This conceptual research aims at filling this gap, by highlighting the green imperative for business and marketing in India. A literature review of current scholarly writings is presented, and a proposal to conduct a survey among business students is developed. Hypotheses relating to environmental concern as well as possible determinants are also proposed. Finally, the usefulness of this research to stakeholders in India is highlighted.

INTRODUCTION

In recent decades, there have been increasing concerns relating to the environment (Bhuian, Joonas, and Ruiz 2007; Egri and Herman 2000; Polonsky 2001). As a result, consumers, marketers, not-for-profits, as well as governments approach the environment as a strategic consideration (e.g. Miles and Colvin 2000). Further, concern for the environment is reflected in regional trade organizations (e.g. Sanchez 2002), whose growth is matched with greater influence of business and marketing managers, and lower involvement of green NGO’s. Because of this, doubts have been expressed about the efficacy of regional environmental agreements curtailing environmental degradation. However, literature pertaining to environmental concern among business and industry in India is sparse. There is a pressing need to establish a baseline in India, and to raise consciousness, and promote green marketing.

In this context, India is a signatory to the South Asian Association for Regional Cooperation (SAARC) protocols on environmental protection, climate change, and natural disasters. In addition, India shares common ground relating to the Kyoto Protocol of BASIS countries, along with Brazil, South Africa and China. Unlike SAARC and similar regional associations, BASIS members face related but highly disparate issues due to wide socio-demographic differences amongst them. For instance, in 2010, with estimated gross domestic product purchasing power parity (GDP) at US $4.06 trillion, and real growth rate in GDP of 10.4%, India ranked fifth in the world on both these economic indices. Since several years, its industrial growth rate continues to grow (10.6% in 2010), owing largely to sectors like textiles, chemicals, food processing, steel, transportation equipment, cement, mining, petroleum, machinery, and pharmaceuticals. This coupled with fact that India has a 2011 population of 1.21...
billion, spread over area about a third that of the US, with average density per square mile of 954 persons (compared with US of 83 persons). India faces significant issues relating to pollution of physical and natural resources. The revered rivers and pristine coastlines that defined India’s civilization status from earliest times have in recent decades, virtually transformed into sewers that spew poison across the length and breadth of her lands.

Moreover, over 31% of India’s population is urban, with density being exponentially higher in megacities, urban agglomerations and urban mega-slums. A case in point is Greater Bombay (population estimated over 20 million within 233 square miles) where elite commercial and residential high-rise co-exists with urban shanties lacking basic utilities. There are virtually no zoning laws, often manifest in overlap of manufacturing, marketing, and housing, jostling for adjacent, and sometimes the same, space. This combination poses acute health as well as moral hazards, and diminishes the quality of life. The three salient aspects, namely significant overpopulation, environmental degradation, and the nature of industries feeding rapid economic growth (United States CIA Factbook 2011), taken along with a growing consumer culture, point to the critical need for Indian business and marketing, to strategically minimize their environmental footprint.

This issue is all the more relevant as regional and environmental protocols drive business school accreditation institutions to prescribe standards on global and green matters, in preparing future business and marketing managers. In addition, there is a growth in partnerships between primarily Western business schools, and similar institutions around the world. For instance, Association to Advance Collegiate Schools of Business (AACSB) Communications (2001: 17) lays down the standards relating to global and environmental issues for business school accreditation:

“C.1. CURRICULUM CONTENT
C.1.1: Both undergraduate and graduate curricula should provide an understanding of perspectives that form the context for business. Coverage should include ….ethical and global issues; ….the influence of political, social, legal and regulatory, environmental and technological issues….
INTERPRETATION: The perspectives indicated above might be addressed via individual courses with titles that explicitly identify the perspective being treated. However, it is not the intent of this standard to require a separate course for any one or for any combination of these perspectives. Schools may approach any or all of these topics by interweaving them throughout other required curricular elements.”

Despite the fact that current research highlights green issues among environmental stakeholders (Bhuian, Joonas, and Ruiz 2007, Miles and Covin 2000), little research focus has been given to the environmental concern of Indian business students. The purpose of this descriptive study is to investigate environmental beliefs and attitudes of Indian business students.

This study is important because business students are future business and marketing decision-makers (Bhuian, Joonas, and Ruiz 2007; Varadarajan and Thirunarayana 1995). Further, business education shapes and forms business students’
attitudes toward green issues (Whitehead 1994, http://www.ucd.ie), which in turn affects the environmentally friendly behavior of business and marketing managers (Bhuian, Joonas, and Ruiz 2007; Varadarajan and Thirunarayana 1995). The current conceptual research attempts to shed light on this gap in the literature pertaining to India.

ENVIRONMENTAL BELIEFS AND ATTITUDES

ECBA finds roots in the means-ends theory (Rokeach 1973), which states that motives are explained by underlying consequences, as well as personal values. In the context of environmentally concerned behavior, the salient personal values (Rokeach 1973) cover, as an example, clean physical and natural resources like air, water, and land. Negative underlying consequence would include polluted environment experienced in the short as well as long term. Personal values represented by ECBA would promote production and consumption that have the least environmental impact.

Another source of ECBA lies in the expectancy value model (Fishbein and Ajzen 1975) and the theory of reasoned action (Ajzen and Fishbein, 1980). Attitude toward a behavior is determined by salient beliefs about the behavior, and the person’s evaluation (expectancy) of the outcome of that behavior (Ajzen and Fishbein 1980; Fishbein and Ajzen 1975). Thus, attitude is related to the causal determinants of volitional behavior. The theory of reasoned action assumes that human beings tend to behave in a rational way— they process available information, and weigh the consequences of actions. It may therefore be expected that people behave in line with intentions. Intentions are formed by personal and social factors. Attitude toward the behavior comprises the personal factor, or the individual’s positive or negative evaluation of engaging in a specific behavior. A person’s beliefs reflect information they have about themselves and their world, hence behavior can ultimately be traced to information. Based on the theory of reasoned action (Ajzen and Fishbein 1980; Fishbein and Ajzen 1975), ECBA reflect an individual’s positive evaluation of behaviors, like protecting physical and natural resources, making good for environmental damage (for instance through taxation), or negative evaluations of behaviors such as environmental degradation. In addition, ECBA comprise the information individuals have about environmental issues in their immediate vicinity, and in the world.

The theory of planned behavior constituted an extension of the theory of reasoned action. It explicated that individuals and groups attempt to order their beliefs in a consistent framework (Ajzen 1985, 1988) conscious of a particular conduct or end state that is personally or socially preferable (Rokeach 1973: 5). Based on an interpretation of the theory of planned behavior, ECBA would relate to the cognizance of the personally and socially preferable end state of preserving the environment through conduct like creating, distributing, communicating, consuming, and disposing of products and services. Attitude towards such conducts is formed by beliefs about these conducts, and evaluation of the results of the conducts (Ajzen and Fishbein 1980; Fishbein and Ajzen 1975), such as the preserving and protecting the environment for the benefits that can be gained.

In the environmental context, this relationship among attitudes, intentions and behavior, especially in the creating scales to measure environmental concern, appears in early studies (e.g. Dunlap and Van Liere 1978; Gooch 1995; Hallin 1995; Heberlein 1981, 1989; Stern, Dietz and
Guagnano 1995). Notably, ECBA were also measured through the New Environmental Paradigm (Dunlap and Van Liere 1978), general awareness of consequences of environmental conditions (Stern et al 1995), the ethnographic approach (Hallin 1995), support for science and technology, and perception of local environmental conditions (Gooch 1995).

ECBA, reflecting concern for the environment, include the cognitive, affective as well as behavioral dimensions of the traditional consumer behavior model; and numerous researchers have tried to define them as such. As an example, environmental concern is a strong positive attitude towards preserving the environment, and a global attitude with indirect effects on behaviors through behavioral intentions (Crosby, Gill and Taylor 1981). Environmental concern attitude is a general concept that can refer to people’s feelings about many different green issues (Zimmer, Stafford and Stafford 1994). Some writers have referred to “ecological concern”, which refers to the degree of emotionality, the amount of specific factual knowledge, the level of willingness, as well as the extent of the outcomes of these (like behavioral intent, recycling behavior, and purchase intent) on pollution-environment issues (Maloney and Ward 1973).

ECBA as a construct is of dual significance. Firstly, at the individual level, ECBA comprise a key psychological determinant of environmentally concerned consumer behavior. These include consumers’ search for information, conserving behavior, supporting intent, and purchase behavior (e.g. Minton and Rose 1997). Secondly, at the organizational level, ECBA are carried forward into the arena of managerial decision-making (e.g. Egri and Herman 2000). Thus, ECBA directly relate to environmental stakeholders. ECBA represents the aspirations of consumers individually and in groups; they are strategically and tactically crucial for business and marketing managers, and are at the heart of government’s public policy (Bhuian, Joonas, and Ruiz 2007).

Below, we cover the salience of ECBA in the context of India.

**CULTURAL MOORINGS OF INDIAN BUSINESS STUDENTS**

Cultural values and their impact on beliefs and attitudes, especially collectivist orientation, have been discussed in the literature in terms of typology (Hofstede 1980, 1997, 2001), as well as empirically evidenced (e.g. Joonas 2004; Ling-yee 1997). Under Hofstede’s (1980, 1997, 2001) typology, India had an Individualism (IDV) rating of 48, compared to a world average of 40, and was described as a collectivist society. In at least one study, pertaining to the introduction of ATMs in India, Collectivist Orientation was ascertained to be high (De Angeli et al 2004).

Collectivist orientation is a socio-cultural value, manifest in cooperation, helpfulness, and consideration for group goals. In the context of the environment, it would signify a greater value on protecting community resources above individual motives and consumption needs. Collectivism typifies societies in which people from early life are bonded into strong, cohesive in-groups. Numerous environmental behaviors like sharing information about environmentally friendly products and services, community arrangements for conservation and recycling, and for institutional support, are carried out in groups that have bonds akin to family, among people that may not have blood ties.
Further, in a collectivist society, there is a high level of social interaction; therefore it is crucial to maintain group harmony. Thus, environmental protection would constitute a way to keeping harmonious social relations. In addition, collectivist societies are “shame” cultures, with loss of face for the individual and the family, following any damage to the environment. In contrast, environmental protection would raise the honor of the individual as well as the family (Hofstede 1997). Lifestyles in such societies are “other-dependent”, and bank on social networking as the basic information source, as we see in environmental organizations. Further, the social structure of a collectivist society (Hofstede 2001) is reflected in the social structure of a community that is friendly to the environment.

In light of the preceding, we hypothesize that:

H$_1$: Overall, the level of ECBA of Indian business students will be high.
H$_2$: The level of Collectivist Orientation among Indian business students will be high.
H$_3$: The level of Collectivist Orientation among Indian business students will have a significant positive effect on ECBA.

**METHODOLOGY**

An initial random survey will be conducted among over 200 business students in India, from schools accredited by regional bodies. A voluntary, anonymous, objective type, paper-and-pencil survey was used. The researcher’s cover letter will be provided, outlining research objectives, and assuring that information received will be confidential, and used research purposes only. The survey will be pretested prior to administration, to ensure validation. Since by and large, English is the medium of higher education in India, the need for translation will be obviated. A 16-item ECBA scale (Minton and Rose 1997, Antil and Bennett 1979), with a reported Cronbach’s $\alpha = .95$, will be used to measure environmental concern. Collective Orientation will be measured through a four-item scale modified from Ling-yee (1997), with a reported Cronbach’s $\alpha = .76$. Both these will be seven-point scales. Structural equation modeling will be used to study relationships among these constructs and control variables.

**CONCLUSIONS**

As stated earlier, business students are potential business and marketing managers, whose green attitude will impact their long-term behavior. This conceptual research will be useful to developing a consistent and strategic enhancement of business students’ ECBA, through sharing of environmental ideas, through schools and colleges. Knowledge-sharing on the green platform, incorporating ethical and legal considerations, and managerial dimensions of green systems and structures, products and services, disposal, distribution, and promotion, could be explicited through the marketing curriculum. Stress would be laid on integrating related local and global organizations, including media, with business schools. Any resultant increase in ECBA would constitute a fitting response to the green marketing imperative, not of India alone, but also of regional and global affiliates such as SAARC and BASIS.
REFERENCES


TECHNOLOGY TRANSFER: UNANTICIPATED APPLICATIONS

"MAPPING" CHARITABLE GAMING IN KENTUCKY: AN EXPLORATORY ANALYSIS USING GIS

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EXTENDED ABSTRACT

There are almost limitless applications for Geographic(al) GIS information systems analysis and study. In just about any case that there is a geographic “map” present, there is an opportunity to apply GIS analysis. Some of these areas include social sciences, government planning and research, environmental issues, healthcare, crime analysis, and business. Health care and public policy applications of GIS abound. Epidemiologic data in the healthcare industry provides the perfect opportunity to apply GIS analysis to disease outbreak. Further healthcare applications include access to services and facilities, gaps in public service provisions and availability of palliative care. Government agencies and urban planners employ GIS in examining population shifts, traffic patterns, as well as planning green space. Since socio-demographic variables can be correlated with gambling and charitable gaming participation, it makes perfect sense to “marry” the use of GIS mapping to analyze charitable gaming data and socio-demographic/census data to visually analyze patterns of these variables.

The purpose of this study is to explore socio-demographic variables and charitable gaming activities using GIS technology. Based upon the review of GIS literature and applications, the researchers believe a spatial (map) analysis of socio-demographic population characteristics and charitable gaming revenues, along with other relevant data pertaining to charitable gaming operations is appropriate. Based upon the review of literature the following research questions were developed:

1. What is the geospatial pattern of individuals living at or below the poverty line in counties of Kentucky?
2. What is the geospatial pattern of the median income for counties in Kentucky?
3. What is the geospatial pattern of educational attainment for counties in Kentucky?
4. What is the geospatial pattern of religious affiliation for counties in Kentucky?
5. What is the geospatial pattern of total gross in dollars (receipts at door) for counties in Kentucky?
6. What is the geospatial pattern of total payout in dollars for counties in Kentucky?
7. What is the geospatial pattern of proceeds ratio (in percentage) for counties in Kentucky?
8. What is the geospatial pattern of gaming licenses by type of licensee for counties in Kentucky?

Findings indicate there are patterns across the state at the county level regarding poverty, income, education and religious affiliation. Analysis of charitable gaming data also revealed county-level patterns regarding total gross, total payout, and proceeds ratio data. The GIS mapped results also showed patterns by the types of license for several counties.
THE CHALLENGES FACING SALESPEOPLE WHEN INTRODUCING NEW TECHNOLOGIES

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ABSTRACT

A common element of concern among salespeople – although to date not extensively addressed in the sales management literature, is the task of introducing new technological products into their respective markets. Salespeople, regardless of training, may succumb to mistakes when attempting to introduce a new technology into their markets. Of the various types of mistakes or misjudgments that may compromise a salesperson’s ability to adequately represent an innovative technological product, six are discussed in this paper.

INTRODUCTION

The task of selling new products, or innovations, has been an area that has apparently been largely overlooked in the selling and sales management literatures. The issues involved in releasing new products to the market has been addressed, but primarily from the point of view of the manufacturer or product producer (e.g., Wu, Balasubramian, and Mahajan 2004; Abernathy and Clark 1985; Chandy and Tellis 1998). A fundamental issue addressed in this literature, for example, is the complex of problems that can be incurred when an announced product introduction is delayed for whatever reason – the impact of such delays on partner firms and ultimately on customers. However, direct reference to the problems facing the salespeople who are responsible for selling the innovation to the market – whether it is delayed, or there are any other problems associated with it (such as the complexity of the innovation, which salesperson is obliged to somehow overcome for the benefit of his/her customers), is difficult to find in the literature.

The reasons for this gap in the literature are not clear. Perhaps there is a tendency to favor manufacturers when considering the challenge of product introductions – for example, the “MOA” framework introduced by Wu, Balasubramian, and Mahajan (2004), which addressed the role of ability (top management emphasis and interfunctional coordination), opportunity (partner power and market dominance), and motivation (competitive objectives and control of cannibalization). Nowhere does this framework appear to address the problems associated with selling innovative products, except in its indirect reference to “partners” and their involvement in new product development.

In any event, the challenge for salespeople of introducing new technological products to the market is an ongoing one. Salespeople, irrespective of the training they receive in sales techniques, their abilities to overcome buyer objections and to obtain commitment, and their degree of product knowledge, may fall prey to mistakes or misjudgments when attempting to introduce innovations – particularly technological ones – to their respective markets (e.g., Futrell
The premise of this paper is to explore what may be some types of errors that salespeople fall prey to when selling innovations to their markets. Owing to the relative dearth of available literature that deals directly with this subject, this paper is entirely conceptual and exploratory in nature. The overriding objective is to identify what these potential missteps may be, so that subsequent research may be able to objectify and measure some of these issues, and provide potential solutions.

The author contends that there are at least six types of obstacles encountered by the sales representative when selling an innovation. Each subsequent section of the paper addresses one of these potential impasses. A conclusions paragraph follows the discussion of each of these selling mistakes.

**EXPLAINING THE INNOVATION**

The first challenge for the salesperson is to explain the innovation to the market in a way that will facilitate understanding. As the research alluded to above suggests, technological pioneers may indeed lead the way when it comes to developing new products, and may encounter their own particular set of difficulties, all associated with new product introduction. However, it remains the task of the salesperson to explain these products, along with their attributes and potential benefits, to those who are not as close to the product as they are. A perennial issue in selling is the distinction between attributes and benefits of a new product (e.g., Weitz, Castleberry, and Tanner 2003). Attributes, of course, represent what the new product is capable of, the utility and relative advantage that it offers to prospective buyers. The problem, of course, is in convincing buyers that these attributes represent benefits particularly for them.

In providing the explanation, however, the salesperson should keep in mind that few things frighten prospective buyers more than technical jargon and product development vernacular. Thus, the challenge to the salesperson is to explain the innovation to the prospect in simple ways. Arguably, if such simple explanations are not possible, if the salesperson feels bound to a jargon-laden script, then the new product may indeed not be ready to launch. Ingram (1996) notes that commitment cannot normally be elicited from buyers, without a satisfactory summary of the solution in order to confirm exactly what the benefits of the new product are.

One model of relationship selling suggest that a key element in selling (one that becomes even more critical when selling an innovative product) is to customize the relationship through the linkage of the product as a solution to the buyer’s specific needs (Ingram 1996). In this manner, the distance between the prospective buyer and those directly involved in the production and distribution of the product, may be lessened as the buyer sees, in unambiguous terms, how the product directly benefits him/her. Of course, this linkage of potential solution to buyer need is not possible unless the salesperson can first adequately explain the attributes to the buyer, so that the linkage to buyer benefits is apparent.

**ASSOCIATING THE INNOVATION WITH A NEED**
When examining the prospect of buying an innovation, the potential purchaser very likely is thinking, “Do I really need this? What exactly will this product do for me? I’ve gotten along so far without this product, what problem does it truly solve for me, that I really need a solution for?” As any B2B salesperson should know, an appropriate buyer response can only be triggered when he/she believes that this new technology is connected to a pertinent issue or event that they are faced with.

Sales research in the area of overcoming buyer objections suggests that objections can result from varying sources, such as objections related to the product, to the sources of the product, to price, and objections related to time (e.g., “I need time to think about it”) (Weitz, Castleberry, and Tanner 2003). However, a separate type of buyer objection is specifically related to buyer need: e.g., “I’ve never done it that way before,” or “I just don’t need the product” (Weitz, Castleberry, and Tanner 2003). One method offered by researchers to deal with this type of objection is the feel-felt-found method (Weitz, Castleberry, and Tanner 2003). For example, “I understand how you feel, you just don’t see the direct connection to your need right now. Ms. _____ felt the same way as you, but after I explained how our product addressed her needs, she found that buying the innovation from us was her best course.”

IS THE INNOVATION APPEALING TO THE “RIGHT” PEOPLE?

Sometimes, those who are most intrigued or excited about a new technological innovation may not be those who are in the best position to provide entrée into the market. This raises the question, who are the “right” and “wrong” people to whom the salesperson should target the innovation? The “wrong” people might be thought of as those who are more concerned with the “why” of an innovation rather than the “how.” Thus, they would be buying mostly as a result of curiosity, satisfying a technological bent, or they may be end-users seeking to satisfy an epistemic bent (e.g., the first consumer who purchased VCRs or satellite dishes).

In B2B selling, the prospects representing the highest likelihood of buying would be those who have thought out the “how” of the technology – i.e., “how can I use this?” When buyers are thinking “how” rather than “why,” then the salesperson has already at least partially closed the sale. A closing method such as the benefit summary might then be effective – e.g., sampling listing all of the potential benefits of the new product, and then linking them to specific buyer needs (as addressed in # 1). This gets buyers to then think in terms of they can use the new product to address their specific needs.

A key factor that affects the adaptation of any innovation is, of course, relative advantage – the salesperson shows the buyer how this new product represents a distinct advantage over alternative choices that are already available. As long as the salesperson continues to think in terms of “how” rather than “why,” then this relative advantage can be brought home to the buyer.

MAKING THE TECHNOLOGY MORE “HUMAN”

A challenge for salespeople when introducing a new technological innovation to clients may be finding a way to make the new technology seem more “human.” The “high tech / high
touch” continuum has been written about as a social trend, in which people seek ways to “humanize” their lives, that have become increasingly dominated by and dependent on emergent technology (Naisbitt, Naisbitt, and Philips 1999). As one “personalizes” technology, taking away some of its high-tech mysticism and power to intimidate users, one moves closer to the “high touch” end of the continuum, where reliance on human interaction is more prevalent.

From the perspective of the potential buyer of a technical innovation, that innovation can seem remote and inaccessible, and those who produce and market the innovation as abrasive, and lacking the necessary “human” skills to develop a long term relationship with the client. Firms with a strong technological bent may reason that, as long as the innovation provides the necessary utilities, who really cares how it is presented to the market? Those on the “high touch” end of the spectrum, however, may indeed care. Technology can be off-putting to people in some situations; its complexity can make it intimidating, and prospects need to see how the technology can be used, in a “human” way, particularly by those who may be closer to the “higher touch” end, seeking a more humanized explanation or demonstration of the innovation’s benefits.

THE “ENGINEERED” SALES PROCESS

Firms may sometimes launch product innovations that are so close to their technologies, that their view of the sales process for these products may be driven by their own engineering perspective. Thus, the sales process they follow may seem “engineered” to their prospective buyers. Some firms, such as Apple Computer, have been accused of this in the past – e.g., “engineers making computers for other engineers.”

Processes developed by engineers of necessity may tend to be presentation-heavy, relying on considerable explanation and demonstration, which may be perceived as out of sequence by the buyer “on the street.” Sales itself is, arguably, an intuitive process, which depends at least as much on the ability to connect with others and develop long term relationships, as on the technical competence of the salesperson (e.g., Weitz, Castleberry, and Tanner 2003).

From time to time, one hears that technology has become a “replacement” of sorts for the salesperson, a view with which the author strongly disagrees. It may be reasonable to predict that technology can eliminate sales positions that are non-productive, as well as eliminating non-productive salespeople themselves. However, it cannot eliminate the need for salespeople who are high-earners, those who attract “big” money, and can generate revenue directly for their companies. As the old cliché reminds us, “salespeople don’t cost the firm money, they make the firm money.”

Another argument may be made for using “high tech” selling techniques (see # 4) to effectively sell “high touch” products. Indeed, one may argue that technology has completely changed the nature of the relationship between existing customers and the sales organization. Technological advances have freed salespeople from many “non-sales” functions, such as administration. However, the point remains that when the sales process itself appears (from the point of view of the prospect) to be “engineered” in order to make the sale on the basis of the technological attributes of the innovation, that markets may resist this approach.
THE CHALLENGE OF SHORTER PRODUCT CYCLES

Most marketing researchers agree that product cycles are generally becoming increasingly shorter (e.g., Peter and Donnelly 2009), meaning in effect that there really is no longer the time necessary for a salesperson to master the particular selling formula that will work for a new technological product.

Most selling styles are arguably informal in nature – reliant on the history of the client, successful skills for “bonding” with the client (similarity, likeability, matching of social style type, etc.), and the mastery of adaptive selling skills (e.g., Futrell 2009). In fact, the necessity of adapting to the client can introduce more of a time requirement into the process. This, combined with ever-shorter product cycles, translates into less time for the salesperson to learn the formula that will be successful for innovative products.

The shorter cycle is also compounded by problems associated with forecasting – despite the metric used, forecasts often are overly –optimistic (or may be driven by fear), or may be too reliant on what has happened in the past (e.g., Winer and Dhar 2011). Another factor that may interact with shorter cycles to make thing more difficult for salespeople, is how sales managers use their time. The communication of “pipeline management” issues, assignment of territories, and forecast results, may not reach the salesperson in time to really do them much good – given that he/she is already battling the issue of shorter cycles. Then, if that management-generated information is not of sufficient quality, the salesperson may find him or herself in a no-win situation when trying to sell the prospect on a technological innovation.

CONCLUSION

In conclusion, the purpose of this paper has been to explore, with the goal of gaining some understanding, some of the challenges facing today’s B2B salesperson when attempting to introduce a product innovation (particularly a technological one) to the market. This paper is exploratory only – the topic addressed here does not appear to have been given much attention in the marketing (or sales) literature, and it is the author’s hope that this paper will stimulate discussion and thought on this most important issue.

Finally, it is hoped that future researchers will seize upon some of the ideas contained herein with the goal of advancing a model or conceptual framework that may be empirically tested in a sales context. Rather than to try to present potential solutions to these challenges (which would represent a separate paper in itself), the author feels that it is sufficient to state the case that these challenges exist, and to hopefully lay some groundwork for future theoretical and empirical development.
REFERENCES

THE “E” IN “ESERVICE LEARNING”
Sue Y. McGorry, DeSales University

ABSTRACT

Institutions of higher education are realizing the importance of service learning initiatives in developing awareness of students’ civic responsibilities, leadership and management skills, and social responsibility. These skills and responsibilities are the foundation of program outcomes in accredited higher education business programs at undergraduate and graduate levels. In an attempt to meet the needs of the business student market, these institutions of higher education are delivering more courses online. This study addresses a comparison of traditional and online delivery of service learning experiences. Results demonstrate no significant difference in outcomes between the online and face-to-face models.
CONSUMER REACTION TO BUSINESS FIRMS’ RESPONSES TO NEW TECHNOLOGIES IN COMMUNICATIONS: EMAILS OF PRAISE AND COMPLAINT

Michael M. Pearson, Loyola University New Orleans
Thomas M. Hickman, Loyola University New Orleans

EXTENDED ABSTRACT

Teaching introductory marketing students the marketing concept and conveying the notion that firms are actually able to create a competitive advantage by being consumer-centric has proven to be a challenging task. We often find that introductory students believe it only makes sense for companies to take this approach and that they do not easily grasp the idea that what "makes sense" is not equally executed by all firms. Therefore, we implemented a student letter writing exercise that allowed us to demonstrate that not all businesses are equally consumer centric and that diligence in following through with the marketing concept creates an advantage for the firm. Letter writing assignments have been used in the past, but this exercise is unique in that it uses e-mails rather than traditional letters, spans the length of the semester and utilizes pre-test and post-test measures with the purpose of bringing the marketing concept to life.

EXERCISE DESIGN

The following outline is the process for this marketing concept assignment that engages students with a business of their choice through an e-mail of praise or complaint to the firm.

1. During the first week of the semester, students enrolled in Basic Marketing are required to initiate contact with a business through an e-mail assignment that instructs them to write a letter of either praise or complaint to the business of their choice by the start of the second week of the semester. They are instructed that the letter be genuine and rooted in the students' personal experience as a customer of their chosen business.

2. During the second week of the semester students forward their e-mails to the instructor and complete a five question survey, hereafter referred to as the pre-test, that assesses the students' level of belief that companies care about their customers and their likelihood of responding to letters of praise or complaint. Table 1 displays pre-test and post-test measures.

3. During the latter portion of the semester students are given the same survey, hereafter referred to as the post-test, as they were at pre-testing as well as additional questions that gauge student reaction to the response or lack of response to their e-mail.

4. Students are shown the results of their class’s surveys as well as the cumulative results of all surveys collected over several semesters of this assignment and a discussion about how firms differ in executing the marketing concept is initiated by the instructor. The discussion is designed to allow students to hear how various firms handle consumer
praise and complaint and to demonstrate that all businesses do not respond and those that do respond do so in varying degrees of consistency with the marketing concept.

**FINDINGS**

Over the course of four semesters, 202 students enrolled in Basic Marketing participated in this exercise and received extra credit for their participation in both a pre-test and post-test phase.

Overall, student attitudes toward business became more negative from the beginning to the end of this experiment. Statistically significant differences \((p < .001\) were found in the following statements:

- Firms care about their customers
- Small firms care about their customers
- Large firms care about their customers
- Firms will respond to complaint

Only the statement “Firms will respond to praise” showed a positive change in attitudes toward business, but this was at a statistically non-significant level.

Students that received a response from their emails had higher ratings toward business. Significant differences \((p < .001)\) on posttests were shown on the following statements.

- Firms care about their customers
- Large firms care about their customers
- Firms will respond to praise
- Firms will respond to complaint

The statement “Small firms care about their customers” also showed higher attitudes toward business among students receiving responses to their emails, but only at a \(p < .076\) level.

**FUTURE STUDY**

Much more needs to be studied in understanding how customers react to responses from business to emails of praise and complaint vs. traditional letters of praise and complaint. The difference in changes in consumer attitudes as a result of that consumers praise letter verses a complaint letter also needs to be addressed. Also, the apparent bias among students that small firms have a higher level customer centric nature deserves more study.

One important area of future study deserves to be explored. It appears that when a customer sends a letter or email to a business firm that an expectation is generated. The response or non-response by the business firm results in satisfaction or dissatisfaction by the customer toward the firm within the mind of the consumer. This should lead to a change in behavior as to continuing buying the business firm’s product or shopping at the business firm’s store. The big question is whether an email letter of praise or complaint generates the same level of expectation as does a traditional letter. The following big question is whether an email or traditional letter of response generates the same level satisfaction in the mind of the consumer.
CREATING SUSTAINABLE COMPETITIVE ADVANTAGE IN MARKETING

CHANGE AND STABILITY MANAGEMENT AS A SOURCE OF COMPETITIVE ADVANTAGE FOR ORGANIZATIONS

Jorge Humberto Mejia, Autonomous Technological Institute of Mexico

ABSTRACT

While firms must consider change and stability to compete and survive, most management literature analyzes these concepts as incompatible and contradictory. Using a qualitative, multiple-case methodology in Mexico, we propose a conceptual model based on our literature review and empirical data that shows how change and stability management could be a source of competitive advantage for the SMEs of our sample. Our findings showed multiple ways of change and stability interaction in SMEs. Key resources and capabilities were grouped in the proposed model. Theoretical and empirical implications are discussed and future research opportunities from this seminal work are also considered.

INTRODUCTION

Competitiveness is one of the principal challenges of SMEs around the world (Jitnom & Ussahawanitchakit, 2009). Thus, the research of Ghobadian and Gallear (1996) suggests that, in order to respond to the increasing competitiveness and constant claims of their clients, most of the time Multinational Companies (MNCs) and Top Management Teams (TMTs) of SME’s, should implement radical changes. Total Quality Management (TQM) programs are considered an important catalyst in this effort. Some scholars support the idea that these programs are a source of competitive advantage for the firms (Douglas & Judge Jr., 2001). Kolb (1997) found two parallel perspectives in quality systems (ISO 9000). The first one is focused on innovation activities and continuous improvement processes and it concentrates on change management. The second one is focused on norms; with the objective to certify that company products and/or services are produced according to international standards. This second perspective concentrates on exploitation and continuity, looking for stability of internal processes. Kolb argued that the implementation of quality systems as ISO 9000 in Small and Medium Size Enterprises (SMEs) is especially interesting because it is a deep, transformational process.

In spite of this, most organizational theorists study change and stability as two separate concepts, thus building two visions of organizations that confront each other: organizational change and organizational stability (Sull & Houlder, 2005; Alter, 1996; Ghemawat, 1991; March, 1991; Van de Ven & Poole, 1989; Campbell, 1969; Burns & Stalker, 1961). Adopting this
position in most managerial theories, researchers have assumed that stability and change are largely incompatible and mutually exclusive.

Despite the interest in the literature about understanding the links between change and stability (Farjoun, 2010; Reschke & Kraus, 2009; Lüscher & Lewis, 2008; Leana & Barry, 2000; Mbengué, 1997; Demers, 1999; Van de Ven et al., 1995; Quinn & Cameron, 1988), few empirical studies have explored how organizations combine stability and change (Mejía-Morelos 2010; Sutton-Brady, 2008; Feldman & Pentland, 2003). These authors suggested developing more empirical research for understanding change and stability dimensions and interaction processes of oppositions and complementarities.

Consequently, we know very little about how change and stability management could be a source of competitive advantage for organizations. This paper addresses this gap. To our knowledge, this is the first empirical, academic study to focus on understanding change and stability interaction as a source of competitive advantage for SMEs. For this purpose we explore two main questions, is there an interaction between change and stability during ISO 9000 execution process? and if such a linkage exists, then “how TMTs combine resources and capabilities in terms of change and stability to produce sources of competitive advantage?”. The answers of these research questions could give scholars, managers and consultants insightful information for better understanding the “competitive advantage” concept in the context of SMEs and certainly will help stimulate scholarship and develop theories and frameworks for manage change and stability in organizations.

Thus, a proposition for a theoretical model that helps scholars and managers understand factors influencing change and stability management in SMEs as a source of competitive advantage in the context of a specific change initiative or project as ISO 9000; is a natural starting point for my research. This model will be developed as follows: first, a preliminary conceptual framework, including change and stability variables will be developed from our literature review focused on the resource based view theory (Barney 1991). Subsequently, we will discuss the methodology and the sample selection. Next, the empirical results will be contrasted with the preliminary conceptual framework and a revised model will be proposed. Finally, this paper will conclude with the implications and contributions of the research.

LITERATURE REVIEW

In this section, we draw upon an extensive review of the relevant literature on competitive advantage, Total Quality Management (TQM), and TMTs. This leads us to identify categories of resources and capabilities that are supposed to generate competitive advantage in organizations. We present the research focused on competitive advantage, TQM in terms of competitiveness and TMTs characteristics (Souitaris & Maestro, 2010; Zarutskie, 2010; Amason, Shrader, & Tompson, 2006; Weinzimmer, 1997; Hambrick, Geletkanycz, & Fredrickson, 1993; Grimm & Smith, 1991; Romano, 1990; Bantel & Jackson, 1989; Hambrick & Mason, 1984). This literature review allows us to create a preliminary conceptual framework. It draws on the process/capability school (Grant, 1991 and Teece et al., 1997). This school is interested in analyzing how a firm’s performance and competitive advantage depend on the way in which organizational resources and capabilities are managed.
**Competitive advantage: different approaches**

This section presents the main issues of this field, the definition we adopt to develop this paper and the key theoretical approaches interested in studying this subject. Competitive advantage remains a subject of discussion in the strategy literature (O'Shannassy 2008; Powell 2001; Rumelt 2003).

In general, competitive advantage of a specific firm is defined as a condition that competitors cannot replicate. This could be classified as sustainable and unsustainable competitive advantage (Barney 1991; Coyne 1986; Porter 1985; Porter 2008). Research of Barney, 1991 and Barney & Hesterly 2012, based on the resource based view theory, identifies four dimensions for classifying resources and capabilities in the VRIO framework. To operationalize this construct we decide to adopt the definition of Besanko, Dranove, and Shanley (2000: 389): “when a firm receives a higher rate of economic profit than the average rate of economic profit of their competitors within the same market, the firm has a competitive advantage in that market.”

Thus, the main activity of management team is to identify the sources of competitive advantage and to exploit them in terms of economies of scale and/or economies of scope (Learned 1969; Porter 1985). Thus, stability in resources and capabilities becomes a fundamental source of competitive advantage. On the other side, innovation as change can create “isolation mechanisms” that protect profit margins and allow benefits to be gained for firms (Chang 2011). Consequently, innovation as change becomes a key source of competitive advantage.

Two theoretical approaches attempt to explain competitive advantage. The first focuses on industry analysis approach; that emphasizes the importance of industry structure and market position as sources of competitive advantage (Porter, 1980; Porter 2008). The second one is the resources based view (RVB) that points out a firm's unique access of resources and capabilities that allow it to develop and maintain core competences, and dynamic capabilities (Barney, 1991; Prahalad and Hamel, 1990; Teece et al., 1997).

In summary, a firm's competitive advantage arises from two main sources: industry and resources and capabilities inside the company. Therefore, TQM programs and practices can develop and maintain different combinations of resources and capabilities that may allow firms to identify sources of competitive advantage.

**TQM practices and competitive advantage**

This section presents a literature review of TQM and competitive advantage to serve as the theoretical base to propose our preliminary conceptual model. Founders of TQM movement linked quality to organizational competitiveness (Crosby, 1979; Deming, 1986; Ishikawa, 1986; Juran, 1986). Two dimensions concerned the expected results of TQM programs: the first dimension is internal based on more efficient processes, lower non-quality costs and more efficient and committed employees. The second dimension is external and it builds a company image based on quality, increased customer loyalty and satisfied and improved market share and profits. TQM programs are supposed to have a positive effect on business competitiveness.
Specially, TQM philosophy provides a model of business excellence (EFQM) that is used as a standard to compare firms. This literature allows us to identify critical resources and capabilities that are supposed to help managers of organizations to reach a competitive advantage.

**Critical resources and capabilities associated to reach competitive advantage**

Our research shows that there are several TQM practices associated with resources and capabilities (Powell, 1995; Mehra et al., 2001; Lakhal et al., 2006; Teh, Ooi and Yong., 2008). For example, the American Malcolm Baldrige National Quality Award (MBNQA), considers six resources of TQM practices associated with organizational performance (Teh et al., 2008): leadership; strategic planning; information and analysis; human resource focus; process management; customer and market focus and business results.

Lakhal et al., (2006) summarized, based on their literature review, the resources and capabilities compiled from a large set of research papers and proposed ten categories: top management commitment and support, organization for quality, employee training, employee participation, supplier quality management, customer attention, continuous support and improvement of quality system, information and analysis, and use of statistical quality techniques. Similarly, Mehra et al., (2001) were able to group forty-five resources into five main categories. They are human resources motivation, management structure, quality tools, supplier support and customer orientation.

This body of literature on TQM shows a lack of consensus about the influence of TQM on competitive advantage (e.g. Young, 1992) as well as a lack of an integrative theoretical framework. This research addresses this gap. One of the main resources mentioned by the scholars of our literature review is human resources commitment, especially TMT’s participation in TQM practices.

**TMT characteristics an integrated framework in terms of change and stability**

Since the seminal study of Hambrick and Mason (1984) scholars have devoted significant attention to explore how the human side of managers, such as their backgrounds and psychological characteristics, influence the organizational outcomes and the diversity of decisions they make (Bell et al., 2011; Harrison & Klein, 2007; Menz, 2011). Despite the large number of studies on TMT heterogeneity, research has yielded inconsistent results (Nielsen, 2010, p. 301). We draw upon an extensive review of the relevant literature on TMT (Amason, Shrader, & Tompson, 2006; Bantel & Jackson, 1989; Cho & Shen, 2007; Grimm & Smith, 1991; Hambrick, Geletkanycz, & Fredrickson, 1993; Hambrick & Mason, 1984; Weinzimmer, 1997; Yong et al. 2011; Zarutskie, 2010) an integrated framework in terms of change and stability that considers the main characteristics of TMTs (Hambrick and Mason, 1984). Psychological characteristics of TMTs are out of the scope of this paper. Based on this literature review we identified studies focused on change and others on stability, Table 1 summarizes the research interest of this literature in terms of change and stability.
### TABLE 1 Summary of the TMT Characteristics in Terms of Change and Stability

<table>
<thead>
<tr>
<th>TMT Characteristics and Definitions</th>
<th>Studies Focused on Change</th>
<th>Studies Focused on Stability</th>
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<tbody>
<tr>
<td><strong>Level of Education of TMT</strong></td>
<td><strong>Main ideas:</strong></td>
<td></td>
</tr>
<tr>
<td>Educational level is the TMT’s highest educational achievement.</td>
<td><em>It is an important factor in SME development, growing innovation and change.</em> Educational level can make a management team more receptive to change and can influence their amount of innovations (Souitaris et al., 2010; Weinzimmer, 1997; Romano, 1990; Bantel &amp; Jackson, 1989; Hambrick et al., 1982; Rogers &amp; Shoemaker, 1971; Becker, 1970).</td>
<td><strong>Main ideas:</strong> <em>Stability as a source of no change.</em> Professional education in management is associated with control and moderation. For example, MBA candidates are not as change-oriented, innovative, or risk-prone as more &quot;self-made (non-professional)&quot; executives (Collins &amp; Moore, 1970; Hambrick &amp; Mason, 1982).</td>
</tr>
<tr>
<td><strong>Managerial Experience of TMT:</strong></td>
<td><strong>Main ideas:</strong></td>
<td></td>
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<tr>
<td><strong>Organizational and Industry Tenure</strong></td>
<td><em>Managers with different work experiences in organizations were able to highly contribute to change and innovation.</em> (Bantel &amp; Jackson, 1989; Rothwell &amp; Zegveld, 1985; Shrivastava &amp; Souder, 1985; Hambrick &amp; Mason, 1984; and Dearborn &amp; Simon, 1958).</td>
<td><strong>Main ideas:</strong> <em>Stability as resistance to change and/or the absence of change.</em> Teams composed of members with long organizational and/or industrial tenure, become homogeneous over time, more committed to the organizational status quo, which might have negative consequences in terms of dealing with an uncertain environment, or organizational change. Alutto &amp; Hrebinjak, 1975; Bell et al. 2011; Grimm &amp; Smith, 1991; Staw &amp; Ross, 1980; Stevens, Beyer, &amp; Trice, 1978; Goodman, 1988; Hambrick, 1982; Marcus &amp; Goodman, 1986; Newell, 1989). <strong>Main idea:</strong> Stability in TMT as a support to operational effectiveness (Dickenson &amp; Kawaja, 1987; cited by Bell et al. 2011; Chatman, 1991; Sturman, 2003; Van Maanen &amp; Schein, 1979).</td>
</tr>
<tr>
<td><strong>TMT Turnover</strong></td>
<td><strong>Main ideas:</strong></td>
<td></td>
</tr>
<tr>
<td>It is defined by the level of permanence of team members in a specific firm.</td>
<td><em>If new team members are integrated into the TMT over time, new team members can provide fresh ideas, approaches, and innovate the existing methods inside the TMT.</em> (Bell et</td>
<td><strong>Main ideas:</strong> A minimum turnover in team members should facilitate communication frequency and the development of shared norms, language, and routines that results in commitment to a status quo and strategic inertia. (Zenger &amp; Lawrence, 1989). Cited by Wally</td>
</tr>
<tr>
<td>TMT members’ age</td>
<td>Main ideas: Younger TMTs members are more likely to seek growth and change Child (1974), Chown (1960) and Taylor (1975), Hambrick and Mason (1984)</td>
<td>Main ideas: Older TMTs members become more inflexible to change, take fewer risks and are more committed to the status quo. Hambrick, Geletkanycz, &amp; Fredrickson, 1993, Hambrick and Mason (1984)</td>
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</table>
As table 1 shows, most researches have analyzed the TMTs characteristics in terms of change. The scholars that studied stability usually focused on issues like change resistance, inertia, commitment with status quo, routines and no change. Then, stability has been regarded as a problem to be solved or avoided in order to reach and lead change. One exception to this argument is the research of Dickenson & Kawaja (1987) that conceives stability in TMT as a support to operational effectiveness. This literature review on TMTs characteristics shows that research pays limited attention to stability and to TMT management activities (Wu et al. 2002). We aim to contribute to this literature review by integrating change and stability in the study of TMTs characteristics. A preliminary theoretical framework emerges from our literature review; it is shown in Figure 1. The methodology, procedures, and analysis of the comparative case studies are developed in the following section.
Sources of competitive advantage

Internal resources and capabilities
- Human resource commitment
- ISO methods
- Organizational Structure
- Suppliers support
- Customer Relations and
- Rivalirity

External (triggers/resources and capabilities)

TMTs characteristics
- Level of Education
- Managerial Experience
- Turnover
- Age

Figure 1: Preliminary Theoretical Model based on TQM Program (ISO 9000)
METHODOLOGY AND CASE STUDIES

The key aim of this research is to explore “how TMTs combine resources and capabilities in terms of change and stability to produce sources of competitive advantage in the SMEs analyzed”. Therefore, this research used a qualitative, multiple-case methodology, which is highly recommended for clarifying a phenomenon that is not yet well understood (Marshall & Rossman, 1995) and for seminal works (Burke & Jarratt, 2004; Mintzberg, Raisinghani, & Theoret, 1976; Siggelkow, 2007). This research represents a seminal work because there appear to be no published studies about change and stability as a source of competitive advantage in SMEs.

The firms participating in this study were selected through purposeful sampling (LeCompte & Preisslele, 1993; Patton, 1990), which is a criterion–based selection method that allows the creation of a sample that fits a predefined profile. To be eligible, each enterprise had to meet the following criteria: a) have the same TQM program, ISO 9000, as the only major project in the recent past to avoid another variable interfering in our research. The implementation of quality systems as ISO 9000 in SMEs is especially interesting because it is a deep, transformational process (Kolb, 1997); b) be an SME; c) exhibit different results from the same change initiative: certified as successful and non-certified as unsuccessful in the application of their certification; d) have received their certification one to five years before the date of the study. The consultants, as well as the ISO inspector, suggested this because of the assimilation process of this program. Consequently, our unit of analysis for this study was the TMTs, ISO inspectors and consultants discourse. This allowed us to reconstruct the change and stability process as sources of competitive advantage; e) we looked for comparable companies in terms of results (Eisenhardt, 1989). The sample was also designed to be quite homogeneous. The firm’s context, change initiative and size was controlled to maximize the validity of the study. Each of the firms in the sample was in a different industrial sector within the same geographical region; f) the managers participating in this program were available even if they did not work in the selected SME any more; g) the companies should have documentation that testified their situation before, during, and after the application of the ISO 9000 system. Table 2 shows a summary of the characteristics of our sample.

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1 We used the enterprise classification criteria of the Mexican Minister of Economy (2002). The SMEs are those that have between 31 and 251 employees.
<table>
<thead>
<tr>
<th>Firm’s size (number of employees)</th>
<th>Sector of Activity</th>
<th>Case Studies</th>
<th>Tenure of Certification ISO 9000 (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SME A (116)</td>
<td>Miscellaneous Plastics Products</td>
<td>C1</td>
<td>Not certified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C2</td>
<td>5</td>
</tr>
<tr>
<td>SME B (120)</td>
<td>Textile Mill Products</td>
<td>C3</td>
<td>Not certified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C4</td>
<td>5</td>
</tr>
<tr>
<td>SME C (250)</td>
<td>Electrical Equipment and Components</td>
<td>C5</td>
<td>3</td>
</tr>
<tr>
<td>SME D (210)</td>
<td>Construction and Transportation Equipment</td>
<td>C6</td>
<td>Not certified</td>
</tr>
<tr>
<td>SME E (125)</td>
<td>Textile Mill Products</td>
<td>C7</td>
<td>Not certified</td>
</tr>
<tr>
<td>SME F (80)</td>
<td>Printing, Publishing, and Allied Industries</td>
<td>C9</td>
<td>1</td>
</tr>
</tbody>
</table>

* The names of the companies are not shown to ensure the confidentiality of the informants.
Originally we identified fifteen potential companies in Mexico and only six met all the above-mentioned criteria. Out of those, nine case studies emerged.

Primary data was obtained from different sources in multiple rounds. Face-to-face, semi-structured interviews were conducted with a certification inspector, consultants and TMT members from each company occurred following a predesigned protocol. The main themes of these questions concerned the background of the enterprise, management of resources and capabilities as organizational structure and development, business operations, HR practices, and views on management change. Informants were asked to give examples to substantiate their views.

Each respondent was interviewed twice. With the consent of the interviewees, the interviews were tape recorded for later transcription. Respondents were asked to verify transcripts and interview notes for accuracy purposes (Langley, 1999; Lincoln & Guba, 1985). Interviews were conducted in Spanish; each interview lasted from 60 to 120 minutes. We interviewed all of the TMT in each company. Data collection lasted over one year for the nine case studies. Data from the transcripts of the interviews was coded using typical qualitative analysis procedures (Lincoln & Guba, 1985; Strauss, 1987). The data was divided into categories determined by our preliminary conceptual framework as shown in Figure 1 and into the new detailed categories that emerged from our content analysis. We created subcategories when the new data did not fit into existing categories but required a more specific categorization. When discrepancies existed between informants from the same company, we talked to the TMT members to reconcile discrepancies. Data obtained from interviews, observation, and archival sources was triangulated, revealing a high level of consistency (Denzin, 1978; Janesick, 1994; Krippendorff, 2003).

Data Analysis

The method used in analyzing the nine case studies was analytical induction (Glaser & Strauss, 1967; Yan & Gray, 1994). This method was helpful in refining or extending theories by comparing them with typical cases (Glaser et al., 1967). As is usual for inductive research, data analysis proceeded in several rounds.

First Round

The first stage involved the “open coding” of each interview (Corbin & Strauss, 1990), which resulted in a thematic analysis per interview. We then proceeded to compare and analyze emerging themes across interviews per phase of ISO 9000 implementation and SME, which resulted in SME specific reports.

Second Round

Following the phase of ISO implementation and SME specific analyses, we proceeded to a cross-case analysis of the studied SME (Eisenhardt, 1989). First, we compared themes that had emerged in each of the nine cases, seeking similarities and differences across cases. Patterns of cross-theme relationships could be identified, and each theme received further density and
structure, that is, “theoretical saturation” (Corbin & Strauss, 1990). Second, we compared certified versus non-certified cases along the identified themes (Eisenhardt, 1989). The coding instrument assessed the presence/absence (1=presence, 0=absence) of the following key categories: stability, security, support, continuity, exploitation, maintenance, coherence, order, preservation, rules, sustainability, inertia, change, transformation, flexibility, equilibrium, innovation, exploration, adaptation, creation, development, growth, sense, direction, uncertainty, inconsistency, insecurity, ambiguity, resilience, resistance to change and risk. Those thirty-one elements that emerged from the content analysis were strongly correlated. Therefore, we merged them into two groups: change and stability even though some of them appeared in both groups: sustainability, flexibility, support, continuity, equilibrium, resilience, permanence, preservation, exploitation, adaptation, and coherence. This allowed us to make the hypothesis that change and stability conform to a duality and that they are not one-dimensional concepts.

A key insight from this process was to realize the different forms in which change and stability can interact in our nine cases.

A second primary source of data was field observation. In each selected company, we observed the day-to-day activities of TMT members and TMT meetings related to the change initiative we analyzed. We also attended several informal meetings with other non-participating managers in our sample and visited other small firms from the same region in an informal manner. Field observation and direct contact with the target group of small businesses in Mexico helped us understand the cultural and contextual specificities necessary to summarize the holistic and complex nature of the main issue we were studying. Secondary data was used for complementing the analysis as well as for verification purposes (Eisenhardt, 1989; McCarthy, 2003; Yin, 2003). Archival data that included organizational brochures, documents, and internal reports was collected from the organizational files and documentation available. The next section shows findings from our study. For confidentiality and anonymity, the firm’s names are referred to here as “A, B, C, D, E” and individual participants will be referred to by rank.

**FINDINGS**

Our results give relevant information concerning our research questions: change and stability interaction during ISO 9000 execution process and insightful evidence about the way TMTs combine resources and capabilities in terms of change and stability to produce sources of competitive advantage in the SMEs analyzed. Tables 3 and 4 reveal the combination of resources and capabilities adopted by certified and non-certified firms of our sample.

<table>
<thead>
<tr>
<th>ISO 9000</th>
<th>Findings: Certified Cases</th>
<th>Selected Examples from interviews</th>
</tr>
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<tbody>
<tr>
<td>Implementation</td>
<td>Organizational Structure</td>
<td>Leadership style</td>
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<td></td>
<td>TMT characteristics</td>
<td>“Our CEOs work together to get the change project done and give us the support we need during the process they lead” Case 8</td>
</tr>
<tr>
<td></td>
<td>ISO Methods</td>
<td>TMT Type of education</td>
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<tr>
<td></td>
<td></td>
<td>“We develop a particular set of&quot;</td>
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</table>
technical capabilities that reinforce and add new ones based in the main activity or profession of every member of the firm (including TMT). This helps us to manage this change project better, and this lets us change without fear"

“Multidisciplinary TMT members help us to manage change from different approaches. That is why it is important to have a solid knowledge about the function we manage”
Case 5

TMT Managerial experience
“To get our certification we support the changes with the operational processes and the routines. Not only looking for the business indicators but also looking for employee’s continuity, sense and motivation. This combination gives us the legitimacy and credibility to lead future changes and innovations. Those things help us to create a solid firm” Case 2

“I have to get profit from the long experience of my TMT. To do that I give continuity to their knowledge and capabilities. It gives me a major process flexibility and more filtered and selective process innovation proposals in ISO context” Case 9

Comunication: Action
“I think that the convergence between given information and actions of each member of TMT sends a message of coherence and direction during the change process to the rest of the firm. This represent a support for change”. Case 5
<table>
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<th>Post-implementation</th>
<th>Vision and integration (TMT)</th>
<th>Vision and integration</th>
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<td></td>
<td>TMT characteristics</td>
<td>“As CEO, I’m focused on</td>
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<td>ISO Methods</td>
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<td>relationships. For us the Suppliers</td>
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<td>suppliers are stable. Those let us</td>
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<td>change internally” Case 9</td>
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<td>TMT Management capabilities</td>
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<td>“In this firm we need stability for</td>
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<td>managing other change projects</td>
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<td>“ISO 9000 methods of managing the firm give us continuity in our</td>
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<td>employment preservation in a</td>
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<td>continuous changing firm” Case A</td>
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<td>Informal networks</td>
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<td>“Informal relations with clients and suppliers give us feedback</td>
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<td>about products and services we</td>
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<td>should change and maintain”</td>
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Table 3: Findings summary of certified cases

<table>
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<tr>
<th>ISO 9000</th>
<th>Findings: Non-Certified Cases</th>
<th>Selected Examples from interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-implementation</td>
<td>Trigger (External reasons)</td>
<td>Principal reasons for ISO 9000 adoption</td>
</tr>
<tr>
<td></td>
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<td>“I identified more than six new competitors during the last two years. We have to do something to</td>
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<tr>
<td>Communication (ch-stab)</td>
<td>ISO Methods: Consultants</td>
<td>TMT characteristics</td>
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</tbody>
</table>
| keep our market share” Case 1  
“ISO 9000 is requested for doing business with international and local clients. Most of the competitors are looking for it” Case 6 | Human Resource  
No Commitment  
“This change is too dangerous because we risk to loose our employment” Case 7 | “The discourse of CEO is concentrated in crashing inertia and resistance for changing purposes.” Case 6  
“ The CEO doesn’t think about the support we need to manage change” Case 7 |
| Planning activities  
“This firm does not make any planning, we react to change” Case 3  
“We are tired of changing without planning, direction and results” Case 6 | TMT Educational Level:  
“We are sensible to change but it is too dangerous for the rest of the people in this firm. I will support my people”. | TMT Managerial experience  
“My cross functional experience lets me manage this change project but it has contradictory goals: stability for the CEO and instability for us. I wont do it because I have no guarantee to be here after ISO” Case 7 |
<table>
<thead>
<tr>
<th>ISO 9000</th>
<th>Findings: Non-Certified Cases</th>
<th>Selected Examples from interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation</td>
<td>Organizational Structure</td>
<td>Perception of coherence among change initiatives (projects)</td>
</tr>
<tr>
<td></td>
<td>TMT characteristics</td>
<td>“As a TMT we waste time, we change all the time, we do the same thing and we do not understand the contribution of our day to day work to change projects” Case 7</td>
</tr>
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<td></td>
<td>ISO Methods</td>
<td>“I think we are not connected as a team with the CEO’s proposals” Case 6</td>
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<td>TMT Managerial experience</td>
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<td>“We can not take advantage of our experience in this firm because the change projects are not related. They are even contradictory” Case 1</td>
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<td></td>
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<td>“This project led me so far from our competencies and we don’t have the possibility to make a radical change in them. We have a lot of experience that is very useful and we will not learn new things now”. Case 6</td>
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<td>Leadership style</td>
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<td>“We have the responsibility to manage this change project but we can not make any relevant decision...we have to be authorized by the CEO...we are not able to take advantage of our experience” Case 3</td>
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<td>Communication effects</td>
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<td>“The CEO is a good leader but he thinks he masters all the situations and I don’t think so. We have not had a positive result from his change projects” Case 1</td>
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<td>TMT Turnover</td>
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<td></td>
<td>“We have a TMT members turnover, we cannot work as a team with this level of instability” Case 6</td>
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</tbody>
</table>
Table 4: Findings summary of non-certified cases

From the information presented in tables 3 and 4, we revised our preliminary theoretical model. The models emerged from this research are shown in the following section.

Certified cases

Two revised general models illustrate the effectiveness of TQM program: ISO 9000; our findings support that the change/stability interaction represents a fertile field of research as shown in Figure 2.

Figure 2: Certified cases model

The consistent evidence across case studies leads to the inclusion of new variables that could explain the sustainability of the competitive advantage.

These cases combined resources and capabilities as presented in Figure 2 in order to produce competitive advantages. These cases present a completely different notion of stability from the one described in the literature. For the owners/managers of these firms, stability is a capability of management that enables them to perform and support competitive advantage and change in their organizations. Their TMT manage change and stability simultaneously. For them these two concepts are not in opposition, they complement each other and they stabilize
processes (e.g. value and supply chain) relations with employees, clients, suppliers and other key stakeholders. This allows them to select change initiatives, aligned to their specific environment as we described in triggers of change. Besides, stabilization gives them advantages in costs, differentiation, allowing them to stabilize their suppliers, this give to these cases a constant access to raw materials, in this way they stabilize their processes and finally their clients with products and services with little variance in terms of quality and delivery time. These cases have a different vision from traditional marketing perspective; the most important “player” is the supplier and not “the client”. This strategic view of their organization’s dynamics presents a critical coherence between the internal process ISO 9000 implementation and their key internal and external stakeholders. Additional research is needed to corroborate these results.

**Non-certified cases**

In contrast with certified cases, Figure 3 illustrates the stability as the opposite of change.

Three key findings emerged from the case studies. 1) The CEOs and other TMTs members have a single role of change without considering stability: they trigger the change process disrupting continuity as perceived by managers and employees. For example, the CEO of case 6 tried to avoid inertia with a lot of change initiatives; the problem was the instability generated inside his firm. 2) In contrast with the cases illustrated in figure 2, we identified a process of destabilization caused by a lack of perception of meaning, continuity, support and
direction. 3) Consultants were perceived, by the management team, as change agents as well as the CEO. Further research should validate these findings.

Consequently, these cases are not concerned by managing change and stability. It appears that the absence of stability variables influences the lack of results and change resistance for a change initiative. The immediate implication of these findings is that these firms were not able to generate competitive advantages from their resources and capabilities.

LIMITATIONS AND CONCLUSIONS

There are some shortcomings to this study in terms of the sample and the survey. The sample may have a self-selection bias. As derived in the methodology section, we looked for a very specific profile of firms, the consequence was a reduced number of firms participating in our research. For this reason, generalizations to the whole population of small firms based on the empirical results should be made with caution. The survey used here also suffers from typical biases related to survey research. Asking survey subjects to recall to what extent they utilized certain techniques, methods, tools and to compare past to present brings in the risk of spurious data if the respondents cannot remember a specific situation and the respondents may tend to provide consistent responses over time (Rips et al. 2003). For this reason we decided to verify the respondent’s discourse with other information like historical files, other respondent’s versions of the same situation and, if it was suitable, we looked for the financial information of the firm participating in our research as we describe in the methodology section of the paper. This would indicate that survey respondents did in fact try to accurately assess past and present situations of ISO 9000 implementation in their firms.

Despite these limitations, this is the first study to the best knowledge that applies and empirically tests organizational theory with regard to the competitive advantage from a change and stability perspective in small firms. While this study only begins to develop research in this field, it does find promising evidence in order to develop a new theory about change and stability (Van de Ven and Poole 1988). Many questions remain concerning change and stability and small firm development, and this is an important area of discovery in terms of survival and growth, given the high death rate of small firms around the world.

Rethinking the relationship between change and stability is therefore critical for new theory building about competitive advantage. Our research findings show that stability variables can contribute to develop a competitive advantage in the firms of our sample. The understanding the role of this group of variables, could stimulate discussion of causal ambiguity in the analyzed firms.

REFERENCES


DEVELOPING SUSTAINABLE INTERNATIONAL ENTREPRENEURIAL VENTURES: THE CASE OF MEXICAN CULINARY ART IN FRANCE
Fernanda Arreola, Fundação Getulio Vargas, Sao Paulo, Brazil

EXTENDED ABSTRACT

This case study focuses on describing the experiences of a young Mexican entrepreneur and his establishment of a sustainable Mexican restaurant in central Paris. The aim of the case study is to showcase the different steps in the setting-up of this restaurant and to understand the decision to develop a sustainability-oriented business model. In this scenario, such sustainable practices include legal opportunity employment for migrants (in the form of receiving foreign students), in-restaurant recycling programs, use of recycled and recyclable dishware and serving utensils, use of ecofriendly cleaning products, development of direct suppliers, use of fair-trade discounting practices and creation of a free online community promoting Mexican culture in Paris.

The term sustainability, as used in this research, depicts the idea of successfully rationalizing the use of resources in all of their forms (environmental, social and economic). In our view, sustainability as a strategy, allows the creation of value and differentiation in business practices, as it becomes a recognizable feature in the perception of related stakeholders (Cohen, Smith & Mitchell, 2008). The main purpose of this paper goes beyond exploring the causal relationships between financial gains and social responsibility, as it focuses on exploring the beliefs, incentives and rationale that support the decision to start a sustainable entrepreneurial venture.

The case leads us to understand several aspects affecting the decision to create a sustainable business. We first explore the entrepreneur’s belief system as a considerable driver in the decision to invest in sustainable operations (Pastakia, 1998). The exploration of this particular situation locates additional relevant items including the entrepreneur’s migrant status as a determinant of a sustainable-driven venture (Shapero & Sokol, 1982). We also review the financial impact of investing in a sustainable project finding that, against what some authors suggest (Dean & McMullen 2005), there is no immediate cost efficiency gain resulting from the implementation of sustainable practices. Considering these findings, we explore if CSR-type practices affect profit generation by moving business away from their primary profit-generation objectives (Henderson 2001).

The case also points at the fact that SMEs do not seem to be restricted from engaging in sustainable activities (Larson, 2000). As portrayed in this research, new ventures can commit to following a sustainable differentiation regardless of their size, country of origin and even when contending at highly competitive environments such as the restaurant industry (Gibbs, 2009). Many opportunities exist for companies to further explore market failures that relate to sustainability (Hawken, 1993). We finish the case by evaluating the role of each of the actors involved in the creation of sustainable practices (government, society and entrepreneurs). We begin by assessing the importance of cultural paradigms possessed by the French with relations to the Mexican community and their effect on entrepreneurial choice (differences between Mexican and French societies regarding CSR and sustainability can be assumed considering the
arguments of several research studies including, to mention a few, Skogen 1999, Katz, Swanson & Nelson 1993 and Burton, Farth & Hegarty 2000). We also point at the extent to which States play a crucial yet not sufficient role in promoting the development of sustainable venture. Nations lack the appropriate tools to adequately track and manage resources aimed at favoring the creation of specific types of businesses (Kemp & Parto, 2005).

Our research concludes by revealing the relevance of the entrepreneur’s beliefs, personal motivations, migratory status and availability of incentives. In this case we can come to the conclusion that the unavailability of sufficient government incentives, promoting sustainable practices in the restaurant sector, is being subsidized by the hopes, dreams and personal drivers of young entrepreneurs. As a whole, proactivity arriving from business leaders is to a great extent responsible for the likelihood of existance of such initiatives (Klassen & Whybark 1999).

This paper argues that the attempt of new entrepreneurs to maintain sustainability as a differentiating role, will be determined to a large part on the recognition that society makes of their efforts (Brown & Dacin 1997) although it could also be influenced by market mechanisms including inefficiencies, market imperfections and information asymmetries (Cohen & Winn 2003). Finally, this case shows the extent to which a person’s migratory status plays a determinant role in the decision to improve a country’s image (in this case through sustainability) as well as for using an entrepreneurial opportunity to further integrate two different cultures in ways beyond culinary appreciation.

REFERENCES

Organizational Change Management, 11(2), 157-173.
EXTENDED ABSTRACT

Over the years, new product development (NPD) has been acknowledged by marketing researchers as an important area of investigation. In today’s global marketplace, new product development has become a complex process. The importance of creativity, innovation, and new product development, even during turbulent times like recession, has been reverberated in popular press (Rigby et al., 2009; Lechleiter, 2010) as well. Studies on NPD projects report increased sales, profits, and competitive advantage for firms (refer Eng & Quaia, 2009; Frishammar & Ylinenpaa, 2007; Ernst, 2002 for a review).

This research integrates new product development and strategic alliance literature and proposes that a balance of new product development (NPD) project types in a firm’s NPD project portfolio mix has a positive effect on its NPD program performance. The study also proposes that the level of environmental turbulence affect this relationship. Applying portfolio theory and the resource based view to new product development, a model to investigate the effect of NPD portfolio is developed and empirically tested using a sample of 183 U.S. firms. Employing mixture model analysis, results of the study indicate a positive relationship between NPD portfolio mix and NPD program performance. However, environmental turbulence moderates this relationship.

SELECTED REFERENCES:


LOGISTICS AND SUPPLY CHAIN MANAGEMENT

SUPPLIER STRATIFICATION MANAGEMENT: CASES FROM INDUSTRY

Xiaoming Li, Tennessee State University
Festus Olorunniwo, Tennessee State University
Joel Jolayemi, Tennessee State University
Chunxing Fan, Tennessee State University

ABSTRACT

This paper explores current practice in supplier stratification management. We first highlight four supplier segments: strategic, custom, collaborative, and commodity. Then, we show how each segment is assessed by two levels of criteria: an immediate level of direct purchasing attributes and an aggregate level of the corporate and the relationship between the purchaser and the supplier. The strategic suppliers are the most important one and the commodity suppliers are the least important one, while the custom and collaborative suppliers are in the middle layer with different emphases. We provide particular guidelines for differentiating supplier management based on supplier stratification results.

INTRODUCTION

In the age of globalization, companies face complex sourcing challenges due to diverse market conditions, various spending, and assorted technological requirements. Uncertainty and competition on time and customization further compound above different purchasing scenarios, while companies still need to maintain high standard on quality, delivery, and service.

In this tough environment, first, companies must effectively manage their suppliers based on vital evaluation criteria (Hirakubo and Kublicn 1998, Howard 1998, Simpson et al. 2002, Monczka et al. 2009, p. 248); second, companies must structure diversified suppliers into meaningful categories - supplier stratification (Kraljic 1983, Doran et al. 2005, Monczka et al. 2009, Day et al. 2010). Although companies need to differentiate their supplier evaluation criteria based on supplier stratification results (e.g., a strategic supplier should be treated differently than a trivial supplier), the majority of research tends to focus on either supplier stratification or supplier evaluation. This research is to fill this void by combining supplier stratification with supplier evaluation. In particular, our research answers basic “what” and
“how” questions: how suppliers are stratified and how suppliers in each segment should be evaluated differently.

We begin by reviewing literature on supplier stratification and supplier evaluation criteria. After this, we present our research methodology, leading to our research framework and hypotheses. Then, we show our results of our analysis and address managerial implications.

SUPPLIER STRATIFICATION


Karljic (1983) popularizes supplier management by emphasizing its increasing importance due to globalization, political turbulence, and government intervention. He argues that companies need to upgrade their routine purchasing to strategic supply management through three key steps: supplier classification, market analysis, and strategic positioning. Based on different levels of profit impact and supply risk, the purchased items are divided into four segmentations: strategic (high profit impact, high supply risk), bottleneck (low profit impact, high supply risk), leverage (high profit impact, low supply risk), and noncritical (low profit impact, low supply risk). Market analysis then weights a company’s bargaining power against its supplier. Finally, the company should strategically place itself into three positions: exploit if the company has a stronger strength than its supplier, balance if about same, and diversify if weaker.

More recently, Monczka et al. (2009) apply a portfolio analysis matrix based on two important factors: value potential and complexity or risk impact. Suppliers are thus divided into four quadrants. Critical suppliers have high value potential and high complexity or risk impact; leverage suppliers have high value potential and low complexity or risk impact; bottleneck suppliers have low value potential and high complexity or risk impact; routine suppliers have low value potential and low complexity or risk impact. Then, each segment is managed with different strategies, tactics, and actions.

Gordon (2008, p. 62) provides a supplier management matrix encompassing two axes: one is strategic importance/investment in the relationship/focus on total cost of ownership and the other is dependence on the supplier/criticality of the supplier/the difficulty of switching. On strategic importance/investment in the relationship/focus on total cost of ownership, both strategic and collaborative suppliers are high, while both custom and commodity suppliers are low. On dependence on the supplier/criticality of the supplier/the difficulty of switching, both strategic and custom suppliers are high, while both collaborative and commodity suppliers are low.

Under the huge influence of Japanese manufacturing practices in relationships between organizations, Dyer et al. (1998) summarize two supplier segmentation practices: arm’s-length model and partner model. The arm’s-length model advocates minimizing dependence on suppliers and maximizing bargaining power. On the other hand, the partner model promotes
long-term relationship that includes information sharing, coordination, relationship-specific asset investment and trust.

After a broad review on supplier segmentation, Day et al. (2010) provide a taxonomy of supplier segmentation bases built on two constructs: power/dependence and relationships. Power and dependence includes industry and supplier market factors, as well as the characteristics, capabilities and vulnerabilities of buyers and suppliers. The relational base includes the relational history, the exhibited behaviors, norms and latent attitudes from previous interactions, and the relational investments. Zhu et al. (2010) employ a supplier classification portfolio model based on supplier’s relative power and supplier’s overall performance. The supplier’s overall performance includes various aspects of economic, operational, and environmental factors and relationship as well.

Other researchers have shown practical use of portfolio analysis by case study (Doran et al. 2010) and the analytical network process (Zhu et al. 2010). Doran et al. (2005) investigate buyer-supplier relationships in four spend categories in a case study. These relationships are then mapped into a portfolio matrix and thus appropriate strategies and tactics can be applied to different relationships accordingly. Zhu et al. (2010) develop a three-step process: first, calculate supplier’s power/dependence and overall performance; second, classify suppliers into a portfolio matrix; and third, treat suppliers differently depending on which quadrant these suppliers locate.

**SUPPLIER EVALUATION CRITERIA**


Simpson et al. (2002) suggest that factors of continuous improvement and the channel relationship should be considered as important dimensions also. After investigating 19 categories of supplier evaluation criteria, Simpson et al. (2002) find that the most popular one is quality and process control, followed by continuous improvement, facility, environment, customer relationship and communication, and delivery. Monczka et al. (2009) argue that a purchaser needs to consider more evaluation criteria for critical items: management capability, employee capabilities, cost structure, total quality management, process and technological capability, environmental regulation compliance, financial stability, production scheduling and control systems, e-commerce capability, supplier’s sourcing, longer-term relationship potential.

Overall, we summarize three levels of evaluation criteria: An immediate level of the product/service includes mainly cost, quality, delivery, and service. These criteria assess purchasing attributes directly. An aggregate level of the corporate covers technical/production capability and summative metrics including management and employee competence, business process, financial strength, and market performance. The third level is the relationship between the purchaser and the supplier, comprising information sharing, collaboration, joint-performance
measurements, and risk and reward sharing.

Our research questions thus are as follows:
(1) How are suppliers stratified in current industry practice?
(2) What are the major differences between these supplier segments?
(3) Overall, how are these evaluation criteria applied for each supplier segment?
(4) What are the major latent factors of these criteria?

METHODOLOGY

Our research methods include interview and survey, which cover a cycle of three research stages: description, explanation, and testing (Meredith 1989). We select both interview and survey for the exploratory and explanatory nature of our research (Malhotra and Grover 1998, Meredith 1998). We first contacted and interviewed senior supplier relationship management (SRM) managers from sixteen companies. Combining with literature results, we aim to describe the current practices in supplier stratification and identify key factors in how suppliers are stratified into different segments. Then, on the basis of this description, we construct a conceptual framework with testable hypotheses with an intention to explain these industrial practices.

Second, we designed a questionnaire that comprehensively surveys all aspects of supplier evaluation criteria on supplier stratification. We apply statistical analysis of our survey data to test these hypotheses of the supplier stratification framework.

Interview of SRM executives

Our interviewing approach is guided by well-defined case study protocols (Yin 2003): an overview, field procedures, and key questions. The unit of analysis is a company’s supplier stratification (Yin 2003). Twenty executives were interviewed from 16 fortune 500 companies in different industry sectors: automobile, computer, media, software, healthcare, aerospace, retail, and electronic industries. These large multi-national companies were selected due to their complex global supply networks as well as diversified industrial sectors. One of such interview was face-to-face. The others were through telephone conferencing. Each interview lasted about one hour. With the interviewees’ permissions, the conversations were recorded on tape.

Managers interviewed provided information about their supplier stratification practices and processes. Examination of our interview notes indicate that each company typically stratifies suppliers into two to four groups, using all kinds of nomenclature such as: strategic supplier, key supplier, incumbent supplier, vendor, medical and non medical service supplier, equipment contract supplier, materials contracts supplier, tactical supplier, valued supplier, opportunity supplier, bottleneck supplier, transactional supplier, commodity supplier, preferred supplier, reducing-risk supplier, small-strategic supplier, alliance supplier, collaborative supplier, aligned-business framework supplier, market research category supplier, and advertising category supplier. These various groups are used mostly for the convenience to classify different importance levels and to maintain various relationships.
Summarizing literature and interview results, we thus identify two underlying factors: value and relationship. In terms of value, a supplier can be critical, important, or trivial. A company’s relationship with its suppliers can be cooperatively partnering or disobligingly transactional.

Rather than a two by two matrix, we use a pyramid (see Figure 1) as the supplier stratification framework to emphasize that in general, companies stratify suppliers into three levels: critical (or strategic), important (custom and/or collaborative), and trivial (commodity). The pyramid also shows the differences in the relative numbers of suppliers belonging to the stratification groups: a small number of suppliers are strategic, some are key and collaborative suppliers, and there are plenty of commodity suppliers.

At the top, the strategic suppliers provide highest value and have highest impact. The company in turn invests highest and establishes long-term relationship. In the middle, both custom and collaborative suppliers are important. Custom suppliers mostly produce specialty goods and are thus distinctive in terms of unique value to the company. These suppliers may be single sourced sometimes due to the unique expertise required. Collaborative suppliers have good working relationships with the company, distinguished by superior information sharing and collaboration for the better business of both companies.

At the bottom, commodity suppliers only have a relatively trivial impact (value-wise) on the company. Inter-firm relationships are managed predominantly on a transactional basis. There is no policy to develop long-term partnership.

Figure 1: Supplier stratifications
supplier segments. All criteria are evaluated on a 5-point Likert scale: 1 = not important, 2 = hardly important, 3 = fairly important, 4 = very important, and 5 = absolutely important. This allows us to formulate our hypotheses in comparing strategic, custom, collaborative, and commodity suppliers based on how important a criterion is with regard to stratifying a supplier into a particular segment. If a segment is highly important to a company, most evaluation criteria will rate highest in their levels of importance with respect to that segment. The converse will also be expected for a least important segment. Of course, one will expect a mixed set of ratings for other segments between these two extremes – namely a set of criteria may be more important than the other for certain segments. Henceforth, we define the ‘importance’ of a supplier segment implicitly by the levels of importance of the evaluation criteria used to stratify that segment.

Our hypotheses are therefore as follows:

**Hypothesis 1.** Strategic Suppliers are the most important segment.

**Hypothesis 2.** Commodity suppliers are the least important segment.

**Hypothesis 3.** Custom suppliers are different from collaborative suppliers.

**Hypothesis 3a.** Custom suppliers are more important in value than collaborative suppliers.

**Hypothesis 3b.** In terms of relationships, Custom suppliers are less important than collaborative suppliers.

**Survey on industry practice**

The development of our survey instrument was based on an extensive literature review and interviews we conducted with senior purchasing managers at sixteen companies. Our intention is to explore current practices of supplier stratification, to identify valuable patterns, and finally to provide managerial insights.

We collected our survey data through various sources and media. Respondents can answer the questionnaire through either an email attachment or an online survey. We contacted 30 purchasing executives at various professional conferences and meetings, and received 23 responses. Additionally, we compiled our own list of 548 purchasing executives from public information available online and received 51 responses after two rounds of reminders. Overall, we collected 74 usably answered questionnaires. All statistical tests were conducted in SPSS 18.

**RESULTS**

**Background information**

We surveyed general information of respondents’ companies. Almost half of the companies have more than 10,000 employees. Table 1 presents detailed distribution.
We use 2007 North American Industry Classification Systems (NAICS) to categorize their industries. About one third (33%) of the companies that responded are in manufacturing. This is followed in order by professional, scientific, and technical services with 13.7%; finance and insurance with 6.8%; and health care and social assistance with 6.8%. See Table 2 for details.

Table 2: In which industry would you categorize your company – your 2007 North American Industry Classification System (NAICS) code?

Supplier stratification

The following four stratification categories were considered in the survey: strategic suppliers, custom suppliers, collaborative suppliers, and commodity suppliers. Every respondent rated the importance of each evaluation criterion with respect to all supplier segments [Note: All criteria are evaluated on a 5-point Likert scale: 1 = not important, 2 = hardly important, 3 = fairly important, 4 = very important, and 5 = absolutely important].

Criteria in direct purchasing attributes consist of cost, quality, delivery, and service. Technical capability and corporate metrics are assessed for the corporate level. The relationship criteria include information sharing, long-term relationship, and joint performance. Table 3 shows average importance score for each stratification group across all criteria.
<table>
<thead>
<tr>
<th>Company industry</th>
<th>Response</th>
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<tr>
<td>11 Agriculture, Forestry, Fishing and Hunting</td>
<td>1.37%</td>
</tr>
<tr>
<td>21 Mining, Quarrying, and Oil and Gas Extraction</td>
<td>1.37%</td>
</tr>
<tr>
<td>22 Utilities</td>
<td>4.11%</td>
</tr>
<tr>
<td>23 Constructions</td>
<td>5.48%</td>
</tr>
<tr>
<td>31--33 Manufacturing</td>
<td>34.25%</td>
</tr>
<tr>
<td>48--49 Transportation and Warehousing</td>
<td>2.74%</td>
</tr>
<tr>
<td>51 Information</td>
<td>4.11%</td>
</tr>
<tr>
<td>52 Finance and Insurance</td>
<td>6.85%</td>
</tr>
<tr>
<td>53 Real Estate and Rental and Leasing</td>
<td>1.37%</td>
</tr>
<tr>
<td>54 Professional, Scientific, and Technical Services</td>
<td>13.70%</td>
</tr>
<tr>
<td>55 Management of Companies and Enterprises</td>
<td>1.37%</td>
</tr>
<tr>
<td>62 Health Care and Social Assistance</td>
<td>6.85%</td>
</tr>
<tr>
<td>71 Arts, Entertainment, and Recreation</td>
<td>2.74%</td>
</tr>
<tr>
<td>Other</td>
<td>13.70%</td>
</tr>
</tbody>
</table>
Table 3: In stratifying your suppliers, what relative importance do you associate with the following criteria with respect to each supplier segment?

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Strategic</th>
<th>Custom</th>
<th>Collaborative</th>
<th>Commodity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>4.25</td>
<td>4.00</td>
<td>3.98</td>
<td>4.42</td>
</tr>
<tr>
<td>Quality</td>
<td>4.71</td>
<td>4.65</td>
<td>4.46</td>
<td>4.48</td>
</tr>
<tr>
<td>Delivery</td>
<td>4.56</td>
<td>4.31</td>
<td>4.29</td>
<td>4.29</td>
</tr>
<tr>
<td>Service</td>
<td>4.46</td>
<td>4.29</td>
<td>4.23</td>
<td>3.90</td>
</tr>
<tr>
<td>Technical capability</td>
<td>4.46</td>
<td>4.27</td>
<td>4.04</td>
<td>3.46</td>
</tr>
<tr>
<td>Corporate metrics</td>
<td>4.02</td>
<td>3.60</td>
<td>3.67</td>
<td>3.15</td>
</tr>
<tr>
<td>Information sharing</td>
<td>4.40</td>
<td>4.10</td>
<td>4.15</td>
<td>3.23</td>
</tr>
<tr>
<td>Long-term relationship</td>
<td>4.77</td>
<td>4.19</td>
<td>4.13</td>
<td>3.21</td>
</tr>
<tr>
<td>Joint–performance</td>
<td>4.31</td>
<td>3.77</td>
<td>3.81</td>
<td>2.77</td>
</tr>
</tbody>
</table>

For strategic suppliers, managers emphasize on a variety of criteria, of which most important ones are long-term relationship and quality. All other criteria are rated as very important.

Custom suppliers are rated as less important than strategic suppliers. According to the survey, the most important criterion is quality. Criteria in the very important category include delivery, service, technical/production capability, information sharing, and long-term relationship. Cost, joint-performance, and corporate metrics are quite important.

Overall, collaborative suppliers are considered as important as custom suppliers. Quality, delivery, service, information sharing, long-term relationship, technical/production capability, and cost are considered as very important. All other criteria are considered as quite important.

Commodity suppliers are in the least important category. In a sense, companies are still focusing on the traditional ‘big three’ criteria: quality, cost, and delivery in managing their commodity suppliers.

Note also that the relative importance of each criterion is generally highest with strategic suppliers and decreases for Custom, Collaborative and Commodity suppliers in that order. The exception is for cost criterion where the Commodity suppliers rate cost criterion the highest.

We first performed the Multivariate Analysis of Variance (MANOVA) by using the GLM multivariate procedure. All four tests of significance for each model effect in the multivariate tests table (Pillai’s Trace, Wilks’ Lamda, Hotelling’s Trace, and Roy’s Largest Root) show a significance value of 0.000, rejecting the null hypothesis that all supplier segments are equal.

**Hypothesis 1.** Strategic suppliers are the most important segment.

We then conducted a paired t-test, shown in Table 4. Compared to other three groups, the
strategic suppliers are more important than any other categories of suppliers with respect all criteria, except cost versus the commodity suppliers (but the difference is not significant). Out of all 27 comparisons, 16 have $p$-values less than 0.01; 7 have $p$-values between 0.01 and 0.05. So, overall Hypothesis 1 is confirmed.

Table 4: Strategic suppliers vs. other suppliers: one-tail paired t-test*: $p < 0.05$; **: $p < 0.01$

<table>
<thead>
<tr>
<th></th>
<th>Strategic- Custom</th>
<th>Strategic- Collaborative</th>
<th>Strategic-Commodity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Paired Mean Difference</td>
<td>$p$-value</td>
<td>Paired Mean Difference</td>
</tr>
<tr>
<td><strong>Purchasing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>.250</td>
<td>.019*</td>
<td>.271</td>
</tr>
<tr>
<td>Quality</td>
<td>.063</td>
<td>.140</td>
<td>.250</td>
</tr>
<tr>
<td>Delivery</td>
<td>.250</td>
<td>.003**</td>
<td>.271</td>
</tr>
<tr>
<td>Service</td>
<td>.167</td>
<td>.037*</td>
<td>.229</td>
</tr>
<tr>
<td><strong>Corporate</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical capability</td>
<td>.188</td>
<td>.054</td>
<td>.417</td>
</tr>
<tr>
<td>Corporate metrics</td>
<td>.417</td>
<td>.001**</td>
<td>.354</td>
</tr>
<tr>
<td><strong>Relationship</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information sharing</td>
<td>.292</td>
<td>.011*</td>
<td>.250</td>
</tr>
<tr>
<td>Long-term relationship</td>
<td>.583</td>
<td>.000**</td>
<td>.646</td>
</tr>
<tr>
<td>Joint-performance</td>
<td>.542</td>
<td>.000**</td>
<td>.500</td>
</tr>
</tbody>
</table>

**Hypothesis 2.** Commodity suppliers are the least important segment.

We already showed above that strategic suppliers are more important than commodity suppliers. So, Table 5 details paired t-test with custom suppliers and collaborative suppliers. The commodity suppliers are less important on all criteria, except for cost and delivery criteria for custom suppliers and the set of cost, quality, delivery and service criteria for the collaborative suppliers. Evaluations of the commodity suppliers are still focused on the traditional “three”: cost, quality, and delivery. Compared to custom and collaborative suppliers, the commodity suppliers are less important on all corporate and relationship criteria, with significance values less than 0.01. In general, Hypothesis 2 is supported.

**Hypothesis 3.** Custom suppliers are different from collaborative suppliers.

**Hypothesis 3a.** Custom suppliers are more important in value than collaborative suppliers.

**Hypothesis 3b.** Custom suppliers are less important in relationship than collaborative suppliers.
Table 5: Commodity suppliers vs. other suppliers: one-tail paired t-test *: p < 0.05; **: p < 0.01

<table>
<thead>
<tr>
<th></th>
<th>Custom - Commodity</th>
<th>Collaborative -Commodity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Paired Mean Difference</td>
<td>p value</td>
</tr>
<tr>
<td><strong>Purchasing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>-.417</td>
<td>.983</td>
</tr>
<tr>
<td>Quality</td>
<td>.167</td>
<td>.037*</td>
</tr>
<tr>
<td>Delivery</td>
<td>.021</td>
<td>.438</td>
</tr>
<tr>
<td>Service</td>
<td>.396</td>
<td>.008**</td>
</tr>
<tr>
<td><strong>Corporate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical capability</td>
<td>.812</td>
<td>.000**</td>
</tr>
<tr>
<td>Corporate metrics</td>
<td>.458</td>
<td>.001**</td>
</tr>
<tr>
<td><strong>Relationship</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information sharing</td>
<td>.875</td>
<td>.000**</td>
</tr>
<tr>
<td>Long-term relationship</td>
<td>.979</td>
<td>.000**</td>
</tr>
<tr>
<td>Joint-performance</td>
<td>1.000</td>
<td>.000**</td>
</tr>
</tbody>
</table>

Due to unique niche of custom suppliers, quality is particularly stressed. Quality is more important for custom suppliers, with p value 0.011. However, there is no significant difference between custom suppliers and collaborative suppliers on all other evaluation criteria. See details in Table 6. Hypothesis 3 is not supported.
Table 6: Custom suppliers vs. collaborative suppliers: two-tail paired t-test *: p < 0.05

<table>
<thead>
<tr>
<th></th>
<th>Custom - Collaborative</th>
<th></th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Paired Mean Difference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>.021</td>
<td>.830</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>.188</td>
<td>.011*</td>
<td></td>
</tr>
<tr>
<td>Delivery</td>
<td>.021</td>
<td>.844</td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>.063</td>
<td>.554</td>
<td></td>
</tr>
<tr>
<td>Corporate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical capability</td>
<td>.229</td>
<td>.140</td>
<td></td>
</tr>
<tr>
<td>Corporate metrics</td>
<td>-.063</td>
<td>.554</td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information sharing</td>
<td>-.042</td>
<td>.772</td>
<td></td>
</tr>
<tr>
<td>Long-term relationship</td>
<td>.063</td>
<td>.700</td>
<td></td>
</tr>
<tr>
<td>Joint-performance</td>
<td>-.042</td>
<td>.772</td>
<td></td>
</tr>
</tbody>
</table>

**Grouping evaluation criteria**

Because each supplier segment has its distinctive characteristics, managers should weight them differently on these evaluation criteria. For instance, commodity suppliers by definition are appraised on a transaction-by-transaction basis, so it is a misfit if a purchaser should invest heavily trying to build a long-term relationship with its commodity supplier. On the other hand, strategic suppliers lie on the opposite, so it is also a divergence if a purchaser does not intend to build a long-term relationship with its strategic suppliers. This section details how to prioritize evaluation criteria for each supplier segment. Specifically, we apply Duncan test with $\alpha = 0.05$ to cluster evaluation criteria into different importance groups.

**Strategic suppliers**

The evaluation criteria for strategic suppliers are grouped into homogenous subsets in Table 7. The most important criteria group has five criteria, including long-term relationship, quality, delivery, service, and tech capability. With long-term relationship being the most important criterion, managers also stress quality, delivery, service, and technical capability.
Corporate metrics are not that important for strategic suppliers, and cost, joint-performance, and information sharing are still not the focus in current SRM practice.

These results can serve as guideline for managing a company’s strategic suppliers. Because strategic suppliers bring highest impact, the company should endeavor long-term relationship on various dimensions including trust and commitment. Trust is built on direct reciprocity. Helping another means helping oneself, because both companies are on the same boat of this small supply chain. The top management needs to make a full commitment on time, resources, personnel, and physical assets; these reciprocal commitments can amplify contributions from each partner and stimulate active involvement from all levels. These heavy requirements of long-term relationship also indicate that a company can only empower very few as strategic suppliers, matching our definition of supplier stratification in Figure 1.

Quality is enormously important for strategic suppliers. In fact, quality is a qualifier for all supplier segments. In today’s competitive business world, a supplier without good quality product and service needs to be terminated very quickly. Due to critical value, delivery, service, and technical capability are very important as well.

Table 7: Evaluation criteria groups: Strategic suppliers

<table>
<thead>
<tr>
<th></th>
<th>Homogeneous Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Long-term relationship</td>
<td>4.77</td>
</tr>
<tr>
<td>Quality</td>
<td>4.71</td>
</tr>
<tr>
<td>Delivery</td>
<td>4.56</td>
</tr>
<tr>
<td>Service</td>
<td>4.46</td>
</tr>
<tr>
<td>Technical capability</td>
<td>4.46</td>
</tr>
<tr>
<td>Information sharing</td>
<td>4.40</td>
</tr>
<tr>
<td>Joint-performance</td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td></td>
</tr>
<tr>
<td>Corporate metrics</td>
<td></td>
</tr>
</tbody>
</table>

Custom suppliers

Evaluation criteria for custom suppliers are clustered into four groups. Custom suppliers become valuable due to their distinctive worth in quality, delivery, service, and technical capability. Quality is obviously the top criterion because of the uniqueness of custom suppliers. The apparent pattern here is that the relationship criteria are second-rate.
To win over more orders, custom suppliers need highlight their particular value in exclusive quality with combination of strong delivery, service, and technical capability. In this way, custom suppliers enhance their competitive advantages in niche markets by offering idiosyncratic products, which are inimitable by their competitors. In return, purchasing companies will treat custom suppliers hardly replaceable.

Table 8: Evaluation criteria groups: Custom suppliers

<table>
<thead>
<tr>
<th>Homogeneous Groups</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>4.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery</td>
<td>4.31</td>
<td>4.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>4.29</td>
<td>4.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical capability</td>
<td>4.27</td>
<td>4.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term relationship</td>
<td>4.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information sharing</td>
<td>4.10</td>
<td>4.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>4.00</td>
<td>4.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint-performance</td>
<td></td>
<td>3.77</td>
<td>3.77</td>
<td></td>
</tr>
<tr>
<td>Corporate metrics</td>
<td></td>
<td></td>
<td>3.60</td>
<td></td>
</tr>
</tbody>
</table>

**Collaborative suppliers**

Collaborative suppliers are highlighted by three direct purchasing criteria - quality, delivery, service, and two relationship criteria – information sharing and long-term relationship. While featuring collaboration in information sharing and long-term relationship, managers also pressure direct bottom-line attributes of quality, delivery, and service. Contrasting to custom suppliers, technology is not the spotlight.

Table 9: Evaluation criteria groups: Collaborative suppliers

<table>
<thead>
<tr>
<th>Homogeneous Groups</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>4.46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery</td>
<td>4.29</td>
<td>4.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>4.23</td>
<td>4.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information sharing</td>
<td>4.15</td>
<td>4.15</td>
<td>4.15</td>
<td></td>
</tr>
<tr>
<td>Technical capability</td>
<td>4.04</td>
<td>4.04</td>
<td>4.04</td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>3.98</td>
<td>3.98</td>
<td>3.98</td>
<td></td>
</tr>
<tr>
<td>Joint-performance</td>
<td></td>
<td>3.81</td>
<td>3.81</td>
<td></td>
</tr>
<tr>
<td>Corporate metrics</td>
<td></td>
<td></td>
<td>3.67</td>
<td></td>
</tr>
</tbody>
</table>

**Commodity suppliers**

Commodity suppliers are focused narrowly on three direct purchasing attributes: quality, cost, and delivery. Service is at the next level. Managers do not pay much attention to the
aggregate level of corporate and relationship criteria.

To compete in commodity markets, companies should precisely and narrowly focus on three traditional criteria, aiming to adopt quality-delivery-cost leadership strategy. In other words, companies need to operate very efficiently to provide the lowest price to value (quality and delivery) ratio. In this target market, products are standardized and generic, so cost, quality, and delivery become major differentiators setting apart suppliers.

Table 10: Evaluation criteria groups: Commodity suppliers

<table>
<thead>
<tr>
<th>Homogeneous Groups</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>4.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>4.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery</td>
<td>4.29</td>
<td>4.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td></td>
<td></td>
<td>3.90</td>
<td></td>
</tr>
<tr>
<td>Technical capability</td>
<td></td>
<td></td>
<td>3.46</td>
<td></td>
</tr>
<tr>
<td>Information sharing</td>
<td></td>
<td></td>
<td>3.23</td>
<td>3.23</td>
</tr>
<tr>
<td>Long-term relationship</td>
<td></td>
<td></td>
<td>3.21</td>
<td>3.21</td>
</tr>
<tr>
<td>Corporate metrics</td>
<td></td>
<td></td>
<td>3.15</td>
<td>3.15</td>
</tr>
<tr>
<td>Joint-performance</td>
<td></td>
<td></td>
<td></td>
<td>2.77</td>
</tr>
</tbody>
</table>

Overall, we find that managers still accentuate direct purchasing attributes: Quality and delivery belong to most important group for all supplier segments. In particular, quality is the single most important criterion: No. 1 in three segments and No. 2 in the forth segment. It is understandable since managers would like to see immediate return on each purchasing and many companies have well documented score-cards in place to evaluate purchasing.

**MANAGERIAL IMPLICATIONS AND CONCLUSION**

We provide current practice in supplier stratification management, applying interview and survey results from industry. Although many stratification nomenclatures and methods emerge from our telephone interviews with several companies as well as in the literature, we surmised that four stratifications seem to cover all these, namely: strategic, custom, collaborative and commodity suppliers. Companies use several evaluation criteria in practice to stratify suppliers into any of the segments. If a segment is highly important to a company, most evaluation criteria will rate highest in their levels of importance with respect to that segment. This allows us to formulate our hypotheses in comparing strategic, custom, collaborative, and commodity suppliers based on how important a criterion is with regard to stratifying a supplier into a particular segment.

Our results show that strategic suppliers are the most important, being markedly so relative to the all the other three segments. The commodity suppliers are at the lowest level of importance, rating significantly lower in all the evaluation criteria except cost. Further, We are not able to detect any significant differences between custom and collaborative suppliers. The
obvious reason is that both segments are in the middle of the management pyramid, belonging to the same level of importance. Our results do show that value (purchasing attributes and tech) of custom suppliers is higher, but fail to show its significance. Also most relationship attributes of custom suppliers are lower, but again fail to show it is significant.

ACKNOWLEDGEMENT

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REFERENCES


CRISIS MANAGEMENT AMONG INDUSTRIAL DISTRIBUTORS: SCALE DEVELOPMENT, ANALYSIS AND INSIGHTS

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Daniel F. Jennings, Texas A&M University
Ismail Capar, Texas A&M University,
Malini Natarajarathinam, Texas A&M University

ABSTRACT

In recent years, there have been several instances of disruptions in global supply chains. Especially in US, we experienced both natural disasters like hurricanes and man-made disasters like terrorist attacks. These events led to several researchers and practitioners question the resilience of firms in this country. In this study we develop and evaluate scale for supply chain crisis management. We especially focus on firms involved in the distribution of industrial products in United States and provide insights on factors, which affect their crisis management strategies.

INTRODUCTION

As business firms have expanded into global markets and have developed business relationships around the globe, their supply chains have tended to become vulnerable to crisis. As an example, a 1999 earthquake in Taiwan lowered the output of global computer manufacturers, Dell and Apple; Hurricane Mitch in Honduras, Guatemala and Nicaragua disrupted the supply chains of food producers such as Dole; longshoreman strikes in U.S. west coast ports in 2002 caused an estimated $11 to 22 billion in lost sales, cost of additional air freight, spoiled perishable goods and underutilized capacity and the 9/11 terrorist attacks crippled transportation networks across the U.S. (Martha and Subbakrishna, 200, Monahan et al., 2003 and Papadakis, 2003). In a recent study of 110 risk managers in North American firms, respondents reported that 73% of their supply chain risk has risen “significantly” since 2005 (Marsh, 2007). Further, a study conducted by the American Management Association found that in 2003, 64% of responding senior executives had crisis management plans while in 2005 that number had decreased to 60% (AMA, 2005). The two preceding studies (Marsh, 2007 and AMA,2005) also defined a supply chain crisis as having occurred from natural disasters, technology systems failures, industrial accidents, risks from crime, terrorism and major fraud. Reviews of the supply chain crisis management literature by Altay and Green (2006) and Natarajarathinam et. al. (2008) indicates that while the number of publications pertaining to supply chain crisis is considerable, the focus on developing scales to measure supply crisis is almost non-existent. In this study we focus on senior managers from distributor firms in different supply chains involved in the distribution of industrial products. The distributor firms in our study are independent firms that purchase products from suppliers (manufacturing firms that produce the products) and then sell
those products to end-use customers who are business firms (Anderson and Narus, 1990). In this paper, we develop a scale for measuring supply chain crisis from the literature and validate that scale based on the responses from senior managers of distributor firms. We also evaluate the differences in crisis management strategies among various distribution firms, identifying the top reactive and proactive channels.

LITERATURE REVIEW

A review of the scale development literature for supply chain issues (Roth, et. al, 2008; Keller, et. al, 2002) did not report any scales or metrics to measure supply chain crisis. The studies by March (2007) and AMA (2005) include such questions as: does your organization have a crisis management plan in place, do you have written policies and procedures, do you have a written contingency plan and required a “yes” or “no” answer. Further, the two preceding studies asked the respondents to list the type of risks for which their company has a crisis management plan. Other researchers who have studied crisis management through survey instruments include Fowler et. al, 2007 and Spillan and Hough, 2003. Fowler et al. (2007) analyzed the perception of organizational preparedness among different level of employees in a company. Spillan and Hough (2003) examine whether the experience of a crisis event by a small business generates concern for future crises and if concern is generated more from the occurrence of a crisis event or from the presence of a crisis management team. Wagner and Bode (2008) provided theoretical constructs for sources of supply chain risks and examine their links with supply chain performance using the responses from supply chain and operations managers. A number of theoretical publications focusing on crisis management have described systematic approaches for responding to crisis situations (Perrow, 2007; Roberto, et, al, 2006). Finally, we reviewed two publications on how the logistics professional can take immediate action to assist an organization’s level of preparedness for disaster incidents (Helferich and Cook, 2002; FEMA, 2006). Helferich and Cook (2002) and FEMA (2006) provide checklists to apply business controls to access the overall readiness and maintenance of an organization’s disaster management plan and are applicable to either natural or man-made disasters.

DEVELOPMENT OF A SCALE TO MEASURE SUPPLY CHAIN CRISIS

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 developed a listing of 878 distributor firms whose managers had attended those programs. The 878 firms represent fourteen different distribution channels which are presented in Appendix One.

Using the publications from Helferich and Cook (2002), FEMA (2006) and Fowler et al. (2007) together with the article by Roberto, et, al, (2006) we developed five constructs for our scale. These five constructs were: (1) Preparation (preparing for a disaster in the supply chain); (2) Mitigation (proactive steps taken prior to the disaster occurrence to reduce or eliminate sources of crisis, so that it never happens or its impact is reduced); (3) Detection (forecasting and warning that a disaster will occur or is occurring); (4) Response (initial response to a disaster [immediate aftermath] based on its impact); and (5) Recovery (longer-term response: to return
the supply chain to normal operations).

**RESEARCH HYPOTHESIS**

We hypothesize that our supply chain crisis management scale will include five factors that will describe the five constructs of Preparation, Mitigation, Detection, Response, and Recovery as shown in figure 1. Thus, we are interested in a theoretical solution of the 20 items used to describe the preceding five constructs.

**Figure 1.** Proposed five construct view of supply chain crisis management

![Diagram of supply chain crisis management constructs: Mitigation, Preparedness, Detection, Response, Recovery]

**RESEARCH METHODOLOGY**

The authors of this study, using their experience in supply chain management together with their academic training and also utilizing the publications from Helferich and Cook (2002), FEMA (2006) and Roberto, et al. (2006) developed four item statements for each of the five constructs (Preparation, Mitigation, Detection, Response, and Recovery) for a total of twenty item statements. A research questionnaire was then developed from these twenty item statements and was tested using a sample of industrial distributor executives. A research sample was developed which contained the 508 distributor firms who had attended professional development programs at our university.

Using the research questionnaire, responses were obtained from senior managers of the distributor firms included in this study. These senior managers had eleven different job titles which are described in Appendix One. The research questionnaire was sent by e-mail to a senior manager at each firm. Responses were measured using a 5-point appropriately anchored Likert scale.

We used Cronbach’s (1951) alpha to determine construct reliability of the 20 items (variables) used to describe the five constructs of our study. We employed a factor analysis using
a principal axis factoring method with a varimax rotation to determine if the 20 items (variables) would load into the five factors.

RESULTS AND ANALYSIS

Respondents included 191 firms, which represents a response rate of 22%. Johnson (2005) and Cohen and Swerdik (2005) report that responses 20% or greater from e-mail questionnaires are considered to be very good. As presented in Appendix One, the respondents were (1) from fourteen different distribution channels and were (2) senior managers having eleven different job titles. Sales revenues of the responding firms ranged from $11 million to $24 billion, with an average sales revenue of $1.9 billion. Descriptive statistics and Pearson correlation coefficients of the 20 items describing the five constructs are presented in Table 1.
**Table 1**

Descriptive Statistics and Pearson Correlation Coefficients for Twenty Item *** Describing the Five Constructs of Preparation, Mitigation, Detection, Response and Recovery.

|     | V1  | V2  | V3  | V4  | V5  | V6  | V7  | V8  | V9  | V10 | V11 | V12 | V13 | V14 | V15 | V16 | V17 | V18 | V19 | V20  | Mean | SD  | N  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|
| V1  | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      | 3.2  | 1.1 | 19  |
| V2  | .37*| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      | 2.8  | 1.0 | 19  |
| V3  | .81*| .35*| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      | 3.0  | 1.2 | 19  |
| V4  | .74*| .45*| .79*| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 3.2  | 1.0 | 19  |
| V5  | .68*| .49*| .7**| .59*| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 3.2  | 1.1 | 19  |
| V6  | .54*| .52*| .59*| .6**| .67*| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2.7  | 1.1 | 19  |
| V7  | .53*| .43*| .49*| .47*| .64*| .78*| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     | 2.4  | 1.2 | 19  |
| V8  | .64*| .34*| .51*| .47*| .39*| .42*| .43*| 1   |     |     |     |     |     |     |     |     |     |     |     |     | 2.4  | 1.6 | 19  |
| V9  | .34*| .61*| .19*| .17*| .38*| .33*| .48*| .28*| 1   |     |     |     |     |     |     |     |     |     |     |     | 2.8  | 1.2 | 19  |
| V1  | .66*| .49*| .57*| .48*| .65*| .6**| .49*| .67*| .46*| 1   |     |     |     |     |     |     |     |     |     |     | 2.4  | 1.1 | 19  |
| V1  | .55*| .44*| .55*| .54*| .66*| .53*| .57*| .29*| .57*| .65*| 1   |     |     |     |     |     |     |     |     |     | 2.5  | 1.1 | 19  |
| V1  | .42*| .34*| .45*| .46*| .53*| .53*| .57*| .32*| .48*| .54*| .71*| 1   |     |     |     |     |     |     |     |     | 2.5  | 1.4 | 19  |
| V1  | .79*| .45*| .82*| .74*| .8**| .78*| .69*| .58*| .38*| .75*| .68*| .59*| 1   |     |     |     |     |     |     |     | 3.1  | 1.1 | 19  |
| V1  | .59*| .49*| .47*| .44*| .54*| .42*| .35*| .58*| .46*| .68*| .48*| .33*| .71*| 1   |     |     |     |     |     |     | 3.1  | 1.0 | 19  |
| V1  | .64*| .53*| .51*| .48*| .55*| .5**| .31*| .44*| .48*| .59*| .37*| .29*| .64*| .76*| 1   |     |     |     |     |     | 3.0  | 1.0 | 19  |
| V1  | .07*| .28*| .09*| .13*| .26*| .38*| .36*| .09*| .31*| .19*| .26*| .14*| .40*| .50*| .48*| 1   |     |     |     | 3.5  | 1.1 | 19  |
| V1  | .47*| .6**| .41*| .44*| .57*| .61*| .56*| .5**| .63*| .66*| .61*| .58*| .64*| .58*| .6**| .42*| 1   |     |     | 2.7  | 1.2 | 19  |
| V1  | .45*| .6**| .56*| .5**| .62*| .62*| .44*| .27*| .4**| .55*| .4**| .36*| .61*| .43*| .6**| .35*| .57*| 1   |     | 3.3  | 1.2 | 19  |
| V1  | .41*| .56*| .46*| .43*| .55*| .51*| .4**| .3**| .47*| .56*| .47*| .32*| .63*| .67*| .69*| .64*| .53*| .72*| 1   | 3.5  | 1.1 | 19  |
| V2  | .43*| .52*| .49*| .55*| .41*| .46*| .26*| .35*| .27*| .6**| .43*| .26*| .63*| .64*| .59*| .43*| .57*| .62*| .78*| 1   | 3.1  | 1.1 | 19  |

*  
**  
*** Item descriptions are presented in Table 3
Cronbach’s (1951) alpha (α) coefficient was used to determine construct reliability of the 20 items used to describe the five constructs of Preparation, Mitigation, Detection, Response and Recovery. The α values were 0.85 for Preparation, 0.81 for Mitigation, 0.83 for Detection, 0.84 for Response and 0.87 for Recovery. According to Nunnally (1978) and Hair et al. (1998), α values equal to or exceeding 0.60 indicate construct reliability for exploratory research. Thus, all of our five constructs met the criteria of α ≥ 0.60 and were 0.81 or above. We employed a factor analysis (FA) using a principal axis factoring method with a varimax rotation. An important test of the factorability of a data set in a FA is the Kaiser, Meyer, Olkin sampling accuracy statistic (KMO). Tabachnick and Fidell (2001) report that KMO values of 0.6 and above are required for good FA. The KMO statistic for the FA conducted in the present study is 0.84 which indicates the data was acceptable for FA. Another test of factorability is Bartlett’s test of sphericity that measures the suitability of data for FA. Correlation matrices that are factorable should contain several sizable correlations. However, it is possible that the correlations are between only two variables and do not reflect underlying processes that are simultaneously affecting several variables. Thus, Bartlett’s test of sphericity is a sensitive test that the correlations in a correlation matrix are not zero. However, such a test is recommended only if there are fewer than five cases per variable (Tabachnick and Fidell, 2001). Bartlett’s test of sphericity for the FA conducted in the present study was significant at 0.000 and it further indicates that the present study data was suitable for a FA.

As previously mentioned, we hypothesized that our supply chain crisis management scale will include five factors that will describe the five constructs of Preparation, Mitigation, Detection, Response and Recovery. In other words, the 20 items (variables) that we used to describe the preceding five constructs would load into five factors. In employing the FA we used only those items having a factor coefficient of 0.60 or greater. After employing the FA, four factors emerged. Eighteen of the original twenty items had factor coefficients of 0.60 or greater and loaded on the four new factors. Item V02 does not load in any factors and is been dropped from further analysis. After reviewing each item (variable) that loaded on the four factors, we assigned new descriptions to the new factors: (1) Proactiveness, (2) Reactiveness, (3) Information Sharing and Coordination and (4) Training and Preparedness Effectiveness as shown in Figure 2. Following is a listing of the items that loaded on each new factor and the α value for the new factor. The first new factor, Proactiveness, included items V01, V03, V04, V05, V06 and V13 and had an α of 0.94. The second new factor, Reactiveness, included items V15, V16, V18, V19, and V20 and had an α of 0.90. The third new factor, Informational Sharing and Coordination, included items V07, V09, V11, V12, and V17 and had an α of 0.87. The fourth new factor, Training and Preparedness Effectiveness, included items V08, V10, and V14 and had an α of 0.86. Again, the revised four factor loadings met the criteria for reliability. Factor loadings and α coefficients for the four new factors are described in Table 2. Descriptive statistics and Pearson correlation coefficients for the new four factors are presented in Table 3.
Figure 2. Validated (EFA) four construct view of supply chain crisis management

- Information Sharing and Coordination
- Proactiveness
- Reactiveness
- Training and Preparation Effectiveness
Table 2
Rotated Factor Loadings and Alpha Coefficients for the Four Obtained Factors (constructs) of Proactiveness, Reactiveness, Information Sharing and Coordination, and Training and Preparedness, Effectiveness

<table>
<thead>
<tr>
<th>KMO (Kaiser, Meyer, Olkin) Measure of Sampling Accuracy</th>
<th>Proactiveness (α=0.94)</th>
<th>Reactiveness (α=0.90)</th>
<th>Information Sharing and Coordination (α=0.87)</th>
<th>Training and Preparedness Effectiveness (α=0.86)</th>
</tr>
</thead>
<tbody>
<tr>
<td>V 01 How much effort has gone into building a crisis management for your organization?</td>
<td>0.680</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V 02 To what extent has your organization planned the budget to manage a crisis situation?</td>
<td></td>
<td>0.851</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V 03 Do you have a clear crisis management checklist for your organization?</td>
<td></td>
<td></td>
<td>0.800</td>
<td></td>
</tr>
<tr>
<td>V 04 How well are organizational roles defined in times of a disaster/crisis?</td>
<td></td>
<td></td>
<td></td>
<td>0.644</td>
</tr>
<tr>
<td>V 05 How much importance is given to disaster mitigation programs in your organization?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V 06 How frequently is the vulnerability of your supply chain assessed in your organization?</td>
<td></td>
<td></td>
<td></td>
<td>0.630</td>
</tr>
<tr>
<td>V 07 Does your organization coordinate crisis management activities with supply chain partners?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V 08 How often do you conduct emergency drills in your organization?</td>
<td>0.662</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V 09 Do you have an early warning system for potential threats?</td>
<td></td>
<td>0.774</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V 10 How do you rate your formal program to train key personnel to detect this?</td>
<td></td>
<td></td>
<td>0.611</td>
<td></td>
</tr>
<tr>
<td>V 11 How detailed is the procedure to share detected crisis information within your supply chain?</td>
<td></td>
<td></td>
<td></td>
<td>0.698</td>
</tr>
<tr>
<td>V 12 How do you have a procedure to acknowledge and disseminate external (Federal/Local) warning signals?</td>
<td></td>
<td></td>
<td></td>
<td>0.755</td>
</tr>
<tr>
<td>V 13 How do you rate your company's immediate response plan?</td>
<td>0.715</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V 14 How do you rate your emergency or backup communication systems?</td>
<td></td>
<td></td>
<td></td>
<td>0.659</td>
</tr>
<tr>
<td>V 15 How do you rate the procedures for infrastructure protection in your organization?</td>
<td></td>
<td></td>
<td>0.642</td>
<td></td>
</tr>
<tr>
<td>V 16 To what extent does your organization support your family during a disaster?</td>
<td></td>
<td></td>
<td></td>
<td>0.789</td>
</tr>
<tr>
<td>V 17 How do you rate your company's disaster aid programs (counseling, legal, unemployment assistance)?</td>
<td></td>
<td></td>
<td></td>
<td>0.626</td>
</tr>
<tr>
<td>V 18 Do you have a plan to ensure chain of command (continuity of management)?</td>
<td></td>
<td></td>
<td>0.636</td>
<td></td>
</tr>
<tr>
<td>V 19 How do you rate your company's ability to resume normal operations?</td>
<td></td>
<td></td>
<td></td>
<td>0.841</td>
</tr>
<tr>
<td>V 20 How do you rate your company's plan to record decision/actions to use for continuous improvements?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Eigen Values

<table>
<thead>
<tr>
<th></th>
<th>4.53</th>
<th>4.09</th>
<th>3.75</th>
<th>2.83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variance Explained - %</td>
<td>22.63%</td>
<td>20.46%</td>
<td>18.76%</td>
<td>14.15%</td>
</tr>
<tr>
<td>Variance Explained – Cumulative</td>
<td>22.63%</td>
<td>43.09%</td>
<td>61.85%</td>
<td>76.00%</td>
</tr>
</tbody>
</table>

Bartlett's Test of Sphericity
Approx Chi-Square ------- 3984.055
Df ---------------------- 190
Sig. --------------------- .00
Table 3
Descriptive Statistics and Pearson Correlation Coefficients for the Four Obtained Factors (Constructs) of Proactiveness (F1), Reactiveness (F2), Information Sharing and Coordination (F3), and Training and Preparedness Effectiveness (F4)

<table>
<thead>
<tr>
<th></th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td>18.72</td>
<td>5.99</td>
<td>191</td>
</tr>
<tr>
<td>F2</td>
<td>0.682**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td>22.75</td>
<td>6.18</td>
<td>191</td>
</tr>
<tr>
<td>F3</td>
<td>0.703**</td>
<td>0.628**</td>
<td>1.0000</td>
<td></td>
<td>13.02</td>
<td>5.11</td>
<td>191</td>
</tr>
<tr>
<td>F4</td>
<td>0.796**</td>
<td>0.679**</td>
<td>0.641**</td>
<td>1.0000</td>
<td>11.34</td>
<td>4.32</td>
<td>191</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level

Proactiveness factor represents the set of activities a company takes in advance to deal with a crisis situation and Reactiveness factor represents the activities the company takes to respond and recover from a crisis. The other two factors namely, Information Sharing and Coordination, and Training and Preparedness Effectiveness represent the support activities needed to detect and mitigate a crisis situation in a supply chain.

When we analyze the new factors by their channel type, size and revenue of the companies we find interesting relationships. Certain channel types come out on top in crisis management activities like Electrical Utilities, Electronics, Power Transmission and Chemical distributors. Our informal discussions with executives of these channel types confirm this notion. For example, when Hurricane Ike hit Houston, several electrical distributors had contingency plan in place like makeshift facilities, generators, support for employees and their families. Whereas there are vertical channels in which crisis management is not a priority, like pipe valve fitting distributors, plastics, hose and gaskets distributors. On the other hand, company size (no. of employees) and revenue does not matter when it comes to crisis management strategies. Thus we see that product
Table 4. Factor values by Channel type

<table>
<thead>
<tr>
<th>Channel Type</th>
<th>Proactiveness</th>
<th>Reactiveness</th>
<th>Information Sharing and Coordination</th>
<th>Training and Preparedness Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev</td>
<td>Mean</td>
<td>Std. Dev</td>
</tr>
<tr>
<td>Electrical MRO</td>
<td>0.01</td>
<td>0.79</td>
<td>-0.41</td>
<td>1.19</td>
</tr>
<tr>
<td>Electrical Utilities</td>
<td>0.80</td>
<td>0.24</td>
<td>0.80</td>
<td>0.42</td>
</tr>
<tr>
<td>Electronics</td>
<td>0.29</td>
<td>0.80</td>
<td>-0.28</td>
<td>1.03</td>
</tr>
<tr>
<td>Fluid Power</td>
<td>-0.84</td>
<td>1.35</td>
<td>0.34</td>
<td>0.84</td>
</tr>
<tr>
<td>Power Transmission</td>
<td>0.58</td>
<td>0.54</td>
<td>-0.01</td>
<td>0.92</td>
</tr>
<tr>
<td>Oil Field Services</td>
<td>-0.42</td>
<td>1.12</td>
<td>0.50</td>
<td>0.57</td>
</tr>
<tr>
<td>General Line</td>
<td>-0.34</td>
<td>0.82</td>
<td>0.09</td>
<td>0.95</td>
</tr>
<tr>
<td>Hose &amp; Gaskets</td>
<td>-0.38</td>
<td>1.39</td>
<td>0.26</td>
<td>0.82</td>
</tr>
<tr>
<td>Chemical</td>
<td>0.37</td>
<td>0.56</td>
<td>0.12</td>
<td>0.67</td>
</tr>
<tr>
<td>HVAC</td>
<td>-0.02</td>
<td>1.38</td>
<td>0.34</td>
<td>0.84</td>
</tr>
<tr>
<td>Building Materials</td>
<td>0.16</td>
<td>0.85</td>
<td>-0.28</td>
<td>1.06</td>
</tr>
<tr>
<td>Pipe, Valve, Fittings</td>
<td>-0.62</td>
<td>0.43</td>
<td>-0.33</td>
<td>1.22</td>
</tr>
<tr>
<td>Plastics</td>
<td>-0.10</td>
<td>1.08</td>
<td>-1.30</td>
<td>1.54</td>
</tr>
<tr>
<td>Plumbing</td>
<td>0.81</td>
<td>0.54</td>
<td>-0.10</td>
<td>0.68</td>
</tr>
</tbody>
</table>

Table 5. Factor values by Company size

<table>
<thead>
<tr>
<th>No of Employees</th>
<th>Proactiveness</th>
<th>Reactiveness</th>
<th>Information Sharing and Coordination</th>
<th>Training and Preparedness Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev</td>
<td>Mean</td>
<td>Std. Dev</td>
</tr>
<tr>
<td>0-500</td>
<td>0.13</td>
<td>0.82</td>
<td>-0.22</td>
<td>1.10</td>
</tr>
<tr>
<td>500-1000</td>
<td>-0.05</td>
<td>1.25</td>
<td>0.18</td>
<td>0.85</td>
</tr>
<tr>
<td>1000-5000</td>
<td>-0.30</td>
<td>1.13</td>
<td>0.17</td>
<td>0.92</td>
</tr>
<tr>
<td>&gt;5000</td>
<td>0.01</td>
<td>0.83</td>
<td>0.28</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Table 6. Factor values by Company revenue
and market characteristics are major drivers of crisis management philosophies. We also find various distributor associations in distribution channels such as electrical, electronics and chemical industry have started educating the members on the importance of crisis management. This further supports our perception that product and market characteristics determine the extent of crisis management strategies adopted in a company.

**DISCUSSION AND CONCLUSION**

In the present study we developed and validated a scale that will allow researchers to explore how firms within a supply chain manage their responses to either natural or man-made crisis. The development of such a scale consisted of the following: (1) generating items for the scale from the literature, (2) conducting a study measuring the scale items and 3) the use of a FA to determine the factor structure of the scale items (DeVillis, 1991, Schriesheim et.al. 1993). A strength of our study is that it utilized a sample of firms from fourteen different industrial distribution channels and involved the responses of senior managers having eleven different job titles. As such, our study avoids the criticism that it lacks generalizability (Hunter and Schmidt, 1990). Future research could involve an analysis to determine if significant differences exist among the different industrial distribution channels regarding the level of preparedness for disaster incidents. Another area of research could involve checking for nomological validity conducting a second sampling using the four factors of Proactiveness; Reactiveness; Information Sharing and Coordination; and Training and Preparedness Effectiveness and subjecting those results to a confirmatory factor analysis and to structural equation modeling. A case study based research on the top performer to find the tactical decision drivers of crisis management policies in a company would also be of interest to both academics and practitioners.

Finally, we trust that our study will prompt others to conduct research on the management of supply chain crisis.

**REFERENCES**


APPENDIX ONE

Respondents by Channel Type

<table>
<thead>
<tr>
<th>Channel Type</th>
<th>No. of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical MRO</td>
<td>27</td>
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<tr>
<td>Electrical Utilities</td>
<td>11</td>
</tr>
<tr>
<td>Electronics</td>
<td>7</td>
</tr>
<tr>
<td>Fluid Power</td>
<td>15</td>
</tr>
<tr>
<td>Power Transmission</td>
<td>17</td>
</tr>
<tr>
<td>Oil Field Services</td>
<td>4</td>
</tr>
<tr>
<td>General Line</td>
<td>37</td>
</tr>
<tr>
<td>Hose &amp; Gaskets</td>
<td>11</td>
</tr>
<tr>
<td>Chemical</td>
<td>5</td>
</tr>
<tr>
<td>HVAC</td>
<td>15</td>
</tr>
<tr>
<td>Building Materials</td>
<td>17</td>
</tr>
<tr>
<td>Pipe, Valve, Fittings</td>
<td>7</td>
</tr>
<tr>
<td>Plastics</td>
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</tr>
<tr>
<td>Plumbing</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>191</strong></td>
</tr>
</tbody>
</table>

Respondents by Job Title

<table>
<thead>
<tr>
<th>Job Title</th>
<th>No. of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
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</tr>
<tr>
<td>President</td>
<td>43</td>
</tr>
<tr>
<td>VP Sales</td>
<td>24</td>
</tr>
<tr>
<td>VP Operations</td>
<td>9</td>
</tr>
<tr>
<td>VP IT</td>
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</tr>
<tr>
<td>VP HR</td>
<td>5</td>
</tr>
<tr>
<td>Sales Mgr</td>
<td>7</td>
</tr>
<tr>
<td>Branch Mgr</td>
<td>9</td>
</tr>
<tr>
<td>Regional Mgr</td>
<td>4</td>
</tr>
<tr>
<td>Procurement Mgr</td>
<td>2</td>
</tr>
<tr>
<td>VP Business Development</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>191</strong></td>
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</table>
PERCEIVED PRODUCT FRESHNESS: EXPLORING CONSUMERS’ NEGATIVE REACTIONS TO SELF-TOUCHED PRODUCTS
Devdeep Maity, Oklahoma State University

EXTENDED ABSTRACT

Past studies have shown that by merely touching a product prior to purchase, consumers may develop positive associations with it either through increased affective responses (Peck and Wiggins 2006), or through a sense of psychological ownership (Peck and Shu 2009). However, contradictory evidence suggests that “it is common for consumers to try out on an article or flip through a magazine but after deciding to make a purchase, select a “fresh” one from the back of the display”(Argo et al. 2006). This switching preference while making a final purchase decision is especially surprising in situations where consumers actually examine a “fresh” product instead of a trial or a demo product.

This conceptual study offers insight on the above issue. Specifically in this study, it is suggested that consumers perceive a difference in freshness between the touched product and the untouched ones with the self-touched product being perceived to be low on freshness. A new variable known as perceived product freshness is introduced in this study with a thorough discussion. Additionally, it is suggested that this low product freshness perception will attenuate consumers’ ownership feelings towards the touched product. Moreover, such perception of freshness will vary based on consumers’ chronic regulatory focus.

REFERENCES


SEARCH: AN EXPENSE OR AN EXPERIENCE? EXPLORING THE IMPACT OF SEARCH ON PRODUCT RETURN INTENTIONS
Devdeep Maity, Oklahoma State University

EXTENDED ABSTRACT

Traditionally, search is viewed as an expense or an effort that an individual may resist to waste. Since past study indicates that consumer are sensitive towards their search effort investment and that such sensitivity influences their willingness to acquire the product (Alba et al. 1997; Monga and Saini 2009) we ask the following questions - Does such consumer sensitivity towards search effort remain instrumental beyond the product acquisition phase upto the product retention or product returns phase? More specifically, is there any relationship between consumer’s product return intentions and pre-purchase product search behavior? If so, how are these two related? Does viewing pre-purchase search process as an experience, as opposed to expense, have any impact on a consumer’s product return intentions?

In this conceptual paper, the author argues that in product-return situations, where consumers are not compensated for the search effort they initially invested towards product acquisition, higher search effort will lower their product return intentions. However, viewing search as an experience or a pleasure activity may have reverse implications, since it is argued that it weakens the negative search – product return intention relationship. The author suggests product satisfaction to act as a partial mediator between search and product return intentions. Furthermore, the author develops competing propositions regarding the interplay between the variables.

REFERENCES


STATUS IS EVERYTHING: HOW FACEBOOK STATUSES USED BY BUSINESS PAGES AFFECT PURCHASE INTENTION AND CONSUMER ATTITUDES

Megan C. Uebersax, Berry College
Nancy D. Albers-Miller, Berry College

EXTENDED ABSTRACT

This study examines the relationship between the perception of consumers to how a corporation makes a charitable contribution. It also discusses how the consumer can be made aware of the contribution and how they feel about it. Previous studies have indicated that a corporation can increase their status in the eyes of their consumers by making a charitable contribution (File and Prince 1998), but it is unclear as to what kind of contribution is seen as the most favorable. That is the object of this study. This paper will discuss what a charitable contribution is, including the positive and negative effects of charitable giving. According to Chen et al., a charitable contribution is a measure of positive social performance (2007). In previous years, corporations and other entities have shown their social responsibility by donating cash assets. According to Giving USA 1999, an annual report on the state of philanthropy published by the American Association of Fundraising Counsel, in 1998, foundations, corporations, and individuals gave $174.52 billion to registered non-profits in the United States alone, and of that staggering amount, corporations only gave about five percent, a mere $8.726 billion in the scheme of things (Klein 1999. Then, there will be a discussion on the social status of a corporation and how consumers view the corporation on the charitable contributions they make. A corporation can make a charitable contribution for many reasons, one simply being the benefit of social status of their company. Jones and Wood have shown that a common way for companies to demonstrate their social responsiveness to their communities is through their philanthropic activities that can stimulate goodwill (1995). Other scholars have argued the company’s stakeholders, including investors, customers, suppliers, and employees, can see the company in a better light because of the charitable contributions that the corporation makes (Buchholtz et al. 2003, Himmelstein 1997, and Smith 1994). A corporate reputation is a collective opinion of an organization held by its stakeholders (Brammer and Millington 2005). The status of this corporation can increase in the eyes of the stakeholders when the corporation does something noteworthy for the better, but it can also decrease if the corporation does something that can be viewed by the public as negative. For example, if a corporation donates an entire day when their employees are normally at work to help out their community in a way that utilizes their services the community will more than likely have a positive opinion of that corporation. On the other hand, if a corporation chooses to become involved in an act that could potentially have a negative impact on their community, such as laying off a large amount of their employees, the community will more than likely have a negative opinion of them. Their reputation has been identified as playing a significant role in improving the firms value, raising employee morale and productivity, and improving the retention of their employees (Baker et al. 1998, Beatty and Ritter 1986, and Fombrun and Shanley 1990).
NEW GUITAR CONSUMERS: INEXPERIENCED CONSUMERS LACK EXPERIENCE CORRELATING TO INTERPERSONAL INTERACTIONS

Alex Willoughby, Berry College
Nancy D. Albers-Miller, Berry College

EXTENDED ABSTRACT

The 1930’s started an insurgency with the invention of the electric guitar, causing it to become the most popular instrument of the twentieth century and carry over to the twenty-first century (History of Fender 2010). Even with the intricacy that accompanies learning and mastering the guitar, there are still attempts to keep the guitar in modern pop culture. Video games such as Guitar Hero and Rock Band are an example of ways in which pop culture has incorporated the guitar. Eight weeks after Rock Band was released, over two-point-five million of the songs that were on Rock Band were downloaded (Snider 2007). This image of a directly correlated simulation between an average individual being a rock star, could probe the cultural image of the guitar higher than previously viewed. Promoting the guitar market would profit guitar companies regardless of brand communities. It is imperative for these companies to realize that the progression to lure consumer activity is not so straightforward. With the lack of mass marketing associated with guitar demographics, it remains vital that the underlying assumptions of consumer encoding and interpersonal relations are first and foremost in mind. This research will try to define what kind of consumer will be satisfied with a guitar purchase. It will also address certain purchasing situations that lead to satisfaction.

Consumers Learn

Consumers, in guitar market, assert the same behavioral and learning techniques as any other consumer (Solomon 2010). The consumer is a “black box” that perceives stimuli from the external environment (Solomon 2010). The stimulus is perceived through the black box, and the response indicates how a consumer interpreted the stimuli (Solomon 2010). There are many more aspects to how the stimulus is encoded (which will be discussed later in the proposal), which directly influences how the consumer will respond (Hoch, Dieghton 1989). This concept of consumers learning is very important to the next stages of the guitar purchase.

Importance of Experience

Experience of a product or information seems to be the best form of loyalty (Hoch, Dieghton 1989). This means that a consumer will form an enhanced attachment to a brand because of previous interactions (Hoch, Dieghton 1989). Experience provides a more accurate insight because the information is more vivid, and is also likely to have a very direct influence in what a consumer may do (Hoch, Dieghton 1989). Familiarity provides a knowledge that provides
storage for prior knowledge, and more accurate related correlations between products and information (Hoch, Dieghton 1989). Familiarity can also cause smaller brands to have rising power and recognition over the brands that contain more market share (Alba and Chattopadhyay 1985, 1986). If a consumer knows something about a brand, they will use that prior knowledge to exclude and ignore any external information that surrounds them (Biehal 1983). However, the memory process can cause problems (Biehal 1983). The memory may not be as useful as some external information that is trying to be pushed through to the consumer (Biehal 1983). Research has been done to help marketers understand that it is important to push consumers toward prior experience (Heilman, Bowman, Wright 2000).

Satisfaction

The beginning of customer satisfaction begins back with the learning stage, which was previously discussed (Rust, Inman, Jia, Zahorik 1999). The customer will be more intrigued by the product once the knowledge of utility is present (Rust, Inman, Jia, Zahorik 1999). It is the direct correlation between the perceived quality the consumer assigns to the product, and the actual quality the product contains that builds the fundamental definition of satisfaction (Rust, Inman, Jia, Zahorik 1999).

Interpersonal Relationships (Salesperson and Experienced Personnel)

Musicians friend is a website that provides knowledge on purchasing guitars from experienced personnel. If consumers do have experience, then the utilization of experts is not needed (Hubbard 2002). The consumer relies on the expert profoundly, because the expert can provide to the reign of knowledge as little, or as much as he/she wants (Hubbard 2002). A salesperson, however, has many other obligations besides trying to sell the best-fit purchase for the consumer (Pennington 1968). The whole purpose of an interpersonal interaction for a guitar consumer is to make a high-quality purchase based on the information given to them by the interpersonal source. This cannot happen when salespeople try to influence this process in their behalf of making a profit. Invalidity is also assumed from the sales force because of the study of different messages that they can present to a consumer (Weitz 1981). This study of diverse messages can also directly correlate to the different abilities that a salesperson obtains through personality or training (Weitz 1981). I believe research will show that a consumer will be more satisfied with their purchase by taking advice from an experience guitar consumer, rather than a salesperson.
FACTORS CONTRIBUTING TO A SUCCESSFUL DEBUT ALBUM: A SIMPLE REGRESSION ANALYSIS

Clyde Philip Rolston, Belmont University
Terry Tompkins, Drexel University
Marieta Velikova, Belmont University

ABSTRACT

This paper explores the some of the marketing variables which impact the sales of debut releases in the American music market. Previous research has investigated the makeup of a hit song (Dhanaraj and Logan 2005; Kasha & Hirshhorn 1990; Burns 1987) or consumer choice of artistic products (Spierdijk and Voornevel 2007; Adler 2006; Chung and Cox 1994). This paper extends the analysis of debut releases in Tompkins and Rolston (2009) by attempting to statistically quantify the importance of the marketing variables through a simple regression model.

The research presented here is limited to debut artists who achieved Gold, Platinum or Multi-Platinum RIAA certification status on their first release during 1999-2008. A debut artist, for the purposes of this study, is defined as an act releasing their first album on a nationally distributed record label in the United States. Specialty genres (Gospel, Jazz, Classical, etc.) were eliminated to narrow the findings to include the five popular music genres – Rock, Country, Pop, R&B, and Rap. Two-hundred twenty-five (225) albums were included in the study.

Step-wise regression was used to select a subset of explanatory variables that maximized adjusted r-squared and minimized Akaike Information Criterion (AIC) and Schwartz Information Criterion (SIC). The independent variables in the models selected were tested for multicollinearity using the variance inflation factor (VIF). The full model with expected signs is given by the following:

\[
SALES = f(RELEASES, RIAA, SS, PEAKSALES, WEEK1SALES, CHARTPOSITION,
WEEK\$BB200, AVGAUDPERSONG, HOT100PERCENT)
\]

where

- \(SALES\) = first release sales;
- \(RELEASES\) = number of releases;
- \(RIAA\) = number of weeks to RIAA certification;
- \(SS\) = number of weeks to SS certification;
- \(PEAKSALES\) = peak week sales amount;
- \(WEEK1SALES\) = first-week sales amount;
- \(CHARTPOSITION\) = peak BB 200 chart position;
- \(WEEKSBB200\) = number of weeks on the Billboard 200 charts;
- \(AVGAUDPERSONG\) = average audience per song;
The model indicates that many of the marketing variables controlled by the artist and record company had no significant impact on sales. As noted in the previous study (Tompkins and Rolston 2009), the number of weeks the release was on the charts rather than its peaks seemed to be a better indicator of sales. Here we additionally find that longevity rather than a fast start translate into greater sales.