Allied Academies
International Conference

Maui, Hawaii
October 14-17, 1997

Academy of Marketing Studies

Proceedings

Affiliates	***Journals***
International Academy for Case Studies	*Journal of the International Academy for Case Studies*
Academy of Entrepreneurship	*Academy of Entrepreneurship Journal and the Entrepreneurial Executive*
Academy of Accounting and Financial Studies	*Academy of Accounting and Financial Studies Journal*
Academy of Managerial Communications	*Academy of Managerial Communications Journal*
Academy of Educational Leadership	*Academy of Educational Leadership Journal*
Academy of Marketing Studies	*Academy of Marketing Studies Journal*
Academy of Strategic and Organizational Leadership	*Academy of Strategic and Organizational Leadership Journal*
Academy of Free Enterprise Education	*The Journal of Entrepreneurship Education*
Academy of Information and Management Sciences	*Academy of Information and Management Sciences Journal*
Academy for Studies in Business Law	*Academy for Studies in Business Law Journal*

Allied Academies, Inc.
An International Non Profit Association
of Scholars and Practitioners

PO Box 2689, Cullowhee, NC 28723
Voice 704-293-9151; FAX 704-293-9407
www.alliedacademies.org

Volume 2, Number 2 1997

Proceedings of the Academy of Marketing Studies

October 14-17, 1997
Maui, Hawaii

Jo Ann and Jim Carland
Co-Editors
Western Carolina University

The Proceedings of the
Academy of Marketing Studies
are published by the
Allied Academies, Inc., PO Box 2689, Cullowhee, NC, 28723.

The Academy of Marketing Studies is an affiliate of the Allied Academies, an international, non-profit association of scholars whose purpose is to support and encourage the exchange of knowledge.

Proceedings of the Academy of Marketing Studies

Table of Contents

STUDENT ATTITUDES REGARDING PERFORMANCE EVALUATIONS OF SALESPEOPLE

Sandra McKay, Southeastern Louisiana University
smckay@selu.edu
Uday Tate, Southeastern Louisiana University
utate@selu.edu

ABSTRACT

This study examined how students believe salesperson ability vs. salesperson effort impacts evaluations of salesperson performance. Students reviewed information about either a performance attributed to the salesperson's ability or a performance attributed to the salesperson's effort. The information had purportedly been prepared by the salesperson's supervisor and indicated the level of performance as high or low. Students were asked how they thought the salesperson's supervisor might respond to the performance in terms of rewards (e.g., promotion, pay increases) for high performers and corrective measures (e.g., termination, counseling) for low performers. The results of the study indicated that students expect supervisors to react more punitively toward salespeople with low performances attributed to effort than toward salespeople with low performances attributed to ability. Conversely, students expected nonpunitive (e.g., counseling) actions were significantly more likely for correcting salespeople who performed poorly due to low ability. In contrast, students expected supervisors to grant the "highest" rewards (e.g., promotion) to salespeople with high performances attributed to ability rather than effort. Implications for managers are discussed.

INTRODUCTION

Attribution theory pertains to the processes used by individuals to interpret events by developing causal explanations. Weiner's (1972; 1980) attributional paradigm, proposed that the perceived causes for behavior (ability, effort, task difficulty, and luck) vary along three dimensions: (1) locus--whether the cause in internal or external to the person; (2) stability--whether or not the cause varies over time; and (3) controllability--whether the cause in under the person's volitional control. Subsequent responses to a behavior (e.g., performance) depend more on the underlying dimension of the attributed cause than on the cause itself. Since both ability and effort are internal to the person, they may vary in terms of stability and controllability. Specifically, ability is generally considered a stable and uncontrollable cause, whereas effort is considered an unstable and controllable cause.

According to Weiner, it is the controllability of the cause that affects evaluations. Since effort is generally considered as more controllable than ability, attributions to effort are predicted to result in more extreme evaluations than attributions to ability since the individual is seen as more personally responsible for the performance outcomehen it is attributed to effort. A number of studies in non-sales environments have found that when success was attributed to effort, high performance was evaluated more positively, and when failure was attributed to effort, low performance was more severely punished (e.g., Weiner, Russell, and Lehrman, 1979; Knowlton and Mitchell, 1980; Pence, Pendleton, Dobbins, and Sgro, 1982).

The stability rather than the controllability of the perceived cause determines responses that are based on expectations of future performance (Weiner, 1972). When performance is attributed to a stable cause, the individual is expected to perform in a similar manner in the future. Since ability is typically viewed as more stable than effort, responses that require some predictions of future performance, such as promotion should be governed by ability attributions.

The purpose of this study is to see if students believe that performances attributed to different causes impact differential supervisor responses. Specifically, students were asked how that thought a supervisor would react to identical performances, attributed to either effort or ability, in terms of rewards and corrective actions.

METHOD

Students enrolled in upper level classes at a medium-sized university located in the Southeastern U.S. participated in the study. Of the 256 students in the sample, 92% were from the College of Business Administration.

Students reviewed performance information, purportedly prepared by the salesperson's supervisor, about either a performance attributed to the salesperson's ability or a performance attributed to the salesperson's effort. Students were randomly assigned to each of four groups--low ability, low effort, high ability, high effort--with an equal number of students in each condition. Consequently, half of the students were reading information about an ability-derived performance, either high or low, and half were reading information about an effort-derived performance, either high or low. The procedure resulted in a between-subjects design.

For comparison purposes, students were given performance information on all four salespeople plus an average performer. However, each group of students responded to job performance information regarding only one salesperson, either a high performance attributed to ability, a low performance attributed to ability, a high performance attributed to effort, or a low performance attributed to effort. A cover sheet explained that all five salespeople had the same amount of training, sales experience, and education.

ANALYSIS AND RESULTS

The dependent measures were compared across the treatment conditions of effort and ability to assess the effects on students' expectations regarding how a supervisor would probably reward or correct the salespeople in the scenarios. The dependent variables were grouped *a priori* and analyzed via MANOVA. The results indicate a significant effect for the effort variable ($F(3,252) = 139.1$, $p<.000$), and for the ability variable ($F(3,252) = 112.4$, $p<.000$), and no effect for the interaction of the variables ($p<.063$). Wilks' criterion was used for both effort and ability.

The univariate analysis for each reward action shows significant effects for promotion ($F(1,254) = 31.7$, $p<.01$) and territory assignment ($F(1,254) = 61.9$, $p<.01$). The effects of the ratings on compensation and recognition were not significant. Table 1 contains the mean ratings for each treatment variable.

Table 1
Means for the Reward Action Measures

	Evaluative Criteria*	
Reward Action Measures	Ability	Effort
Promotion	1.73	1.08**
Compensation	1.40	1.74
Recognition	1.65	1.36
Territory Reassignment	2.57	-.45

*The scores for each type of reward were standardized where the mean = .00 and the standard deviation = 1.00. The possible range of scores on the standardized measures was +3.00 to -3.00. A higher mean can be interpreted as indicating a greater likelihood that a particular reward would beallocated.
**>p<.01

Univariate analysis for each corrective action shows significant effects of effort for coercive actions ($F(1,254) = 56.4$, $p<.05$) and termination (F(1.254 = 157.6, $p<.000$) and significant effects of ability for nonpunitive actions

((F(1,254) = 150.2, p<.05) and territory reassignment (F(2,254) = 46.9, p<.05). The mean ratings for the corrective measures for each treatment variable are shown in Table 2.

Table 2
Means for the Corrective Action Measures

	Evaluative Criteria*	
Corrective Action Measures	Ability	Effort
Coercive Actions	-.19	2.40**
Nonpunitive Actions	2.96	.09**
Territory Reassignment	2.69	-.31**
Termination	-.43	2.99**

*The scores for each type of action were standardized where mean = .00 and the standard deviation = 1.00. The possible range of scores on the standardized measures was +3.00 to -3.00. A higher mean can be interpreted as indicating higher expectations that a particular action would be taken.
**p<.000

DISCUSSION

In general, the relationships found between perceived ability and effort, on the one hand, and expected responses, on the other, are compatible with predictions from attribution theory. The results of this study indicate that students believe that the underlying "cause" for a performance would probably influence a supervisor's responses to that performance. This is particularly evident in students's attitudes regarding treatment for low performers. Students believe that supervisors would react more punitively toward performers who expend little effort than toward those who have low levels of ability. For example, students indicate that they think supervisors would more readily use coercive actions, such as admonishment, with those who perform at low levels because they did not try very hard and would more likely use nonpunitive actions, such as counseling or territory reassignment, with those who have little ability. Further, students strongly believe that supervisors would be more willing to fire, the harshest treatment possible, those who perform at low levels because they fail to make the appropriate effort.

Students believe that high performers, regardless of the perceived reason for the performance, would probably be equitably paid and recognized. However, students believe that supervisors would more readily reserve the highest rewards, such as promotion and assignment to lucrative territories, to those who have high levels of ability.

These findings indicate that students expect supervisors to display a tendency to overreact to low effort, given low performance. Reacting more coercively toward a salesperson who performs below expectations because of low effort rather than low ability deserves careful scrutiny. Since effort is generally perceived as more *controllable* than ability, low performance due to low effort should be easier to correct than low performance due to low ability. Thus, low ability may be a more understandable reason for reacting coercively to low performance than low effort. Similarly, terminating employees for low effort may be counterproductive since effort is controllable and can be changed through the manager's actions.

Given that a prerequisite for promotion or transfer to a better territory is continued high performance and that ability is more stable relative to effort, allocation of these rewards to salespeople with high ability would appear to be justifiable. Students expected high performers to be equitably rewarded through pay and recognition regardless of "why" they performed well. Compensation and recognition are the type of rewards that are typically used with greater frequency than other rewards, such as promotion. Frequently allocated rewards used appropriately (i.e., contingent upon performance) could facilitate a manager's ability to positively affect salesperson motivation, satisfaction, and future productivity.

REFERENCES

Knowlton, W.A., Jr. & T.R. Mitchell (1980). Do sales managers really manage by objectives. *Marketing in the 80's: Changes and Challenges, 46*. Chicago: American Marketing Association, 248-251.

Pence, E.C., W.C. Pendleton, G.H. Dobbins, & J.A. Sgro (1982). Effects of causal explanations and sex variables on recommendations for corrective actions following employer failure. *Organizational Behavior and Human Decision Performance, 29*, 227-240.

Weiner, B. (l980). A cognitive (attribution)-emotion-action model of motivated behavior: an analysis of judgments. *Journal of Personality and Social Psychology, 39(February)*, 186-200.

Weiner, B. (1972). *Theories of Motivation: From Mechanism to Cognition*. Chicago: Markham.

Weiner, B., D. Russell, & D. Lehrman (1979). The cognitive-emotion process in achievement-related contexts. *Journal of Personality and Social Psychology, 37 (July)*, 1211-1220.

INTERNET ADVERTISING: MONEY DOWN THE DRAIN OR AN EFFECTIVE MARKETING TOOL?

Lisa McConnell, Sam Houston State University
Sara Hart, Sam Houston State University
Mitchell Muehsam, Sam Houston State University
Gerald Kohers, Sam Houston State University
GBA_SAH@SHSU.EDU

ABSTRACT

The primary purpose of this research project is to determine whether Internet advertising is a cost effective marketing tool. To accomplish this objective, a questionnaire survey is used to explore 1) the content of Internet advertising, 2) the costs associated with monitoring and maintaining web sites, 3) the extent of communication between marketing and the individuals monitoring and maintaining the web site, and 4) the effect on revenue. The directors of the marketing function of the "Chronicle 100" companies in the Houston, Texas, area were surveyed; 68% responded.

Survey findings indicate no quantifiable increases in revenue. However, since this advertising medium is still in its infancy, it is possible that there has not been sufficient time for companies to assess the impact. Based on the results of the survey, early indications are: (1) that the primary function of Internet advertising is to furnish information, encourage customer interaction, and generate goodwill; (2) that companies are partial to internal personnel to create, monitor, and maintain Internet web sites; (3) that there is regular communication between marketing and Management Information Systems (MIS) departments concerning web site updates but less concerning web site "hits"; and (4) that the average monthly costs is less than $1,500.

INTRODUCTION

The worldwide communication network available through the Internet is changing marketing promotion strategy and tactics in revolutionary ways. In early l994, many people did not know what a "web site" was. However, by the first part of 1995, a handful of companies began creating web sites; and by the end of 1995, an estimated 25 million users were browsing the Internet (Samli, Wills, and Herbig, 1997). By 1996, more than 100,000 sites had been established (Romano, 1996).

LITERATURE REVIEW

The emergence of electronic communication and the Internet has changed the communication, information, and transaction processes of traditional marketing; and marketers are realizing that the rules have changed with this new technology. Customers increasingly have quick, convenient access to information on all types of products and services (Ducoffe, 1996). Using the Internet today, prospective customers are able to enter into direct communication with a company to make their needs and problems known, thus bringing sellers and buyers closer together in effective two-way communication.

Based on survey results by Nielsen Media Research and CommerceNet, an estimated 17% of the population of US and Canadian consumers have access to Internet, with two-thirds of the 17% having used the Internet within the first three months of 1996. According to some surveys, the number of Internet users has practically doubled every year for the past decade (Samli, et.al., 1997). Most of this growth can be attributed to the Worldwide Web, which makes surfing the Internet as easy as pointing and clicking a mouse.

While these numbers appear large, only 20 percent of the population is on-line. These users tend to be better educated, employed, male, wealthy, who regard themselves as smart, fairly social, and individualistic. However, many have only been users for less than one year (Romano, 1996).

In response to this burgeoning market, businesses have hooked onto the Internet in large numbers. Open Market, Inc. estimated 170,000 businesses had links in 1994 and 210,000 had links by the end of 1995. During the first two weeks of August, 1995, 1,000 new domains were registered for use on the Web (Ducoffe, 1996). These users are not only surfing the Internet--they are purchasing products. Purchases on the Internet have been estimated at slightly under $100 million per year (Samli, et.al., 1997).

The increase in registered domains and Internet purchases has brought about a rush by companies to advertise on the Internet. Apparently, the belief is "that advertising on the web is the in thing to do." "Either get on the bandwagon or be prepared to be blown away" was the challenge issued by the founder of a web site that offers a database of commercial real estate lenders (Gibbs, 1996). Businesses are being advised by consultants and management/marketing professors to hook up to the Internet, create web sites, and make nonconfidential information available as soon as possible (Samli, et.al., 1997). However, businesses are beginning to realize that web sites may not be the marketing generators they were first thought to be (Romano, 1996).

A review of the literature concerning Internet advertising revealed no prior research attempts to quantify 1) the percentage of companies using Internet advertising, 2) who develops the website, 3) the cost incurred, 4) the personnel used to monitor the site, or 5) the communication level between the marketing department and the developers of the site. The questionnaire developed for this research project addresses these issues.

PROBLEM AND PURPOSE

This project seeks to determine whether advertising on the Internet is a cost effective marketing tool for generating revenue. Specific problems are (1) to determine the percentage of companies now advertising on the Internet; (2) to determine the content of Internet advertising; (3) to determine whether companies utilize internal versus external resources to create, monitor, and maintain their Internet advertising; and (4) to determine costs of Internet advertising and the impact on revenue.

This project addresses whether Internet advertising is a cost effective, revenue generating marketing tool. This project defines advertising as "any paid form of nonpersonal presentation and promotion of ideas, goods, or services by an identified sponsor" (Kotler, 1997).

RESEARCH DESIGN

First, business periodicals were consulted for general information concerning the Internet and business advertising. Second, an MIS professional was interviewed to determine common contents of web sites, the appropriate ranges for the costs of monitoring and maintaining web sites, and the ranges regarding length of time companies have utilized Internet advertising. A questionnaire was developed and then reviewed by a business executive for relevancy. Questionnaires were mailed to companies listed in the Houston Chronicle newspaper's "Chronicle 100" list published May 16, 1996. Companies on this list, which tend to be large corporations representing a wide range of industries, were evaluated on four key performance areas: total revenue, return on equity, revenue, and stock price growth (Houston Chronicle, 1996). Within the company, the questionnaire was directed to a marketing employee who would know of the expenses and effectiveness of Internet advertising. Since all companies may not have internal MIS personnel, MIS personnel were not included.

Of the 100 questionnaires mailed out, 68 were useable; however, despite the high return rate, the sample size is statistically insignificant to draw conclusions about the population. Descriptive statistics were used to analyze the survey data.

SURVEY FINDINGS

Analysis of the data resulted in a comparison between web sites created and maintained by internal MIS personnel and those designed and maintained by external companies. This factor apparently influenced what was advertised as well as the communication level between the marketing department and the MIS department.

On the question of who creates company web sites, 54% use internal, 35% use external, and 11% use both to create their web sites. Since this 11% represents only three companies, their responses are presented in the tables but not included in the comparisons. As to monitoring and maintaining the web sites, 75% use internal personnel as compared to 25% who used external companies.

On average, 41% (26) of the companies responding to the survey are currently advertising on the Internet. Of the 58% not advertising, 33% plan to begin within the next six months. Table 1 below shows the results for the question regarding the content of the web site. These results indicate that 92% of the companies utilizing internal MIS personnel have company information on their web site while 78% of the web sites created by external personnel contain company information.

Table 1
Content of the Company's Web Site
(based on how the web site is developed)

Developer of the Web Site	Company Information	Product Information	Financial Information	Price List	Catalog	Order Form	E-mail
Internal	100%	93%	57%	7%	7%	29%	71%
External	78%	78%	67%	0%	0%	0%	56%
Both	100%	33%	67%	0%	0%	0%	0%
Total	92%	81%	62%	4%	4%	15%	58%

Eighty-one percent report their web site contains product information. Ninety-three percent of the companies using internal MIS personnel to create their web sites contain product information, compared to 78% of those companies using external companies. However, on the question of financial information, 62% of the companies' Internet advertising contains financial information. In contrast to previous findings, 57% of the companies using internal MIS personnel included financial information compared to 67% of the companies who use external sources. This is the only question on which companies using external personnel has a higher percentage than companies using internal personnel.

Low percentages (4%) were reported both for including price lists and catalogs. Of the web sites created by internal MIS personnel, 7% include catalog information and 7% include price lists. None of the web sites created by an external company included either a price list or a catalog.

A higher percentage, 15%, reported including an order form in their Internet advertising; 29% of the companies using internal MIS personnel to create their web sites include an order form while none of the companies utilizing external companies include an order form.

The percentages again increased on the question of e-mail with 58% of the companies including e-mail information in their Internet advertising; 71% of the companies using internal MIS personnel versus 56% of those using external companies contain e-mail information.

Overall, the percentages for types of information are higher for companies utilizing internal MIS personnel to create their web site with the exception of financial information. A higher percentage of companies using external companies to create their web sites include financial information.

A major consideration in Internet advertising is the communication link between marketing departments and the individuals monitoring and maintaining the web sites. Table 2 presents the results of communication questions pertaining to web site updates and "hits." Eighty-five percent of the companies report that the individuals monitoring and maintaining the web sites regularly consult with the marketing department concerning web site updates. In comparing companies who use MIS personnel versus external sources, 89% of the companies who use internal MIS personnel to create their web sites report regular communication with the marketing department, compared to 67% of the companies who use external sources.

Table 2 General Information Related to the Company's Web Site (based on how the web site is developed)			
Developer of the Web Site	Marketing Department's Role in Development	Marketing Department's Knowledge of Visits to Site	Revenue has Increased
Internal	93%	69%	9%
External	78%	56%	0%
Both	67%	67%	0%
Total	85%	64%	5%

In reporting the number of "hits" the web site receives, 64% of the companies report that the individuals who monitor and maintain the web sites communicate with marketing concerning the number of "hits." Again, the percentage is higher for those utilizing internal sources, with 72% of those companies utilizing internal MIS sources compared to 33% of the companies using external sources. Thus, a higher percentage of companies using internal MIS personnel report regular consultation regarding the web site updates as well as communication regarding the number of "hits."

Figures 1-3 presents the average monthly costs to monitor and maintain companies' web sites when the site is developed internally, externally, and both. Of those companies responding with cost information, 64% spend less than $1,500 per month and only 18% spending more than $2,500.

[Insert Figure 1, 2, 3 about here - Not Available Contact Author for Copy]

Approximately two-thirds of the companies (69% of those utilizing internal personnel and 60% of those utilizing external personnel) report the average monthly costs to be less than $1,500. When the average is less than $1,500, 71% indicate regular consultation with the marketing department regarding web site updates; however, when the average monthly costs exceeds $1,500, all companies report regular consultation regarding updates.

In contrast, the number of web site "hits" are not as frequently communicated except the $2,000 - $2,500 range. Of the respondents who spend less than $1,500, 50% indicate regular consultation with marketing concerning the number of web site "hits." All companies (100%) who report costs in the $2,000 - $2,500 range report regular communication on both Internet updates and web site "hits." This appears to be the optimal point where companies benefit the most from regular communication between MIS personnel (both internal and external) and the marketing department.

On the question of Internet advertising increasing revenue, none of the responding companies indicated any increase in revenue attributable to their advertising on the Internet.

The question should be raised about how any advertising program can be traced to an increase in revenue. An increase in sales following the introduction of a new advertising campaign can be attributed to the advertising itself, but there are also other factors to consider such as the simultaneous action of a competitor, market changes, economic conditions, etc. In the strictest sense, Internet advertising has not been cost effective since there has not been any quantifiable increases in revenue. However, since Internet advertising is relatively new and companies have not had adequate time to fully realize its benefits in generating revenues, it is possible that this problem is premature and cannot be fully analyzed for several years.

SUMMARY AND CONCLUSION

In summary, it appears that sales is not the primary function of Internet advertising. While most of the companies place company information, product information, financial information, and e-mail on their web sites, only a small percentage use price lists, catalogs, and order forms. This is further confirmed by the fact that none of the companies attributed any increase in revenue to their Internet advertising. It appears that web sites are intended to provide information, encourage customer interaction through e-mail, and generate goodwill.

Internal personnel were more frequently used to create, monitor, and maintain web sites. In general, internal personnel did more communicating with the marketing department concerning updates and web site "hits." This could possibly be due to the proximity of internal personnel to the marketing department and the likelihood that external companies may charge extra for these services.

There does not appear to be any cost savings using internal MIS personnel versus an external company. However, a company may have more difficulty determining the costs factors when internal MIS personnel are used. A majority of the responding companies spend on average less than $1,500 per month on Internet advertising.

It should be noted that only 38% of the respondents currently advertising on the Internet have been doing so for longer than one year. Since this advertising medium is still in its infancy, it is possible that companies do not yet know if Internet advertising is working. Unless the primary purpose of the Internet advertising is sales, any increase would be difficult to quantify.

Based on the results of the survey, early indications of the trends for Internet advertising are:

1. The primary function of Internet advertising is to furnish information, encourage customer interaction through the use of e-mail, and generate goodwill.
2. Companies are partial to utilizing internal MIS personnel to create, monitor, and maintain Internet web sites.
3. Marketing and MIS personnel engage in regular communication concerning web site updates; however, there is less communication concerning web site "hits."
4. The average monthly cost for maintaining an Internet advertisement or web site is less than $1,500.
5. Internet advertising will continue despite the lack of any quantifiable increase in revenue.

REFERENCES

Ducoffe, R. H. (1996, September/October). Advertising value and advertising on the web. *Journal of Advertising Research*, 36, 21-35.

Gibbs, M. (1996, August). Riding the Internet wave: climb on board or get out of the way. *National Real Estate Investor*, 80-81.

Kotler, P. (1997). *Marketing Management* (9th ed.). New Jersey: Prentice Hall.

Romano, C. (1996, September). Web sites: If you build it, will they come? *Management Review*, 49-51.

Samli, A. C., Wills, J. R., Jr., Herbig, P. (1997). The information superhighway goes international: Implications for industrial sales transactions. *Industrial Marketing Management* ,26, 51-58.

The Chronicle 100. (1996, May 16). *The Houston Chronicle*. (Internet)http://www.chronn.com/content/chronicle/business/96/05/19chron/tables/chron100.htm

AN ASSESSMENT OF THE CROSS-NATIONAL RELIABILITY OF THE CAD SCALE

Ugur Yavas, East Tennessee State University
RAXYAVAS@ETSU-TN.EDU
Glen Rieeken, East Tennessee State University
GRIECKEN@ETSU-TN.EDU
Emin Babakus, University of Memphis

ABSTRACT

The pervasive question, "To what extent can consumer behavior theories widely accepted in the United States be applied in different cultures? underscores the need for cross-national research to establish the universality of marketing concepts and facilitate the design of multinational marketing strategies. Sound measures of consumer behavior are necessary for any cross-national research effort. As observed by several scholars, measures lacking universal reliability and/or validity can seriously hinder credibility, generalizability and comparability of cross-national research findings. If significant reliability or validity problems exist, then substantive conclusions cannot be drawn because the replicability and meaning of the results will be questionable.

This study presents evidence concerning selected psychometric properties of the CAD scale on the basis of a survey conducted in Turkey. The CAD scale was selected as the focus of investigation for several reasons. First, it is a wideranging measure commonly used in marketing and consumer behavior. Second, it consists of a parsimonious number of items making it easy to administer. Third, the psychometric properties of the scale has been extensively studied in the United States.

The paper is organized into three sections. The first section describes the measurement properties of the CAD scale and briefly reviews the psychometric evidence bearing on its reliability and validity on the basis of prior U.S. studies. This is followed by a presentation of the research process, database and results of an empirical study conducted in Turkey. The paper concludes with a discussion concerning the cross-national viability of the measure.

The results of the study are encouraging and suggest that the CAD instrument demonstrates acceptable psychometric properties when tested in a different culture.

Results of the study will be of interest to researchers and practitioners who are interested in multinational business practices by providing one piece of evidence that helps address the question raised in the opening paragraph.

THE FIRST STEP IN GAINING MARKET SHARE: IMPROVE YOUR CUSTOMER SERVICE

Joan C. Hubbard, State University of West Georgia
jhubbard@westga.edu
Charles W. Hubbard, Clayton College and State University
hubbard@cc.csc.peachnet.edu
Daniel E. Hallock, Clayton College and State University
hallock@cc.csc.peachnet.edu
Karen A. Forcht, James Madison University
forchtka@jmu.edu

ABSTRACT

Customers are the foundation for any business. To maintain current customers and to gain new ones, a business must strive to provide the best possible customer service. This paper focuses on the ways that businesses can customize a quality customer service to enhance their position in today's competitive global marketplace.

INTRODUCTION

Customers are the foundation for any business. Therefore, to maintain current customers and to gain new ones, a business must strive to provide the best customer service possible. A successfully competitive company realizes the need for superior customer service. According to Smith and Lockamy (1996), "Rapid changes in prospective competitors, product and process technologies, current competitors' capabilities, and market expectations suggest that firms must continually improve to enhance their competitiveness" (p. 69).

PURPOSE OF THE STUDY

The purpose of the study was to demonstrate that customer service can be the key to success. Constantly focusing on the customer is necessary to stay ahead of the competition. The need to strive for superior customer relations must be the focal point for running a profitable business.

SCOPE

Although customer service impacts every aspect within a company, this study will focus on the following areas:

- Customer/Employee Interactions
- Customer Education
- Complaint Handling
- Quality Improvement Programs

METHODS AND PROCEDURES USED

Secondary research was conducted by a thorough search of current periodicals and online services. Primary data were gathered by surveying consumers in the North Georgia area and by interviewing the training director or the customer service representative in three Georgia manufacturing companies.

CUSTOMER/EMPLOYEE INTERACTION

Customer and employee interaction plays a large role in developing quality customer satisfaction. A relationship has to exist in order for both parties to accomplish what they have set out to do. All businesses should look at their customers as being in a partnership with them. Many businesses have begun to look at the human dimension of interactions, business strategies, the communication process, methods of receiving feedback, and empowering employees.

HUMAN DIMENSION OF INTERACTIONS

According to Whigham-Desur (1996), it is not just the price of the product that counts, it is how customers are valued and treated. Focusing on the human dimension of interacting is to show customers that they are respected and appreciated as individuals. For example, when employees are speaking to customers over the telephone, their professionalism and eagerness to serve are conveyed by their words, the tone of their voice, and the volume and pace of their speech. Employees should sound professional (by the choice of their words), be enthusiastic (have a pleasant and cheery voice), and speak at a pace that the customer can understand ("Quality Service Skills," 1990). If the contact employee acts hurried, the customer's anxiety level will rise, and this will result in unsatisfactory communication.

Employees who are enthusiastic and have a positive attitude tend to have a positive effect on the customer (Graham, 1996). Friendliness, enthusiasm, and attentiveness of contact employees positively affects the customers' perception of the organization and the service that it provides. Simple things such as unexpected thank-you messages can show a company's sincerity. All customers want to feel that they are doing business with a company that appreciates them.

The Training Director of Financial Services at a major carpet industry stated that is important for companies to keep their commitments to their customers. If a service representative tells a customer he or she will do something, the commitment should be kept. Trust is a vital part of any relationship (Personal Interview, 2/11/97).

BUSINESS STRATEGIES

To increase profits, businesses should use strategies to stay ahead of the aggressive competitor. Strategies may include making courtesy calls, thanking customers, and listening to customers' needs and wants. Saying "thank you" sends the message that the customer is noticed (Graham, 1996).

The physical appearance of a business is also a strategy for being competitive. A very neat and presentable showroom gives a professional impression of the company to the customer. A company should strive to differentiate itself from the competition. This can be done by the design of the company's signs, the company logo, and the colors that the company uses (O'Leary, 1996).

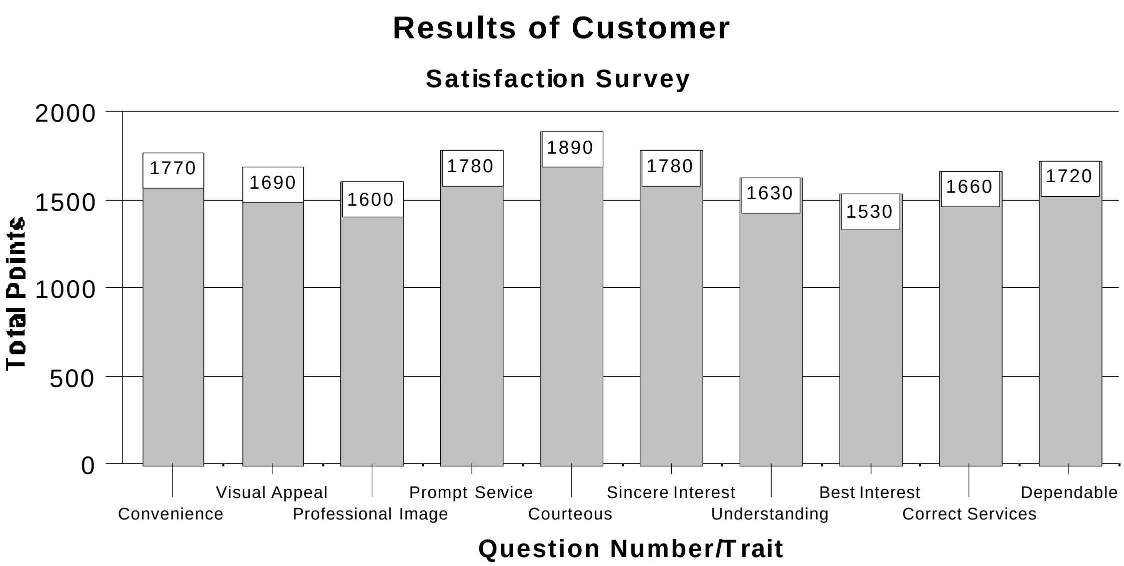
THE COMMUNICATION PROCESS

Many employees fail to realize that the impression they make within the first fifteen seconds is the one most likely to remain with the customer. If the telephone is not answered in a timely manner, or if calls are not returned promptly, this will create a negative impression. The telephone should be answered before the third ring . Correspondence and complaints should be responded to quickly to gain the customer's confidence. Most people tend to respond to calls and requests according to their own personal priorities instead of the customer's (O'Leary, 1996).

Many times the only communication a customer receives after a sale is the bill. Companies should communicate regularly with customers to let them know that they are not taken for granted. Graham (1996) stresses that personalizing all communications, instead of just saying "dear customer," is an excellent way of showing customers that they are special and that the company knows who they are. The HR Director at a major wholesale and retail furniture manufacturer in the North Georgia area indicates that their customers have responded positively to the personal attention they receive after an order has been placed. As a result of these communication efforts, they have developed an impressive base of loyal, repeat customers (Personal Interview, 3/21/97).

Companies must listen actively to customers to hear what they are really saying. Letting customers talk about what is important to them at the moment of contact is important. What they have to say may have nothing to do with what you sell; but by listening, the employee creates goodwill. By asking customers what they think, companies learn things that will enable them to custom-tailor products to better serve the customer (Lowder, 1996). Knowing the customers' business strategies and providing innovative solutions to their problems will give the company an advantage over the competition. When companies use their continuing relationships with customers effectively, customers start understanding the company's perspective, and the limits to which the company can go to provide excellent service.

METHODS OF RECEIVING FEEDBACK



Businesses have many options to choose from when researching or obtaining customer information. Such methods can include normative surveys, observational research, and experimental research. This research may be obtained through questionnaire surveys, personal interviews, telephone interviews, and participant observation. Currently, surveys are the most popular tool used by today's businesses.

Data were gathered by surveying a convenience sample of 138 consumers in the North Georgia area. Respondents were asked to rank 10 traits of a shopping experience in respect to how each affected them in choosing a specific place to purchase goods or services. The options were: (1 point) strongly disagree, (2 points) disagree, (3 points) slightly disagree, (4 points) slightly agree, (5 points) agree, and (6 points) strongly agree. The results were ranked first by trait, and then by option. The total points for each option were calculated.

As shown in Figure 1, consumers were most concerned with the following four traits (listed in order of the trait consumers most strongly agreed with):

- Representative being courteous (Trait 5)
- Business having convenient service features (Trait 1)
- Representative showing a sincere interest in solving their problems (Trait 6)
- Representative giving them prompt service (Trait 4)

EMPOWERING EMPLOYEES

Customers are in the hands of employees within the business environment. As a result, employees must do everything possible to keep customers returning. Employees need to be able to make on-the-spot decisions instead of looking around for someone else to handle a customer's problem (Graham, 1996).

Customers are most satisfied with the service encounter when employees possess the ability, willingness, and competence to solve their problems. Companies must give their employees a picture of how customers perceive their company and where their performance does not meet customer needs or expectations. To do this, a company should interview its customers and identify key components of the encounters that influence the customers' buying decision. Then the company should survey a broad base of their customers on how satisfied they are with the company's performance in comparison with the performance of competitors (Klassen, 1993).

By having a clear picture of how an organization is currently satisfying customers, and where improvement is needed, employees will begin to break the quality barriers and customers will notice. Customers have changed drastically in the past 20 years. They have become more sophisticated in their decision making and, as a result, have higher expectations. Customers are demanding that their expectations be met and are looking for companies that are interested in providing them with what they want and need. It is important for a company to empower its contact employees with authority and decision-making skills so they can solve customer problems.

The power of success lies in the hands of the employees. This power can make or break a business. Therefore, it is important for companies to educate both their internal and external customers.

CUSTOMER EDUCATION

To achieve quality customer service, businesses must educate both their internal and external customers. The internal customers are the company's employees who, in turn, actually serve the external customer, who buys the company's services or products (Cooper, 1995). A company must first serve its internal customers in order to better serve its external customers. Thus, a company must educate its management on how to serve and educate its employees. AT&T makes a goal of this new concept by maintaining that customers are no happier with their product than AT&T employees are with their jobs (Wiesner, 1995). In meeting employee's needs, Cotts and Friday (1994) emphasize in their book, Quality Facility Management: A Marketing and Customer Service Approach, that management must focus on two basic concepts. First of all, the internal customer runs the facility service process, which promotes an efficient, productive work environment, and which defines quality. Secondly, facility management must promote the idea that the customer is the real judge of quality for the service process and outcome. Businesses must educate their management, employees, and external customers about customer education to provide quality service.

EDUCATING MANAGEMENT

Employees are a valuable information source on customer service. By questioning employees, management can discover problems in customer service, find solutions to those problems, and improve overall customer service relations.

Since employees stay in contact with customers, management can work with employees through a number of ways to gather vital information. A customer satisfaction survey can be administered to employees to rate the quality of the company's customer service. For instance, International Facility Management Association (IFMA) conducted a survey about employee satisfaction with the facility staff, company building, office environment, building equipment, building services, procedures, and overall satisfaction rating. Each subject lists more specific areas for the employee to rank according to satisfaction and importance. This survey data provides management with useful information on customer service (Cooper, 1995).

Besides surveys, companies can receive employee feedback in several other ways. "Brown bag" lunch seminars are a more informal way to survey employees on a variety of customer-service related subjects. Through personal contact, lunch seminars allow management to interact more closely with employees on improving customer service. A company newsletter is yet another way to circulate information through a specific column or series of articles on facility-related issues. Manager meetings are also important in sharing ideas on how to better serve and educate employees (Cooper, 1995).

EDUCATING THE INTERNAL CUSTOMERS

Self-administered computer programs are excellent ways to educate employees about customer service. For example, Tandem Computers, Inc. employs a comprehensive electronic sales and training system for its 1,700 national and international field representatives. Tandem is currently using the "just-in-time" training model, which quickly provides the necessary information. This "just-in time" training educates employees on how to think about a sale, and choose the necessary facts to use. Additionally, employees learn to use such tools as a presentation creation module, a resource library, sales tips, positioning information, and demo scripts. This program, which was designed by San Mateo, California-based Medior Incorporated, is available on CD-ROM and instigates a demand-driven learning approach.

"Just-in-time" training has provided several benefits for Tandem. According to Scott Davison, general manager of Medior's enterprise business group, the program enables salespeople to quickly obtain information, giving them more confidence and competence. Mastering, duplicating, and mailing costs of the CD-ROM program, which contains more than 1,000 documents and presentations, equals former costs of printing and mailing one data sheet. Also, this program cuts warehouse, printing, and distributing costs by two- thirds. Tandem is currently working on a CD-ROM sales workshop that will provide a guide on how to make effective proposals and independent study programs on market factors, and tips on selling Tandem products when competing with other vendors. The tutorials provide text, data, and charts that salespeople can use in actual customer presentations (Lindstrom, 1995).

EDUCATING EXTERNAL CUSTOMERS

Companies must educate their external customers in order to satisfy their needs. The best customers are those who are educated about a company's services and products, according to Brown (1996). Information is a decision-making tool. Employee interaction with customers is vital (Johnson, 1996). A representative of the Customer Service division of an aluminum extrusion manufacturing company in Central Georgia indicates that their on-site customer visitation program has been an overwhelming success, both with their customers and with their employees. Customers have the opportunity to meet personally the people who make the product and to ask any questions about the manufacturing process. According to the CS representative, the morale of the people on the line has seen a significant rise as a result of this program, and the customers have become more tolerant about the little “glitches” that may cause a slight delay in shipping the product (Personal Interview, 5/13/97). Distributing product samples or a company handbook that provides details about a product is an excellent way to inform the public (Barrier, 1995). Internet web sites, computer databases, toll-free service hotlines, and media advertising are other ways companies can educate their customers.

In order to help people choose a product or service, many businesses provide a helpful, user-friendly, educational pamphlet which contains clear, objective information. By using quotes from leading authorities on the company's products or services, the product is given more credibility. An efficient consumer education guide can cost anywhere from ten cents to ten dollars. However, the pamphlet can be made a cost-effective sales tool by including a mail reply card geared toward specific marketing data for the company. In terms of providing new sales leads in new markets, creating new customer databases, adding information to customer profiles, and educating clients, the benefits of this guide are numerous (Johnson, 1996).

Through customer education, businesses and their employees will be more capable of understanding a customer's needs in handling complaints.

COMPLAINT HANDLING

The competitive marketplace has proven that the critical ingredient to a company's long- term success is the constant improvement of customer relations (“The TARP Formula . . . ,” 1996). Through effective complaint handling, customer satisfaction and loyalty can be improved.

As one of the most important aspects of customer service, effective complaint handling has become the key to survival in today's competitive workplace. Businesses cannot afford to lose customers because complaints are handled poorly "Effective Customer Relations . . .," 1995). In fact, customer frustration, loss of customers, and declining profits are often the result of mismanaged complaints. Research shows that "complainers" are more likely to continue to do business with a company than those who do not complain. Only a small percent of claims are from unethical individuals. The great bulk of claims are from people who believe they have a legitimate complaint. The way in which the employee handles the claim determines the goodwill of the company (Lehman, Himstreet, & Baty, 1996).

COMPLAINTS AS GUIDELINES

One of the foremost contributions to customer frustration is a lack of comfortable, yet reliable, means of having their opinions and complaints heard and handled accordingly ("Effective Customer Relations . . . ," 1995). At any time, complaints should be welcomed as guidelines which will show the business what the customer expects, be it in product quality or service.

All businesses should have a policy that states exactly how complaints are to be handled and a formal procedure that documents the details of the complaint.

HANDLING THE COMPLAINT

As the customer explains the complaint, the representative should listen carefully. How the representative listens to the complaint will set the tone for the rest of the conversation (Ensman, 1996). Employees need to separate the message of the complaint from the emotion of being blamed. It is important for the representative to know these simple facts:

- About fifty percent of the time, customers who have a problem with a product or service are not likely to tell the company about it ("Customer Satisfaction Research," 1996).
- Nine out of ten of these "silent critics" will probably take their future business to a competitor ("Why Good . . . ," 1996).
- Dissatisfied customers typically tell between seven to nine other people when they had an unsatisfactory experience with a company (TARP Formula, 1996).
- Word-of-mouth advice is one of the most important factors influencing a customer's decision to buy from a company ("Effective Customer Relations . . . ," 1995).

A complaint is really a statement about an unmet expectation. After listening to the complaint, the problem should then be investigated thoroughly by checking the company's in-house records. Next, an inspection of the product should be done. If additional information is needed, a follow-up call should be made to the customer.

RESOLVING THE COMPLAINT

The representative should walk through the problem with the customer and explain the claims process and how he or she will resolve the problem (Ensman, 1996). When appropriate, a choice of two or three resolution options could be offered. If the customer is unsatisfied, another representative should be asked to look into the complaint. In any case, a solution to the problem must be formed quickly to ensure maximum customer satisfaction (Barlow, 1996). The appropriate action to correct the complaint should then be taken.

FOLLOWING-UP THE COMPLAINT

The company policy for handling complaints must contain regulations for customer follow-up. This will ensure that problems are taken care of and that the customer is satisfied with the results. Follow-up will allow customer service personnel to exercise control, while assuring the customer that the company cares about the problem. During the follow-up call, if the customer is still not satisfied, the proper chain of command should be followed to notify upper management ("Mazda Customer Relations," 1996). The customer should feel that his or her complaint was handled well and that adequate steps are being taken to ensure that the problem will not occur again.

POLICY AND PROCEDURE REVIEW

Management must look over the policies and procedures to ensure that complaints are being handled correctly ("Effective Customer Relations . . . ," 1995). Complaints should be used as "a free source of information to improve quality," not only by evaluating the quality of the service or product, but also by allowing the company to review and improve customer relations policies and procedures (Barlow, 1996). Effective complaint handling will be viewed by the customer as an added incentive for future business.

QUALITY IMPROVEMENT PROGRAMS

To be successful in today's competitive environment, companies must continuously strive to improve their products and the service they provide. Organizations must keep existing customers satisfied and be able to convince potential customers that they should choose to do business with them. A number of organizations have turned to benchmarking, process reengineering, total quality improvement programs, and customized processes to exceed customer expectations and requirements.

BENCHMARKING

Benchmarking is the systematic comparison of the performance of an organization against those of other organizations. Breakthrough gains in productivity, quality customer satisfaction, and many other elements of performance are identified and adapted for improvement. Sometimes competitors will cooperate with each other for a specific purpose, such as increasing the industry's economic possibilities (Thor, 1996).

In today's business environment, leveraging an organization's knowledge of the industry can lead to a multitude of benefits, including faster innovation of new products, reduced duplication of efforts, savings in research and development, and increased employee satisfaction (Hiebeler, 1996). Benchmarking can sharply improve an organization's goal setting because the goals are based on achievable levels of performance (Thor, 1996). Processes are frequently and constructively challenged.

If a company is going to benchmark the practices and processes that others use, it needs to understand its own practices first. Otherwise, the benchmark process will result in a waste of time from everyone's perspective (Scott, 1996). For this reason, benchmarking alone is not recommended for companies that want to target continuous improvement and outmaneuver the competition.

PROCESS REENGINEERING

Reengineering is the radical redesign of business processes for dramatic improvement (Mullin, 1996). In the early 1990's many companies chose reengineering to reduce costs and ease their financial pain. Now, many companies are reengineering to keep ahead of the competition. A primary goal of reengineering is to satisfy customers and focus on achieving massive improvement by radically redesigning the way a process operates (Chang, 1994). Redesigning business processes gives employees more power and job satisfaction while keeping the company ahead of the competition (Chase, 1996).

To achieve radical change in a short time, senior executives must be committed to the reengineering effort, from the start to the finish. This often involves structural change, job redesign, and sometimes job elimination or downsizing (Chang, 1994). When a reengineering effort results in having to let people go, it should be done "with class" and done all at once to minimize the effect on employee morale (Carlini, 1996).

Reengineering involves employees working in process-improvement teams. These teams tend to work full time but for shorter periods of time than in a total quality improvement process. Most experts say that reengineering is not meant to replace continuous quality improvement. Both approaches are essential to improve overall business performance (Chang, 1994). Also, reengineering can be one of the most costly methods a company can use to improve performance. This is why management must be totally confident that reengineering is the answer for their company.

TOTAL QUALITY MANAGEMENT

Many companies have adopted quality improvement programs. Some popular programs are Total Quality Management (TQM), Just-In-Time (JIT), and the Kaizen approach. Quality improvement programs are meant to be continuous and must become a permanent part of the business to be effective. One of the principles of total quality management is the focus on customer satisfaction. According to Woods (1996), "the purpose of all companies is to provide customers with products and services that fulfill their needs and wants, and keep them coming back for more" (p.68).

The total quality management movement draws on decision-making power being distributed to the people closest to the problem. Each employee, from the president to the custodian, is expected to solve problems, participate in team-building efforts, and expand the scope of his or her role in the organization (Crosby, 1985).

SUMMARY

The ability to provide superior customer service is necessary in today's competitive marketplace. A company must be aware that the customers' perception of the company is extremely important. To portray a positive image, a company should focus on: (1) improving customer/employee interactions, (2) educating customers on the company's products and services, (3) educating employees on effective complaint handling, and (4) implementing quality improvement programs. By addressing these areas, companies can design plans that are appropriate for their particular company.

CONCLUSIONS

Based on the findings of this research, the following conclusions were drawn:

5. Customer/employee interaction plays a major role in developing quality customer satisfaction. The customer satisfaction survey we conducted reinforced this. Three of the areas that consumers were most concerned with (the representative being courteous, showing a sincere interest in solving problems, and giving prompt service) involve customer/employee interaction.
2. Effective complaint handling involves changing the philosophy of viewing complaints as negative feedback to accepting them as opportunities to improve customer relationships.
3. To be successful, companies must continuously strive to improve their products and the service they provide. Adopting a customized quality improvement program will enable a company to focus on continuous improvement.

REFERENCES

Barlow, J. (1996). Welcome complaints. *Executive Excellence, 13* (11), 20.

Barrier, M. (1995). Customers need training too. *Nation's Business 83* (10), 74 - 75.

Brown, A. (1996). Client education. *Black Enterprise*, 27 (5), 27 - 30.

Carlini, J. (1996). Some common sense about reengineering. *Network World, 13* (12), 49.

Chang, R.Y. (1994). Improve processes, reengineer them, or both? *Training & Development, 48*(3), 54 - 58.

Chase, N. (1996). The new face of reengineering: Process redesign grows up. *Quality, 35* (11), 43.

Cooper, R. B. (1995). Giving real meaning to customer service. *Managing Office Technology, 40* (5), 44 - 46.

Cotts, D.G., and Friday, S. (1994). *Quality facility management: A marketing and customer service approach.* New York: John Wiley & Sons, Inc.

Crosby, P. (1985). *Quality improvement through defect prevention - the individual's role.* Winter Park, Florida: Philip Crosby Associates, Inc.

Customer satisfaction research. (1996). *Intelliquest.* [Online] http://www.intelliquest.com/qa2.htm.

Effective customer relations and complaint handling. (October, 1995). Better Business Bureau, Inc.

Ensman, Jr. R. G. (1996). Angry Customers: A step-by-step guide to turning things around. *American Mover, 54* (12), 23 - 31.
Graham, J. R. (1996). Ways to build customer loyalty. *American Salesman, 41*(10), 18 - 23.
Hiebeler, R. J. (1996). Benchmarking: Knowledge management. *Strategy & Leadership, 24*(2), 22 - 29.
Johnson, M. (1996). Consumer education: The right choice for direct response? *Direct Marketing, 59*(4), 32-34.
Klassen, C. (1993). Improving quality means improving communication. *Canadian Business Review, 20*(2), 15 - 18.
Lehman, C.M., Himstreet, W.C., & Baty, W. M. (1996). <u>Business communications</u> (pp. 336). Cincinnati, Ohio: South-Western Publishing Company.
Lindstrom, R. L. (1995). Training hits the road. *Sales & Marketing Management* (6), 10 - 14.
Lowder, C. (1996). Customer communications: Building lasting customer loyalty. *Executive Speeches, 11*(2), 23 -25.
Macht, J. (1996). Together at last. *Inc., 18*(4), 74.
Management tools measure up. (1996). *Management Services, 40*(10), 4.
Masters, R. J. (1996). Overcoming the barriers to TQM's success. *Quality Progress, 29*(5), 53 - 55.
Mazda customer relations. (1995). Sunridge Mazda. Scarborough, Ontario. [Online] http://earth3.galib.uga.edu:4000/Q...mplaints%22:next=html/Article.html.
Mullin, R. (1996). Michael Hammer sees the processes of the future. *Journal of Business Strategy, 17*(6), 11 - 13.
O'Leary, J. P. (1996). The CEO and customer satisfaction. <u>Management Review,</u> <u>85</u> (9), 62.
Quality service skills. (1990). Learning International, Inc. Stanford, CT: Learning International.
Scott, P. (1996). Benchmarking. *Management Accounting, 74*(7), 50 - 52.
Smith, W. I. & Lockamy III, A. (1996). Take action: A process of continuous improvement. *Production, 37*(3), 69 - 74.
The TARP formula for maximizing profits. (1995). Technical Assistance Research Programs, Inc. [Online] http://www.tarp.com/satform.html.
Thor, C. G. (1996). Let's clear up some confusion about benchmarking. *Journal for Quality & Participation, 19*(4), 88 - 90.
Wiesner, P. (1995). The power of the employee. *Colorado Business Magazine, 22*(1), 8.
Whigham-Desur, M. (1996). Putting the service in customer relations. *Black Enterprise, 27*(5), 125 - 128.
Why good customer service means success. (1996). Service Webpage by Robert Carper. [Online] http://www.indy.net/%7Erobo/mythou~1.htm.
Woods, J. A. (1996). How do I keep customers coming back for more? *Journal for Quality & Participation, 19*(7), 68 - 73.

REDUCING THE UNCERTAINTY IN NEW PRODUCT DEVELOPMENT: A FUZZY SET APPROACH

Andre de Korvin, University of Houston-Downtown
ADeKorvin@UH.EDU
Robert M. Kleyle, Indiana University-Purdue University at Indianapolis
rkleyle@math.iupui.edu
Philip Siegel, Monmouth University
psiegel@mondec.monmouth.edu
Dawn R. Deeter-Schmelz, Monmouth University

ABSTRACT

Predevelopment activities, including feasibility studies, are needed to help reduce the uncertainty associated with determining the critical attributes of new product success. This paper presents a method for accessing the potential marketability of a new product at an early stage of development. Using the newly developed technique of computing fuzzy conditional expected sales revenue, we create a decision mechanism by which we can decide whether to continue or terminate development. Two simplified numerical examples illustrate the procedure.

INTRODUCTION

> For U.S. companies that spent the 1980s improving efficiency and boosting quality, and that now face vicious competitive battles in slow-growth markets, raising the success rate of new products increasingly looks like one of the final frontiers.
>
> —*Business Week* 1993, p. 77.

New product development is a key to success for many companies (Thomas, 1994). "New products can help keep a company on the leading edge, or can help bring it back from the edge of a marketing disaster" (Paley, 1996, p. 40). Indeed, a strong relationship exists between new product success and a company's health. Not surprisingly, companies spend a great deal of time and money on new product development. Yet, the process of developing new products is plagued with uncertainty and a high rate of failure (Angeli, 1995). Competition from abroad and demanding consumers add to the complexity of bringing a product to market (Towner, 1994). Researchers and practitioners would benefit from a method of reducing the uncertainty associated with new product development. The purpose of this paper is to present a methodology for determining the economic feasibility of the proposed new product development at an early stage of development.

DRIVERS OF NEW PRODUCT SUCCESS

The process of new product development is inherently ambiguous. This ambiguity stems, in large part, from the uncertainty associated with determining the critical attributes of new product success. Decisions about pursuing a project often are made with incomplete information on such important attributes as price and quality. Omer, Shipley, and de Korvin (1995) have observed that considerable uncertainties exist about how customers perceive planned product quality and price. In general, managers face ambiguity as they attempt to subjectively determine the relative importance of each critical attribute and the appropriate strategy for each attribute (Omer, Shipley, and de Korvin, 1995).

Given this ambiguity inherent in new product development, as well as the research and development costs involved, practitioners are encouraged to continuously manage the risk associated with the product development process (Towner, 1994). One way to manage this risk is to focus on the drivers of new product success. Several key drivers of new product success have been identified, including product quality, product definition, quality of execution, and time to market (Cooper and Kleinschmidt, 1993; Töpfer, 1995). Companies can increase their likelihood of success by thoroughly conducting predevelopment activities, such as initial screenings, preliminary market assessments and technical appraisals, intensive market and implementation studies, and business and financial analyses (Cooper and Kleinschmidt, 1993; Töpfer, 1995). Cooper and Kleinschmidt (1993) found that new product projects characterized by solid predevelopment activities were 75% successful, while projects lacking these activities experienced a 70% failure rate. Moreover, predevelopment activities have been positively linked to new product profitability and cycle-time reduction (Cooper, 1995).

Feasibility studies also play an important role in these predevelopment activities. Managers should be concerned with feasibility early in the process to determine if a company should proceed with the development and marketing a product, or if the research and development associated with the product should be abandoned.

Finite fuzzy sets offer a method for making just such a determination. The following section will explore finite fuzzy sets and their application to new product development in detail. For the reader unfamiliar with fuzzy set theory, we present the notation for finite fuzzy sets and define set operations in terms of finite fuzzy sets since this is the only type of fuzzy set considered in this paper.

FINITE FUZZY SETS

Consider an ordinary (i.e., crisp) finite set represented by $X = \{x_1, x_2, ..., x_n\}$. Finite fuzzy set A is defined by the notation.

$$A = \sum_{i=l}^{n} \alpha_i \, / \, X_i \, , \tag{1}$$

where α_i denotes the *membership* of element X_i in fuzzy set A, $o \leq \alpha_i \leq 1$. If $\alpha_i = 0$, then element X_i is definitely not in A. If $\alpha_i = 1$, then element X_i definitely is in A. If $0 < \alpha_i < 1$, then α_i represents the degree to which we believe that element X_i is in fuzzy set A. The subset of X_i's for which $\alpha_i > 0$ is called the *support* of fuzzy set A. Note the unconventional use of the Σ operator in eq. (1). Throughout this paper (with the exception of equation 4) the Σ operator will be used in to define finite fuzzy sets rather than to denote summation as is usually the case.

Let B denote another fuzzy set defined on X. That is

$$B = \sum_{i=l}^{n} \beta_i \, / \, X_i \, .$$

The operations of union, intersection and negation are defined as follows.

$$A \vee B = \sum_{i=l}^{n} Max \, \{ \, \alpha_i \, , \, \beta_i \, \} \, / \, X_i \, ,$$

$$A \wedge B = \sum_{i=l}^{n} Min \, \{ \, \alpha_i \, , \, \beta_i \, \} \, / \, X_i \, ,$$

$$\neg A = \sum_{i=l}^{n} \left(1 - \alpha_i\right) / X_i \ .$$

Fuzzy conditional expectation will be defined later in the context of our product development problem. For a thorough treatment of the theory of fuzzy sets, refer to Klir and Folger (1988).

PRODUCT DEVELOPMENT IN A STABLE ECONOMY

Consider a set of competing companies all of which produce a product which occupies a certain niche in the market. Our company is trying to decide if we should manufacture a similar product to compete for this market. In particular we want to look at expected dollar sales given certain prevailing conditions. Since our proposed new product bears some resemblance to the products of our competitors, we can express our product as a finite fuzzy subset of competing products. Suppose there are m competitors. Then,

$$Prod_{New} = \sum_{i=l}^{m} \alpha_i \ / \ Product_i \ .$$

The memberships (i.e. the α_i's) represent subjective judgment on the manufacturer's part as to the extent to which the new products resemble the m competing products.

Let $F_1, F_2, \ldots, F_n$ be certain product features which are relevant to how well the product sells. For example F_1 may represent appearance, F_2 could represent quality, and F_3 could represent public acceptance. A preliminary rating of the features of our proposed new product may not yield an exact value but rather a possible set of values with different degrees of belief. This is particularly true since at this stage our new product is only partially developed. Thus the reliability of a product may be excellent with degree of belief .8 and very good with belief .3. We denote this assessment by the fuzzy set .8 / excellent + .3 / very good. More generally features will be written as

$$F_k = \sum_t \beta_{kt} \ / \ X_{kt} \qquad k = 1,2,\ldots n,$$

where X_{kt} represents the t^{th} possible value of feature k, and membership β_{kt} represent the belief that feature F_k will achieve value X_{kt}. The development team responsible for the new product use their combined judgments to assign the beliefs (i.e., the betas) which hereafter will be regarded as fixed.

Now suppose we have information that allows us to estimate the expected sales of competitors products for each possible combination of feature values and for each competing product. That is, given the history of the product i, we can estimate

$$E[S_i | X_{lt_i} \ , \ X_{2t_2} \ ,\ldots, \ X_{nt_a} \ ] \tag{2}$$

for $i = 1,2,\ldots,m$, where $X_{lt_1}, X_{2t_2}, \ldots, X_{nt}$ represent one possible combination of values for the n features under consideration. Perceived features take on different values at different times. For example, initially a product may be perceived to have an excellent appearance and good reliability, but later as the product is modified, the same product may be perceived as having only a moderately good appearance but excellent reliability.

The expected sales for the proposed new product can be represented by the following expectation conditional on the fixed fuzzy sets $F_1, F_2, \ldots, F_n$. That is,

$$E[S_{New}|F_1\ ,\ F_2\ ,...,\ F_n\ ]\ =\ E[\sum_{i=1}^{n}\ \alpha_i\ /\ S_i|F_1\ ,\ F_2\ ,...,\ F_n] =$$

$$\sum_{i}\ \sum_{t_1}\ \sum_{t_2}\ \cdots \sum_{t_a}\ (\alpha_i\ \wedge\ \beta_{1t_1}\ \wedge\ \beta_{2t_2}\ \wedge ... \wedge \beta_{nt_a}\ )\ /\ E[S_i|X_{1t_1}\ ,X_{2t_2}\ ,...,X_{nt_a}\ ] \qquad \textbf{(3)}$$

The expectation given by (3) is, of course, a fuzzy conditional expectation. The above formulation of fuzzy conditional expectation is restricted to finite fuzzy sets. In practical situations there may be some ties. That is, two or more conditional expectations of the type given by eq. (2) have the same value. When this happens, it is conventional to give the tied value(s) only once in the support of the fuzzy conditional expectation and associate with it the highest of the memberships associated with the tied values. This will become obvious in the context of the example which follows. A more general formulation of the concept of fuzzy conditional expectation that applies to all types of fuzzy sets has been given by de Korvin and Kleyle (1996).

So far we have used fuzzy sets to model uncertainty. However in order to make a final decision as to whether or not to introduce the new product, we need to defuzzify the expectation given in (3). One approach to defuzzification is the center of area (*COA*) method. Suppose, for example that the above conditional fuzzy expectation can be represented by

$$E[S_{New}\ |\ F_1,\ F_2,...,\ F_n]\ =\ \sum_{i}\ \delta_j\ /\ v_j$$

Then

$$COA([S_{New}\ |\ F_1,\ F_2,...,\ F_n]\ )\ =\ \frac{\sum_{j}\ \delta_j\ v_j}{\sum_{i}\ \delta_j} \qquad \textbf{(4)}$$

(Note the Σ operators in equation (4) are used in the conventional summation sense). We then need some criterion against which to compare this defuzzified expected sales (in dollars). If $COA([S_{NEW}\ |\ F_1,\ F_2,\ ...,\ F_n])$ meets this criterion, we decide to proceed with the development of the proposed product. If it fails to meet the criterion, we terminate the project. Also, the procedure outlined above can be used to compare two or more potential new products. The idea here being to continue the development of only those products having the greatest defuzzified conditional expectations.

Suppose that a new product which is under development is being rated on two features, appearance and reliability. After some discussion the developers arrive at the following fuzzy ratings:

Appearance: F_A = .8 / Good + .3 / Average;

Reliability: F_R = .9 / Very Good + .6 / Good.

The similarity of the proposed new product to three somewhat similar competitor's products is represented by the fuzzy set $Prod_{New} = .6 / Product_1 + .8 / Product_2 + .5 / Product_3$. The conditional expected sales (in dollars per week) for the three competitor's products are given in Table 1.

Thus the fuzzy conditional expected sales for the new product given by eq. (3) is

$$\begin{aligned} E[Sales_{New}\ |\ F_A,\ F_R] &= \text{Min}\ \{.6,.8,.9\}\ /\ 2100 + \text{Min}\ \{.6,.8,.6\}\ /\ 2000 \\ &+ \text{Min}\ \{.6,.3,.9\}\ /\ 1800 + \text{Min}\ \{.6,.3,.6\}\ /\ 1200 \\ &+ \text{Min}\ \{.8,.8,.9\}\ /\ 2450 + \text{Min}\ \{.8,.8,.6\}\ /\ 2400 \\ &+ \text{Min}\ \{.8,.3,.9\}\ /\ 2300 + \text{Min}\ \{.8,.3,.6\}\ /\ 2100 \\ &+ \text{Min}\ \{.5,.8,.9\}\ /\ 2100 + \text{Min}\ \{.5,.8,.6\}\ /\ 1900 \\ &+ \text{Min}\ \{.5,.3,.9\}\ /\ 1900 + \text{Min}\ \{.5,.3,.6\}\ /\ 1700. \end{aligned}$$

E[Sales$_{New}$ | F$_A$, F$_R$] = .6 / 2100 + .6 / 2000 + .3 / 1800 + .3 / 1200 + .8 2450 + .6 / 2400
+ .3 / 2300 + .3 / 2100 + .5 / 2100 + .5 / 1900 + .3 1900 + .3 / 1700.

TABLE 1

		Appearance	
Product 1		***Good***	***Average***
	Very Good	**2100**	**1800**
Reliability	***Good***	**2000**	**1200**
Product 2		**Appearance**	
		Good	***Average***
	Very Good	**2450**	**2300**
Reliability	***Good***	**2400**	**2100**
		Appearance	
Product 3		***Good***	***Average***
	Very Good	**2100**	**1900**
Reliability	***Good***	**1900**	**1700**

Notice that 2100 appears three times in the above fuzzy conditional expectation with membership values .6, .3 and .5 respectively. Following the convention described above, 2100 will appear only once in the support with maximum membership .6. A similar situation occurs with 1900 which appear twice with respective memberships .5 and .3. This when redundant values in the support are removed, the above conditional expectation is written

E[Sales$_{New}$ | F$_A$, F$_R$] = .6 / 2100 + .6 / 2000 + .3 / 1800 + .3 / 1200
+ .8 / 2450 + .6 / 2400 + .3 / 2300 + .5 / 1900
+ .3 / 1700.

Defuzzifying by the *COA* method given by eq. (4), we get *COA* ([S_{NEW} | $F_1, F_2, ..., F_n$] = 8910/4.3 = 2072.1. If our criterion is that given our fuzzy assessment of the appearance and reliability of our new product is that an average weakly sales should be 2072 dollars or less is acceptable, we would further pursue the development of this product. If our criterion is in excess of 2072 dollars, we would stop development of the product. Thus, by defuzzification, we are able to make a crisp (i.e. non-fuzzy) decision as to whether or not to continue development of the proposed new product.

VARIABLE ECONOMIC ENVIRONMENTS

$$E_V\ [S_i \mid X_{1t_i}, X_{2t_2}, \ldots, X_{nt_a}] \quad i = 1,2,\ldots, m, \tag{5}$$

The above model assumes that the economic environment is stable. In a volatile economy we need to create a more flexible model which is dependent on the current state of the economic environment. We do this by treating the conditional expectations as environmental specific: where $X_{1t_1}, X_{2t_2}, \ldots, X_{nt_a}$ represent one possible combination of values for the n features under consideration, and v indexes the specific economic environment.

Now suppose we have information that allows us to estimate the expected sales of product *i* for each possible combination of feature values under a variety of economic environments. That is, given the history of product *i*, we can estimate the expectation in (5) for all possible feature combinations and all possible environments.

For simplicity we will consider only three environments: good , moderate and poor. The fuzzy probability distribution, conditional on the observed feature values, for the current economy is

$$P_C(\cdot|X_{1t_1},X_{2t_2},...,X_{nt_a}) = \gamma_1 / P_{V_1}(\cdot|X_{1t_1},X_{2t_2},...,X_{nt_a})$$
$$+\ \gamma_2 / P_{V_2}(\cdot|X_{1t_1},...,X_{nt_a}) + \gamma_3 / P_{V_3}(\cdot|X_{1t_1},X_{2t_2},...,X_{nt_a}),$$

assuming that the current state of the economy can be represented by the fuzzy set $C = \gamma_1/Poor + \gamma_2/Moderate + \gamma_3/Good$, where γ_1 = the belief that the economic environment is poor, γ_2 = the belief that the economic environment is moderate and γ_3 = the belief that the economic environment is good. Therefore, the fuzzy expected value (in dollars) of the weekly sales of the new product can be expressed as

$$E_C[\sum_i \alpha_i / S_i|F_1, F_2,...,F_n] =$$
$$\sum_i \sum_{t_1} \sum_{t_2} ... \sum_{t_a} \sum_k \{\alpha_i \wedge \beta_{t_1} \wedge \beta_{t_2} \wedge ... \wedge \beta_{t_a} \wedge \gamma_K\} / E_{V_k}[S_i|X_{2t_2},...,X_{nt_a}]. \quad \textbf{(6)}$$

As before, defuzzification yields a real value which can then be used to decide if the development of the new product should be pursued.

Suppose that $C = .3/Poor + .7/Moderate + .8/Good$. Let the conditional expectation tables given in example 1 represent the conditional expectations for a moderate economic environment. Conditional expected weekly sales for poor and good economies are given in Table 2.

Thus, from eq. (6)

$$\begin{aligned}
E_C[Sales_{New}] &= \text{Min}\{.6,.8,.9,.3\} / 1800 + \text{Min}\{.6,.8,.6,.3\} / 1700 \\
&+ \text{Min}\{.6,.3,.9,.3\} / 1500 + \text{Min}\{.6,.3,.6,.3\} / 900 \\
&+ \text{Min}\{.8,.8,.9,.3\} / 2150 + \text{Min}\{.8,.8,.6,.3\} / 2100 \\
&+ \text{Min}\{.8,.3,.9,.3\} / 2000 + \text{Min}\{.8,.3,.6,.3\} / 1800 \\
&+ \text{Min}\{.5,.8,.9,.3\} / 1800 + \text{Min}\{.5,.8,.6,.3\} / 1600 \\
&+ \text{Min}\{.5,.3,.9,.3\} / 1600 + \text{Min}\{.5,.3,.6,.3\} / 1400 \\
&+ \text{Min}\{.6,.8,.9,.7\} / 2100 + \text{Min}\{.6,.8,.6,.7\} / 2000 \\
&+ \text{Min}\{.6,.3,.9,.7\} / 1800 + \text{Min}\{.6,.3,.6,.7\} / 1200 \\
&+ \text{Min}\{.8,.8,.9,.7\} / 2450 + \text{Min}\{.8,.8,.6,.7\} / 2400 \\
&+ \text{Min}\{.8,.3,.9,.7\} / 2300 + \text{Min}\{.8,.3,.6,.7\} / 2100 \\
&+ \text{Min}\{.5,.8,.9,.7\} / 2100 + \text{Min}\{.5,.8,.6,.7\} / 1900 \\
&+ \text{Min}\{.5,.3,.9,.7\} / 1900 + \text{Min}\{.5,.3,.6,.7\} / 1700 \\
&+ \text{Min}\{.6,.8,.9,.8\} / 2400 + \text{Min}\{.6,.8,.6,.8\} / 2300 \\
&+ \text{Min}\{.6,.3,.9,.8\} / 2100 + \text{Min}\{.6,.3,.6,.8\} / 100 \\
&+ \text{Min}\{.8,.8,.9,.8\} / 2750 + \text{Min}\{.8,.8,.6,.8\} / 2700 \\
&+ \text{Min}\{.8,.3,.9,.8\} / 2600 + \text{Min}\{.8,.3,.6,.8\} / 2400 \\
&+ \text{Min}\{.5,.8,.9,.8\} / 2400 + \text{Min}\{.5,.8,.6,.8\} / 2700 \\
&+ \text{Min}\{.5,.3,.9,.8\} / 2200 + \text{Min}\{.5,.3,.6,.8\} / 2000 \\
&= .3 / 900 + .3 / 1200 + .3 / 1400 + .3 / 1500 + .3 / 1600 + .3 / 1700 \\
&+ .3 / 1800 + .5 / 1900 + .6 / 2000 + .6 / 2100 + .3 / 2150 + .3 / 2200 \\
&+ .6 / 2300 + .6 / 2400 + .7 / 2450 + .3 / 2600 + .8 / 2700 + .8 / 2750
\end{aligned}$$

TABLE 2				
			Appearance	
	Product 1		***Good***	***Average***
	Reliability	***Very Good***	**1800**	**1500**
		Good	**1700**	**900**
			Appearance	
	Product 2		***Good***	***Average***
	Reliability	***Very Good***	**2150**	**2000**
		Good	**2100**	**1800**
			Appearance	
	Product 3		***Good***	***Average***
	Reliability	***Very Good***	**1800**	**1600**
Poor Economy		***Good***	**1600**	**1400**
			Appearance	
	Product 1		***Good***	***Average***
	Reliability	***Very Good***	**2400**	**2100**
		Good	**2300**	**1500**
			Appearance	
	Product 2		***Good***	***Average***
	Reliability	***Very Good***	**2750**	**2600**
		Good	**2700**	**2400**
			Appearance	
	Product 3		***Good***	***Average***
	Reliability	***Very Good***	**2400**	**2200**
Good Economy		***Good***	**2200**	**2000**

Although there are a total of 36 conditional expectations, there are only 18 terms in the support of the above fuzzy expectation. This happens because 1500 occurs twice (both times with membership .3), 1600 occurs twice (both times with membership .3), 1700 occurs twice (both times with membership .3), 1800 occurs 4 times (all times with membership .3), 1900 occurs twice (with memberships .3 and .5), 2000 occurs 3 times (twice with membership .3 and once with membership .6) 2100 occurs 5 times (three times with membership .3, once with membership .5 and once with membership .6), 2300 occurs twice (once with membership .3 and once with membership .6), 2400 occurs 4 times (once with membership .3, one with membership .5 and twice with membership .6), and 2700 occurs twice (with memberships .5 and .8). Whenever a value appears more than once, the highest membership is assigned to it.

Defuzzifying by eq. (4), yields $COA\ (EC\ [Sales_{NEW}]) = 17420/8.2 = 2124.4$. Thus, if our criterion is an average weekly sales of 2124 dollars or less, we would decide to pursue the development of this new product. However if our criterion requires an average weekly sales in excess of 2124 dollars, we would terminate the development of the proposed new product.

SUMMARY

In this paper we present a method for accessing the potential marketability of a new product at a fairly early stage of its development. We describe a decision mechanism by which we can decide whether to continue development and eventually market the product or to terminate it development. We do this by defuzzifying a conditional fuzzy

expectation, which is based on information concerning expected sales of products with similar features under a variety of economic conditions.

Although finite fuzzy sets are the key to our method, we consider the conditional expected sales of the competing products given in equations (3) and (5) to be crisp values. A natural extension of our method would be to represent these conditional expected sales as finite fuzzy sets. This would lead to the support in our overall conditional expectation given by eq. (3) and more generally by eq. (6) to be themselves fuzzy sets. The result of this would be a second order or type II fuzzy set. The development of expectation and conditional expectation of type II fuzzy sets will be the topic of future research.

REFERENCES

Angeli, P. (1995). Thinking out of the box: A new approach to product development. *Business Horizons*, 38 (May-June), 18-22.

Business Week (1993). Flops. (August 16), 76-82.

Cooper, R. G. (1995). Developing new products on time, in time. *Research Technology Management*, 38 (September-October), 49-57.

------------ and E. J. Kleinschmidt (1993). Screening new products for potential winners. *Long Range Planning*, 26 (6), 74-81.

de Korvin, A. and R. Kleyle (1996). A note on fuzzy conditional expectation. Working paper, University of Houston-Downtown.

Klir, G. and T. Folger (1988). *Fuzzy Sets, Uncertainty and Information*. Englewood Cliffs, NJ, Prentice Hall.

Omer, K., M. Shipley and A. de Korvin (1995). New product development: A decision model based on Dempster-Shafer theory. In *Applications of Fuzzy Sets and the Theory of Evidence to Accounting*, Edited by P. Siegel, A. de Korvin and K. Omer. Greenwich, CT: JAI Press, 253-267.

Paley, N. (1996). A sticky situation. *Sales & Marketing Management*, 148 (5), 40-41.

Thomas, J. W. (1994). Marketing success means developing new products. *Marketing News*, 28 (18), 12-13.

Töpfer, A. (1995). New products—cutting the time to market. *Long Range Planning*, 28 (2), 57-65.

Towner, S. J. (1994). Four ways to accelerate new product development. *Long Range Planning*, 27 (2), 57-65.

THE MARKETING OF MARTIAL ARTS MOVIE STAR JACKIE CHAN: A LONGITUDINAL ANALYSIS

Michael Tejada, Pacific Gas & Electric Co.
Beng Soo Ong, California State University, Fresno
beng_ong@csufresno.edu

ABSTRACT

The first objective of this study was to examine how Jackie Chan was first marketed in Hong Kong, and, in the early eighties, in the United States. A few explanations were offered for Jackie Chan's failure in his first attempt at the U.S. movie market. Next, how Jackie Chan was marketed in Hong Kong in the eighties and nineties was elaborated. The paper then discussed the environmental factors that contributed to Jackie Chan's success in the U.S. market in the mid-nineties. The second objective of this study was to analyze Jackie Chan's positioning strategy in the U.S. relative to his competitors namely Jean Claude Van Damme and Steven Seagal. New Line Cinema's promotional tactics of Jackie Chan's movies were discussed.

INTRODUCTION

Who is Jackie Chan? Ask that question in the U.S. and many moviegoers today know who he is. Ask that five or ten years ago, few moviegoers in the U.S. would have a clue of this movie star. Jackie Chan was born in Hong Kong in 1954. He entered the Peking Opera school at the age of seven to study acting, singing, dancing, acrobatics, and martial arts (Kahr, 1996). By late 1970s, after starring in a few successful kung-fu movies, Jackie Chan was very popular in Hong Kong, and in a few Southeast Asian countries such as Malaysia and Singapore. In the early 1980s, Jackie Chan entered the U.S. movie market through starring roles in four American movies. None of these movies were successful. In mid-nineties, he reentered the U.S. market and his two recent U.S. releases have done well at the box office (Reid, 1996). Now that Jackie Chan is better known in the U.S., will his popularity soar or fizzle in the next few years? Where is he at in terms of the "Jackie Chan product life cycle?" What factors contributed to Jackie Chan's failure in the U.S. market the first time, and to his success in the second attempt at the same market? These questions provided us the impetus to conduct a longitudinal analysis of how Jackie Chan was marketed in Hong Kong and the U.S. in the midst of other martial arts movie stars.

HOW JACKIE CHAN WAS FIRST MARKETED IN HONG KONG

During his early years he appeared as a stunt man in some Bruce Lee films and also starred in old style Hong Kong singing films. When Bruce Lee died in 1973, Jackie Chan was chosen as his successor (Au, 1996a). He starred in the sequel to *Chinese Connection, Fists of Fury II,* and several other kung fu films between 1976 and 1978. All failed terribly. The Hong Kong movie industry tried to market him as the next Bruce Lee, but the audience did not buy that concept. Many perceived there was one, and there will be only one Bruce Lee. At this time in Hong Kong, most of the studios were producing martial arts films. None of new Hong Kong martial arts actors stood out as none had a unique positioning. Therefore, Jackie Chan needed to differentiate himself, and find or create his own niche in the martial arts market.

The typical post Bruce Lee kung fu movie was very unrealistic. In the movies, ninjas would be flying through the air, jumping off 30-foot buildings and landing on their feet, and doing several other unbelievable things. What Jackie Chan tried to do was to make his movies more realistic, and his movie character more human (Au, 1995b). He then added his years of acrobatic training, some comedy, and "daredevilism" to his movies. One other important ingredient that goes with the stunts is the humor. In his early movie career, when he was living in Bruce Lee's shadow, he portrayed serious characters. Bruce Lee was a quiet and serious fighter. The new humorous character probably helped Jackie Chan to contrast himself from the late Bruce Lee, and hence, developed his own image.

However, Jackie Chan's most successful trademark is the fact that he does all of his own stunts. In the movie *Snake and Crane Arts Of Shoalin*, Jackie Chan eluded three bad guys with barbed spears for over five minutes (King, 1996). He continued making these types of movies, which included *The Young Master*, *Dragon Lord*, and *Armor Of The Gods*. At this point in time, Jackie Chan was becoming very popular in Hong Kong, and in a few other Asian countries. He had successfully created his own niche in the market.

WHY JACKIE CHAN FAILED IN U.S. IN THE 1980s

In the U.S., moviegoers were treated to Chuck Norris and David Carradine's styles of martial arts. In the early 1980s, Jackie Chan tried to enter the U.S. market. He starred in the following movies: *The Big Brawl, The Cannon Ball Run, The Cannon Ball Run II, and The Protector*. None of these movies were successful (Reid, 1996). Part his failure could have been due to American egocentricity (King, 1996), or the lack of promotion of Jackie Chan and his movies (Dahm & Rogers, 1996). He was not from the "right" ethnic background, or right place (i.e., U.S. or Hollywood). Many Americans, at that time, probably could not have imagined that Hong Kong was the world's third largest movie producer, behind India (first) and U.S. (Corliss, 1995b). How could there be a talented actor from Hong Kong? During this era, Asians were typically cast as villains, restaurant owners, cooks, or helpers, and butlers, rather than heroes. Furthermore, the audience was probably more accustomed to the American martial arts stars' styles of fighting. In terms of the diffusion process, Jackie Chan was probably not adopted due to incompatibility of image (see Rogers, 1983, p. 192). At that time, American moviegoers were more into Chuck Norris or Sylvester Stallone movies featuring MIA rescue themes and heavy artilleries. The American movie audience was probably reluctant to pay to see an "unknown" actor. Furthermore, in the *Cannon Ball Run* series, Jackie Chan was overshadowed by a sleuth of more popular American celebrities. He did not have the opportunity to demonstrate his martial art talents in those two movies.

MARKETING JACKIE CHAN IN HONG KONG IN THE 80s & 90s

After the unsuccessful attempt at the U.S. market, Jackie Chan decided to concentrate on the Hong Kong market where he knew he had a loyal following. However, in the 1980s, other Hong Kong actors started copying Jackie Chan, thus creating an influx of the kung fu style movies (Reid, 1996). Jackie Chan's niche was being invaded. Consequently, he needed to elevate his movies to a different level. He needed to differentiate himself again. This time, Jackie Chan moved into a different genre of movies, the Police stories. This is the where he really differentiated himself from all the other Asian martial artists of that time. He combined his acrobatic skills with comedy and dangerous stunts to put together some of the most astonishing action sequences in modern day settings. For example, he did a back flip on a moving train where a fall could spell death (Corliss, 1995a). Because the magnitude of danger in the stunts was beyond what anyone else was even willing to consider, Jackie Chan had no foreseeable competitor in that niche.

Apart from solidly positioning himself as a celebrity who does his own stunts, Jackie Chan is always portrayed as funny, sweet, innocent, and a good guy. Throughout his movie career, he has always been the bumbling hero, who somehow manages to win the fight, despite his inadequacies (King, 1996). Jackie Chan has been the good guy for over 20 years that the Asian audience would find it hard to adjust to him as a bad guy. Casting him in a villain's role could spell disaster for his film career. Jackie Chan turned down a major role to star alongside Michael Douglas in the successful movie *Black Rain*, because he (Jackie Chan) would have been portrayed as an evil villain (Au, 1995b).

This "does own stunts" positioning is, however, a double-edged sword. While age is catching up with Jackie Chan (already in his forties), he cannot start to use stunt doubles. He would be viewed as a fake. In "Defining The New Marketing Concept" article, Frederick E. Webster (1994a) noted that retaining customers means keeping them satisfied, and keeping them satisfied requires innovation. In Jackie Chan's case, innovation means he has to try to do crazier or more impressive stunts. Each movie has to have something different; the same stunt cannot be done movie after movie. From this standpoint, it is not clear how much longer could Jackie Chan keep this unique selling proposition or USP (see Krugman et al., 1994; p. 288) without risking death.

RE-ENTERING THE U.S. MOVIE MARKET

Jackie Chan's second attempt at this market in the mid-nineties was successful. His recent U.S. releases, *Rumble In The Bronx* and *SuperCop*, have done well at the box office (Reid, 1996). *Rumble In The Bronx* brought in US$21.5 million in the first month, and *SuperCop*, to date, grossed $15 million (Carter, 1996). What has changed? There are a few potential explanations for Jackie Chan's acceptance in the U.S. this time. First, there was a lot of attention on Hong Kong being handed back to China by the British. The media hype started a few years prior to July 1, 1997. Furthermore, over the last three or four years, there has been steady news coverage on this colony, Tibet, Taiwan, and China, in general, and with respect to politics, economics, and people. As a result, Americans became more aware of Hong Kong's entertainment industry and its celebrities. Second, the boom in tourism and migration from Asia made U.S. even more cultured. For example, in December 1995, a 70-foot screen behind Las Vegas MGM Hotel's reception counter was promoting concerts by Asian singers to be held at the hotel. Hence, Americans were more culturally prepared to adopt foreign Asian celebrities by the mid-nineties.

Another factor was the international film festivals, which introduced Americans to Chinese movies. At the 1995 New Directors/New Films showcase in New York City, five out of the twenty-featured films were from the three Chinas (i.e., China, Hong Kong, and Taiwan). In August 1995, a one-month festival of Hong Kong films was played in New York City; 11 films were shown (Corliss, 1995b). By the mid-nineties, there have already been high profile U.S. films involving Chinese families, and Chinese history such as *Joy Luck Club*, and *The Last Emperor*. Actors/actresses such as Joan Chen, John Lone, Vivian Wu frequently appeared in television shows, movies, and in magazines. Slowly, American audience was warming up towards Asian stars and films with Asian themes.

Next, the emergence of John Woo as a successful director in the U.S. has helped to focus the American eyes even more towards the Far East. Mr. Woo, a well-known and successful action movie director in Hong Kong, migrated to the States in the early nineties. His first assignment was to direct Jean Claude Van Damme in the movie *Hard Target*, which was released in 1993. It had a decent showing at the box office, but his next movie was the one that has established him as a "successful director". *Broken Arrow*, starring John Travolta and Christian Slater, was the huge hit in the winter of 1996. Ang Lee, a native from Taiwan, directed the Academy Award winner *Sense and Sensibility* (Corliss, 1995b). Other award winning films (e.g., *Raise The Red Lantern, Judo*) by award winning Asian directors (e.g., Zhang Yi-Mou) started to hit cable television. Video chains such as Blockbusters were carrying Asian kung-fu selections on their shelves. These factors have opened the door for Jackie Chan in U.S.

While the environmental factors were in Jackie Chan's favor in the mid-nineties, his continued success will also depend on how he is marketed to the American audience. Mitchell Goldman, president of marketing and distribution at New Line Cinema (which has contracted to release three of Jackie Chan's movies) noted that they're in the business of Americanizing Jackie Chan as much as they can (Au, 1996a). Being able to do this is very important, as one usually have to be an American to be successful in the U.S. movie market.

Thus far, the Americanizing has been limited to public appearances such as at television talk shows and Oscar night. Jackie Chan has graced the covers of the August 1996 edition of *GQ*, and several martial arts magazines. He received the MTV Lifetime Achievement Award, which is given to one who has established him/herself in the movie industry for a long period of time (Au, 1996c). So far Jackie Chan has appeared on The David Letterman Show (2 times), Jay Leno (1 time), Conan O'Brian late-night show (1 time), and Rosie O'Donald day-time talk show (1 time). On the Letterman shows, Jackie broke bottles with his hands and feet. On the Conan O'Brian show, Conan and Jackie have fooled around throwing punches and kicks at each other. These little demos illustrated Mr. Chan's flexibility, dexterity, and martial arts skills. Now the viewers at least know that this guy can move and fight, if they didn't believe it before. The "kidding around" could also influence viewers to feel that Jackie Chan is very much at home (Americanized) in front of American cameras, host, audience, and other celebrities.

Such events could enhance Jackie Chan's credibility. For some marketers, the number of publicity appearances is a measure of an actor's value. The more the American public is exposed to Jackie Chan, the easier his acceptance will be in the U.S. entertainment business.

POSITIONING AND TARGET SEGMENTS IN THE U.S.

The two key attributes New Line Cinema has focused on when promoting Jackie Chan's movies were: (1) he does his own stunts and (2) he is a great martial artist. In the trailers for *Supercop* and *Rumble In The Bronx*, the ads always mention at least once that Jackie Chan does his own stunts. This is a unique attribute as the U.S. insurance companies will not allow famous actors such as Schwarzenegger, Willis, and Eastwood to perform dangerous stunts (Dahm & Rogers, 1996). These restrictions do not exist in Hong Kong. Therefore, what Jackie does is exclusively unique to the U.S. market, and New Line Cinema is hoping that this fact will draw people to his movies. Van Damme and Seagal will not try to do the crazy stunts that Chan does. Thus, Jackie Chan has a strong positioning and an uncontested niche.

New Line also segments the market. Six different trailers were made for *Rumble In The Bronx*. Some of the previews would show more fighting scenes while others would show more of the humor in the movie (DiLucchio, 1996). In general, the trailers always show a good amount of fight scenes so that the audience will know that there will be a lot of fighting in the movie. For the martial arts fans, this is a huge enticement. The humor in Jackie Chan's movies was not being directly marketed, but it was very visible from the movie previews. The previews did not say "come watch the funny man," but they did show him making funny faces and gestures. The comedy in the movie will make Jackie more marketable in the U.S. Jackie Chan's movies are targeted at the typical family. He will not have any love scenes in his movies, and there is hardly any nudity (Au, 1995b). His sweet and innocent character makes his movies suitable for different age groups.

JACKIE CHAN'S COMPETITION

Although Jackie Chan has a secure niche, he is a late entry to the U.S. martial arts movie industry where stars such as Jean Claude Van Damme and Steven Seagal have established themselves a decade ago. A number of others with fewer movies or starring roles include Don "The Dragon" Wilson, Oliver Grunner, Mark Dacascos, and Cynthia Rothrock. Jean Claude Van Damme emerged onto the American scene in 1987 with the movie *Bloodsport*, in which he portrayed a very good looking, young, honorable fighter. Most of his other movies cast him in similar roles. Over the next 10 years, he has tried to get away from his nice boy and martial arts image, and tried to establish himself as just an action star. Van Damme's key selling points are his (1) body and overall physical appearance, and (2) martial arts skills, especially his kicking ability and flexibility.

One segment targeted in Van Damme's movies is women via his body and looks. His movie previews will always show him with his shirt off and they will also show a brief clip from one of the love scenes in the movie. His shirt will usually come off more than once during the movie. What brings men to see Van Damme is his martial arts skills, his flexibility, and his ability to overpower people. He is known for his "kick-boxing" skills, which includes a wide array of different kicks. Van Damme's trademark is his round house kick, along with his sidekicks and crescent kicks. In order to exemplify the power that he puts into these moves, those scenes in the movie are sometimes shown in slow motion. This allows the audience to see his muscles flex right before his foot makes contact with his opponent. At times they also show him doing the splits to further exemplify his flexibility.

Steven Seagal emerged onto the American scene in a 1987 movie, *Above The Law*, in which he portrayed a sophisticated, serious, and honorable policeman. Thereafter, Seagal has been positioned as a calm, sophisticated, and confident good guy. What separates Seagal from Jackie Chan and Van Damme is his sense of sophistication. In his movies, Seagal is always trying to outsmart his opponent, and not just relying on his martial arts skills. He usually has some words of wisdom to say in most of his movies. Whenever Seagal is interviewed, he is always calm and soft-spoken, not wild like Jackie Chan. In his movies and fighting scenes, Seagal is usually fully clothed, and to the extend of well dressed. This further enhanced his positioning. At times, he is also portrayed as an Italian, which has a certain air of sophistication. This positioning would attract the more sophisticated boomer audience along with the regular martial arts fans.

Steven Seagal's style of fighting is Akido, and currently nobody else in the movie industry is using that style. Akido consists of a series of arm locks, leg locks, in which he will eventually break several of his opponent's bones. He rarely kicks in his movies; he usually takes on about three guys at the same time. So, the movie previews make sure that they show him taking on several assailants at once. Seagal has created his own Akido niche.

CLOSING COMMENTS

Although there appears to be some overlap in the audience (i.e., they all attract martial arts fans), Chan, Van Damme, and Seagal have distinct niches via their fighting styles and movie characters. However, the double-edge sword of "doing one's own stunts" raises concern as to the product life cycle (PLC) of Jackie Chan. Perhaps, New Line Cinema should play down this attribute and start looking for a new unique selling proposition or USP. The question of whether an actor needs to be Americanized to be successful in the U.S. should be debated. If the answer were yes, then Jackie Chan might need further work on acquiring the American English accent, and understanding American humor. But then again, superstars like Arnold Schwarzenegger still have a non-American accent. And an even more philosophical question would be what constitutes "Americanized?"

Jackie Chan's movies, in its current form, would likely not appeal to a substantial portion of the female segment. Women tend to lean toward romance stories, and be less attracted to martial arts movies. Unlike Van Damme's movies, Jackie Chan's movies lacked romance, a heroine, and steamy interludes.

Mr. Chan's publicity efforts in U.S. may not have reached certain important market segment. The teenage market can be a rich source of martial arts fans. This segment is not likely to be exposed to Jackie Chan's guest appearances at night talk shows. How many high school students are actually watching The Conan O'Brian Show at 12:30 in the morning?

Jackie Chan markets to two worlds. He is currently more anxious to market himself in the U.S. For example, he left the set of his new movie, *Nice Guy*, to make talk show appearances, even though he only had a week left of filming (McDonagh, 1996b). Jackie Chan needs to be cognizant of the possibly that his Hong Kong fans may feel abandoned, or that they may not like his American movies. He could risk losing his Hong Kong fans (McDonagh, 1996a). Jackie Chan may be facing strategic selectivity. The concept implies turning away potential customers and revenue and concentrating on building relationships with customers who are most likely to become satisfied and loyal (Webster, 1996b). Should that be his Asian fans then?

REFERENCES

Au, Daniel C. (1996a, January). Jackie Chan, American Action Hero? http://pubweb.acns.nwu.edu/~dcau/jackie.htm

Au, Daniel C. (1995b, June). ASIAWEEK'S 20 TOP ASIANS. http://pubweb.acns.nwu.edu/~dcau/jackie.htm

Au, Daniel C. (1996c). Jackie Chan Takes Los Angeles by Storm. http://pubweb.acns.nwu.edu/~dcau/jackie.htm

Carter, Eric (1996). The Box-office Page. E-mail: 76702.2047@compuserve.com

Corliss, Richard (1995a, February). Jackie Chan! Do Death-Defying Stunts! Break All His Bones! Reign as Asia's No. 1 Star! http://pubweb.acns.nwu.edu/~dcau/time0295.htm

Corliss, Richard (1995b, August). ASIAN INVASION. http://pubweb.acns.nwu.edu/~dcau/time0895.htm

Dahm, Rich & Rogers, Ian (1996). Jackie Chan Will Kick Your Ass. http://www.filmzone.com/Chan/

DiLucchio, Patrizia (1996, July). PEOPLE Online Conference with Jackie Chan. http://pathfinder.com/@@oDfDHgUABoCO2cf0/people/interacitve/ chantrans2.html

Krugman et al. (1994). *Advertising*. 4th ed. The Dryden Press.

McDonagh, Maitland (1996a). Jackie Chan, Reel Life. http://www.tvguide.com/movies/mopic/wideangl/features/072696/chan1.htm

McDonagh, Maitland (1996b). Jackie Chan, The Promised Land. http://www.tvguide.com/movies/mopic/wideangl/features/072696/chan2.htm

McDonagh, Maitland (1996c). Jackie Chan, Biography. http://www.tvguide.com/movies/mopic/wideangl/features/072696/chan4.htm
Kahr, Michelle (1996, October). Jackie Chan Biography. http://www.dimensionfilms.com/jackiebio.html
King, Myron (1996, December). Out From The Shadow Of The Dragon. *Karate International*, pp. 40-45.
Reid, Craig D. (1996, June). Jackie Chan Finally Has Hollywood On The Run. *Black Belt*, pp. 122-125; 128-129.
Rogers, Everett M. (1983). *Diffusion of Innovations*. 3rd ed. New York: Free Press.
Webster, Frederick E. (1994a). Defining the New Marketing Concept. *Marketing Management*, Vol. 2, No. 4.
Webster, Frederick E. (1994b). Executing the New Marketing Concept. *Marketing Management*, Vol. 3, No. 1.

A CASE OF MISTAKEN IDENTITY: APPLYING QUALITATIVE RESEARCH METHODS TO ASSESS A UTILITY COMPANY'S PROPOSED CHANGE IN CORPORATE IDENTITY

Mary Ellen Campbell, The University of Montana
mec@selway.umt.edu
Carol L. Bruneau, The University of Montana
bruneau@selway.umt.edu

ABSTRACT

The electric and gas utility industry in the United States is in a state of rapid change. The onset of deregulation is responsible for converting strong regional monopolies into companies who are facing fierce competition in retaining current customers and obtaining new ones. Over the next five years, competition for utility providers will be as ferocious as that currently occurring with long distance phone carriers. Because of these trends, the marketing concept of branding is becoming increasingly important to this industry. One crucial element of the branding concept is brand identity. The company used as a research site is a multinational energy and telecommunications company with headquarters in the western United States. This paper discusses the importance of using qualitative research to evaluate a brand name before it is introduced Using qualitative research to evaluate a change in corporate identity not only has significant cost benefits, it also has important management implications relating to all stakeholders. The process suggested by the authors includes extensive use of qualitative research in the form of focus groups. This research established checks and balances of the many constituents involved in the branding process.

The company discussed supplies electricity and gas to approximately 43 0, 000 customers and also conducts a variety of non-utility business activities including telecommunications, mining and alternative energy businesses. Being proactive in recognizing that in the near future competition for customers will be global, the company considered changing its name to appeal to a larger market-base and accommodate multiple product lines. This company hired a consulting firm that has had prior success in creating utility names. These consultants did not use up-front qualitative research to determine the attitudes and opinions of the stakeholders. As a result, the list of 14 names created by the identity consultants did not reflect the image of the company held by the employees or by its current customer-base.

Conducting focus groups of various stakeholders prior to creating names would have enabled the identity consultants to establish a benchmark for this company's current brand identity. Stakeholder groups include the directors, managers, employees, current and potential residential and commercial customers and investors. Because of the investment required to rename and to reposition the organization, the company decided to critique the decisions of the Madison Avenue creatives. It hired the authors, two academic researchers, to conduct focus groups consisting of 8 to 12 participants for the employee and customer stakeholder categories. These focus groups provided valuable insights into the firm's current brand identity and modified the renaming process.

This paper discusses the importance of academic research methods to the private sector in evaluating brand identity. It reinforces the belief that well-timed qualitative research contributes to cost effective decision-making by more accurately assessing stakeholders' attitudes and by limiting the dominance of any single group of stakeholders or vendors.

IS THERE A RELATIONSHIP BETWEEN PERSONALITY TYPES AND INSTRUCTIONAL METHODS?

Bill McPherson, Indiana University of Pennsylvania
mcpherso@grove.iup.edu

ABSTRACT

Recent research in personality assessment has demonstrated that certain types of personalities are attracted to specific types of professions (Sipe, 1988). During the past decade, the typological approach to ascertaining personality influences has produced a prodigious number of studies based on Jungian personality types (Watson, 1990). Retrospective studies using the Myers-Briggs Type Indicator (MBTI) determine the psychological type preference of people in a number of different professions indicate that individuals choose careers which are in keeping with their type preferences. Preliminary research in the area of teaching strategies and teacher psychological type indicated that teacher type does affect the way teachers teach and what they prefer to teach (Carylin, 1976; Lawrence, 1979; Sipe, 1988; Weychert, 1975).

The purpose of this study was to (1) examine the personality type of secondary marketing education teacher-coordinators (SMETCs) to ascertain the influence of personality type on the choice of instructional methods in marketing education, and (2) to examine the relationship between personality types and instructional methods with selected ancillary variables (subjects taught, gender, profession, age, level of education, and years of teaching).