

# Marketing research, market orientation and customer relationship management: a framework and implications for service providers

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## Abstract

**Purpose** – As service organizations continue to expand internationally, the need to be able to understand consumers in faraway places is increasing. Marketing research is a key mechanism through which service companies understand their current as well as potential customers. As service organizations contemplate the global marketplace, there is increasing demand for managers to understand customer behavior in multiple countries. This article aims to discuss the importance of market research information in developing a market orientation and its impact on international service organizations.

**Design/methodology/approach** – Extant literature is reviewed and discussed pertaining to the interrelationships between market research, market orientation and customer relationship management (CRM)-related issues. Conceptual models are presented to illustrate the interrelationships between these streams of research.

**Findings** – Several anecdotal and case examples are used to illustrate the essential linkages between market research, market orientation, and CRM. These include the Ritz Carlton Hotel Company, Federal Express, Hallmark Cards, Harrah's Entertainment and, most notably, VeriFone.

**Practical implications** – The key implications revolve around the notion that in today's hyper-competitive markets service firms must be market-oriented in order to be competitive, and that market research plays a critical role in generating the needed data on which a market orientation can be developed and implemented, which, in turn, can enhance the practice of CRM.

**Originality/value** – The article promises to help service providers address the challenge of generating and using market research data to develop a market orientation and a corresponding CRM program.

**Keywords** Market research, Market orientation, Customer relations, Customer satisfaction, Customer retention, Services marketing

**Paper type** Conceptual paper

**An executive summary for managers can be found at the end of this article.**

## Introduction

The business environment today is characterized by the increasing globalization of services. The Uruguay Round of the General Agreement on Tariffs and Trade (GATT) paved the way for marketing services internationally (e.g. Fieleke, 1995). Since the agreement, barriers to trade have been reduced and trade in services has been growing worldwide. For service marketers, these international trends represent unprecedented opportunities as well as difficult challenges.

Worldwide trade in services grew faster than trade in merchandise during the 1990s (Javalgi and White, 2002). Total world trade in services exceeded \$1.3 trillion in 1999 (Ball *et al.*, 2004). While services account for almost two-thirds of the world's total output (The World Bank, 2000), they account for over 70 percent of production and employment in many developed nations (Javalgi *et al.*, 2001). Services have come to play a pivotal role in the value chain for a wide variety of multinational organizations. Czinkota and Ronkainen (2002) report that the service sector accounts for over 75 percent of gross national product in the USA, and employs 80 percent of the workforce. It is clear that the move from manufacturing jobs to service sector jobs will continue throughout the new millennium as well.

As service organizations become more global in their operations and as competition across markets intensifies, the need for an effective market orientation becomes apparent. This involves establishing and maintaining a meaningful dialog with customers. Yet, how will these companies be able to carry on a meaningful dialog with their customers as they become ever more dispersed around the globe? Which

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countries represent the best opportunities for the organization's services? How will these firms design consumer-based strategies that are customized for distant international market segments? Market research represents a key element in the search for answers to these and related questions.

Market research is the functional link between marketing management and an organization's ultimate customer base. As globalization increases, service firms will need to know how to utilize market research approaches that enable them to stay close to these worldwide and diverse customer segments. A discussion of the strategic challenges surrounding international services marketing research is the primary focus of this article. Although not an empirical study, this article provides a conceptual foundation that integrates marketing research, market orientation and customer relationship management (CRM) concepts. Additionally, the article uses practical examples and an extended case to illustrate the framework.

The remainder of the article is organized as follows: First, a brief explanation of how services marketing is different is provided. The second section offers a brief review of the market orientation literature. The third section is a discussion of the importance of market research information as the foundation of a market orientation. The fourth section draws on practical company examples to illustrate the components of CRM. The article then discusses an extended case history of a comprehensive global marketing research study. The last section of the paper provides marketing implications, conclusions and guidelines for managers.

### Services marketing is still different

When purchasing goods, the consumer employs many tangible cues to judge quality including color, style, finish, package, fit and others. However, when purchasing services, fewer tangible cues exist to help consumers make decisions. In many cases tangible evidence is limited to the service provider's physical facilities, equipment, and personnel (Parasuraman *et al.*, 1983). Inseparability, intangibility, heterogeneity, and perishability are the four characteristics that are most commonly used by marketers to differentiate between goods and services (Parasuraman *et al.*, 1983). Lovelock (2004) also discusses how services differ from packaged products and offers several key managerial implications of these differences. Clearly there are significant differences between consumer goods and services. Moreover, these differences underscore the critical importance of a market orientation since so much of service delivery is represented by the employee/customer interaction. Recognizing the unique challenges service marketers face, this article uses service settings to illustrate the crucial importance of market research and its relationship to market orientation followed by the positive strategic outcomes related to CRM.

### A review of the literature

#### Background

How can service companies, large and small, increase their performance level in today's intensely competitive market? Managers, employees and other stakeholders alike have been asking the question with increasing frequency during the 1990s and now at the beginning of the new century. One

answer that has been discussed by both managers and scholars lies in the concept of market orientation. The importance of a market-oriented culture is crucial to all levels of the modern organization (Day, 1990; Deshpandé and Webster, 1989; Narver and Slater, 1990; Shapiro, 1988). Comprehensive theories explaining the nature and consequences of a market orientation have been developed (Kohli and Jaworski, 1990; Narver and Slater, 1990; Shapiro, 1988) and a body of research illustrating the relationship between market orientation and performance has emerged (Deshpandé *et al.*, 1993; Ruekert, 1992; Slater and Narver, 1994). Market orientation has also taken a central role in discussions about marketing management and strategy (Day, 1992).

#### Market orientation

Market orientation is a concept that is believed to have far-reaching effects on organizations as it influences how employees think and act. A market orientation is valuable because it focuses the organization on first, continuously collecting information about target customers' needs and competitors' capabilities and second, using this information to create continuously superior customer value (Slater and Narver, 1995). Scholarly attention has focused on the definition, measurement, and impact of a market orientation. Attention has also focused on organizational drivers of market orientation and its enhancements (Jaworski and Kohli, 1996).

Market orientation has been the topic of varying definitions. Among the most commonly cited are the following: market orientation is "the organization wide generation of market intelligence pertaining to current and future needs of the customers, dissemination of intelligence horizontally and vertically within the organization, and organization wide action or responsiveness to it" (Jaworski and Kohli, 1993). Narver and Slater (1990) said "market orientation consists of three behavioral components - (1) customer orientation, (2) competitor orientation, and (3) inter-functional coordination - and two decision criteria, (1) long-term focus and (2) profitability." Deshpandé *et al.* (1993) define customer orientation "as the set of beliefs that puts the customer's interest first, while not excluding those of other stakeholders such as owners, managers, and employees, in order to develop a long-term profitable enterprise." George Day (1994) simply says that market orientation represents superior skills in understanding and satisfying customers. The market orientation construct has been extended to international settings (Diamantopoulos and Cadogan, 1996) and a scale for measuring export market orientation has been developed and validated (Cadogan *et al.*, 1999).

In an evaluation of the two primary definitions for market orientation, the Jaworski and Kohli definition has as its central theme the concept of information and information management. Since information represents the cornerstone of market research this article utilizes the Jaworski and Kohli conception of market orientation. The Narver and Slater definition with its broader emphasis involving more of an organizational behavior perspective does not provide for the importance of customer information directly. Furthermore, the Jaworski and Kohli definition has been the subject of numerous measurement and scaling related articles thus lending it to improved empirical testing.

In an earlier piece of research Kohli and Jaworski (1990) interviewed 62 managers in diverse functions and

organizations. The objective of this qualitative research was to build a theory of market orientation by asking subjects about several issues related to market orientation. Questions included their understanding of the term "market orientation," organizational factors that either encourage or discourage its implementation, and the possible consequences of a market orientation. Findings indicated that managers were consistent in the view that the customer was the central element in a market-oriented strategy. However, few mentioned that market orientation requires a well coordinated functional strategy within the firm. Moreover, few managers mentioned that overall profitability is a component of market orientation. Other findings indicated that senior managers must themselves be convinced of the value of a market orientation and communicate their commitment to lower level employees. Though annual reports and public interviews proclaiming a market orientation are helpful, junior employees need to witness behaviors and resource allocations that reflect a commitment to a market orientation (Kohli and Jaworski, 1990).

Narver and Slater (1990) discuss the effect of a market orientation on business profitability in their groundbreaking study. These researchers developed a scale to measure market orientation and used it to study 140 SBUs of a single major western corporation. Their scale measures customer orientation, competitor orientation, inter-functional coordination, a long-term focus and a profit objective. Their findings supported a positive relationship between market orientation and business profitability as measured by return on investment. Furthermore, the businesses having the highest degree of market orientation are associated with the highest profitability.

Kohli and Kohli (1993) discuss the market orientation construct in terms of its antecedents and consequences. The model they proposed included three sets of antecedents and two sets of consequences regarding market orientation. Namely, the strong commitment of top management, low interdepartmental conflict allowing more intelligence dissemination, and a less formal and centralized organizational structure all represent antecedents of market orientation. The consequences of market orientation include increased firm performance and increased organizational commitment of employees.

Slater and Narver (1995) discuss market orientation in terms of the learning organization. Organizational learning is the development of new knowledge or insights that have the potential to influence behavior (Fiol and Lyles, 1985; Huber, 1991; Simon, 1969; Sinkula, 1994). For a business to maximize its ability to learn about markets, creating a market orientation is only the start. A market-oriented culture can achieve maximum effectiveness only if it is complemented by a spirit of entrepreneurship and an appropriate organizational climate, namely structures, processes, and incentives for operationalizing the cultural values. Thus Slater and Narver argue that the critical challenge for any business is to create the combination of culture and climate that maximizes organizational learning on how to create superior customer value in dynamic and turbulent markets, because the ability to learn faster than competitors may be the only source of sustainable competitive advantage (DeGeus, 1988; Dickson, 1992).

To achieve superior performance, a business must develop and sustain a competitive advantage (Porter, 1985). But

where competitive advantage was previously based on structural characteristics such as market power, economies of scale, or a broad product line, the emphasis today has shifted to capabilities that enable a business to consistently deliver superior value to its customers (Slater and Narver, 1994). A business is market oriented when its culture is systematically and entirely committed to the continuous creation of superior customer value. Specifically, this entails collecting and coordinating information on customers, competitors, and other significant market influencers such as regulators and suppliers to use in building that customer value (Slater and Narver, 1994).

Slater and Narver (1994) go further and explain that the heart of a market orientation is a firm's customer focus. To create superior value for buyers continuously requires that a seller understand a buyer's entire value chain, not only as it is today but also as it evolves over time. Other writers have added that competitive advantage is not just a function of how well a company plays by the existing rules of the game (Govindarajan and Gupta, 2001). More importantly, it depends on the firm's ability to radically change those rules. One way that Govindarajan and Gupta (2001) discuss for changing those rules is through a customer knowledge advantage. They cite direct contact with customers as having helped Dell Computer gain a superior understanding of specific customer needs. By organizing its marketing and sales functions around distinct customer segments, Dell was able to address varying customer needs with greater precision and speed.

Slater and Narver (1994) further agree that market-oriented businesses understand cost and revenue dynamics of not only current customers but also of future target buyers. They stress the need to understand immediate as well as downstream customer needs. This is accomplished by spending considerable time both meeting and talking with customers formally and informally. Market-driven businesses also continuously monitor their customer commitment by making improved satisfaction an ongoing objective. It follows that a great deal of this customer communication, interaction and knowledge transfer relies on a consistent and committed use of market research.

### **The importance of market research information in developing and refining a market orientation**

Central to these discussions involving market orientation and organizational learning is the development and implementation of customer information. It follows from this discussion that the process of conducting marketing research and its effective use within service organizations could have a direct effect on the components of customer relationship management. It is logical to draw the conclusion that customer information is the cornerstone of this continuous information management process. Furthermore gathering customer information for use in making marketing decisions is the primary objective for conducting market research.

The management of information has always been an essential component of good management practice (Yaman and Shaw, 1998). However, the mere possession of information is not sufficient. Arguably, the organizations that will have a decisive competitive advantage will be those that can make the best use of the knowledge they possess.

The use of market research occupies an important place in managing information and developing a market orientation (Jaworski and Kohli, 1993). Moorman *et al.* (1992) identified an important role of knowledge use in developing trust between the providers (researchers) and users (managers) of marketing research. Glazer (1991) stressed the implications of knowledge use in an information-intensive environment. Despite the importance of the issue, however, research into the use of knowledge in business in general is fragmented, and the validity of existing research instruments is limited because they have not been developed according to accepted measurement guidelines (Yaman and Shaw, 1998). Anecdotally, Louis Gerstner, recently retired CEO and Chairman of IBM, pointed out some of the issues and obstacles his company faced in IBM's attempts to use market research to enhance their market orientation, and thus their effectiveness. One of IBM's market research challenges was to overcome the bias created by sales people who tended to distribute customer satisfaction surveys selectively – to their 'best and happiest customers.' Another problem was that each unit in the company seemed to have its own customer satisfaction measurement instrument – at one time a total of 339 different surveys! According to Gerstner, "Disparate methodologies made it impossible to get a single view – even if the sample wasn't biased by the sales force" (Gerstner, 2002, p. 223).

Given that market research is the process of planning, collecting, and analyzing customer-oriented information for use in making decisions (Aaker *et al.*, 2004), the two concepts of market orientation and market research are inextricably linked. In fact, market orientation has been defined as the organization-wide generation of market intelligence pertaining to current and future needs of customers, dissemination of intelligence within the organization, and responsiveness to it (Kohli *et al.*, 1993). Thus information is integral to both market orientation and, in turn, business performance. Designing and executing any successful business strategy to determine the basis of the decision would result in uncovering one of only three possibilities (Duboff and Spaeth, 2000):

- 1 the chief executive officer as Plato's philosopher-king, instinctively makes the correct decision in the face of intense competitive pressures;
- 2 luck or simply good fortune; and
- 3 insights into the marketplace provided by market research.

The third option seems the most likely in today's increasingly competitive business climate. As Duboff and Spaeth (2000) note, in war it is easier if you know the terrain, the weaponry of the opposition, and the skills of your generals. In sports, it is easier if you have scouted the competition and their characteristics. Likewise, in achieving competitive advantage and superior performance, it is easier if you know the current environment and the likely actions of all key players, from customers to competitors. Excellent marketing information is the edge that differentiates market winners from losers who, when faced with identical opportunities, make different decisions resulting in varying degrees of success or failure. More than ever before, both product and service organizations must listen to and correctly interpret the voice of the market. They must be fully attuned to the signals that come from customers, dealers, as well as competitors in order to make the right decisions at the right time. Firms that lose touch with the market, that either ignore or misinterpret its

signals, will fail in hyper-competitive environments (Barabba and Zaltman, 1991). It follows that capturing customer insights and applying analytical tools to extract this new learning helps improve decision making and in turn service firm performance. A key vehicle that organizations use to capture these critical insights is market research, which is critical to understand the voice of customers.

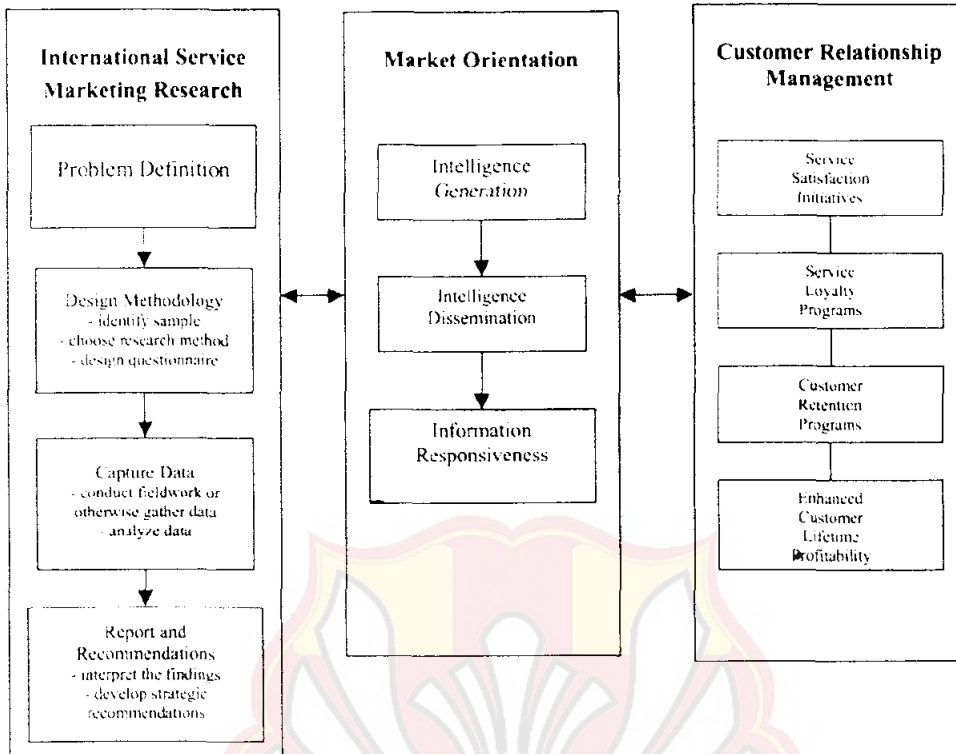
### Market research, market orientation and the components of CRM

The accompanying model – Figure 1 – illustrates the dynamic relationship between service marketing research, market orientation and customer relationship management. Information gathering begins in the marketing research stage of the model. As the organization defines specific problems, designs methodologies to meet information objectives, conducts fieldwork, analyzes the data, and reports results, the information collected helps drive the firm's market orientation. A market-oriented organization takes market research information and transforms it into market intelligence that then gets disseminated throughout the firm. The firm, in turn, responds appropriately to the new intelligence information. As the firm becomes increasingly market oriented the positive strategic outcomes of customer relationship management, including satisfaction, loyalty, retention and ultimately enhanced customer lifetime value are the final results. These outcomes are highly unlikely and rarely sustainable in any but the smallest of service firms without the input of market research information systematically obtained from key customer segments. This process is one of continuous interaction as new information is gained through marketing research and processed through the organization's market-oriented framework.

Although defined in a multitude of ways, essentially customer relationship management (CRM) is based on the belief that developing a relationship with customers is the best way to get them to become loyal and that loyal customers are more profitable than non-loyal customers (Dowling, 2002). CRM is a strategic concept which incorporates the strategic outcomes of satisfaction, loyalty, customer retention and profitability while relying on technology to harness market-relevant data and guide decision making. Accordingly, CRM systems include call centers, web sites, customer service and support initiatives, and loyalty programs all designed to help understand and manage the relationship between the organization and its customers (Dowling, 2002). Not surprisingly, the interrelationships among satisfaction, loyalty, retention and profitability are the consequences of a market orientation which, in turn, is the result of developing and integrating information through the effective use of marketing research. Thus, without the informational input of marketing research the possibility of developing effective relationship management strategies is severely diminished. Technology and marketing research information often work in tandem to create enduring customer relationships as the example from the Ritz-Carlton Hotel Company shows below:

*Relationship management and service marketing research in action: the Ritz-Carlton Hotel Company, winner of the 1992 Malcolm Baldrige National Quality Award, targets its services to industry executives, meeting and corporate travel planners, and affluent travelers. Although there are many dimensions related to the success of the Ritz, one of the keys is the quality of their customer database. By training each employee to note the likes and dislikes of regular guests and to enter this customer information into the*

Figure 1 Framework for International service marketing research, market orientation and CRM



customer's file, employees at any Ritz-Carlton Hotel are able to personalize services to the hotel's 240,000 repeat customers. The Ritz can know in advance the guest's preferences and be prepared to provide individualized service even before the guest's arrival. For example, if a particular guest prefers a feather pillow, wants extra brown sugar with their oatmeal, or always orders a glass of sherry before retiring, this information can be accessed in the marketing database and those needs can be anticipated and satisfied (Zeithaml and Bitner, 2003).

Each of the highlighted elements of customer relationship management will be discussed in the following section. Figure 2 shows the relationship between service marketing research and the components of customer relationship marketing. As shown, service marketing research represents the center starting point of information acquisition. The information gleaned helps the organization develop and maintain customer satisfaction, loyalty, retention and lifetime value initiatives all within the broader context of CRM.

### Service satisfaction

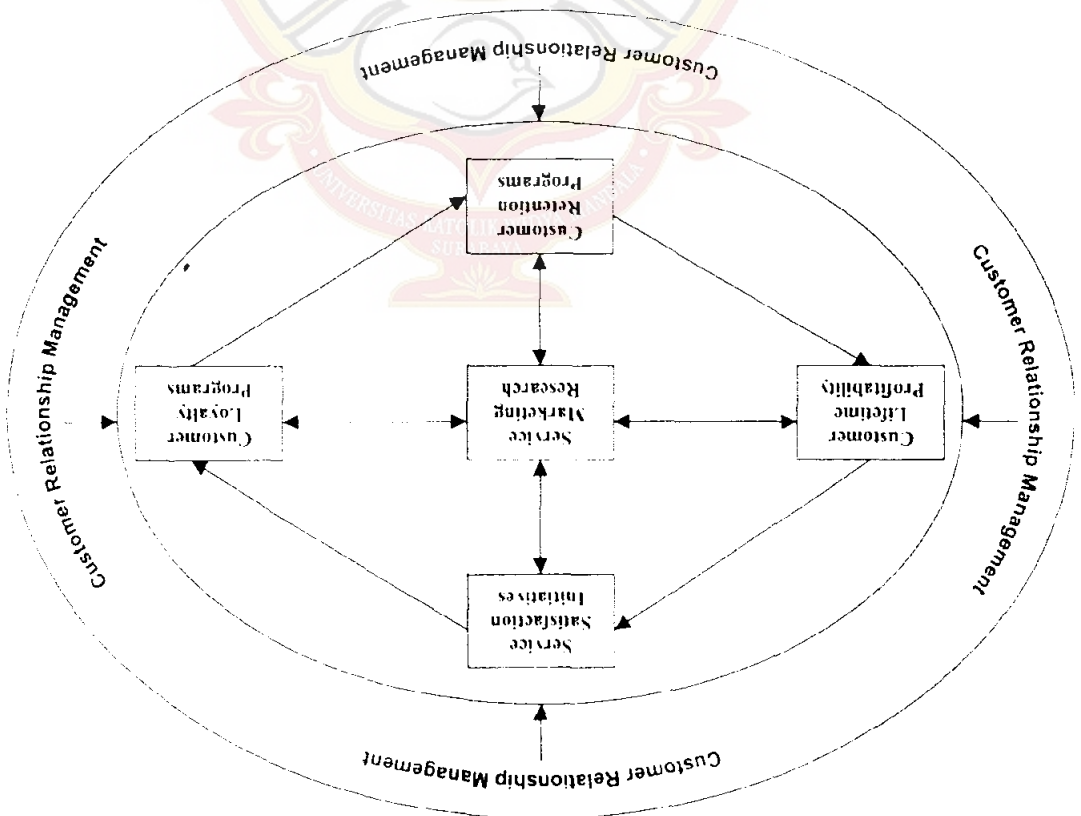
According to Oliver (1980) the two critical constructs that comprise customer satisfaction are performance-specific expectation and expectancy disconfirmation. Given the differences between tangible products and intangible services discussed earlier, service level expectations are a critical component of service satisfaction. Customer satisfaction became a popular topic in the marketing and management literatures during the 1980s and has continued to be a heavily debated topic during both business expansions and recessions. The marketing literature identifies three interrelated concepts that comprise satisfaction. First is the customer's initial expectation of the product or service delivery. Next is the actual delivery of the customer experience. Lastly, the customer compares the service

delivery with their prior expectations. Differences are expressed in terms of disconfirmation. If prior expectations are exceeded a positive disconfirmation results, while a negative disconfirmation results when prior expectations are unmet.

Specific service features as well as service quality influence customer satisfaction. Customer satisfaction with a product or service is influenced significantly by the customer's evaluation of product or service features (Oliver, 1997). For a service organization like a luxury hotel, important features include restaurants, room amenities, staff courtesy and sports facilities like pools, fitness rooms, golf or other outdoor activities. Satisfaction is also influenced by customers' emotional responses and perceptions of equity (Zeithaml and Bitner, 2003). Perceptions include price and value comparisons as well as equity assessments among other customers. Emotional evaluations are related to temporary mood states, such as the overall positive frame of mind consumers tend to have when they are on vacation. Although in highly competitive markets the presence of customer satisfaction does not necessarily ensure desirable consequences such as loyalty and retention (loyalty and retention also depend on how well competitors satisfy customers), the absence of satisfied customers is clearly a reason for concern (Kotler, 2003). Still, on balance, the consequences of service satisfaction tend to be inseparably intertwined with other strategic outcomes such as service loyalty, customer retention and long-term customer profitability:

*Satisfaction and service marketing research in action:* Federal Express drives its worldwide operation with the help of the most comprehensive customer-defined index of service standards and measures in the world. FedEx developed the service quality indicator (SQI) as an unforgiving internal performance measurement to ensure that the company delivered its goal of

Figure 2 Impact of market research on CRM components



**Brand loyalty versus service loyalty**

A common question raised by marketers concerns the differences between brand and service loyalty (Javalgi and Moberg, 1997). In an analysis of how consumers evaluate products and services, Zeithaml (1981) included a discussion of the differences in loyalty that exist between goods and services. Some of the main determinants of brand loyalty for products and services include the perceived risk associated with a purchase, past satisfaction with a brand, the costs of switching brands and the availability of substitutes. The difficulty of evaluating quality of services makes switching brands of service less likely as customers become familiar with a particular service (Javalgi and Moberg, 1997). Since there is also an inseparability of provider and customer in many service settings, consumers may be less likely to switch after they have developed an effective, satisfying or comfortable relationship with a service provider. Moreover, since services are intangible and heterogeneous, most consumers will perceive higher risk in services than in goods. As perceived risk in a category increases, the likelihood of loyalty to a familiar and satisfying brand increases (Cunningham, 1966; Guseman, 1981; Roselius, 1971). The intangibility of services also makes the evaluation of service quality more difficult, which means that consumers often depend on credence qualities to evaluate services (Zeithaml, 1981). Additionally, intangibility makes it more difficult to gather information about services. This makes information about services more expensive and may lead to consumers having less information about services than about goods. For all these reasons, it appears that brand loyalty may be a more

100 percent customer satisfaction after every interaction and transaction and development of the SQI led to a Malcolm Baldrige National Quality Award. What makes this service index different from those of other companies is its foundation in customer feedback. Since the 1980's, FedEx has collected customer complaints and used the information to improve internal processes. Another distinguishing feature of the SQI is its reporting in terms of actual numbers of errors rather than percentages. Top management strongly believed that percentages distanced the company from the consumer. For example, reporting that 1 percent of packages are delivered late diminishes the reality that 15,000 customers were unsatisfied with their delivery time. Furthermore, the SQI is disseminated weekly to everyone in the company reflecting a sincere market orientation (Zeithaml and Bitner, 2003).

**Service loyalty**  
Most research covering brand loyalty examines loyalty focused on goods rather than services (Dick and Basu, 1994). Inseparability, intangibility, heterogeneity, and commonly used by marketers to differentiate between goods and services (Parasuraman *et al.*, 1983). Since services have these distinct characteristics that result in differences in strategic orientation, it follows that the most effective strategies for building and retaining loyalty will also vary between packaged product and service providers (Javalgi and Moberg, 1997). Furthermore, these differences also imply that a market orientation may indeed have different implications for service providers as opposed to product marketers.

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relevant objective for service providers than it is for manufacturers (Zeithaml, 1981):

*Service loyalty and service marketing research in action:* Hallmark Cards Inc. uses marketing research to track customer purchases, contacts, and communications so that it learns what each customer individually values about the relationship with the company. The customer research allows Hallmark to understand customers in all 5,000 retail stores. Information relates to what core product or benefit has the most value as well as what differentiates Hallmark from its competitors. Customers receive newsletters, reward certificates, and customized news about new products and local store events. Results indicate that customers are very satisfied with Hallmark since 35 percent of total transactions and 45 percent of total retail sales are from frequent customers (Newell, 2000).

### Customer retention

Many organizations overspend on courting new customers and under-spend on retaining existing customers (Kotler, 2003). Many advertising campaigns and strategies are designed with new clients in mind as opposed to existing customers. Some organizations have formal incentives and even entire departments dedicated to identifying and developing what has become known as "new business," while no one seems to be responsible for retaining existing customers who, once acquired, may be neglected. In reality, 80 percent or more of marketing budgets are often earmarked for attracting new customers, leaving only 20 percent allocated to retaining existing customers (Weinstein, 2002) – despite the wide array of practices available to retain customers (Claycomb and Martin, 2002).

While it is critical for a business to replace lost customers and discover expanding markets, this objective can be pursued without necessarily sacrificing the goals of maintaining relationships and retaining existing customers. In her paper discussing customer switching behavior, Keaveney (1995) found that service-related problems such as inconvenience, core service failures, failed service encounters, and response to failed service accounted for more than two thirds (67.8 percent) of the reasons why customers switch service providers. Contrary to popular belief, pricing was related to only 17.1 percent of switching behavior. Once marketers realize that many customers leave primarily due to service-related reasons, these issues become highly controllable from the firm's perspective (Weinstein, 2002).

Reichheld (1996) builds a strong case why organizations should develop and use customer retention strategies. He shares the following insights related to customer retention:

- increasing the customer retention rate by 5 percent can have dramatic effects on average customer lifetime profits with increases of 25-100 percent possible;
- the typical organization loses 10-30 percent of its customers every year; and
- on average, US corporations lose half their customers over five years.

Claycomb and Martin (2002) surveyed 205 mostly large service firms in the USA to determine the specific objectives these firms had for "establishing and nurturing relationships with customers." The responses included frequent mentions of customer retention-related objectives. More specifically, Aspinall *et al.* (2001), examined how organizations approach the topic of customer retention. Respondents were asked if their organization had an agreed upon definition of what constitutes customer retention, and if so, what this definition was. Interestingly, although over half (54 percent) of the sample of 314 considered customer retention to be more important than

customer acquisition, only one quarter of the sample claimed that the company had a definition of customer retention. Moreover, 20 percent of those with a claimed definition stated that they did not know what it was. It appears that even as companies espouse the importance of customer retention, they do not do much to define or measure it:

*Customer loyalty and service marketing research in action:* the gambling industry has long recognized that certain customers are better than others and that encouraging the high rollers to spend time in one's casinos is a worthwhile and profitable strategy. Harrah's Entertainment, which owns and operates more than 20 gambling casinos in Las Vegas and Atlantic City, has successfully used marketing research information to understand its customers better. Harrah's uses research to track the names and addresses of repeat visitors, the machines they play, how long they play, and how much they gamble. The marketing research information allows Harrah's to determine how profitable all customers are and make special offers and modifications in order to keep their best customers coming back for return visits (Heun, 2000).

### Customer profitability

The objective of customer profitability analysis is to assign the revenues, expenses, assets, and liabilities of an organization to the customers who cause them (Howell and Soucy, 1990). This involves a two-step process. The first step is to assign costs to physical products. Customers who purchase high cost products are charged properly by applying those costs against the appropriate customers. The second step is to assign marketing and sales costs to customers. Adding these together provides a total cost associated with a given customer or customer segment. This total cost is compared with the customer's revenue stream to establish overall profitability.

Lifetime revenue is a critically important concept for service marketers to understand. Lifetime revenue is interrelated to customer loyalty, satisfaction and retention. For example, the lifetime revenue stream from a loyal pizza customer can be \$8,000, a Cadillac owner \$332,000, and a corporate purchaser of commercial aircraft can literally add billions of dollars of revenue over a lifetime (Heskett *et al.*, 1994).

Understanding the cost and value of service activities is a requirement of the modern business landscape of today's markets. Markets demand services that often drive business expenses up without a corresponding increase in revenue (Howell and Soucy, 1990). Organizations that understand and that can accurately quantify these costs are in the best position to control them. The objective is not to minimize the service, just the associated cost, through the elimination of non-value-added activities (Howell and Soucy, 1990).

Other writers (e.g. Wayland and Cole, 1994) have discussed an approach called customer franchise management: "In essence, the goal becomes to maximize the firm's value by focusing on the acquisition, development and retention of your most profitable customer. Underlying customer franchise management is a very simple premise: A company can out-perform its industry average by better managing its portfolio of customer assets. To achieve maximum franchise value, firms must focus on customer profitability at all three points in the relationship cycle: acquisition, development and retention" (Wayland and Cole, 1994, p. 22).

The most attractive acquisition candidates are those customers that display a relatively high degree of preference for certain products and are likely to be profitable to serve (Wayland and Cole, 1994). Conversely, customers who are attracted to the product or service but likely to generate low profits will consume marketing resources without adequate return. The most attractive development candidates are those

with the greatest potential to increase their level of purchases or to shift their buying to higher margin products (Wayland and Cole, 1994). Likewise, customer retention efforts should focus on keeping the most profitable customers and "firing" unprofitable ones, or as Kotler (2003) suggests, making unprofitable or marginally profitable customers more profitable by increasing fees or decreasing services levels.

In practice, however, it is not always possible to know which customers are profitable or potentially so. For example, Martin (1996) points out that because customers may not be able to evaluate a service prior to purchase, they may opt to "sample" the service as a way of assessing the emerging relationship with the service provider and the level of service quality before committing more fully – such as when investors initially "trust" a financial planner or broker with only a small percentage of their assets. Using this example, if service quality is marginal because the sampling investors are categorized as only marginally profitable, there may be no motivation for the investors to turn over larger portions of their portfolios to the planner/broker. Under other scenarios, why would marginally profitable customers who pay high fees and/or receive mediocre service be interested in continuing the relationship with a service provider as circumstances change and they become more profitable – especially when they are likely to be increasingly courted by competitors as their potential profitability increases? In such cases, it seems intuitively obvious that the negative memories of previously neglected customers places the initial service providers at a distinct disadvantage.

Still, in the present economic environment, characterized by intense competition and technological dynamism, the problems of customer retention and customer profitability have become paramount for the success of any business (Gurau and Ranchhod, 2002). In most industries, companies are facing an ever-increasing level and intensity of competition, as well as a rapid evolution of the market environment. Under these conditions, the analysis and management of customer profitability becomes a key issue in securing the long-term success of the business (Gurau and Ranchhod, 2002). Again, market information and a market orientation are key. As Kotler (2003) notes, the potentially profitable practices of cross-selling and up-selling hinge upon a thorough understanding of customers.

Measuring customer profitability is particularly common among banking organizations. Garland (2002) examined 1,100 retail bank customers to determine the non-financial drivers of customer profitability. Jarrar and Neely (2002) looked at cross-selling in the financial services sector, Sutherland (2001) provided some guidelines about what is considered to be important in a bank account and customer profitability valuation, Narayanan and Brem (2002) examine customer profitability and CRM at RBC Financial Group and Hasapidis (2001) looked at using the Marketing Customer Information File (MCIF) as a database to help determine customer profitability. Niraj *et al.* (2001) even extended customer profitability analysis to an intermediary in a supply chain.

### **VeriFone conducts wide-ranging international segmentation research**

A service company that seems ideally suited for global services market research is VeriFone Inc., a manufacturer of

transaction automation products based in Redwood City, California. Transaction automation products are used by gas stations, restaurants, grocery and other retailers worldwide for electronic payment processing. Consumers are not familiar with the brand name, but they do recognize the devices that merchants use to swipe their credit, debit, or smart card just prior to purchase. VeriFone has 2,400 employees, half of whom work outside the USA and operates manufacturing and distribution centers in 16 countries on five continents.

VeriFone was interested in researching the international market looking for segments potentially interested in a new portable transaction terminal (Rydholm, 1996). VeriFone needed extensive consumer behavior information from merchants to determine if this new concept had any initial appeal. If VeriFone could find a viable market segment, it then needed comprehensive customer information on segment size, product attributes, design, competitive positioning, including which benefits to emphasize and which were trade-offs, and potential pricing. Worldwide customer input was also needed to develop marketing and other communication programs.

The project was designed as a two-phase international research project with interviewing in the USA, Canada, Germany, Taiwan, Singapore, China and Hong Kong. The first phase consisted of a series of qualitative one-on-one interviews with merchants, banks, and competitors. This exploratory phase was designed to allow customers talk freely about features distinguishing between the "musts" and "delights" to help determine the price/feature ratio. The second phase was a quantitative survey, which was designed based on the findings from the initial exploratory research. The company also held discussions with their own field sales people around the world. The sales people were able to provide feedback on the potential features of the product but their input was not used as a proxy for the actual customer interviews.

VeriFone used a monetary incentive and native language interviewers to enhance the comfort level of respondents and to increase response rates. VeriFone also found that native language speakers influence the motivation of respondents who find it easier to converse with someone using their own language. This was particularly important for the initial exploratory phase of the project. Language barriers during this exploratory phase could potentially introduce biases that would ultimately harm the quality of the second, more quantitative, phase of the project. These initial findings, in turn, became inputs into the second more quantitative phase of the project.

VeriFone also used a single research supplier experienced in international research to manage the project. Branch office personnel from the research vendor conducted most of the actual fieldwork. In a few cases, local interviewers were subcontracted to conduct interviews in specific markets. The single research vendor added value due to its local branches and connections with merchants in the various regions. In the USA and Canada, businesses are much more accustomed to being recruited via telephone for research projects. But in many cases in Asia, the interviews had to be conducted face-to-face in the respondent's office to establish the necessary rapport and credibility. Researchers have more access to top management in the USA and Canada versus the Asia-Pacific region, making it more difficult to reach the appropriate sample in other regions.



VeriFone was also acutely interested in managing for cultural and language differences. Question phrasing and building rapport were imperative to assure a successful project especially during the qualitative phase of the research. For example, in Germany, respondents are suspicious of interviewers asking too many questions, so VeriFone had to pre-fax a list of questions so that respondents could get permission from their superiors, or be prepared themselves before they spoke to an interviewer.

The local interviewers used on the VeriFone project were bilingual so back translation was used to assure accurate translations. To keep the same context, phrasing was carefully customized to elicit the same response across regions. For example, VeriFone learned that the word "portability" had different meanings in different regions, which was critical since portability was one of the primary selling points of the product. Extra time was built in to the timeline to allow time for precise translation and adapting the questionnaire to local cultural norms.

In order for the project to have worldwide application but still allow local regions an element of control, a core set of 25 questions was used on the global study. Each region was given the opportunity to fine tune its project by adding five customized questions of its own. This autonomy was highly valued by the local personnel and helped generate the necessary level of support for the project to be successful.

The findings from this project provided VeriFone engineers and marketers valuable insights. The segmentation did elicit more than one viable market target and helped VeriFone refine other marketing mix variables. The engineers received very specific guidance regarding product design and the marketers were able to make recommendations on positioning and key customer benefits. The study also provided good ideas of what each region demanded and at what price. The company was able to prioritize the variety of features thereby being more efficient in the manufacturing process. Furthermore, the results also enabled VeriFone to determine an optimal positioning for the product and to develop an effective communications plan.

The product was launched in 2000. The research helped the VeriFone team build a marketing strategy for a new product concept with both flexibility and applicability to the different market segments represented around the world. VeriFone was very effective at using a comprehensive market research project to provide feedback on segmentation, positioning, manufacturing and design issues, the importance of various attributes, and marketing mix strategies.

### Marketing implications

The marketing research function of the firm is well positioned to be the key department that provides the building blocks of a market orientation. This market orientation, in turn, has previously been linked to positive organizational performance. The argument proposed here is that due to the unique aspects of the service-provider experience, market orientation should positively affect the key customer relationship management components of service satisfaction, loyalty, retention, and customer lifetime value. Furthermore, this positive impact is only possible if the antecedent factor of developing and managing a strong marketing research function is present in the service organization.

Lovelock (2004) reports that when researching the marketplace, service marketers should attempt to find answers to the following questions: What are the optimal ways to use marketing research information to support an international segmentation strategy for the firm's service? What are the needs of the specific segments that have been identified? Which of the segments best fits the organization's mission and operational capabilities? What do customers in each segment view as the firm's competitive advantages? How should the organization differentiate marketing efforts to attract and retain the most optimal customer segments? What is the long-term financial value of a loyal customer in each segment? What other strategies are necessary in order for the organization to build long-term relationships in terms of satisfaction, loyalty, retention and profitability with target segments? How can service marketing research be better integrated into the organization to support improved relationship marketing strategy execution?

Marketing information provided by research and managed through the firm's market orientation forms the foundation for providing answers to these, and other, key questions. Information is a key element in developing and implementing effective international marketing strategies (Craig and Douglas, 2000). Developing, implementing and maintaining a marketing research strategy is a critical priority for organizations committed to global market expansion. Global marketing research information systems and market orientation concepts are essential in developing and deploying strategies to build lifetime customer value and maximize long run profitability.

### Conclusions and guidelines for managers

Based on the extended case history of VeriFone as well as the other examples cited above, it is clear that information gleaned from market research is extensively used to deliver impactful strategies for international service providers. The examples highlight the importance of integrating market research information with market orientation concepts. Market research is primarily concerned with generating information while market orientation is concerned with how organizations synthesize, communicate and respond to market challenges in a customer-centered way based on this information. As such, the two constructs of market research and market orientation are inextricably linked. Market research information forms the foundation for the firm's market orientation which results in the positive strategic outcomes of satisfaction, loyalty, retention and profitability.

The dramatic changes in today's international business environment, coupled with technological advances in data collection, analysis and dissemination, imply that service marketing researchers will need to broaden their capabilities in order to design, implement and interpret research in the new millennium (Craig and Douglas, 2001). The focus on the customer, regardless of where they live and how far away they are, will remain a major thrust in marketing of services internationally (Javalgi and White, 2002). Marketing research is imperative in order to establish and maintain an open dialog with customers. The information provided by marketing research represents the cornerstone of developing a market orientation which, in turn, positively influences the organization's strategic outcomes representing the components of customer relationship marketing. Market

ientation is focused on information development, management, and responsiveness. International service marketing research serves as the catalyst for the organization's market orientation.

Javalgi and White (2002) discuss several challenges to the marketing of services internationally. These include reducing on-tariff barriers, countering the effects of country of origin and ethnocentric tendencies in service evaluation, understanding cross-cultural differences, information content and delivery variations, and global standardization versus local adaptation decisions. These strategic considerations all require an in-depth understanding of foreign customers and markets. This understanding can only be provided by conducting marketing research in order to form the foundation for developing a market orientation.

As marketing research efforts become increasingly aligned with corresponding high potential market segments, researchers will need to develop the capabilities and skills to design and execute research in a wide variety of global contexts (Barnard, 1997). New methods incorporating state-of-the-art technology will need to be mastered and creative approaches required to understand customer behavior in differing international cultural contexts will need to be developed (Craig and Douglas, 2001). The ability to interpret and integrate complex information sources from diverse sources and environments will also be critical in order to provide meaningful recommendations for the firm's global marketing strategy. Studies integrating the market research and market orientation constructs are an important topic that needs the attention of additional researchers and management scholars.

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Rajdeep Grewal & Patriya Tansuhaj

# Building Organizational Capabilities for Managing Economic Crisis: The Role of Market Orientation and Strategic Flexibility

Firms around the world often must manage and survive economic crises. Recent cases in Asia, Eastern Europe, and South America bear testimony to this point. As economic weak spots are integrated into the global economy, it is timely to develop an understanding of organizational capabilities that can help firms manage their way through such crises. The authors investigate the role of market orientation and strategic flexibility in helping Thai firms manage the recent Asian crisis. The results demonstrate the contingent nature of the influence of market orientation and strategic flexibility on firm performance after a crisis has occurred. As hypothesized, market orientation has an adverse effect on firm performance after a crisis. This effect is moderated by demand and technological uncertainty and is enhanced by competitive intensity. In contrast, strategic flexibility has a positive influence on firm performance after a crisis, which is enhanced by competitive intensity and moderated by demand and technological uncertainty. It seems that market orientation and strategic flexibility complement each other in their efficacy to help firms manage varying environmental conditions.

Organizations frequently must cope with anomalous events, referred to as crises, that create high levels of uncertainty and are potential threats to the viability of an organization. The past decade, for example, has witnessed tremendous economic upheavals that have manifested in economic crises, such as the crashes of the Mexican peso, the Russian ruble, and the Brazilian real. Organizational crises have been extensively researched from divergent perspectives, including those of psychology (Halpern 1989), social polity (Weick 1988), and technological structure (Pauchant and Douville 1994). We add to this body of research by studying the relevance of market orientation and strategic flexibility in determining firm performance in developing economies and during periods of economic crisis; we investigate these relationships in the context of the recent Asian economic crisis.

Literature on the Asian crisis (see Champion 1999; Goad 1999) emphasizes, in general, the need to "better manage" but does not underscore the specifics of this better management. We adopt a resource-based perspective to identify organizational capabilities that would help firms manage their way out of an economic crisis (see Barney 1991; Dickson 1992; Hunt and Morgan 1995). Resources embody "stocks of knowledge, physical assets, human cap-

ital, and other tangible and intangible factors that a business owns or controls, which enable a firm to produce, efficiently and/or effectively, market offerings that have value for some market segments" (Capron and Hulland 1999, p. 42). In turn, the firm uses the capabilities developed by resource utilization to manage its environment and perform (Day 1994). Two such capabilities are market orientation and strategic flexibility.

Central to the development of high-caliber marketing practice is the construct of market orientation (Day 1994; Kohli and Jaworski 1990). Being market oriented implies delivering products and services valued by consumers, usually accomplished through (1) ongoing monitoring of market conditions and (2) adaptation of organizational responses (Narver and Slater 1990; Shapiro 1988). Top management plays a critical role in fostering market orientation (Webster 1992), and market orientation influences organizational performance, commitment, and motivation (Jaworski and Kohli 1993). Given the importance of market orientation, it comes as no surprise that this construct has received scrutiny from marketing scholars.

The past decade has witnessed an increase of interest in strategic flexibility, which bestows on a firm the ability to respond promptly to market opportunities and changing technologies (Sanchez 1995). Technological advances in diverse fields such as communication and transportation have endowed organizations with the ability to carry out real-time market research, reduce new product development time and costs, offer a wider product line, mass customize products, and upgrade products at a faster pace than ever before (Kotha 1995). Again, the development of capabilities to be flexible rests on the mandate of top management, helps firms manage environmental uncertainty, and tends to enhance firm performance (Evans 1991).

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However, there are at least two limitations of current research on both market orientation and strategic flexibility that preclude researchers from claiming their centrality to the field of marketing. First, researchers primarily have examined the two constructs in the context of organizations in either the United States or Western Europe. As the number of emerging economies in Asia, Eastern Europe, and South America grows, generalizability of market orientation and strategic flexibility rests on the constructs' applicability to the developing world. Our research takes a step in this direction by examining the performance consequences of these constructs for firms in Thailand. Second, research on market orientation and strategic flexibility has concentrated on the normal course of a firm's business and as a result has ignored the constructs' impact on the firm's ability to manage crises. Because of increasing globalization and the emergence of the network economy (Achrol and Kotler 1999), sooner or later economic crises are going to have a direct or indirect effect on almost every firm. Thus, it is essential to develop an understanding of organizational capabilities that will help firms manage an economic crisis. Our research examines the role of market orientation and strategic flexibility in helping Thai firms manage the recent Asian economic crisis. By studying both market orientation and strategic flexibility, we hope to shed light on the resource allocation decision between these two organizational capabilities. The practical implications from our theoretical model and its empirical examination should provide managers with concrete lessons for devising strategies in crisis situations.

## Conceptual Background and Research Hypotheses

In this section, we review literature on (1) economic crises, (2) market orientation, and (3) strategic flexibility to develop our hypotheses. The literature on economic crises helps us crystallize the challenges that organizations face in managing the critical event of an economic crisis. In contrast, literature on market orientation and strategic flexibility provides a means for these organizations to manage this critical event.

### **Economic Crisis**

A crisis represents "a low probability, high impact situation that is perceived by critical stakeholders to threaten the viability of the organization" (Pearson and Clair 1998, p. 66). The significant impact of crises, which may be manifested in the firm's demise, makes it critical for managers to understand and effectively manage these events. Crises come in many forms, including natural disasters such as earthquakes and meteor showers, technological disasters such as the fervor regarding the Y2K computer bug, firm-level crises such as labor strikes, and economic crises such as the one in Asia in 1997. Our research focuses on economic crises and firm-level strategies for managing them (henceforth, we use "crisis" to refer to "economic crisis").

Economic crises are inexorably linked to the concept of business cycles (sometimes referred to as crisis cycles;

Mattick 1981), which have continued to befuddle scholars since the beginning of the nineteenth century. Macroeconomics giants, including Keynes (1936), Mathews (1959), and Schumpeter (1939), expended considerable effort to understand these elusive cycles and the ensuing crises. Indeed, the primary criticism of capitalism in Marx's *Das Kapital* and by subsequent proponents of Marxist thinking (see Mandel 1980) is centered on the contraction phase of business cycles.

Even though much research has been carried out to understand the advent of business cycles and the ensuing periods of expansion and contraction, they remain an enigma (Sharma 1999). The complications stem from the existence of many different cycles, including those with 50–60-year waves, 15–25-year waves, 6–10-year waves, and 40–60-month waves (Mullineux 1984). After adding these cycles, economists must take general trends (for example, an upward trend for a growing economy), along with interdependencies among national economies (which may have different general trends and/or cyclical waves) and external shocks (such as natural disasters), into consideration to get a measure of the complexity involved in predicting and understanding business cycles. However, not all periods of contraction (or troughs in a cycle) are classified as crises. Crises refer to contractions in which real output decreases, not to periods of slow growth. Therefore, it comes as no surprise that it is difficult to predict and gauge the influence of these economic crises.

Furthermore, there is little consensus as to the reasons for the manifestation of economic crises. Whereas the Great Depression of the 1930s was characterized as a Keynesian crisis (i.e., chronic insufficiency of demand) and the oil shock of 1970s was attributed to an external shock, the Brazilian crisis of the 1980s was blamed on governmental failures (excessive and distorted growth of the state), and the recent Asian crisis was considered a culmination of antiquated banking practices and idiosyncratic cultural elements, such as lack of transparency (Aggarwal 1999; Alon and Kellerman 1999; Pereira 1996). However, crises are characterized by the co-movement of many macroeconomic indicators, including decreases in real output (measured by real gross domestic product [GDP]), high levels of inflation and unemployment, and an unstable currency.

The organizational crisis literature focuses on myriad factors that influence strategies for crisis management, including the psyche of managers, the nature of crisis-triggering events, organizational structures and processes, and environmental variables (Pearson and Clair 1998). Research on the organizational response, however, has primarily focused on industrial crises (Smith 1990). Industrial crises, such as those related to negative consequences of product consumption (e.g., the silicon breast implants of Dow Corning) and industrial accidents (e.g., the 1984 Union Carbide gas leak incident in Bhopal, India), usually influence a single firm at a time. Unlike industrial crises, which influence a firm or an industry, economic crises affect a country (e.g., Mexico in 1994) or a region (e.g., Asia in 1997). Furthermore, industrial crises usually involve a struggle for legitimacy, in which organizational moral and ethical standards are subject to public scrutiny (Pauchant and Dou-

ville 1994). In contrast, economic crises alter demand patterns, thereby testing organizational marketing skills (Block 1979). In addition, organizational research has not examined the significance of market orientation and strategic flexibility, both of which are considered important organizational capabilities and critical for competing effectively in the marketplace. Research on organizational crises (D'Aveni and MacMillan 1990) shows that surviving firms, in comparison with failing firms, focus on both external and internal environments, which is a critical feature of market orientation (Kohli and Jaworski 1990), and the attainment of a balance between the two environments, which is an important aspect of strategic flexibility (Volberda 1996).

Scholars assert that the environmental context interacts with organizational capabilities to influence firm performance (Houston 1986; Lusch and Laczniak 1987). Research on market orientation has examined the interactional effects of the facets of the environment and market orientation on firm performance (e.g., Jaworski and Kohli 1993; Slater and Narver 1994). In an ordinary course of events (without a crisis), firms develop capabilities to manage their environment. Organizational investments in these capabilities should reflect the firm's environmental needs (Clark, Varadarajan, and Pride 1994). In environments characterized by high uncertainty, for example, a firm will face many diverse situations and should invest more in being flexible (Harrigan 1985).

Thus, a firm develops its capabilities to maximize performance (we refer to this as performance before crisis) during the normal course of its activities. The firm uses these capabilities to manage crises (i.e., performance after the crisis has occurred, henceforth referred to as performance after

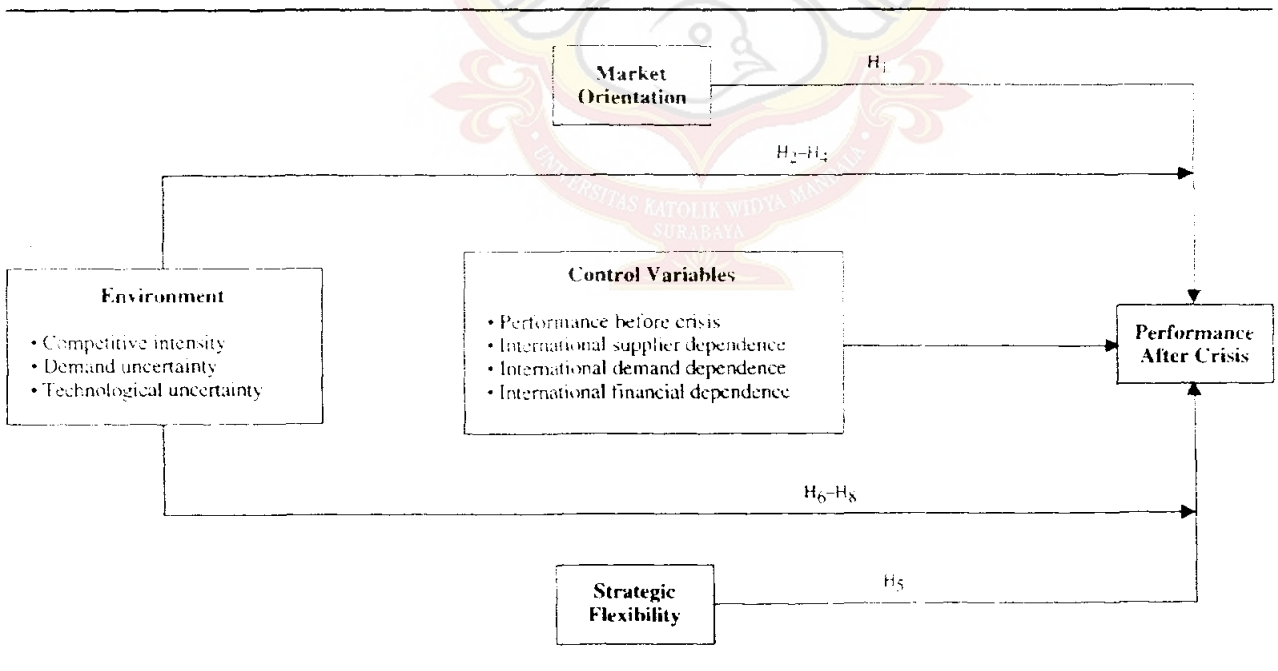
crisis). Therefore, drawing from contemporary research on market orientation, we examine three facets of the environment: competitive intensity, demand uncertainty, and technological uncertainty (Kohli and Jaworski 1990). These three facets provide a comprehensive theorizing of organizational environments (Clark, Varadarajan, and Pride 1994).

It is important to emphasize that an economic crisis does not influence all firms in a similar manner. If a firm has foreign customers, for example, it may benefit from a crisis. However, if the firm has foreign suppliers, it might suffer and may need to look for alternative sources of supply. Likewise, as a crisis influences the currency exchange rates, the nature of a firm's debt becomes important. In a similar vein, a firm's performance before crisis should affect its performance after crisis (Kuran 1988). Therefore, we cannot apply the macroenvironmental phenomenon of an economic crisis homogeneously at the firm level. To conceptualize crises at the firm level, we control for a firm's performance before crisis and reliance on international suppliers, international demand, and international financial institutions. By controlling the organizational context, we customize a crisis for a firm and thereby conceptualize it at the firm level. We present our theoretical model in Figure 1, which summarizes the hypotheses pertaining to market orientation and strategic flexibility. Next, we develop these hypotheses.

### Market Orientation

Market orientation represents the implementation of the marketing concept, an important cornerstone of the marketing discipline (Barksdale and Darden 1971; Felton 1959; McNamara 1972). A "market oriented organization is one whose actions are consistent with the marketing concept"

FIGURE 1  
Conceptual Model



(Kohli and Jaworski 1990, p. 1). Contemporary research on market orientation focuses on (1) its definition and conceptualization (Jaworski and Kohli 1993; Narver and Slater 1990), (2) its antecedents and consequences (Jaworski and Kohli 1993; Slater and Narver 1994), (3) its influence on employee attitudes (Siguaw, Brown, and Widing 1994), and (4) its measurement (Deshpandé and Farley 1998; Kohli, Jaworski, and Kumar 1993).

Following the work of Jaworski and Kohli (1993; Kohli and Jaworski 1990; Kohli, Jaworski, and Kumar 1993), we conceptualize market orientation in terms of the activities of information generation, information dissemination, response design, and response implementation. Information generation captures the organizational emphasis on gathering information on current and future customer needs, information dissemination is the degree of sharing of information across departments, and response design (the use of market intelligence in planning) and implementation (execution of the plans) assess organization-wide responsiveness.

A standard argument in the market orientation literature suggests that market-oriented firms are in a better position to satisfy the needs of their customers (Narver and Slater 1990). Empirical research in the U.S. context supports this assertion (e.g., Jaworski and Kohli 1993; Lusch and Laczniak 1987; Slater and Narver 1994). Therefore, researchers expect market orientation to be manifested in enhanced firm performance (i.e., under the normal course of events), at least in the U.S. context.

According to Hofstede's (1980) cultural dimensions, Thailand is similar to its Asian neighbors and clearly different from Western countries, where most market orientation research has been undertaken. Yet a recent empirical study of Thai managers' attitudes toward market orientation supports the centrality of this construct for Thai firms (Powpaka 1998). Managers of Thai firms and those in other Asian countries have adopted U.S. business practices in recent years. The widespread acknowledgment of U.S. business school models is homogenizing managerial thinking and market-based practices (e.g., the use of a market orientation) across nations (see Doremus et al. 1998). The role of world bodies, such as the World Bank and International Monetary Fund, reinforces this thinking, because the United States is the primary contributor to these bodies and therefore exerts a high level of control over them. The preeminent position of U.S. consulting firms in Thailand further strengthens this line of reasoning (see Mertens and Hayashibara 1998). Therefore, market orientation should have a positive influence on firm performance in noncrisis situations for Thai firms.

Meanwhile, we expect market orientation to have a negative influence on firm performance after crisis. Research on market orientation also shows that excessive customer orientation, an important aspect of market orientation, can be harmful for organizations (see Bennett and Cooper 1979; Frosch 1996; Macdonald 1995). For example, Christensen and Bower (1996, p. 198) conclude from their analysis of the hard disk drive industry that "firms lose their position of industry leadership ... because they listen too carefully to their customers." Similarly, Hamel and Prahalad (1994, p. 99) view this customer orientation

as the "tyranny of the served market" and think of customers as "notoriously lacking in foresight." In defense of market orientation, Slater and Narver (1998, p. 1003; also see Connor 1999; Slater and Narver 1999) point out that in comparison with customer-oriented firms, market-oriented firms "scan the market broadly, have a longer term focus, and are more likely to be generative learners." In a similar vein, Jaworski, Kohli, and Sahay (2000) theorize market orientation as both market driven and market driving. The focus of market orientation is on both expressed and latent customer needs, unlike customer orientation, which focuses only on expressed customer needs (Slater and Narver 1998). Market orientation also stresses learning from and monitoring competitors' capabilities and plans, as opposed to customer orientation, which neglects competitors.

Market orientation is indeed a learning process in which organizations learn from all aspects of their environment, including customers and competitors, and take both short- and long-term organizational goals into consideration (Kohli and Jaworski 1990). Market orientation captures organizational learning from the environment, and organizations derive benefits from this learning (Slater and Narver 1995). However, we do not expect this learning to be useful in crisis situations for at least two reasons. First, because crises are unique, low-probability situations, firms do not encounter them frequently and therefore cannot learn about them in advance. Second, learning from nonunique crisis situations is less likely to prove useful because firms rarely encounter these situations, do not have ample opportunity to use their learning about crises, and therefore should be less motivated to learn.

Crises also "defy interpretations and impose severe demands on sensemaking" (Weick 1988, p. 305). It is possible that even an organizational capability as powerful as market orientation may not be able to capture the rare circumstances that organizations can face in a crisis. Highly attuned market orientation would cause firms to lock into a standard mode of cognition and response, thereby building inertia instead of the creative thinking needed to manage crises (Day 1994; Scott 1987). In the context of reactions to competitive threats, Chandrashekar and colleagues (1999) show that it is fairly easy and common for firms to steer into such inertia. At least three factors contribute to creating inertia. First, managerial bias toward the status quo creates inertia by enhancing the preferences for tested and institutionalized business models (Ritov and Baron 1992). Second, research on bounded rationality recognizes the cognitive limitations of managers and organizations and the difficulties those limitations create in evaluating new business models, specifically in high-turbulence situations such as crises (Dickson 1992). Third, sunk cost fallacy, driven by the human tendency to be more averse to losses than gains, contributes toward creating barriers to change time-tested techniques and procedures (Kahneman and Lavallo 1993). Market orientation contributes to organizational success (Jaworski and Kohli 1993; Slater and Narver 1994) and entrenches business models, thereby creating inertia. Thus, we expect market orientation to have an adverse effect on firm performance in the face of a crisis.

H<sub>1</sub>: The greater a firm's market orientation, the lower will be the level of firm performance after crisis.

### **Interactions Between Market Orientation and Facets of the Environment**

**Competitive intensity.** Competitive intensity, the degree of competition that a firm faces, has been purported to moderate the influence of market orientation on firm performance. As competitive intensity increases, so does a firm's need to be market oriented (Houston 1986). Therefore, in highly competitive environments, greater emphasis on market orientation is required for better performance (Kohli and Jaworski 1990).

**Firms in highly competitive environments focus considerable attention on competitors.** In these markets, firms often assume that competitors' actions are optimal and mimic them (Day and Nedungadi 1994; Day and Wensley 1988). Such mimicking should not pay off in a crisis situation, because the idiosyncratic challenges of a crisis should also befuddle competitors. In addition, a crisis represents an anomaly and has the potential to change the very basis of competition. Firms that get locked into precrisis assumptions of competition are likely to be at a disadvantage. Arthur (1989), for example, discusses the way small, chance events result in nonoptimal decisions (e.g., the "QWERTY" typewriter keyboard) and have a lingering, long-term influence on organizational activities. Likewise, DiMaggio and Powell (1983) note how the pressures of professionalization are manifested in similar thinking across firms, which leads to institutionalized business models. Similarly, firms in highly competitive environments focus more on learning about competitors, which is a key aspect of market orientation (Han, Kim, and Srivastava 1998), and over time this learning becomes institutionalized. Organizations that are market oriented are more likely to be locked into institutionalized thinking about competitive behaviors. This type of thinking becomes a greater burden as competitive intensity increases, because the need for an appropriate response to competitors is greater in highly competitive environments (Jaworski and Kohli 1993). Thus, as competitive intensity increases, we expect the negative relationship between market orientation and firm performance to become stronger.

H<sub>2</sub>: The greater the competitive intensity, the stronger will be the negative relationship between market orientation and firm performance after crisis.

**Demand uncertainty.** Demand uncertainty captures the variability in customer populations and preferences, which requires organizations to adapt their product offerings, plans, and strategies to the changing demand conditions. Market orientation helps firms track these changes in the consumer environment and should aid in managing this uncertainty. As the demand uncertainty increases, so does a firm's need to be market oriented. Therefore, researchers posit that the positive relationship between market orientation and firm performance should become stronger as demand uncertainty increases (Jaworski and Kohli 1993; Slater and Narver 1994).

In the long run, an economic crisis may change the nature of consumer demand. Usually, economic crises manifest themselves in high inflation and tend to make consumers more price-sensitive (Block 1979). As a result, con-

sumers (1) resort to greater information search, (2) postpone their purchase decisions, or (3) switch brands. Congruently, a major decline in the sales of consumer durable products, such as automobiles and household appliances, occurred during the recent Asian economic crisis, perhaps because of postponement of purchase (Hla 1999) and/or high rates of brand switching (see Siam Commerce 2000). Similar consumer behaviors were reported in South Korea. Korean students, for example, switched from a U.S. educational institution to a Korean university for their undergraduate studies (Woodard 1998). In the short run, economic crises may cause consumers to move downward on the demand curve and buy at a lower price or to purchase less quantity at the same price. Research on consumer behavior shows that consumers learn from experience, and this learning affects their future behavior (Hoch and Deighton 1989). Therefore, in addition to the temporary effects of crises on consumer behavior, the changes in consumer behavior, such as increased price sensitivity of consumers, postponement of purchase decisions, increased consumer information search, and brand switching, can have far-reaching, long-term implications and perhaps even alter the nature of the demand.

Market-oriented firms in high-demand uncertainty environments are more accustomed to monitoring consumers and therefore, with their focus on the consumer, should be in a better position to make the adjustments necessary to tap into the new demand curves (Slater and Narver 1995). The nature of demand is inherently complex in high-demand uncertainty markets. A crisis is likely to complicate these markets further, because it will directly affect the demand pattern (e.g., a rise in inflation makes some consumers more price sensitive; they therefore resort to greater information search). The market orientation skills of a firm are critical and are subjected to a Herculean examination in crisis-torn, high-demand uncertainty markets. After an economic crisis, market orientation is even more important in markets characterized by high levels of demand uncertainty as opposed to low-demand uncertainty markets. Therefore, we expect demand uncertainty to moderate the negative effect of market orientation on firm performance after crisis.

H<sub>3</sub>: The greater the demand uncertainty, the weaker will be the negative relationship between market orientation and firm performance after crisis.

**Technological uncertainty.** Both the pace and degree of innovations and changes in technology induce technological uncertainty. Often organizations use technological orientation as an alternative means to market orientation to build sustainable competitive advantage (Kohli and Jaworski 1990). Even though a balance between an emphasis on technological orientation and one on market orientation is possible, firms in high-technology markets tend to allocate greater resources to technology to manage the uncertainty created by technological changes (Glazer 1991; Slater and Narver 1994). Emphasis on technological orientation as a means of competing should reduce the importance of market orientation. The positive relationship between firm performance and market orientation should weaken as technological uncertainty increases (Jaworski and Kohli 1993).

The effect of an economic crisis on reducing consumers' buying power and altering the basic demand pattern makes market orientation even more critical for two reasons. First, consumers become more price sensitive, which thereby reduces the importance of relatively expensive, technologically advanced products (Bass 1995). Second, the increased price sensitivity makes organizational ability to satisfy consumer needs even more critical. Furthermore, firms in markets characterized by high technological uncertainty, compared with firms in markets characterized by low technological uncertainty, compete more on the basis of technology than on the basis of market orientation (Hayes and Wheelwright 1984). The increased importance of market orientation due to the crisis and the dearth of market orientation capabilities should make market orientation a valued capability. Therefore, we expect technological uncertainty to moderate the negative influence of market orientation on performance after crisis.

H<sub>4</sub>: The greater the technological uncertainty, the weaker will be the negative relationship between market orientation and firm performance after crisis.

### **Strategic Flexibility**

Strategic flexibility represents the organizational ability to manage economic and political risks by promptly responding in a proactive or reactive manner to market threats and opportunities, thereby making it possible for firms to resort to what Ansoff (1980) terms "surprise management." Usually built by means of a flexible resource pool and a diverse portfolio of strategic options, strategic flexibility enables firms to manage uncertain and "fast-occurring" markets effectively (Aaker and Mascarenhas 1984). Strategic flexibility is expected to increase the effectiveness of communications, plans, and strategies, which, coupled with adapted product offering and other aspects of marketing mix, should enhance firm performance (see Miles and Snow 1978).

It is best to consider strategic flexibility a polymorphous construct; that is, the exact meaning and conceptualization of strategic flexibility varies from one context to another (Evans 1991; Young-Ybarra and Wiersema 1999). To study strategies for exiting markets, for example, Harrigan (1980) theorizes strategic flexibility as a firm's ability to redeploy its assets without friction and discusses how this flexibility helps firms overcome exit barriers in declining industries. Similarly, Sanchez (1995) conceptualizes strategic flexibility in the context of product competition as comprising (1) the flexibility inherent in product-creating resources (resource flexibility) and (2) flexibility in using these available resources (coordination flexibility). Likewise, Evans (1991) proposes the offensive/defensive dichotomy for strategic flexibility, in which offensive strategic flexibility aims to create and seize an initiative and defensive strategic flexibility guards against unforeseen competitive moves and environmental eventualities.

In the case of economic crises, the appropriate form of strategic flexibility is reactive. Because the extent, nature, and timing of a crisis are difficult to predict, proactive offensive action to manage the crisis is unlikely, but reactive strategic flexibility capability should be useful. Organizations develop reactive strategic flexibility (henceforth, we

use the term "strategic flexibility" to refer to "reactive strategic flexibility") by building excess and liquid resources (Cyert and March 1963) and creating the capacity to be agile and versatile (Evans 1991). One way for a company to build excess resources is to hedge its options, which is related to organizational slack (the buffer for managing environmental uncertainty) and should mitigate the loss potential of a crisis (Eppink 1978). Liquid assets involve minimal switching costs to convert them to alternative forms and are reflected in the overall organizational emphasis on managing political, economic, and financial risks (Jones and Ostroy 1984). To achieve agility and versatility, organizations instill capabilities for responding to diverse scenarios. Such capabilities are built by placing emphasis on the management of environmental diversity and variability (Evans 1991).

Similar to most resource allocation decisions, opportunity costs are associated with the resources used in building strategic flexibility. Organizations building these resources foreclose other opportunities and means of making profits, such as deriving benefits from scale economies. Therefore, in the normal course of events, when a firm does not need to respond reactively to environmental eventualities, we expect strategic flexibility to have an adverse influence on firm performance (Levitt 1983; McKee, Varadarajan, and Pride 1989).

However, when the benefits of adapting outweigh the gains from standardized strategy, as in crisis situations, strategic flexibility capabilities are likely to be useful. Crises offer greater contingencies and uncertainties to organizations by altering most aspects of competition. A firm's ability to alter and adapt its programs and strategies is likely to come in handy. (Indeed, the economists who study organizational management of business cycles have laid the foundation for work on strategic flexibility; see Hart 1937; Kindleberger 1937; Stigler 1939.) Therefore, we expect strategic flexibility to be manifested in enhanced firm performance after crisis:

H<sub>5</sub>: The greater a firm's strategic flexibility, the higher will be the level of firm performance after crisis.

### **Interactions Between Strategic Flexibility and Facets of the Environment**

*Competitive intensity.* Competitive intensity, the degree of competition a firm faces, requires firms to take a flexible approach so that they can adapt and improvise to put their best foot forward (Moorman and Miner 1998). In conditions of low competitive intensity, investments in flexible resources and strategic options are not useful, because an organization is less likely to face circumstances that require the use of these resources. In contrast, in highly competitive environments, strategic flexibility is a valuable asset (Aaker and Mascarenhas 1984).

A crisis represents an anomaly and has the potential to change the very basis of competition. Firms that have the flexibility to respond to new competitive behaviors are at a definite advantage; they can easily redeploy critical resources and use the diversity of strategic options available to them to compete effectively. Thus, as competitive intensity increases, we hypothesize that the positive relationship between strategic flexibility and firm performance after crisis should be strengthened.



H<sub>6</sub>: The greater the competitive intensity, the stronger will be the positive relationship between strategic flexibility and firm performance after crisis.

**Demand uncertainty.** Demand uncertainty creates difficulty in assimilating information and devising strategic plans. Managing uncertain environments requires concerted deployment of resources devoted to the product-market operations and response to demand idiosyncrasies. Strategic flexibility, by definition, emphasizes answering to the unique needs of consumers, business partners, and institutional constituents (Allen and Pantzalis 1996). Because firms are more likely to face challenging and unique situations in uncertain markets than in stable markets, strategic flexibility should be more useful in these uncertain markets.

Nonetheless, an economic crisis alters the demand characteristics. A firm may be unaware of the new nature of demand or may never have faced the new demand conditions. Even a flexible portfolio of options is unlikely to contain a remedy for the crisis, because it is a low-probability anomaly (Bowman and Hurry 1993). As a result, firms must learn (as manifested in market orientation), not just respond in a flexible manner with an existing toolkit. Therefore, we expect demand uncertainty to moderate the influence of strategic flexibility on firm performance.

H<sub>7</sub>: The greater the demand uncertainty, the weaker will be the positive relationship between strategic flexibility and firm performance after crisis.

**Technological uncertainty.** Variability in technology stemming from innovations contributes to technological uncertainty. Strategic flexibility involves capability building to respond quickly to changing market conditions. Such capability building usually involves investing in diverse resources and possessing a wide array of strategic options (Bowman and Hurry 1993). Because technologically uncertain markets are likely to offer a greater number and range of threats and opportunities for firms to adapt and improvise, we expect strategic flexibility to be of higher importance in markets characterized by high levels of technological uncertainty than in low-technological uncertainty markets.

In contrast, an economic crisis diminishes the importance of technologically advanced products and increases the importance of demand management. Even a flexible portfolio of options is unlikely to be useful in crisis, because the prime need of that moment is to learn and not just respond in a flexible manner. Therefore, we expect technological uncertainty to moderate the positive influence of strategic flexibility on firm performance after crisis.

H<sub>8</sub>: The greater the technological uncertainty, the weaker will be the positive relationship between strategic flexibility and firm performance after crisis.

## Research Context

### *Thailand: The Center of the Economic Crisis*

The Asian economic collapse began in Thailand in July 1997 with a sudden fall of the Thai baht, which could no longer be pegged to a basket of major currencies. The gov-

ernment spent all its reserves to try to keep the baht close to the pegged rate, but without success. In a few months, the baht devalued from approximately 25 baht per U.S. dollar to more than 50 baht. Quickly, the crisis spread to other Asian and then Latin American countries and has had lingering global effects. Therefore, we believe that Thailand is an appropriate context in which to study this crisis. Our data collection exercise was carried out from November 1998 to March 1999, which coincides with signals related to the bottom of the crisis and the recovery of the Thai economy. Since then, the baht has revalued to a floating rate of approximately 35 baht per U.S. dollar, and the short-term interest rates (20%–25% at the height of the crisis) began to decline to approximately 12% in June 1999. Economists have declared Thailand and Korea as frontrunners in managing their way out of the crisis (Aghevli 1999).

### *Generalizability of Context*

We argue that Thailand provides an appropriate context for testing the generalizability of our research on market orientation and strategic flexibility. It is a non-Western nation with a clearly different set of cultural values in comparison with the United States and Western European countries, where most of the research on market orientation and strategic flexibility has been carried out (Hofstede 1980; McGill 1995). Thai managers and business owners are representative of a non-U.S. sample for Asia, because many are Chinese in origin and thereby similar to their counterparts in other Southeast Asian countries (Powpaka 1998). Thailand has also been the regional headquarters of many multinational companies in Southeast Asia, and Thai managers have been employed to run subsidiaries throughout the region.

We further established the generalizability of the Asian crisis and its impact on Thailand in two ways. First, we compared the influence of the Asian economic crisis on Thailand, South Korea, and Japan. Thailand saw a drop in GDP growth from 5.5% to -10%, whereas the drop was not so adverse for South Korea (from 5.8% to -6.8%) and Japan (from 2.9% to -5.2%). The three countries also witnessed negative growth rates, as pointed out in our definition of an economic crisis. The crisis resulted in rising consumer inflation and unemployment, along with currency devaluation in the three countries. The current account deficits also dramatically declined, which signals a substitution of foreign goods for those produced within the country. Second, we compared the influence of the Asian crisis with those for Mexico and Russia. In terms of real GDP growth, consumer price inflation, unemployment rates, and changes in currency exchange rates, the influence of the Asian crisis on Thailand was similar to economic crises in Mexico (1994) and Russia (1997).

### *Control Variables*

We must control for both the historic levels of firm performance and international dependencies that may influence performance after crisis. Aply described as the "tenacious past" by Kuran (1988) and "path dependence" by Arthur, Ermoliev, and Kaniovski (1987), higher performance before crisis generally should be manifested in higher performance after crisis. Furthermore, we viewed international depen-

dencies in terms of linkages with suppliers outside Thailand, the extent to which the product/service is exported, and dependence on international financial agencies. Reliance on suppliers from countries not affected by the Asian crisis is likely to have an adverse influence on performance after crisis, because raw materials and other products used in manufacturing become more costly. Demand dependence captures the extent to which a firm relies on international demand. An economic crisis usually results in currency devaluation that makes exported products cheaper. Demand dependence should therefore enhance performance after crisis. Finally, we controlled for financial dependence, which indicates the extent of reliance on borrowing in foreign currencies. The higher the reliance on international financial institutions, the more severe should be the adverse effects of a crisis.

## Method

### Sample and Data Collection Procedure

We focused on small and mid-sized Thai firms, which were relatively more vulnerable to the crisis because organizational slack (buffer) directly varies with firm size (see Clark, Varadarajan, and Pride 1994). Data were collected from these firms in three waves. First, consistent with recent research on Thai firms (Powpaka 1998), the data were collected during November 1998 from 49 middle managers and owners participating in an executive MBA program at a large university in northeastern Thailand. A subsequent group of respondents who participated in the program in March 1999 provided the second set of 61 responses. Third, during March 1999, a senior manager in a prominent Thai conglomerate in Bangkok agreed to the conglomerate's participation in the study. We distributed the survey to the 30 firms affiliated with the conglomerate and obtained 22 responses. Thus, we received 132 responses, of which 120 were complete and usable. Furthermore, we compared the three groups in terms of the number of employees before crisis (BEMP) and number of employees after crisis (AEMP) and found no differences. We also compared the change in the number of employees ( $CEMP = BEMP - AEMP$ ) for the three groups and found that the mean number of employees increased for the three groups and that there were no statistical differences in the change in these means. Finally, we translated the questionnaire from the original English version to Thai and used the back-translation technique to ensure that the original meaning was maintained.

### Measures

We operationalized market orientation with four subconstructs: information generation, information dissemination, response design, and response implementation. Specifically, we adopted Jaworski and Kohli's (1993) 31-item measure with 10 items for information generation and 7 items for each of the remaining three subconstructs. We carried out a measure purification exercise similar to that used by Kohli, Jaworski, and Kumar (1993, p. 475), who note that "As globalization issues assume the forefront of marketing practice, it is important to consider whether (1) the scale 'makes

sense' in other languages and (2) subsequent measure assessment would produce similar results." However, after the development of this market orientation measure, advances in psychometric research on instrument development provided evidence of two potential issues with this measure. First, Bagozzi and Baumgartner (1994) recommend using 5 or fewer items to measure a unidimensional construct. Because all the subconstructs of market orientation have more than 5 items, it is possible that assessing the unidimensionality of these constructs will pose problems. Second, Herche and Engelland (1996) demonstrate that reverse-scored items need not be the opposite of positively worded items and therefore should be avoided. In the 31-item measure of market orientation, 10 items are reverse-scored. Therefore, cognizant that the market orientation measure may pose challenges, we sought to assess the psychometric properties of this measure as a peripheral objective in the Thai context.

We used four items to measure strategic flexibility. The first item captures the organizational objective of building excess resources by hedging (Eppink 1978) and likewise stresses sharing investments across business activities. Such investment sharing buffers "an organization from external shocks, because the organization can find alternative uses for its resources. The next two items gauge organizational attempts to build agility and versatility by instilling capabilities to respond to disparate situations. Specifically, the second item appraises a firm's emphasis on deriving benefits from diversity in the environment, and the third item measures the importance the firm puts on benefiting from opportunities that arise from variability in the environment. These emphases on actively managing the diversity and variability help organizations become agile and versatile (Jones and Ostroy 1984). The final item appraises strategic flexibility in terms of a firm's strategic emphasis on managing macroenvironmental risk (i.e., political, economic, and financial risks). Firms placing such an emphasis attempt to gain a competitive edge by developing superior abilities in responding to environmental uncertainties. In operational terms, these firms may possess liquid resources or options to enhance the speed and extent of their maneuvering capabilities.

To measure the three components of the environment (i.e., competitive intensity, demand uncertainty, and technological uncertainty), we adopted items from Jaworski and Kohli's (1993) work. The four items for competitive intensity assessed the extent of competition in general, promotional wars, price competition, and new competitive moves. The four items for demand uncertainty measured the uncertainty created by variability in consumer demand, product and brand features, price/quality demanded by customers, and competitive moves. The three-item technological uncertainty scale appraised changes in technology, opportunities created by technology, and manifestation of new products as a result of technology.

We measured performance (both before and after crisis) by assessing satisfaction with respect to return-on-investment goals, sales goals, profit goals, and growth goals. We appraised international interdependencies with three three-item measures. The items for international supplier dependence measured relying on international suppliers, buying raw materials and other supporting materials from abroad.

and relying on multinational corporations for raw material. The scale for international demand dependence assessed selling products to foreign customers, relying on overseas demand, and being able to satisfy multinational and foreign customers. The measure for international financial dependence appraised financing from abroad, the criticality of funding from abroad, and financing from international monetary agencies.

### Measure Validation

We used confirmatory factor analysis to assess the convergent and discriminant validity for our measurement models (Gerbing and Anderson 1988). Specifically, we estimated four measurement models: the first for the three environmental variables (competitive intensity, demand uncertainty, and technological uncertainty), the second for the three control variables (supplier dependence, demand dependence, and financial dependence), the third for the two performance variables (performance before and after crisis) and strategic flexibility, and the fourth for market orientation. We summarize the results from these models in Table 1. Overall, the results demonstrate adequate levels of fit, and all factor loadings are greater than the .4 cutoff (Nunnally and Bernstein 1994). In addition, discriminant validity is established, in that all the  $\phi$ s are statistically different from 1 (Anderson and Gerbing 1982).

We also used low factor loadings, high standardized residuals, and high modification indices from our confirmatory factor analysis results to purify our measures. As we suspected, the majority of the problems pertaining to unidimensionality were related to either long scales (Bagozzi and Baumgartner 1994) or reverse-scored items (Herche and Engelland 1996). We encountered problems in the market orientation subconstructs, especially for response design, which had four of seven items reverse-coded. There is a

need for a more reliable measure for market orientation. Finally, all reliabilities are greater than .7, with the exception of the response design subconstruct (Nunnally and Bernstein 1994). The descriptive statistics for the constructs, along with their correlations, appear in Table 2.

## Results

In Table 3, we summarize the regression results. Typically, multiplying the appropriate independent variables creates indicators for the interaction terms. Because this approach is prone to collinearity (Jaccard, Turrissi, and Wan 1990), we took an instrumental variable approach to capture the interaction effects. Specifically, we ran a regression in which the product of the two variables in question was the dependent measure and the two variables used to obtain the product term were independent variables. We used the residual of this estimation as the instrument for the interaction hypothesis (for statistical details, see Hansen 1982; White 1983). Conceptually, these residuals are orthogonal to the two variables used to obtain them; in terms of hypothesis testing, they explain variance in addition to that explained by the main effects.

For the control variables, our assertions regarding path dependencies and international demand dependence were supported. Firms with high levels of performance before crisis tended to perform better after crisis ( $b = .319, p < .01$ ), and international demand dependence leads to higher levels of performance after crisis as exports become cheaper in the world market ( $b = .214, p < .01$ ). However, international supplier dependence ( $b = .029, p < .67$ ) and international financial dependence ( $b = -.012, p < .88$ ) do not seem to influence firm performance after crisis. Our informal discussions with the respondents reveal a possible explanation for these results. The suppliers for the firms in our sample

TABLE 1  
Results from Confirmatory Factor Analysis Models

Measurement Model	Range of Standardized Factor Loadings	NNFI	CFI	SRMR	RMSEA	$\chi^2$ (d.f., p-Value)
Environment <sup>a</sup>	.60–.92	.90	.93	.08	.09	81.2 (41, $p < .01$ )
Dependence <sup>b</sup>	.68–.98	.94	.96	.06	.11	56.9 (24, $p < .01$ )
Performance and strategic flexibility <sup>c</sup>	.41–.94	.95	.96	.04	.07	82.3 (51, $p < .01$ )
Market orientation <sup>d</sup>	.43–.80	.81	.84	.10	.09	224.5 (113, $p < .01$ )
Market orientation—second order <sup>e</sup>	.62–.85	.91	.97	.04	.14	6.7 (2, $p < .03$ )

<sup>a</sup>The reliabilities for the environmental variables were competitive intensity = .92, demand uncertainty = .87, and technological uncertainty = .86.

<sup>b</sup>The reliabilities for the international dependence variables were supply dependence = .95, demand dependence = .91, and financial dependence = .95.

<sup>c</sup>The reliability for strategic flexibility was .77. The reliabilities for the performance variables were performance before crisis = .91 and performance after crisis = .95.

<sup>d</sup>The reliabilities for the facets of market orientation were information generation = .81, information dissemination = .85, response design = .61, and response implementation = .82. During the item-purification exercise, we deleted the following items from Jaworski and Kohli's (1993) scale: information generation: 4, 7, 8, 9, 10; information dissemination: 6, 7; response design: 1, 3, 5, 7; and response implementation: 2, 6, 7.

<sup>e</sup>Reliability for a second-order factor structure with an average of four subconstructs as items. We also calculated it using the method of linear combinations (see Nunnally and Bernstein 1994, pp. 266–73). Specifically, we calculated reliability as  $\rho = 1 - (\Sigma\sigma_i^2 - \Sigma\sigma_i^2 r_{ii})/\sigma_c^2$ , where  $\sigma_i^2$  is the variance for subconstruct  $i$ ,  $r_{ii}$  is the reliability of subconstruct  $i$ ,  $\sigma_c^2$  is the variance of the construct (i.e., market orientation in our case), and  $\rho$  is the reliability. This method gave us the reliability value of .91.

Notes: NNFI = nonnormed fit index, CFI = comparative fit index, SRMR = standardized root mean square error, RMSEA = root mean square error of approximation, and d.f. = degrees of freedom.

TABLE 2  
Descriptive Statistics

	ISD	IDD	IFD	CI	DU	TU	MO	SF	PBC	PAC
International supplier dependence (ISD)		.37**	.40**	.17	.33**	.23*	.22*	.21*	-.01	.10
International demand dependence (IDD)			.55**	-.05	.13	.10	.21*	.12	.01	.33**
International financial dependence (IFD)				-.01	.14	-.06	.23*	.26**	-.12	.16
Competitive intensity (CI)					.54**	.41**	.33**	.30**	.03	-.07
Demand uncertainty (DU)						.44**	.48**	.41**	.11	.11
Technological uncertainty (TU)							.45**	.41**	.19*	-.04
Market orientation (MO)								.49**	-.07	.11
Strategic flexibility (SF)									-.06	-.06
Performance before crisis (PBC)										.20*
Performance after crisis (PAC)										
Mean	2.74	2.91	2.34	4.15	4.53	4.67	4.93	4.32	3.92	4.82
Standard deviation	1.64	1.96	1.51	1.48	1.30	1.35	0.99	1.11	1.51	1.14

\* $p < .05$ .

\*\* $p < .01$ .

often were from neighboring countries that were equally influenced by the crisis. In addition, the financial institutions provided the funds in local currencies, which thereby insulated the firms from the vagaries of international currency fluctuations. Although we had conjectured along these lines for international supplier dependence and international financial dependence, by measuring these variables we controlled for the biases that might have been induced had we not incorporated these variables in our analysis.

Does market orientation help in managing market crisis situations? Our results show that it does only in certain conditions. In general, market orientation has a negative influence on firm performance after crisis ( $H_1$ :  $b = -.734$ ,  $p < .05$ ), which is aggravated in conditions of high competitive intensity ( $H_2$ :  $b = -.230$ ,  $p < .01$ ). However, market orientation helps firms manage conditions of high demand uncertainty ( $H_3$ :  $b = .301$ ,  $p < .01$ ) and high technological uncertainty ( $H_4$ :  $b = .158$ ,  $p < .10$ ).

Unlike market orientation, strategic flexibility is useful when firms must navigate their way out of crises ( $H_5$ :  $b = .603$ ,  $p < .01$ ) and becomes even more important as competitive intensity increases ( $H_6$ :  $b = .186$ ,  $p < .05$ ). However, demand uncertainty ( $H_7$ :  $b = -.362$ ,  $p < .01$ ) and technological uncertainty ( $H_8$ :  $b = -.140$ ,  $p < .05$ ) moderate the positive influence of strategic flexibility on firm performance after crisis.

We estimated a model with performance before crisis as a dependent measure and market orientation, strategic flexibility, and their interactions with the facets of the environment as independent measures. We recognize that such a model is not theoretically sound, because we are trying to explain the 1996 performance with organizational variables measured in 1998. Nonetheless, we found that market orientation positively influences firm performance before crisis and that this effect is moderated by technological uncertainty. In addition, reactive strategic flexibility has an adverse effect on firm performance before crisis, which is moderated by demand uncertainty.

## Discussion

Using the Asian economic crisis in Thailand as our research context, we studied the importance of market orientation

and strategic flexibility in helping firms manage the chaos and challenges an economic crisis poses. Reasoning that crises "defy interpretations and impose severe demands on sensemaking" (Weick 1988, p. 305), we suggested that learning firms would be locked into set modes of cognition and response because crises are low-probability events and preclude creative sensemaking. The inertia created by market orientation often hampers learning pertaining to the changes in the environment after a crisis, thereby resulting in a negative link between market orientation and firm performance after crisis.

Our results indicate that market orientation is useful for managing crises only in conditions of high demand uncertainty or high technological uncertainty, and it might not be emphasized when competitive intensity is high. When firms have an emphasis on market orientation, they get locked into institutionalized thinking about competitors. However, pre-crisis assumptions of competitive behavior are no longer valid after a crisis, and as a result market orientation tends to hurt market-oriented firms. Conversely, an emphasis on market orientation enables firms to learn the new demand patterns quickly and effectively, because their primary focus in high-demand uncertainty environments is consumers (Day and Wensley 1988). An economic crisis shifts competition away from innovative new products, which tend to be expensive, and toward other market factors such as demand management. Again, market orientation comes in handy here.

In contrast, the tools and skills developed by posturing strategic flexibility are useful in crisis situations. Our results recommend flexibility in managing environments with high competitive intensity. However, flexibility is not a cure for environments with either high demand uncertainty or high technological uncertainty. Readers are advised to observe that in markets characterized by high competitive intensity, strategic flexibility should be emphasized and market orientation should be deemphasized. In markets with high demand uncertainty or high technological uncertainty, market orientation should be emphasized and strategic flexibility should not be stressed. The complementarity of market orientation and strategic flexibility in managing varying environmental con-

**TABLE 3**  
**Results from the Three-Stage Least Squares**  
**Model<sup>a</sup>**

Independent Variable	Dependent Measure: Performance After Crisis
Constant	1.195 (1.604)
Performance before crisis	.319*** (.087)
International supplier dependence	.029 (.068)
International demand dependence	.214*** (.060)
International financial dependence	-.012 (.083)
Competitive intensity (CI)	-.211** (.116)
Demand uncertainty (DU)	.561*** (.153)
Technological uncertainty (TU)	-.050 (.138)
<b>Market Orientation (MO)</b>	
MO	-.734** (.356)
MO × CI	-.230*** (.090)
MO × DU	.301*** (.106)
MO × TU	.158* (.101)
<b>Strategic Flexibility (SF)</b>	
SF	.603*** (.220)
SF × CI	.186** (.087)
SF × DU	-.362*** (.094)
SF × TU	-.140** (.083)

\* $p < .10$ .

\*\* $p < .05$ .

\*\*\* $p < .01$ .

<sup>a</sup>Standard error is in parentheses (one-tail tests).  $R^2 = .27$ .

ditions suggests that top management should develop both of these capabilities in tandem. This complementarity is further reinforced by the finding that market orientation and strategic flexibility capabilities can be simultaneously pursued, as is

indicated by the high correlation of .48 between the two constructs (see Table 2). Firms can simultaneously build these two capabilities and thereby, to an extent, make the resource allocation decision between these two capabilities moot.

### Limitations

The main limitation of our research pertains to the nature of our sample. Two of the three sample sources are executive MBAs, which indicates that caution is necessary in drawing inferences. Firms that participate in executive MBA programs are likely to be somewhat different from firms that do not; they are more likely to succumb to the pressures of professionalization (DiMaggio and Powell 1983) and as a result are more likely to adopt the models propagated by business schools, such as the importance of market orientation.

Three more limitations require caution as we draw implications from and generalize our results. First, we are limited by our context, and replications with other economic crises are needed. Second, there is a need to develop a better measure of strategic flexibility that would give a better sampling of the domain of the construct. Third, similar to most survey research, our results suffer from survival bias. Firms that did not survive the crisis are missing from our sample.

### Theoretical Contributions and Implications

We believe that our research makes important contributions to the literature on economic crisis, market orientation, and strategic flexibility. By using organization-level data with a large number of respondents, we move beyond the theoretical (see Pearson and Clair 1998) and case-based (Abolafia and Kilduff 1988) research that dominates the crisis literature. We also show that the organizational capability (market orientation or strategic flexibility) that would aid organizations in managing a crisis is contingent on the facets of the environment.

We also contribute to the literature on market orientation. Time and again, scholars have expressed the need to study market orientation in a non-U.S. context (e.g., Kohli, Jaworski, and Kumar 1993). We take an important step in this direction and highlight three issues. First, our research examines the psychometric properties of Kohli, Jaworski, and Kumar's (1993) MARKOR measure, and our results suggest further refinement of this measure. Second, we demonstrate that market orientation influences performance after crisis but find that it is only useful for managing economic crises in environments characterized by high levels of either demand or technological uncertainty. Third, we study the boundary conditions for the influence of market orientation. Several studies have shown that customer orientation can be detrimental (Christensen and Bower 1996). Slater and Narver (1998, 1999) rightly argue that market orientation goes beyond customer orientation and should help overcome the weakness inherent in customer orientation. In the case of economic crises, our research shows that market orientation does not help firms effectively manage all environmental conditions and demonstrates the need to refine the construct further. The emergence of the network economy is increasing the interconnectedness among countries (Achrol and Kotler 1999), and regional economic crises therefore may have riveting effects around the world. It therefore becomes important for organizations to build capabilities

to manage crises and for marketing researchers to be attuned to market orientation for crisis situations. We also demonstrate the importance of strategic flexibility in crisis situations, in that strategic flexibility helps firms manage crises in markets characterized by either high levels of competitive intensity or low levels of demand uncertainty and technological uncertainty.

In addition to demonstrating the limitations of a market orientation in crisis situations, our research hints at the manner in which this important construct could be refined. Market orientation primarily reflects a firm's learning about its environment; that is, a firm learns from its environment and learns to manage its environment. However, a firm may face a situation it has never encountered. Crises are obvious examples, but we could also put breakthrough technological advances, such as the emergence of electronic commerce, in this category. If a firm has not been schooled in managing rare situations, it is at odds for its response. The lethargy with which bricks-and-mortar retailers adopted the Internet is an apt example (see Brooker 1999). Our study suggests that a market-oriented firm or a generative learner (see Sinkula 1994) should build a buffer to manage unique, unpredictable challenges reactively. Slater and Narver (1995) discuss buffering but in the context of proactive rather than reactive management. We believe that reactive actions are necessary though not desirable. We recognize that we provide only preliminary evidence for the refinement of market orientation in the direction of incorporating reactive resources, but we have taken an important step in this direction.

## Managerial Contributions and Implications

What capabilities do firms build to manage crises? This is an important question that today's practitioners are asking as organizations around the world try to cope with the growing pains of economic prosperity. Our research helps provide a partial answer to this question. Managers should stress building the skills of market orientation and strategic flexibility while recognizing their usefulness in managing different facets of the environment.

Market orientation aids in enhancing performance before crisis and, consistent with the "tenacious past" (Kuran 1988) argument, indirectly enhances performance after crisis (through firm performance before crisis). Market orientation should also be stressed in environments characterized by high demand or technological uncertainty, whereas strategic flexibility should be sought after in markets characterized by high levels of competitive intensity.

## Conclusion

Economic crises are complex phenomena from both a theoretical and a practical perspective. Our study is among the few attempts to unravel how organizational capabilities may be used to manage these situations effectively. We touch on only two capabilities, and many questions remain to be answered. We hope our research stimulates interest and motivates more organization-level research on economic crises.

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# ETERNAL VIGILANCE

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## Hyper-competition

Our economic opinions are often influenced by our perceptions of how our decisions will influence the competitive environment faced by ourselves and others as producers. The nature of the competition that we face not only influences our productivity, but also influences our personal lives and social structures.

I'd like to see greater consideration of the impact of competition on our lives, but that seems to be difficult in the absence of a formal description of the competitive environments that we may face. If you, dear reader, are familiar with any writings on these issues, please point me to where I may find them. Otherwise, please consider the following analysis and provide any feedback that you may have.

I think that our competitive environments can be described by a point along a spectrum, ranging from *monopoly*, to *competition*, to *hyper-competition*. These environments are described in detail below, but I am specifically interested in hyper-competition, since I have never seen a discussion of this environment\*, despite it's widespread occurrence in our economy.

**Monopoly** (including self-sufficiency): The condition where an actor's welfare is not influenced by competition. Economically, this arises when demand is satisfied by a single producer. The simplest example is an

individual producing a good for his own use. However, producers can increase demand for (and hence, the value of) their produce by engaging in markets with others. The standard definition of "monopoly" applies to this condition, where a market is supplied by a single producer, who typically sees very large returns on his productive labors.

**Competition:** The condition where an actor's welfare is primarily determined by his own actions, but the benefit is limited by others seeking to access to the same resource. Economically, this arises in markets where multiple producers are satisfying the cumulative demand of consumers. Consumers are free to choose among the producers, meaning that producers will be unable to sell their produce unless they compete effectively with the other producers. This is the competitive structure that is typically studied in introductory Economics courses, where market prices tend towards the cost of production.

**Hyper-competition:** A competitive structure where an actor's welfare is solely determined by his performance relative to others. Hyper-competition is characterized by "winner-take-all" dynamics, and epitomized by sports and politics. Economically, this may take many forms, but it may arise from intense competition for access to monopoly benefits. A good example of this is our patent system, where "inventors may work independently for years on the same invention, but one will beat the other to the patent office by an hour or a day and will acquire an exclusive monopoly, while the loser's work will then be totally wasted."\*\*

Many parts of economy seem to share this structure, to a lesser extent. I propose three ways that hyper-competition may arise:

1. From inflexible demand, such that productive innovations do not expand the market--they only displace other producers.



2. From formal bottle-necks in market-entry. One example would be an educational system where school admission is very competitive, but once accepted, students are almost guaranteed to succeed.
3. From informal bottle-necks in market entry, arising from **bounded rationality** (limited information processing ability). This may arise from a positive-feedback loop where successful exploitation of one opportunity produces a reputation that leads to greatly expanded opportunities.

Along this competitive spectrum, I expect to see a change in how much reward a person receives for each unit of good that he produces. Under monopolistic conditions, the law of **diminishing returns** dominates, and rewards decrease with each unit of production. In competitive conditions, market prices are independent of one's own produce, so the producer gains a constant reward for each unit produced. In hyper-competitive conditions, the producer's reward per unit increases as total production increases (this increase may be continuous, or involve thresholds).

Overall, hyper-competition might be expected to produce **Pareto distributions** in human achievement, where success is not directly proportional to skill, but instead increases as a **power function** of skill. Conversely, the reduction of hyper-competition would produce a "**long-tail**" in human achievement. It's interesting to note that a progressive income tax may counter-act the influence of hyper-competition on income.

Any thoughts are appreciated.

#### **Footnotes:**

\*A Google search for "hyper-competition" turned up two concepts. Most prominently, a business-school professor has been using the term to describe a gradual erosion of market imperfections, thereby **eliminating many**

**semi-monopolistic advantages** held by assorted producers; this is not what I'm talking about. My concept is most closely reflected by the writings of some random blogger, who discusses "**winner take all**" market conditions, specifically with respect to high-tech entrepreneurship.

\*\*This quote is from Ayn Rand's essay on *Patents and Copyrights*, which I remember as the epitome of what I dislike about Rand. Her rejection of this "objection to patent laws" is quite dismissive, even as it exhibits glaring circular logic.

Labels: **economics, entrepreneurship, living**

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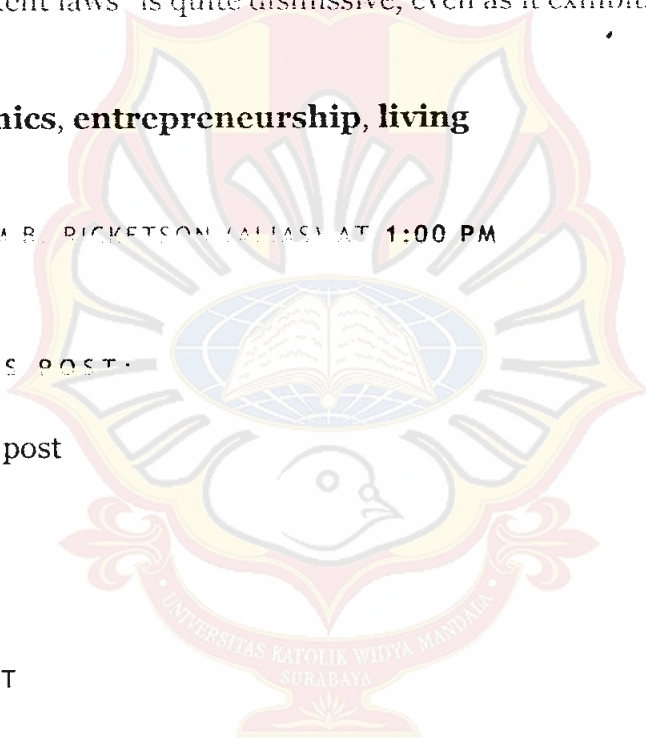
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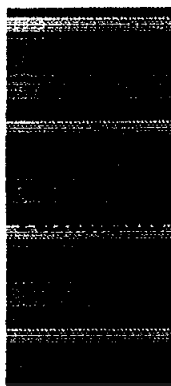
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