ENTREPRENEURIAL INTENSITY, NATIONAL CULTURE, AND THE SUCCESS OF NEW PRODUCT DEVELOPMENTS: THE MEDIATING ROLE OF INFORMATION TECHNOLOGY

Amonrat Thoumrungroje
Department of International Business Management, ABAC School of Management,
Assumption University

ABSTRACT

This paper synthesizes the literature on multiple disciplines, including marketing, entrepreneurship, information technology (IT), and international business. The investigation on the relationships among entrepreneurial intensity, IT, national culture, new product success, and performance is presented. It postulates the mediating role of IT in the relationship between entrepreneurial intensity and new product success, and it explores their indirect relationships with business performance. In addition, the conceptual framework encompasses the effects of cultural differences on the hypothesized relationship between entrepreneurial intensity and IT.

Since new product development[1] is at the heart of every business survival, extant research reveals the necessity to scrutinize the antecedents to and outcomes of new product development (NPD). Review of two articles assessing the research on new product development and management (i.e., Brown and Eisenhardt 1995, and Henard and Szymanski 2001) shows that this field focuses on both internal and external contexts of new product development as antecedents to new product success, which also can be viewed as intrinsic and extrinsic to an organization. While most research explores the effects of both organizational/ internal factors and external forces on new product success with a greater emphasis on the internal factors than the external issues (e.g., Gatignon and Xeureb 1997, Moorman and Slotegraaf 1999, and Sethi, Smith, and Park 2001), some focuses on only organizational factors as antecedents to new product success (e.g., Ayers, Dahlstrom and Skinner 1997, Griffin 1997, and Leonard-Barton 1992). In the same token, the present paper aims at exploring the relationships between two of the organizational factors (i.e., the entrepreneurial intensity and the role of information technology) and the success of new product development.

Previous literature shows that organizational factors affecting NPD success include organizational structure and control system (Ayers, Dahlstrom, and Skinner 1997, Brown and Eisenhardt 1995, Griffin 1997, Henard and Szymanski 2001, Wind and Mahajan 1997); strategic orientation (Gatignon and Xuereb 1997, Henard and Szymanski 2001, Moorman and Slotegraaf 1999, Wind and Mahajan 1997); and capabilities (Moorman and Slotegraaf 1999, Leonard-Barton 1992). Formalization (Ayers, Dahlstrom, and Skinner 1997, Griffin 1997), functional diversity or cross-functional team (Brown and Eisenhardt 1995, Griffin 1997, Sethi, Smith, and Park 2001), and inter-functional coordination and relations (Ayers, Dahlstrom, and Skinner 1997; Sethi, Smith, and Park 2001) are those elements of organizational structure and control system that have been extensively studied as antecedents to NPD success. Since the process of new product development usually involves teamwork, coordination and harmonization are also essential.

Furthermore, the firms' capabilities must be contingent upon the external market condition (e.g., external information) in order for new products to achieve higher success (Moorman and Slotegraaf 1999). As such, it is hypothesized that the use of IT[2] will provide an efficient flow of information in both intra-departmental

[1]Hereafter, new product development is referred to as NPD.

[2]Hereafter, information technology is referred to as IT.

and inter-departmental communications. This will finally enhance the success of NPD. According to Wind and Mahajan (1997), research in NPD with respect to changes in the business environment such as the globalization of business need to pay attention to cross-cultural contexts instead of one national context. Therefore, the present paper proposes a conceptual model and the hypothesized relationships to investigate the effect of national culture on the relationship between entrepreneurial intensity and the application of IT.

The investigation of NPD antecedents and outcomes is increasingly complicated given different units of analysis (i.e., projects, products, teams, and firm). The treatment of measurement of outcome also adds to the complication in interpreting the relationships among variables. Different studies indicate various proxies employed to evaluate new product success using both subjective and objective measures. Indicators of NPD outcomes can be further categorized as perceived firm-related success and perceived market success. For the purpose of this paper, the outcome of NPD is conceptualized as the perceived firm-related success, which includes both the product and process performances. In doing so, the paper attempts at clarifying the ambiguity in the conceptual and operational definitions of NPD success.

The objective of this paper is to propose a conceptual framework exploring the relationships among the four major constructs, namely the entrepreneurial intensity, the national culture, IT, and the new product success. For this reason, the research questions can be stated as: 1) Is the relationship between the entrepreneurial intensity and NPD success mediated through the application of IT? 2) Does new product success lead to business performance? and 3) How does national culture affect the relationship between the entrepreneurial intensity and the IT application?. In the subsequent sections, the literature review, the definitions of the constructs, and the proposed relationships are presented together with the conceptual model. Discussion and suggestions for further research are provided at the end of the paper.

Literature Review and Proposed Relationships

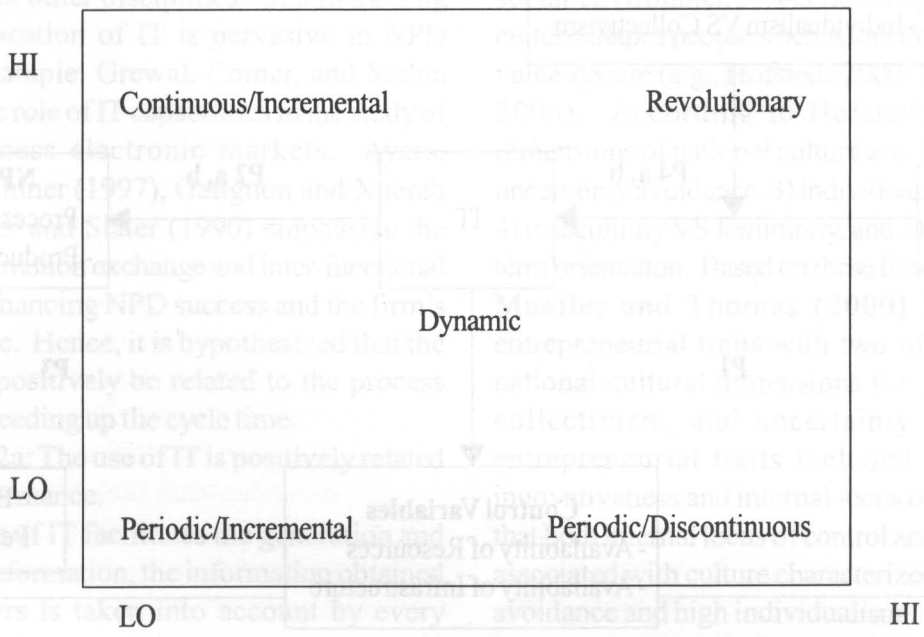
A review of extant research reveals that not only the entrepreneurial characteristics are highly yet implicitly implicated in the NPD research (c.f., Chandy and Tellis 1998; Ettlie, Bridges, and O'Keefe 1984), but also the role of information technology (c.f., Ayers, Dahlstrom, and Skinner 1997; Gatignon and Xuereb 1997; Moorman and Slotegraaf 1999). The notable entrepreneurial characteristics that are found pervasive in NPD research include all five dimensions of entrepreneurial orientation defined by Lumpkin and Dess (1996). These include innovativeness, proactiveness, risk taking, competitive aggressiveness, and autonomy. Regarding the issue of national culture influencing the entrepreneurship, a very thin volume of studies has been conducted (e.g., Mueller and Thomas 2000; Thomas and Mueller 2000). As such, it is interesting to integratively investigate the aforementioned important constructs in the fields of entrepreneurship and NPD in an international setting.

Entrepreneurial Intensity and Information Technology

Entrepreneurial Intensity. Although the concept of entrepreneurship has prevailed in business research for many decades, only lately has the conceptualization of the two related constructs, i.e. entrepreneurial orientation and entrepreneurial intensity, been clarified. Building on the previous literature in the field of management and entrepreneurship, Lumpkin and Dess (1996) conceptualize entrepreneurial orientation as "the process, practices, and decision-making activities that lead to new entry" (p. 136). Entrepreneurial orientation is composed of five major attitudinal and behavioral elements including innovativeness, proactiveness, risk taking, competitive aggressiveness, and autonomy. Among these five attributes, only the first three have been prominently recognized as key entrepreneurial characteristics (Antoncic and Hisrich, 2000; Lau and Chan 1994; Morris and Jones 1999). Based on the traditional way of decomposing entrepreneurship into these three major concepts, Morris and Sexton (1996) develop the notion of entrepreneurial intensity to capture the presence of these three entrepreneurial characteristics in an organization. As such, they define the entrepreneurial intensity as the degree and frequency of the practice of those activities characterized by their innovative, proactive, and risky nature.

In addition to conceptualizing and operationalizing the construct, Morris and Sexton (1996) also introduce the five categories of entrepreneurial intensity based on the two dimensions measuring the entrepreneurial intensity. These five categories are presented in Figure 1:

Figure 1: Five Categories of Entrepreneurial Intensity



This entrepreneurial grid is taken from Morris and Sexton (1996).

According to this entrepreneurial grid, the revolutionary type is high on both degree and frequency of entrepreneurship. This distinguishes those events that are highly innovative, proactive, and risky. The interpretation of the remaining cells is based on the two-dimensional measures (HI-LO degree and frequency) of entrepreneurial intensity.

Information Technology plays a crucial role in generating, processing, and transmitting information (Walsham 2001). These three processes are critical components of an organization, especially with regard to the implementation of market orientation, which places a high value on market intelligence (Kohli and Jaworski 1990; Jaworski and Kohli 1993). Since information is considered an invaluable asset of a firm, the appropriation of IT efficiently accelerates the acquisition, assembling, and dissemination of information between and within different departments in an organization (Court, Culley, and McMahon 1997; Grewal, Comer, and Mehta 2001). This finally enhances the coordination and harmonization in an organization. Such a situation is critical for the development of new products (Ayers, Dahlstrom, and Skinner 1997; Court, Culley, and McMahon 1997; Sethi, Smith, and Park 2001).

Regarding the relationship between the entrepreneurial intensity and the application of IT, there is still a lack of strong empirical support. The only study illustrating such relationship is that of Janson and Wrycza (1999). However, the study is considered an exploratory stage with it having no empirical evidence. From their case studies, Janson and Wrycza observe a tendency of firms characterized by high entrepreneurial intensity to employ IT in their organization. Moreover, past studies also indicate that a number of entrepreneurial firms are from high-tech industries (c.f., McAuley 1999). For this reason, it can be hypothesized that a firm with entrepreneurial intensity is likely to apply IT due to its innovative and proactive characteristics.

Figure 2: ***Proposed Conceptual Model***

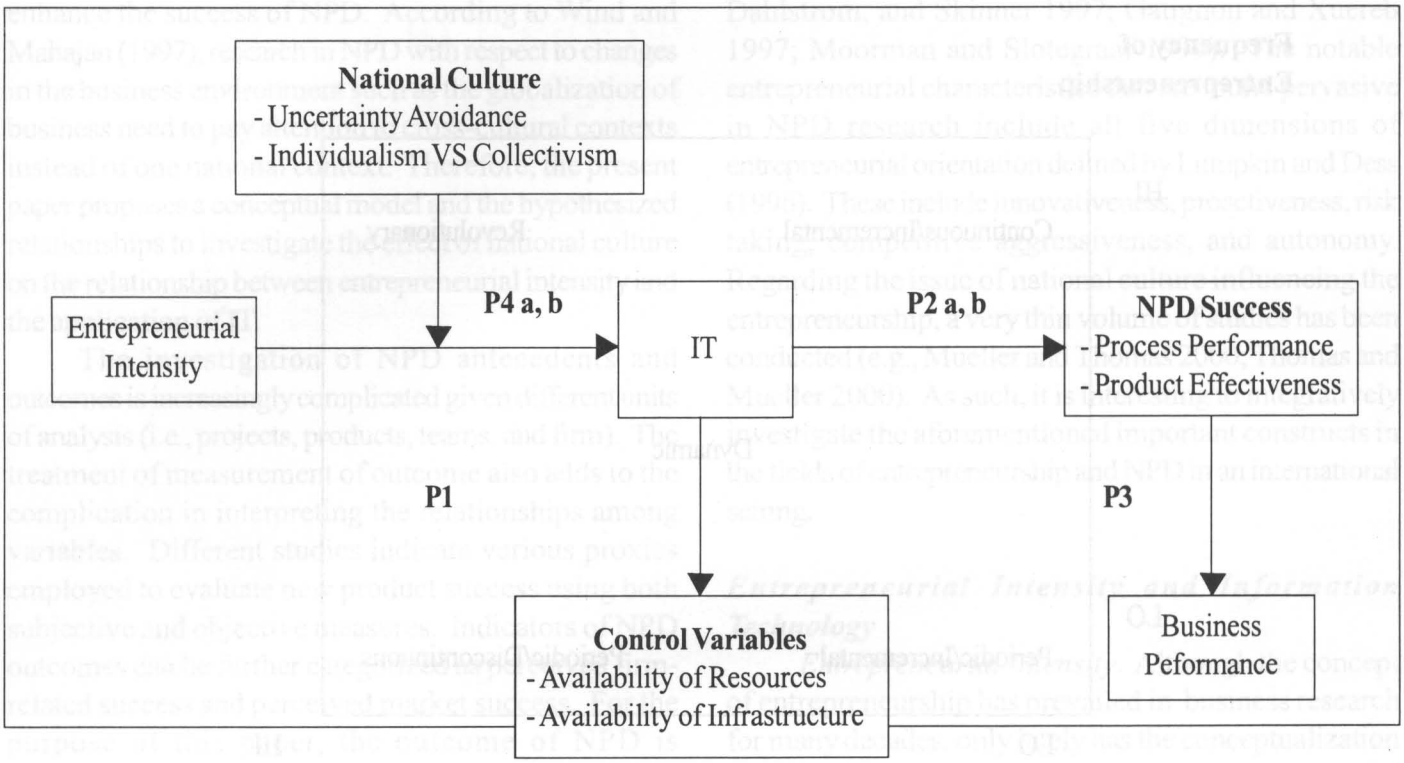


Figure 2 depicts such relationship between entrepreneurial intensity and the application of IT. From the aforementioned discussion on the relationship between entrepreneurial intensity and IT, the first proposed relationship could be stated as:

Proposition 1: The entrepreneurial intensity is positively associated with the application of IT.

Information Technology and New Product Success

New Product Success. Regardless of the search for success factors of new products, the unresolved issue of "what NPD success is," and "how to measure it" persists. There seems to be inconsistencies in both conceptual and operational definitions of NPD success. Some studies use new product characteristics such as innovativeness, managerial foresights, and customers' insights as proxies for success (e.g., Sethi, Smith, and Park 2001). Some equate effectiveness to success and measure it by speed and productivity (e.g., Griffin 1997, and Moorman and Slotegraaf 1999). Many treat NPD success as overall performance of a firm and measure it in terms of financial outcome (e.g., Henard and Szymanski 2001) or market acceptance (Urban, Weinberg and Hauser 1996).

Ayers, Dahlstrom, and Skinner (1997) define new product success as "the extent to which a project meets its commercial objectives" (p.111). This definition seems to be too ambiguous and implies only whether or not the objectives are achieved without considering other related outcomes such as process effectiveness/performance, and product effectiveness/performance. According to an assessment paper on NPD by Brown and Eisenhardt (1995), a success of NPD can be viewed as tripod, i.e. process performance, product concept effectiveness, and financial performance. Process performance refers to the speed of NPD while product effectiveness relates to the fit between the new products and other two factors, which include the market needs and a firm's competencies. These two types of NPD success ultimately lead to a general business performance, which can be operationalized as a firm's profit, sales revenues, and market share. Since the conceptualization of NPD success proposed by Brown and Eisenhardt (1995) reflects a complete picture of NPD performance, the NPD success in this paper refers to process performance, and product effectiveness.

As asserted by Janson and Wrycza (1999), "the use of IT critically determines the extent to which a firm's products and services can be called innovative" (p. 353). This notion indicates that IT leads to innovative product development. A number of past studies in the field of information technology show that IT enhances the process of NPD mainly because it facilitates the flow of information, promotes teamwork, shortens the processing

time, and reduces the operational costs in NPD (Court, Culley, and McMahon 1997; Corso and Paolucci, 2001; Drury and Farhoomand 1999; Ruffles 2000).

Not only has the impact of IT been recognized in IT field, but also in other disciplines. In a marketing context, the implication of IT is pervasive in NPD literature. For example, Grewal, Comer, and Mehta (2001) mention the role of IT capabilities in the study of business-to-business electronic markets. Ayers, Dahlstrom and Skinner (1997), Gatignon and Xuereb (1997), and Narver and Slater (1990) emphasize the importance of information exchange and inter-functional coordination in enhancing NPD success and the firm's performance per se. Hence, it is hypothesized that the use of IT should positively be related to the process performance by speeding up the cycle time.

Proposition 2a: The use of IT is positively related to the process performance.

Since the use of IT facilitates the generation and dissemination of information, the information obtained from the customers is taken into account by every department. This helps ensure that every department in a firm is working towards the same goal; thus, enabling the firm to better serve its customers by developing new products according to the customers' needs. This now leads to the next proposed relationship.

Proposition 2b: The use of IT is positively related to the product effectiveness.

Building on Brown and Eisenhardt's (1995) conceptual model of NPD success, both process performance and product effectiveness are proposed to be antecedents to business performance. For this reason, it is hypothesized that these two types of NPD success ultimately enhance the business performance.

Proposition 3: Both process success and product effectiveness are positively related to the business performance.

From the aforementioned discussion, propositions 1 and 2 (a, b), when taken together, stipulates the mediating role of IT. This paper proposes IT as a mediator between entrepreneurial intensity and NPD success because the result of the only study on entrepreneurial intensity-performance relationship (i.e., Janson and Wrycza 1999) indicates no relationship. When there is no direct relationship, it is possible to hypothesize that some links are missing. Therefore, IT is proposed as one of the missing links in this study.

The Moderating Role of National Culture

National Culture as defined by Raman and Watson (1997, p. 496) is "the common mental programming of a group of people who live or have lived in the same social environment." As noted by many researchers, culture shapes people's behaviors through the underlying value system (e.g., Hofstede 2000; Mueller and Thomas 2000). According to Hofstede (2000), the five dimensions of national culture are: 1) power distance, 2) uncertainty avoidance, 3) individualism VS collectivism, 4) masculinity VS femininity, and 5) long-term VS short-term orientation. Based on these five cultural dimensions, Mueller and Thomas (2000) have related two entrepreneurial traits with two of Hofstede's (1980) national cultural dimensions (i.e., individualism VS collectivism, and uncertainty avoidance). The entrepreneurial traits included in their study are innovativeness and internal locus of control. They find that both internal locus of control and innovativeness are associated with culture characterized by low uncertainty avoidance and high individualism.

Another related study by Thomas and Mueller (2000) extend their previous study by covering other two entrepreneurial traits —risk taking and energy level— in the study of entrepreneurship-culture relationship. Moreover, they also add power distance and masculinity VS femininity dimensions in the latter study. They find that while innovativeness seems to be indifferent given different culture distances, the other three, i.e. risk taking, locus of control, and energy level, are. Grounded on aforementioned studies, individualism VS collectivism and uncertainty avoidance are two cultural dimensions, which are found to be highly associated with the entrepreneurial traits, are included in the present paper.

Based on Hofstede (1980, 2000), uncertainty avoidance refers to the likelihood that a member of society will be risk-averse. Individualism emphasizes an individual member in a society to carry out an activity while collectivism focuses on group work. Since the previous study shows that a culture with low uncertainty avoidance and individualism is likely to drive entrepreneurial behaviors, it is hypothesized that such culture should make the relationship between entrepreneurial intensity and the application of IT more pronounced. On the contrary, a culture characterized by high uncertainty avoidance and collectivism will discourage entrepreneurial intensity, which in turn, hinders the application of IT. For this reason, the next two relationships are proposed in the conceptual framework:

Proposition 4a: In a culture where uncertainty avoidance is high, the relationship between entrepreneurial intensity and the application of IT will be stronger than that of the low uncertainty avoidance culture.

Proposition 4b: In an individualistic culture, the relationship between entrepreneurial intensity and the application of IT will be stronger than that of the collectivist culture.

The Control Variables

The availability of capital and infrastructure has been indicated to affect the full application of IT (Janson and Wrycza 1999). Therefore, these variables must be controlled in order to capture all relationships of interest and to avoid misinterpretation of results.

Discussion and Conclusion

This paper proposes a conceptual model that integrates constructs from multiple disciplines, namely marketing, entrepreneurship, information technology, and international business. Since NPD is an essential part of every business, it is of utmost importance to study its antecedents and outcomes. Moreover, the success of new products is also an integral part of the overall business' performance and survival. Hence, in addition to providing an alternative view of antecedents to the new product success, this paper also clarifies the construct of new product success by incorporating its key considerations, i.e. the process and the product per se. By doing so, the conceptualization of new product success in this paper provides a more complete picture of the construct than those of previous studies.

The incorporation of IT and cultural dimensions moves the study in the field of NPD forward to capture changes in business environment, i.e. globalization and global marketing as mentioned by Wind and Mahajan (1997). The paper also contributes to the research in international entrepreneurship by identifying the differences in the effects of different cultural dimensions on the relationship between entrepreneurial intensity and IT application. Finally, it is hoped that this paper contributes to the theoretical development in marketing, IT, entrepreneurship, and international business by synthesizing the constructs from different disciplines into one conceptual framework.

Regarding managerial contributions, firms can learn from the conceptual model the inherent relationships among factors contributing to the firms' performance, and develop and implement suitable strategies and structures accordingly. The significance of IT in generating and disseminating information, and the processes that enhance coordination among different departments in an organization, has been accentuated. This enables managers to appropriate IT in their organization to help coordinate all functions in order to better serve their customers, which ultimately results in superior business performance.

Implication and Directions for Future Research

An empirical study to test the propositions must be conducted so that the relationships gain strong empirical support. The study should be conducted in at least two national environments that have been proved to be culturally distant to ensure that it captures the effects of differences in national cultures. The present paper only focuses on some dimensions of culture, therefore, future research may consider the addition of other cultural dimensions to extend the model. Moreover, the incorporation of other two entrepreneurial dimensions, i.e., competitive aggressiveness, and autonomy, into the measure of entrepreneurial intensity will add contribution to the field.

This paper represents only an initial step towards the study of entrepreneurial intensity-IT relationships with the emphasis on the success of new products. Future research may consider other factors, e.g. the notion of strategic flexibility, the role of total market orientation, and appropriation of IT in different cultures, and include them into the study. Researchers may investigate how the total market orientation and IT application could affect strategic flexibility of a firm, how IT facilitates/ hinders the adoption of total market orientation as an organizational culture, and how firms, given their diverse cultural backgrounds, differ in their appropriation of both the total market orientation and IT. Since research in IT is still in the initial stage of development compared with other established disciplines, this proposition provides tremendous research opportunities for researchers in IT and related fields.

References

Antoncic, Bostjan and Robert D. Hisrich (2000), "Intrapreneurship Modeling in Transition Economies: A Comparison of Slovenia and the United States," *Journal of Developmental Entrepreneurship*, 5(1), 21-40.

Ayers, Doug, Robert Dahlstrom and Steven J. Skinner (1997), "An Exploratory Investigation of Organizational Antecedents to New Product Success," *Journal of Marketing Research*, 34 (February), 107-116.

Brown, Shona L. and Kathleen M. Eisenhardt (1995), "Product Development: Past Research, Present Findings, and Future Directions," *Academy of Management Review*, 20, 343-378.

Chandy, Rajesh K. and Gerard J. Tellis (1998), "Organizing for Radical Product Innovation: The Overlooked Role of Willingness to Cannibalize," *Journal of Marketing Research*, 35 (November), 474-487.

Corso, Mariano and Emilio Paolucci (2001), "Fostering Innovation and Knowledge Transfer in Product Development through Information Technology," *International Journal of Technology Management*, 22, 126-148.

Court, A.W., S.J.Culley, and C.A. McMahon (1997), "The Influence of Information Technology in New Product Development: Observations of an Empirical Study of the Access of Engineering Design Information," *International Journal of Information Management*, 17 (5), 359-375.

Drury, D. H. and A. Farhoomand (1999), "Information Technology Push/Pull Reactions," The Journal of Systems and Software, 47 (1), 3-10.

Ettlie, John E., William P.Bridges, and Robert D. O'Keefe (1984), "Organization strategy and Structural Differences for Radical Versus Incremental Innovation," *Management Science*, 30 (6), 682-695.

Gatignon, Hubert and Jean-Marc Xuereb (1997), "Strategic Orientation of the Firm and New Product Performance," *Journal of Marketing Research*, 34 (February), 77-90.

Griffin, Abbie (1997), "The Effect of Project and Process Characteristics on Product Development Cycle Time," *Journal of Marketing Research*, 34 (February), 24-35.

Grewal, Rajdeep, James M. Comer, and Raj Mehta (2001), "An Investigation into the Antecedents of Organizational Participation in Business-to-Business Electronic Markets," Journal of Marketing, 65 (July), 17-33.

Henard, David H. and David M. Szymanski (2001), "Why Some New Products Are More Successful than Others," *Journal of Marketing Research*, 38 (August), 362-375.

Hofstede, G. (1980), *Culture's Consequences: International Differences in Work-Related Values*. Beverly Hills, CA: Sage Publications.

_____ (2000), *Culture's Consequences:* ***Comparing Values, Behaviors, Institutions, and Organizations across Nations.*** Thousand Oaks, CA: Sage Publications.

Janson, Marius A. and Stanislaw Wrycza (1999), "Information Technology and Entrepreneurship: Three Cases fro Poland," *International Journal of Information Management*, 19, 351-3673.

Jaworski, Bernard J. and Ajay K. Kohli (1993), "Market Orientation: Antecedents and Consequences, "*Journal of Marketing*, 57 (3), 53-70.

Kohli, Ajay K. and Bernard J. Jaworski (1990), " Market Orientation: The Construct, Research Proposition and Managerial Implications," Journal of Marketing, 54 (April), 1-18.

Lau, Theresa and K.F. Chan (1994), "The Incident Method- An Alternative Way of Studying Entrepreneurial Behavior," *IBAR*, 15, 48-59.

Leonard-Barton, D (1992), "Core Capabilities and Core Rigidities: A Paradox in Managing New Product Development," *Strategic Management Journal*, 1992 (3), 111-125.

Lumpkin, G.T. and Gregory G. Dess (1996), " Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance," *Academy of Management Review*, 21 (1), 135-172.

McAuley, Andrew (1999), "Entrepreneurial Instant Exporters in the Scottish Arts and Crafts Sector," *Journal of International Marketing*, 7 (4), 67-82.

Mueller, Stephen L. and Anisya S Thomas (2000), "Culture and Entrepreneurial Potential: A Nine Country Study of Locus of Control and Innovativeness," *Journal of Business Venturing*, 16 (1), 51-75.

Moorman, Christine and Rebecca J. Slotegraaf (1999), " The Contingency Value of Complementary Capabilities in Product Development," *Journal of Marketing Research*, 36 (May), 239-257.

Morris, Michael H. and Donald L. Sexton (1996), "The Concept of Entrepreneurial Intensity: Implications for Company Performance," *Journal of Business Research*, 36 (5), 5-13.

_____ and Foard F. Jones (1999), "Entrepreneurship in Established Organizations: The Case of the Public Sector," *Entrepreneurship Theory and Practice*, 24 (1), 71-91.

Narver, John C. and Stanley F. Slater (1990), "The Effect of a Market Orientation on Business Profitability," *Journal of Marketing*, 54 (October), 20.35.

Raman, K.S. and Richard T. Watson (1997), "National Culture, Information Systems, and Organizational Implications."

Ruffles, Charles (2000), "Improving the New Product Introduction Process in Manufacturing Companies," International Journal of Manufacturing Technology and Management, 1 (1), 1-19.

Sethi, Rajesh, Daniel C. Smith, and C. Whan Park (2001), "Cross-Functional Product Development Teams, Creativity, and the Innovativeness of New Consumer Products," *Journal of Marketing Research*, 38 (February), 73-85.

Thomas, Anisya S. and Stephen L. Mueller (2000), "A Case for Comparative Entrepreneurship: Assessing the Relevance of Culture," *Journal of International Business Studies*, 31 (2), 287-301.

Urban, Glen L., Bruce Weinberg, and Hauser (1996), "Premarket Forecasting of Really New Products, " *Journal of Marketing*, 6 (January), 47-60.

Walsham, Geoff (2001), *Making a World Of Difference IT in a Global Context*. Chichester, England: John Wiley & Sons.

Wind, Jerry and Vijay Mahajan (1997), "Issues and Opportunities in New Product Development: An Introduction to the Special Issue," *Journal of Marketing Research*, 34 (February), 1-12.

FINANCIAL STRUCTURE OF THE MANUFACTURING CORPORATE SECTOR OF THAILAND AROUND THE ECONOMIC CRISIS: A DECOMPOSITION MEASURE BASED APPROACH

Gour C. Saha
Department of General Management, ABAC School of Management,
Assumption University

ABSTRACT

This paper describes an investigation into the financial structure of the manufacturing corporate sector of Thailand before and after the economic crisis. The structure is important for financial statement analysts who are often concerned with changes over time in the relative shares of the financial statement items. Decomposition analysis has been used for measuring the relative shares. It is found that the decomposition measures are higher after the economic crisis. The total liabilities decomposition measure was found higher as compared to the total assets decomposition measure before the crisis and lower in many cases after the crisis. Industry variations do not provide any systematic explanations for this variation.

Introduction

Studies on the Thai economic crisis have tended to conclude that it was due to the inability of the economy to effectively handle the macro level variables such as financial policies adopted for the industry, level of current accounts, extent of solvency of the financial institutions and amount of money supply (Tower, 1997). Micro level variables are not considered in the context of the crisis in most of the prior studies. This paper investigates the financial statement information to evaluate the manufacturing corporate sector around the economic crisis.

Financial statements provide information reflecting the result of financing and investing decisions made by a company. They reflect the allocation of corporate resources and deployment of these resources. Due to flow of resources within the company itself and between the company and its stakeholders, there is a constant change in the elements of financial statements. External environmental factors including demand of the customers, number of suppliers, global technological change, economic condition, social development and the like are responsible for these changes in the company. These changes could be expected or unexpected. Internal decisions of the company such as adding or dropping product lines, expansion or contraction, vertical or horizontal integration, investment or divestments are all associated with the changes of the environmental factors. Decisions in this regard are reflected in the income statements and the balance sheet of a company.

The impact of decisions changes the various items in the statements. Increase in market demand and consequent decision to extend production capacity of the company could result in acquiring new property, plant and equipment, hiring employees, raising resources from owners and lenders, which are reflected as changes in the financial statements. This composition in turn is associated with business risks and financial risks. A given fixed asset implies an investment that can not be retraced immediately. Holding a large quantity of property, plant, and equipment or fixed assets increase production capacity that can support higher sales. But, on the other hand, there is always a possibility of not achieving the full capacity for various reasons, such as wrong forecasting, poor management or economic downturns, causing a serious business risk. The investment in fixed assets also carries the risk of losing value if the technology changes.

Composition of cash, inventory, and accounts receivables are also subject to business risk. The current assets are held with the motive of exchange or transformation and hence carry with it a direct risk of transaction loss. Cash or near cash assets, which is held