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A Publication of the
International Academy of Business and Economics®

IABE.ORG

ISSN 1553-9563

9 771553 956007   0 0

Printed and Published in the USA.

A Welcome Note from the Managing Editors:

We proudly present to you a new issue of *International Journal of Business Strategy* **(IJBS), Volume 11, Number 2, 2011,** a publication of the International Academy of Business and Economics. In this issue, we publish 11 papers on various topics in the business strategy and hope you will find them useful. IJBS is sponsored by the California State University Channel Islands, California. IJBS is listed in the Cabell's Directories of Refereed Publications 2005-14 Edition. The Journal is also listed in the Ulrich's International Periodicals Directory since 2004. The IJBS has the ISSN (ISSN: 1553-9363) issued by the Library of Congress, Washington. *International Journal of Business Strategy* (IJBS) is a Registered Trademark of the International Academy of Business and Economics. IJBS is available online at EBSCO Publishing and at the Cengage/Gale Publishing.

The academic foundations and real-world applications related to business and economics are rapidly changing. Globalization is accelerating. Challenges for everyone are increasing daily. IJBS presents an analytical perspective on these developments with a special focus on the strategic responses of organizations facing such developments.

The response to this volume has been very gratifying. We wish to thank all authors who submitted such an excellent selection of papers.

All submitted work to the Journal goes through a rigorous double blind review process of experts in the functional area. We wish to thank the scholars who contributed their time and expertise as reviewers for this issue. We are grateful to them and to our board members for donating their time for the cause of academics and research that makes this Journal possible. Our reviewers are a diverse group, from many academic areas and from many countries. We appreciate their dedication and especially for their work under very tight deadlines.

This issue is dedicated to our contributors' active participation in development of conceptual and applied work for the international arena of business and economy.

We are indebted to California State University Channel-Islands for sponsoring this inaugural issue and providing the invaluable editorial support necessary to the successful birth of the IJBS.

Our website, **www.iabe.org,** is completely redesigned for online paper submission, checking status of your paper, and more. We invite you to visit our website and create your member account.

We welcome your comments and suggestions on this issue. We look forward to your paper submissions for future issues.

Best regards,

William P. Cordeiro, Ph.D and Tahi J. Gnepa, Ph.D.
Managing Editors

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STRATEGIC ENTREPRENEURSHIP MANAGEMENT COMPETENCY AND FIRM SUCCESS: A COMPARATIVE STUDY OF SMEs IN AUTO AND ELECTRONIC PARTS IN THAILAND

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ABSTRACT

The purpose of this study is to examine the relationships among organization vision for sustainable growth, competitive learning capability, market culture implementation, SEMC, business practice effectiveness, value creation excellence, operational innovation efficiency, strategic advantage, corporate profitability, firm success via government support, and outstanding business experience as moderators. The model is tested by using data collected from questionnaire mail survey of 480 auto part SMEs and 332 electronic part SMEs in Thailand. The results reveal partial support for hypotheses derived from the conceptual model. In general, it provides empirical evidence that that market culture implementation has a strong impact on all dimensions of SEMC for pooled samples. Also, social survival awareness has a strong impact on business practice effectiveness, value creation excellent, and operational innovation efficiency. Operational innovation efficiency and business practice effectiveness have a significant positive effect on value creation excellence. Operational innovation efficiency and business practice effectiveness have a significant positive influence on strategic advantage and corporate profitability whereas; value creation excellence has a significant positive influence on strategic advantage only. Finally, both of strategic advantage and corporate profitability have a significant positive influence on firm success. Consequently, theoretical and managerial contributions and suggestions for future research are presented.

Keywords: New Business Idea Generation, Continuous Working Improvement, Change Mindset Adaptation , Stakeholder Response Focus , Social Survival Awareness , Organization Vision for Sustainable Growth , Competitive Learning Capability , Market Culture Implementation , Potential Resource Readiness , Business Practice Effectiveness , Value Creation Excellence , Operational Innovation Efficiency , Strategic Advantage , Corporate Profitability , Firm Success , Outstanding Business Experience , Government Support

1. INTRODUCTION

Storey (1994) notes that small firms, however as many researchers defined, constitute the bulk of enterprises in all economies in the world. Since 1980s, the substance and importance of small and medium-sized enterprises (SMEs) have started to become a worldwide discussion (Suteeraroj and Ussahawanitchakit, 2010). A number of SMEs researches mentioned the roles of SMEs contribute to individuals, stakeholders and even social, environmental, and national economic system. Resent research finds that SMEs are the major providers of various careers and positively contribute to economic prosperity, through growth of Gross Domestic Product (GDP) (Audretsch et al., 2002)Considering Small and Medium-Sized enterprise (SMEs) of Thailand the database from website Thaismefranchise (www.thaismefranchise.com), suggests about the problems of Thailand SMEs in 8 items as follows; 1) lack of entrepreneurship, 2) lack of efficiency in management and administration, 3) lack of professional or expert in SMEs business, 4) lack of skilled workers, 5) lack of technology to reduced cost and supporting business, 6) high competition, 7) lack of efficiency and effectiveness of production management, and 8) lack of government support.

Focusing in specify case of SMEs, one of SMEs which had higher growth in recent year is auto parts and electronic parts SMEs (ttmemedia.wordpress.com). Whereas the problem of Tsunami and earthquake in Japan since the beginning of 2011 leading auto parts and electronic parts SMEs of Thailand have the direct impact from this problem. The report of Thai Military Bank (TMB) shows that the production of these SMEs may stop producing or reducing capacity in a short term (www.tmbbank.com). Due to the problem of overall Thai SMEs and specified problem of auto parts and electronic parts SMEs

of Thailand above leading to the way will solve the problem especially in Thai auto parts and electronic parts SMEs.

From the information indicated above, these problems lead to the way to solve these problems as focusing on strategic entrepreneurship management competency (SEMC) which is the competency of firms in using strategy of entrepreneurship to increase performance and assure the success of firm. Most of studies in entrepreneurship and strategic management are related with wealth creation and growth (Amit & Zott, 2001; Hitt & Ireland, 2000; Hitt, Ireland, Camp & Sexton, 2001, 2002; Ireland, Hitt, Camp & Sexton, 2001; Morris, 1998; Priem & Butler, 2001b). Some of these studies have suggested that entrepreneurship focuses on newness and novelty in the form of new products, new processes, and new markets as the drivers of wealth creation (Daily, McDougall, Covin & Dalton, 2002; Lumpkin & Dess, 1996; Sharma & Chrisman, 1999; Smith & Di Gregorio, 2002). Indeed, the ability to create additional wealth accrues to firms and individuals with superior skills in sensing and seizing entrepreneurial opportunities (Teece, 1998).Also, many researchers (Peng, 2001;Zahra, Ireland, Gutierrez & Hitt, 2000) argue that entrepreneurship is increasingly viewed as a stimulus to wealth creation in emerging, developing, and developed economies as a result of the actions of individual firms. Similarly, strategic management is concerned with understanding the reasons for differentials among firms' wealth creations in various economies (Farjoun, 2002; Teece, Pisano & Shuen, 1997).The concept of strategic entrepreneurship is integrated by that of entrepreneurship and strategic management(Ireland et al,2003; Entrialgo et al,2001). Therefore, SEMC which is the integral concept of strategic entrepreneurship in this research is more likely to solve the current indicated problems of SMEs (auto parts and electronic parts) in Thailand.

In previous strategic entrepreneurship research, the study has defined the concept as well as measure strategic entrepreneurship in various perspectives such as entrepreneurial opportunities, entrepreneurial alertness, real options, and an entrepreneurial framework (Ireland et al., 2003). However to date, relatively a few studies have been conducted in strategic entrepreneurship in the new concept of strategic entrepreneurship management competency, so this research examines new five dimensions of SEMC as follows: 1) New business idea generation, 2) Continuous Working Improvement, 3) Change mindset adaptation, 4) Stakeholder response focus, and 5) Social survival awareness. Thus, the relationships among strategic entrepreneurship management competency, antecedents, consequences, and moderator in the context of Thailand SMEs sampling are explained by competency-based view theory, and sociological theories of entrepreneurship.Based on the theories mentioned above, the new dimensions of SEMC in this research expect to increase firm success through the relationships of business practice effectiveness, operational innovation efficiency, value creation excellence, strategic advantage, and corporate profitability. These relationships affect the antecedent of organization vision for sustainable growth, competitive learning capability, market culture implementation, and potential resource readiness. In addition, these variables are moderated by outstanding business experience and government support.

As obviously seen, there is a great deal of academic literature that investigated on the effects of strategic entrepreneurship but only a few studies particularly examined the effects of SEMC. The significant contribution of this research is the acquiring the effects of SEMC with SMEs (auto parts and electronic parts) of Thailand with the current problems. Consequently, the results of this research may contribute to managerial practices concentrating on the SEMC implementation and the usefulness of SEMC to solve the current problem of Thailand SMEs (auto parts and electronic parts) and achieve success. Therefore, this research aims at examining the relationships among dimensions of strategic entrepreneurship management competency, business practice effectiveness, value creation excellence, operational innovation efficiency, strategic advantage, corporate profitability, and firm success of auto parts SMEs and electronic parts in Thailand and the impacts of strategic entrepreneurship management competency, business practice effectiveness, value creation excellence, operational innovation efficiency, strategic advantage, corporate profitability on firm success through the moderating determinants of government support and outstanding business experience of auto parts SMEs and electronic parts in Thailand. Here, the key research questions in the current study are: 1)How does strategic entrepreneurship management competency enhance business practice effectiveness, value creation excellence, operational innovation efficiency, strategic advantage, corporate profitability, and firm

success?, 2)How do business practice effectiveness, value creation excellence, and operational innovation efficiency increase strategic advantage?, 3)How do business practice effectiveness, value creation excellence, and operational innovation efficiency increase corporate profitability?, 4)How does strategic advantage increase corporate profitability?, 5)How do strategic advantage and corporate profitability increase firm success?, 6)How does government support moderate relationship among strategic entrepreneurship management competency, business practice effectiveness, value creation excellence, operational innovation efficiency, strategic advantage, corporate profitability, and firm success?, 7)How do organization visions for sustainable growth, competitive learning capability, market culture implementation, and potential resources readiness encourage each dimension of strategic entrepreneurship management competency?, 8)How does outstanding business experience moderate the relationships among organization vision for sustainable growth, competitive learning capability, market culture implementation, potential resources readiness and dimensions of strategic entrepreneurship management competency?.

This research is outlined as follows. Relevant literature on strategic entrepreneurship management competency, business practice effectiveness, value creation excellence, operational innovation efficiency, strategic advantage, corporate profitability, firm success, government support, and outstanding business experience are reviewed, addressed and criticized, and significant research hypotheses developments are also presented. Next, the research methods used to test the hypotheses are discussed including sample selection and data collection procedure, variables and methods. Also, the results of the study derived from 94 auto parts SMEs and 86 electronic parts in Thailand are detailed and their reasonable discussions with existing literature supports are included. Lastly, the study concludes by discussing implications of the theories, institutions, and professions, identifying limitations of the study, and providing suggestions and directions for future research.

2. RELEVANT LITERATURE REVIEW AND RESEARCH HYPOTHESES

The competency-based view theory traces to the works of Clark and Maurice (1961), and Alderson (1957, 1965) and has been extended by such researchers as Aaker and Mascarenhas (1984); Barney (1991); Bharadwaj, Varadarajan, and Fahy (1993); Day (1994); Day and Wensley (1988); Porter (1990) and Hunt and Morgan (1997). The underlying research of this view is that firms are able to achieve superior financial performance when they are able to develop or gain superior skills and resources that enable firms to achieve a position of competitive advantage. For competitive advantage theorists, skills encompass "the distinctive capabilities of personnel that set them apart from the personnel of competing firms" while superior resources are "more tangible requirements for advantage that enables a firm to exercise its capabilities" (Day and Wensley, 1988, pp. 2-3). The focus of firms, according to competency-based view, should be on the value creating activities or value chain (Porter, 1990) or resource-advantage (Hunt and Morgan, 1997). Only those activities with the greatest impact on differentiation or those that amount to a large or growing proportion of the costs should be considered (Day and Wensley, 1988). Firms that are successful in managing their value chain are posited to achieve positions of competitive advantage which are viewed as either cost leadership or value advantages (Bharadwaj, Varadarajan, and Fahy, 1993). Competency-based view suggests that successful firms generate competitive advantage and superior performance.

This research is based on this simple, sequential determinism of the source, position and performance framework (SPP). Each of the primary elements of the framework is described as shown in Figure 2. There are two sources of advantage which are argued to be key contributors to firm success: strategic entrepreneurship management competency and its four drivers (organization vision for sustainable growth, competitive learning capability, market culture implementation, and potential resources readiness). Business practice effectiveness, value creation excellence, operational innovation efficiency, strategic advantage, and corporate profitability are positional advantages which lead to firm success.

Sociological theories look at how the environment affects entrepreneurship. These studies began with McClelland's work on the need for achievement (1961). This researcher viewed that the high economic and social growth in some societies fostered entrepreneurship. In his view, this growth was owing to a large segment of these societies having a high need for achievement. The factors researched in

sociological research are the environmental institutional forces that affect the founding rate of organizations. Institutional factors are thought to have their largest impact when a new form of organization is being founded (Stinchcombe, 1965). Institutional environmental forces are responsible for the shape of organizational forms. The shape that organizations take has important social consequences (Hannan and Freeman, 1986). The new forms contribute to the diversity of organizations in society. The institutional environmental forces are the most important in the founding of new forms of organizations (Aldrich, 1990). The theories focusing on four factors which have been correlated with entrepreneurial performance are political factors and state policies, culture or social, spatial location, and professionalization of entrepreneurship. The moderator of this research is based on this theory. Government support is an external institution which forces the operation of organization to follow by this theory. Furthermore, outstanding business experience is an internal factor or social which affects the operation of firm.

The following conceptual model shown in Figure 1 includes one main construct, namely, strategic entrepreneurship management competency proposed in five dimensions. These components of SEMC are compound of new business idea generation, continuous working improvement, change mindset adaptation, stakeholder response focus, and social survival awareness. Following this further, there are four influence variables on SEMC which are organization vision for sustainable growth, competitive learning capability, market culture implementation, and potential resource readiness. Additionally, the consequence factors of SEMC are business practice effectiveness, operational innovation efficiency, value creation excellence, strategic advantage, and corporate profitability which transmit their impact to firm success. The moderating variables are outstanding business experience which has a positive effect on the relationships of four antecedence variables and SEMC, government support which has a positive effect on the relationships of SEMC and three consequence variables.

FIGURE 1
CONCEPTUAL MODEL OF STRATEGIC ENTREPRENEURSHIP
MANAGEMENT COMPETENCY AND FIRM SUCCESS
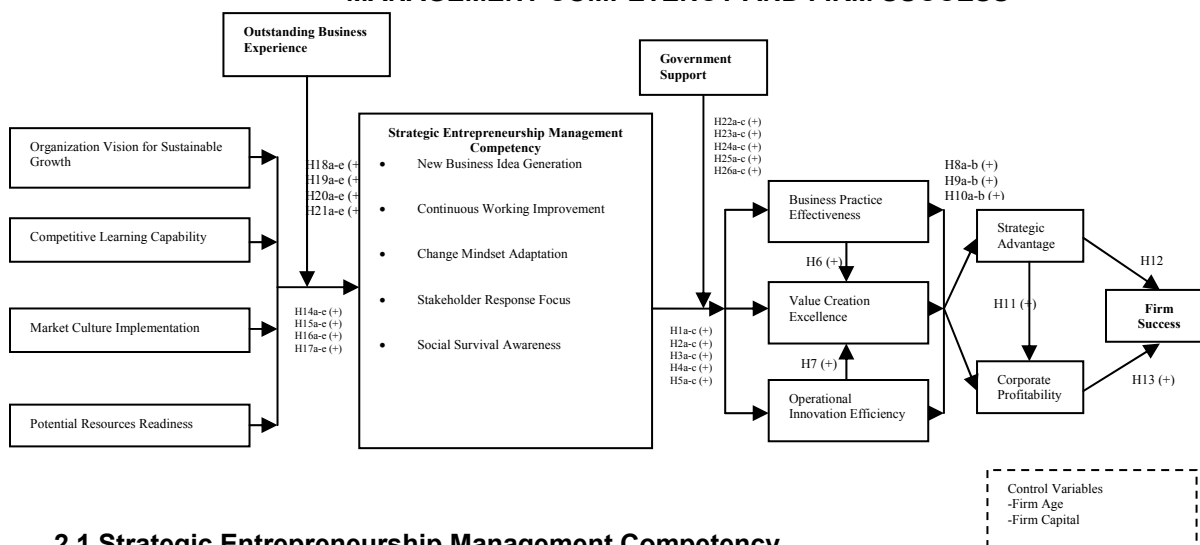
2.1 Strategic Entrepreneurship Management Competency

Strategic entrepreneurship management competency is a key element of this research. The term "competency" emphasizes the role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organizational resources and ability to match the requirements of the changing environment (Teece, Pisano and Shuen, 1997). Therefore, entrepreneurship competency is dependent on the ability of firm to search, utilize, integrate, and set unique operation. In this research, SEMC refers to an ability of firm in adapting, integrating, reconfiguring organizational resource and using the strategy to manage organization leading to efficiency, effectiveness, strategic advantage, high profitability, goal achievement, and extreme benefit (Ireland et al., 2003). Consequently, they reflect that resources and capabilities are key success factors for competitive advantage and its sustainability (Barney, 1991; Varadorajan, 2009); and SEMC becomes an increasingly important component of firm

success (Kroes and Ghosh, 2010). In support of this view, strategic entrepreneurship management competency can be categorized into five dimensions as follows.

New Business Idea Generation refers to the competency of firm to create new operation process, promote staff for new concept and knowledge development, and support budget for create new idea to increasing potential, efficiency, and effectiveness of firm (Grandi and Grimaldi, 2005; Howell and Boies, 2004).In this research, new business idea generation is one dimension of strategic entrepreneurship management competency. Both operation management and entrepreneurship can lead to new value creation across and within industry and firm-level boundaries (Aldrich and Fiol, 1994; Busenitz et al., 2000; Balakrishnan et al., 2007).Then new business idea generation seems to be with high importance to uncover the capability of SEMC, and, new business idea generation that contributes to the competitive superiority. Taking all into account, this research formulates the following hypothesis:

Hypothesis 1: The new business idea generation will have a positive influence on (a) business practice effectiveness, (b) value creation excellence, and (c) operational innovation efficiency.

Continuous Working Improvement refers to the ongoing of firm to adapt the modern and efficiency working method, set the plan for working method adjustment leading to highest efficiency, effectiveness of work, and extreme customer satisfaction (Damij et al., 2008).Corporation way implies to business process. In this research, researcher defines way as a process of business or corporation. Business processes come within our scope in that their potentially added value to the organization and as such are attracting attention. Consequently, business process modeling is on the increase as only a thorough comprehension of the business processes within the organizations can lead to effective, efficient and value-adding systems. According to Aguilar-Saven and Olhger (2002), the business processes are the key factor when integrating an enterprise. A business process is defined by Hammer and Champy (1993) as a collection of activities that takes one or more kinds of input and creates an output that is of a value to the customers. However, Aguilar-Saven (2003) emphasized that a business process is related to the enterprise, as business process defined the way in which the goals of the enterprise are achieved. Laguna and Marklund provide the readers with the following comprehensive definition – a business process as a network of connected activities and buffers with well-defined boundaries and precedence relationships which utilize resources to transform inputs into outputs for the purposes of satisfying customer requirements. Hence, continuous working improvement as one dimension of SEMC seems to be the success of business practice effectiveness, value creation excellence, and operational innovation efficiency. Taking all into account, this research formulates the following hypothesis:

Hypothesis 2: The continuous working improvement will have a positive influence on (a) business practice effectiveness, (b) value creation excellence, and (c) operational innovation efficiency.

Change Mindset Adaptation refers to the ability of firm to promote the staff in changing attitude and reforming work development leading to high potential, competitive advantage, and firm success (Timmor and Zif, 2010). Change mindset implies to change readiness. This research defines change mindset as cognitive precursor to behaviors of either resistance or support for change efforts (Armenakis et al., 1993; Chonko et al., 2002) which is the adaptation concept from change readiness. The concept of change readiness has been largely discussed in the management literature mainly in the Organizational Behavior domain (Alas, 2007; Chonko et al., 2002; Eby et al., 2000; Jones et al., 2005). These studies focus on organizations' structures, learning, and personnel's (managers, employees) attitudes toward organizational changes (Alas, 2007; Armenakis and Bedeian, 1999; Barr et al., 1992; Jimmieson et al., 2009; Newman, 2000; Rajagopalan and Spreitzer, 1996). Most studies have associated change readiness with flexibility, and noted its importance to achieving a strategic advantage in an increasingly turbulent business environment. However, change readiness is strongly related to business and marketing strategy (i.e. how and when to respond to marketing opportunities or threats). From the study of Fuller et al., (2007), these researchers suggested that readiness to change has a positive effect on innovation for internet technology. In addition, Rangarajan et al., (2004) purposed that readiness for change influence selling effectiveness. Furthermore, in the sense of change readiness, this is possible

that change readiness or change mindset adaptation has a positive effect on value creation excellence. Taking all into account, this research formulates the following hypothesis:

Hypothesis 3: The change mindset adaptation will have a positive influence on (a) business practice effectiveness, (b) value creation excellence, and (c) operational innovation efficiency.

Stakeholder Response Focus refers to the emphasis in requirement and expectation analysis of stakeholder (i.e. partner, customer, and employee) in the aspect of profit sharing, organization information, and suitable product and service with customer need for extreme satisfaction (Peachey and Bruening, 2010).In this research, we utilized stakeholder theory to investigate stakeholder responses to the forces driving change. Stakeholder theory is debatable as one of the most important theories of business management (Stieb, 2009). Intrinsically, stakeholder theory is a framework for understanding managerial decision-making by taking into account the interests of stakeholders, or ''any group or individual who can affect or is affected by the achievement of an organization's purpose''. Stakeholder theory posits that ''the nature of an organization's stakeholders, their values, their relative influence on decisions, and the nature of the organization are all relevant information for predicting organizational behavior'' (Brenner & Cochran, 1991). Those stakeholders, then, have stakes in the operation of the organization, or the investment of money, time, or other resources that offer an opportunity for profitable return in terms of achievement of the individual's purpose and/or potential to suffer harm from the actions of another (Mitchell, Agle, &Wood, 1997). The focus of stakeholder management literature has been on the heterogeneity of views across, rather than within, stakeholder groups, assuming that individuals within a broad stakeholder classification (e.g., employees, administrators, and alumni) will have homogenous views on issues. The study of Cullen and Calvert (1995) reveals that university which focuses on stakeholder leads to the effectiveness and value creation of library. Taking all into account, this research formulates the following hypothesis:

Hypothesis 4: The stakeholder response focus will have a positive influence on (a) business practice effectiveness, (b) value creation excellence, and (c) operational innovation efficiency.

Social Survival Awareness refers to the attentiveness of firm in good operation with society and environment, and motivation staff to be responsible with the products that launched to customers (Dray et al., 2009).In this research, social survival awareness is adapted from the concept of corporate social responsibility. Scholars define corporate social responsibility as a firm's status and activities related to its perceived societal obligations and interests (Brown and Dacin, 1997). CSR extends beyond ethical firm behaviors. A firm has a moral obligation to make an overall positive contribution to the communities in which firm operates (Maignan et al., 1999; Sen and Bhattacharya, 2001). Much of the CSR literature that focuses on how managers can increase consumers' perceptions of their firms as socially responsible and, thereby, improve their firms' performance (e.g., Lichtenstein et al., 2004; Sen et al., 2006; Vlachos et al., 2009).Taking all into account, this research formulates the following hypothesis:

Hypothesis 5: The social survival awareness will have a positive influence on (a) business practice effectiveness, (b) value creation excellence, and (c) operational innovation efficiency.

2.2 Business Practice Effectiveness
Business practice effectiveness refers to the activity in operation to reach the goal and continuous better performance following mission and vision of organization (Ussahawanitchakit and Pongpearchan, 2010).The effectiveness is not a characteristic of organizational outcomes, but a continuous process relating the organization to its components and effectiveness related to the firm's strategy to generate a sustainable business growth (Mouzas, 2006; Bolat, and Yılmaz, 2009; Kumar and Gulati, 2010). In addition, effectiveness directly influences the survival of businesses (Kumar and Gulati, 2010). This study focuses on business practice effectiveness as upper-level achievement of organization's operation on criteria, including the following: ability to complete operation, ability to respond quickly to customers' needs, and survival among the turbulence competition. Furthermore, the effectiveness has an effect on the overall performance (Kumar and Gulati, 2010).In addition, the study of Rapp et al. (2008) reveals that value creation of the firm is the positive effect from business practice effectiveness. Thus, the higher the business practice effectiveness is, the more likely that firms will gain greater, value creation excellent,

strategic advantage, and corporate profitability. Taking all into account, this research formulates the following hypothesis:

Hypothesis 6: The business practice effectiveness will have a positive influence on value creation excellent.

Hypothesis 8: The business practice effectiveness will have a positive influence on (a) strategic advantage, and (b) corporate profitability.

2.3 Operational Innovation Efficiency
Operational innovation efficiency refers to capability of firm to use new working process, research and develop new working method, apply outstanding operation technique in the past suitable with present as efficiency (Damanpour, 1991).Innovative operation of firm is willing and tends to take part in support creativity and experimentation in introducing new product/service, technology leadership and R&D in developing new products and services (Ussahawanitchakit, 2006). Most successful innovations are the result of continuously change in concept and methodology implemented over time (Tushman and Nadler, 1986). Effective operational innovation is the key to maintain competitive advantage in a constantly changing environment (Lemon and Sahota, 2004). Effective operational innovation enables the firm to jump over competitors, create entry barriers, establish a leadership position, open up new distribution channels and garner new customers to improve market position (Chandy and Tellis, 2000). Ever since Schumpeter (1934 cited from Liao, Fei and Liu, 2008) pointed out that innovation plays an important in economic development; this research has received much attention. Operational innovation is widely prescribed as a means to improve organizational performance. Thus, fostering innovation remains a major challenge for business competitiveness (Damanpour, 1991; Damanpour and Wischnevsky, 2006). A greater number of traditional previous researches of organization innovation have been focused on the relationships between organization innovation and organizational performance. Some previous works have noted that only certain characteristics of an innovation are positively linked to organizational performance (Gopalakrishnan, 2000; Danneels and Kleinschmidt, 2001). Therefore, the hypotheses are proposed as follows:

Hypothesis 7: The operational innovation efficiency will have a positive influence on value creation excellent.

Hypothesis 10: The operational innovation efficiency will have a positive influence on (a) strategic advantage, and (b) corporate profitability.

2.4 Value Creation Excellent
Value creation excellent refers to the capability of firm to launch good products and services with customers, response to the requirement of stakeholders as best, and make the good perception from customers   (Bourguignon, 2005). 'Value creation' appeared in the mid-1980s, in association with two specific stakeholders of the firm: its customers and its shareholders. Value creation is creating through customer perceive value based on their judgment of trade-off between "what they get" (perceived benefits, quality, or performance) and "what they give" value through the eyes of customer are various including product utility (Zeithaml, 1988), perceive benefits over the costs (Christopher, 1996), market-perceived quality adjusted for relative prices (Grale, 1994), and perceive benefits over sacrifices (Eggert and Ulaga, 2002). Delivering superior value to customers is important for business success and is the source of competitive advantage (Guenzi and Troilo, 2007; Nasution and Mavondo, 2008). In hospitality research, customer value and service quality have been of great interest. If hotels can provide superior customer value and must be done continuously and efficiently; hotels must be successful in the industry (Chu, 2001; Su, 2004). Therefore, the hypotheses are proposed as follows:

Hypothesis 9: The value creation excellence will have a positive influence on (a) strategic advantage, and (b) corporate profitability.

2.5 Strategic Advantage

Strategic advantage refers to the capability of firm to create product and service which are better than competitor in same industry, the style and work method which higher potential than other, the higher operational result than competitor, and continuous loyalty from customer (Bendoly et al., 2009). Researcher employs a common framework of competitive strategies to categorize different types of enterprise information use and strategic performance. Treacy and Wiersema (1993) specify three basic strategies, or what these researchers refer to as value disciplines: operational excellence (e.g., McDonald's), customer intimacy (e.g., Lowe's), and product leadership (e.g., Intel). Market leaders, according to Treacy and Wiersema (1993), typically excel at one of these three value disciplines, and tend to meet industry standards in the other two. Manufacturers that pursue the first approach – operational excellence – strive for cost- effective, rapid, and reliable fulfillment of order requirements. With customer intimacy value discipline, the emphasis shifts to the development of close customer relationships; manufacturers attempt to increasingly tailor products and services to fine-tuned market niches. Finally, product leadership captures the manufacturer's ability to rapidly develop and deploy state-of-the-art products and corresponding services. Furthermore, the study of Bendoly et al., (2009) reveals that firms which high strategic advantage have a positive effect on corporate profitability. In addition, the strategic advantage of a firm can lead to firm success in this research. Therefore, the hypotheses are proposed as follows:

Hypothesis 11: The strategic advantage will have a positive influence on corporate profitability.

Hypothesis 12: The strategic advantage will have a positive influence on firm success.

2.6 Corporate Profitability
Corporate profitability refers to an ability of firm to achieve the objective and goal success of firm in more profit, revenue, and market share in short term (Shen and Lin, 2009). Researchers use ROA and EPS to measure firm profitability. ROA is a widely used measure of profitability in turnover studies (Huson et al., 2004). Researcher calculates ROA as net income divided by total assets. EPS, defined as net income divided by the weighted average number of shares of common stocks outstanding, is one of the most important financial ratios used to evaluate firm performance. In addition, researcher measures market share and all measurements of this construct by perceiving of entrepreneur. This is possible and reasonable that corporate profitability leads to firm success. Therefore, the hypotheses are proposed as follows:

Hypothesis 13: The corporate profitability will have a positive influence on firm success.

2.7 Firm Success
Frequently used operationalizations of new firm success are profit, returns on investment or a substantial income generation for the entrepreneurs and their families. Other indicators used include value added, the growth of turnovers, or the number of employees. Behind most of these operationalizations lurk a particular type of starter – the Schumpeterian starter, someone who consciously strives for (innovative) growth and maximum profit. But one starter is not the same as another; the retired consultant will view profits in quite different terms. A present trend, for instance, is that starters try to arrange some forms of self-employment. Starters such as these are not about to take on more personnel in order to achieve an even greater turnover. Starters do not want to grow for them an acceptable income is enough. After all, the main motives to start a firm are the challenge and the wish to be independent (see Schutjens et al. 1996).

2.8 Organization Vision for Sustainable Growth
Organization vision for sustainable growth is defined as the realizing of firm with social responsibility, the operation support of firm following by principle and social requirement, the emphasis of firm that respects in regulations and law as strongly leading to sustainable in operation and acceptance from society (Ackoff, 1993). Vision guides entrepreneurs' long journeys to establishing new ventures (Baum & Locke, 2004; Dees, 1998; Ensley, Carland, &Carland, 2000; Ensley, Pearson, & Pearce, 2003; Greenberger & Sexton, 1988) At the development stage, all the entrepreneur has is a mental image of what the venture should look like, its place in the business world, and a roadmap for arriving the goal. Vision is so central to the entrepreneurial process that Gupta, MacMillan, and Surie (2004) based their entrepreneurial

leadership definition around vision. For them entrepreneurial leadership is "leadership that creates visionary scenarios that are used to assemble and mobilize a supporting cast of participants who become committed by the vision to the discovery and exploitation of strategic value creation". Similarly, Yukl (2006) stressed the multiple roles of the desired vision as "simple and idealistic, a picture of a desirable future" that "should appeal to the values, hopes and ideals for organizational members and other stakeholders whose support is needed. The vision should emphasize distant ideological objectives rather than immediate tangible benefits". From the concept of vision, organization vision, and entrepreneur vision which is high relation and congruence as mentioned above, this seems that organization vision for sustainable growth has influenced new business idea generation, continuous working improvement, change mindset adaptation, stakeholder response focus, and social survival awareness which are the dimension of SEMC. Taking all into account, this research formulates the following hypothesis:

Hypothesis 14: The organization vision for sustainable growth will have a positive influence on (a) new business idea generation, (b) continuous working improvement, (c) change mindset adaptation, (d) stakeholder response focus, and (e) social survival awareness.

2.9 Competitive Learning Capability
The conceptualization of organizational learning is the competency of an organization to process knowledge—in other words, to create, acquire, transfer, and integrate knowledge, and to modify its behavior to reflect the new cognitive situation, with a view to improving its performance. Dynamic competitive capabilities (DCCs) constitute a type of competitive advantage derived from organizational routines, which offer the greatest sustainable value (Prahalad and Hamel, 1990). Winter (2000, 2003) thinks of an idea of high-level management routines as combinations of various small routines in an organizational system that exerts a key influence on organizational success, and states that DCC development in high-level management not only assists a firm in facing external challenges, but also provides limitless competitive advantages. Because decision-making power is generally concentrated among high-level managers, DCC development in high-level managers via distinctive routines and specific processes can enhance success for a firm. DCCs are organizational routines that store organizational knowledge through complicated, detailed processes (Nelson andWinter, 1982); DCCs are also strategic routines through which a firm achieves new resource configurations (Eisenhardt and Martin, 2000). Therefore, DCCs are an important interface driving the creation, evolution, and recombination of other resources, and can assist in renewing organizational resources and improving competitive strength (Teece et al., 1997). The concept of competitive learning capability is the integration of DCC and organizational learning capability together. Therefore, competitive learning capability is defined as an ability of firm to study variation of customer, market, and industry leading to competitive understanding; the emphasis of firm to predict the variable in market for competitive strategic adaptation (Chen et al., 2009). Due to the mentioned above, this seems that competitive learning capability influences new business idea generation, continuous working improvement, change mindset adaptation, stakeholder response focus, and social survival awareness above. Taking all into account, this research formulates the following hypotheses:

Hypothesis 15: The competitive learning capability will have a positive influence on (a) new business idea generation, (b) continuous working improvement, (c) change mindset adaptation, (d) stakeholder response focus, and (e) social survival awareness.

2.10 Market Culture Implementation
In the past decade, the construct of culture has been put forth in the popular (e.g., Peters and Waterman, 1982; Deal and Kennedy, 1982) and scholarly (e.g., Schein, 1985) literature. Given the meaning of organizational culture (Deshpande and Webster, 1989) marketing culture then refers to the unwritten, formally decreed and what actually takes place in a marketing context; this is the pattern of shared values and beliefs that helps individuals understand the marketing functions and thus provides them with norms for behavior in the firm. Marketing culture refers to the importance the firm as a whole places on the marketing functions; in other words, the marketing culture of a service firm refers to the way marketing "things" are done in the firm. The dimensions of marketing culture are service quality, interpersonal relationships, selling task, organization, internal communications, and innovativeness (Webster, 1990a). From the concept of market culture as

researcher mentioned above, researcher concludes that market culture implementation is the operation of firm to force staff to study the requirement of customer continuously for marketing plan, to bring the marketing method for practice objectively (Webster, 1993; Sashittal and Wilemon, 1996). Based on the reasons above, this seems that market culture implementation has an effect on new business idea generation, continuous working improvement, change mindset adaptation, stakeholder response focus, and social survival awareness. Taking all into account, this research formulates the following hypothesis:

Hypothesis 16: The market culture implementation will have a positive influence on (a) new business idea generation, (b) continuous working improvement, (c) change mindset adaptation, (d) stakeholder response focus, and (e) social survival awareness.

2.11 Potential Resource Readiness
Readiness is associated with introducing change. Readiness is based on a subjective feeling or a perceived ability. Readiness tends to be conceptualized as a state where a person [organization] is assessed as ready or not ready. The concept of readiness is expanded to include the process of becoming ready and the outcomes associated with readiness for change (Mrayyan et al., 2008). Based on the concept of readiness for change, researcher defines potential resources readiness as the resource application of firm to suit with competitive environment, and the adequacy of firm's resource that can compete with competitors (Timmor and Zif, 2010). Due to the reasons and theoretical concept as mentioned above, this is more likely that potential resource readiness has influenced new business idea generation, continuous working improvement, change mindset adaptation, stakeholder response focus, and social survival awareness. Taking all into account, this research formulates the following hypotheses:

Hypothesis 17: The potential resource readiness will have a positive influence on (a) new business idea generation, (b) continuous working improvement, (c) change mindset adaptation, (d) stakeholder response focus, and (e) social survival awareness.

2.12 Outstanding Business Experience
Outstanding business experience is defined as the integration for the best competency of firm in the past to apply with competency in the present leading to higher potential and efficiency than competitors (Ucbasaran et al., 2010). The nature of prior experience, specifically perception of an experience as a 'failure' or a 'success', can shape subsequent attitudes and behavior (Shepherd, 2003). Business failure does not solely relate to the bankruptcy, receivership or liquidation of a venture. Gimeno et al., (1997) argue that business survival (and the decision to terminate a venture) will be shaped by the owner's personal threshold of performance. This would explain why one of two businesses operating at the same level of performance may be closed, while the other survives. To accommodate this view, business failure is defined here as the termination of a venture that has fallen short of its owner's target (McGrath, 1999).Hence, this is more likely that outstanding business experience of entrepreneurs or firms will moderate the higher effect of organization vision for sustainable growth, competitive learning capability, market culture implementation, and potential resource readiness with all dimensions of SEMC. Taking all into account, this research formulates the following hypotheses:

Hypothesis 18: The relationships between organization vision for sustainable growth and (a) new business idea generation, (b) continuous working improvement, (c) change mindset adaptation, (d) stakeholder response focus, and (e) social survival awareness will be positively moderated by outstanding business experience.

Hypothesis 19: The relationships between competitive learning capability and (a) new business idea generation, (b) continuous working improvement, (c) change mindset adaptation, (d) stakeholder response focus, and (e) social survival awareness will be positively moderated by outstanding business experience.

Hypothesis 20: The relationships between market culture implementation and (a) new business idea generation, (b) continuous working improvement, (c) change mindset adaptation, (d)

stakeholder response focus, and (e) social survival awareness will be positively moderated by outstanding business experience.

Hypothesis 21: The relationships between potential resources readiness and (a) new business idea generation, (b) continuous working improvement, (c) change mindset adaptation, (d) stakeholder response focus, and (e) social survival awareness will be positively moderated by outstanding business experience.

2.13 Government Support

Over the last decade, governments worldwide have supported the firms with strategies to assist firms in realizing the cumulative benefits of sustainability- the "triple dividend" of improved environmental, social and economic performance. Common elements of these governmental strategies include: 1) risk management and regulatory regimes that promote environmental innovation, use market forces to motivate environmental improvements and punish companies that fail to meet minimum standards; 2) information disclosure initiatives to help consumers and investors make market decisions based on an informed understanding of financial, environmental and social performance and risk; and 3) assistance to companies in developing and using sustainable development tools and technologies that allow them to realize environmental and financial performances and benefits (Moffat and Auer, 2006). Based on literature reviewed above, researcher defines government support as the regulation from government which helps firms for operation, and the investment of government in information technology and infrastructure that help firms for better performance (Moffat and Auer, 2006). This seems that the support from government will increase the effect of all dimensions of SEMC with business practice effectiveness, value creation excellent, and operational innovation efficiency. Taking all into account, this research formulates the following hypotheses:

Hypothesis 22: The relationships between new business idea generation and (a) business practice effectiveness, (b) value creation excellence, and (c) operational innovation efficiency will be positively moderated by government support.

Hypothesis 23: The relationships between continuous working improvement and (a) business practice effectiveness, (b) value creation excellence, and (c) operational innovation efficiency will be positively moderated by government support.

Hypothesis 24: The relationships between change mindset adaptation and (a) business practice effectiveness, (b) value creation excellence, and (c) operational innovation efficiency will be positively moderated by government support.

Hypothesis 25: The relationships between stakeholder response focus and (a) business practice effectiveness, (b) value creation excellence, and (c) operational innovation efficiency will be positively moderated by government support.

Hypothesis 26: The relationships between social survival awareness and (a) business practice effectiveness, (b) value creation excellence, and (c) operational innovation efficiency will be positively moderated by government support.

3. RESEARCH METHODS

3.1 SMEs in Auto and Electronic Parts in Thailand as Samples of the Study

The entrepreneurship firms chosen for this research are the auto parts and electronic parts SMEs in Thailand. The auto and electronic parts SMEs are chosen because the industry offered the potential to simultaneously examine five dimensions of strategic entrepreneurship management competency. Due to this business concerning with technology and facing technology dynamism, SMES in auto and electronic parts to create new working process to suit technology dynamism. Furthermore, at present these businesses have the effect from Tsunami and earthquake problem in Japan leading entrepreneurs in this business to generate new business ideas, improve working continuously, and change their mindset to

manage and to survive from the problems. As a concluding remark, SMEs in auto and electronic parts in Thailand are the suitable population for this research.

3.2 Sample Selection and Data Collection Procedure

To verify the research relationships, 480 SMEs of auto parts and 332 SMEs of electronic parts in Thailand were selected as the sample. Population data was acquired from Department of Business Development, Ministry of Commerce database (www.dbd.go.th). In this research, the data was collected from all population, i.e. 812 SMEs. A mail survey procedure via the questionnaire was used for data collection. The key participants in this study were auto parts SMEs and electronic parts SMEs in Thailand. For auto parts SMEs, with regard to the questionnaire mailing, 50 surveys were undeliverable because some auto parts SMEs had moved to unknown locations. Deducting the undeliverable from the original 480 mailed, the valid mailing was 430 surveys, from which 94 responses were received. Of the surveys completed and returned, all 94 were usable. The effective response rate was approximately 21.86%. For electronic parts SMEs as the sample of the study, with regard to the questionnaire mailing, 2 surveys were undeliverable because some electronic parts SMEs had moved to unknown locations. Deducting the undeliverable from the original 332 mailed, the valid mailing was 330 surveys, from which 86 responses were received. Of the surveys completed and returned, all 86 were usable. The effective response rate was approximately 26.06%. According to Aaker, Kumar and Day (2001), the response rate for a mail survey, with an appropriate follow-up procedure, greater than 20% is considered acceptable.

To test potential and non-response bias and to detect and consider possible problems with non-response errors, the assessment and investigation of non-response-bias were centered on two different procedures: (1) a comparison of sample statistics and known values of the population, such as job experience and average incomes per month, and (2) a comparison of first and second wave data as recommended by Armstrong and Overton (1977). Neither procedure showed significant differences.

3.2 Variables

In the conceptual model, all of variables were measured on five point Likert scale, ranging from '1 = strong disagree' to '5 = strong agree', except control variable. The variable measurements of dependent, independent, moderator, and control variables are described as below:

Firm success is used as the final dependent variable of SEMC; it is measured by the acceptation of customer as professional business, the increasing of new customer continuously, the continuous growth of operation in total This construct is developed as a new scale from definition and literature including four-item scale*.*

New business idea generation is evaluated via new four-item scale relating a firm's SEMC based on generation and creation the novel business idea. This construct is measured by the firm's new business ideas that are new idea of product and service, new idea of knowledge, new idea of technology, the idea of new market.

Continuous working improvement is measured by new idea of working process, and the continuous working process improvement. This construct is developed as a new scale from definition and literature including three-item scale.

Change mindset adaptation is measured by the competency in attitude changing adaptation to suit with dynamic business environment. This construct is developed as a new scale from definition and literature including three-item scale*.*

Stakeholder response focus is measured by the responses with stakeholders (i.e. partner, employee, and customer). This construct is developed as a new scale from definition and literature including four-item scale*.*

Social survival awareness is measured by the awareness of entrepreneur to environment and social survival. This construct is developed as a new scale from definition and literature including three-item scale*.*

Business practice effectiveness is measured by the effective of firm's operation derives from goal and objective achievement. This construct is developed as a new scale from definition and literature including four-item scale.

Value creation excellent is measured by the competency of firms in benefit creation to customer and shareholder as objectively. This construct is developed as a new scale from definition and literature including four-item scale.

Operational innovation efficiency is measured by new process, service, and product creates from the idea of entrepreneur to build the efficiency of operation. This construct is developed as a new scale from definition and literature including four-item scale.

Strategic advantage is measured by the excellent operation, customer loyalty with firm, and to be product or service leadership in market. This construct is developed as a new scale from definition and literature including four-item scale.

Corporate profitability is measured by the objective and goal success of firm in more profit, revenue, and market share in short term. This construct is developed as a new scale from definition and literature including three-item scale.

Organization vision for sustainable growth is measured by the planning of organization which is the idea of executive or entrepreneur to make continuous and sustainable growth. This construct is developed as a new scale from definition and literature including four-item scale.

Competitive learning capability is measured by the competency of firm in learning, creation, development, and integrative firm's resource to increase competitive capability of firm. This construct is developed as a new scale from definition and literature including three-item scale.

Market culture implementation is measured by the way to create value and believe about the marketing methods in organization of the high quality of services, better relation and communication creation between persons both inside and outside organization, novel market innovation creation. This construct is developed as a new scale from definition and literature including three-item scale.

Potential resources readiness is measured by the preparation of firms for high potential and capability in competition by work process development and intangible resources (i.e. human resource, knowledge resource, and organization culture) development. This construct is developed as a new scale from definition and literature including three-item scale.

Outstanding business experience is measured by the experience of firms or entrepreneurs in the past which firms lead this experience to make new market opportunity. This construct is developed as a new scale from definition and literature including three-item scale.

Government support is measured by the regulations, information, knowledge, and training with entrepreneurs in order to support the firms by government. This construct is developed as a new scale from definition and literature including three-item scale.

Firm capital is a control variable; it is measured by the capital or asset invested on operation in organization. In this research, firm capital is represented by a dummy variable including 0 (3,000,000 baht or less than) and 1 (more than 3,000,000 baht).

Firm age is a control variable; it is measured by subtracting the years of firm establishment from the years of current study. In this research, the firm age is represented by dummy variables including 0 (operation 10 years or less) and 1 (operation more than 10 years).

3.3 Methods

In this study, factor analysis was implemented to assess the underlying relationships of a large number of items and to determine whether they can be reduced to a smaller set of factors. The factor analysis conducted was done separately on each set of the items representing a particular scale due to limited observations. This analysis has a high potential to inflate the component loadings. Thus, a higher rule-of-thumb, a cut-off value of 0.40, was adopted (Nunnally and Bernstein, 1994). All factor loadings are greater than the 0.40 cut-off and are statistically significant. Also, the reliability of the measurements was evaluated by Cronbach alpha coefficients. In the scale reliability, Cronbach alpha coefficients are greater than 0.70 (Nunnally and Bernstein, 1994). The scales of all measures appear to produce internally consistent results; thus, these measures are deemed appropriate for further analysis because they express an accepted validity and reliability in this study. Table 1 shows sample characteristics and Table 2 presents the results for both factor loadings and Cronbach alpha for multiple-item scales used in this study.

TABLE 1
SAMPLE CHARACTERISTICS[a]

Characteristics	SMEs in Auto Parts	SMEs in Electronic Parts
Firm Capital	.29	.27
	(.455)	(.445)
Firm Age	.48	.50
	(.502)	(.503)

[a]Means with standard deviations in parenthesis

TABLE 2
RESULTS OF MEASURE VALIDATION[a]

Items	Auto parts SMEs	Electronic parts SMEs	Pooled Sample
New Business Idea Generation (NBIG)	0.67-0.87	0.73-0.85	0.70-0.86
	(0.85)	(0.81)	(0.83)
Continuous Working Improvement (CWI)	0.87-0.90	0.68-0.84	0.80-0.88
	(0.85)	(0.64)	(0.79)
Change Mindset Adaptation (CMA)	0.59-0.89	0.72-0.89	0.65-0.89
	(0.66)	(0.78)	(0.72)
Stakeholder Response Focus (SRF)	0.50-0.86	0.57-0.80	0.52-0.84
	(0.67)	(0.64)	(0.66)
Social Survival Awareness (SSA)	0.76-0.88	0.81-0.93	0.79-0.90
	(0.77)	(0.82)	(0.80)
Business Practice Effectiveness (BPE)	0.78-0.92	0.80-0.89	0.79-0.89
	(0.88)	(0.86)	(0.87)
Value Creation Excellence (VCE)	0.73-0.84	0.62-0.83	0.71-0.82
	(0.80)	(0.72)	(0.76)
Operational Innovation Efficiency (OIE)	0.75-0.90	0.80-0.91	0.77-0.90
	(0.86)	(0.86)	(0.86)
Strategic Advantage (SA)	0.78-0.91	0.71-0.92	0.75-0.91
	(0.87)	(0.86)	(0.86)
Corporate Profitability (CP)	0.95-0.97	0.91-0.93	0.94-0.95
	(0.96)	(0.91)	(0.94)
Firm Success (FS)	0.75-0.93	0.77-0.91	0.77-0.92
	(0.89)	(0.84)	(0.87)
Organization Vision for Sustainable Growth (OVSG)	0.73-0.87	0.76-0.92	0.74-0.87
	(0.80)	(0.89)	(0.85)
Competitive Learning Capability (CLC)	0.77-0.90	0.91-0.96	0.85-0.92
	(0.80)	(0.92)	(0.86)
Market Culture Implementation (MCI)	0.75-0.89	0.83-0.89	0.77-0.88
	(0.78)	(0.82)	(0.79)
Potential Resources Readiness (PRR)	0.88-0.94	0.87-0.92	0.87-0.93
	(0.88)	(0.88)	(0.88)
Outstanding Business Experience (OBE)	0.83-0.92	0.89-0.91	0.87-0.91
	(0.85)	(0.88)	(0.87)
Government Support (GS)	0.87-0.89	0.92-0.94	0.91-0.92
	(0.85)	(0.93)	(0.90)

[a]Factor loadings with Cronbach alpha in parenthesis

The ordinary least squares (OLS) regression analysis is used to test and examine the hypothesized relationships and estimate factors influencing SEMC, strategic advantage, corporate profitability, and firm success of auto parts SMEs and electronic parts SMEs in Thailand. Here, new business idea generation, continuous working improvement, change mindset adaptation, stakeholder response focus, social survival awareness, and SEMC are main determinants of business practice effectiveness, operational innovation efficiency, value creation excellence, strategic advantage, and corporate profitability which transmit their impact to firm success. Outstanding business experience and government support are moderators of the aforementioned relationships. Then, the aforementioned variables play significant roles in explaining the research relationships. Because all dependent variable, independent variables, mediating variable, moderating variable, and control variables in this study were neither nominal data nor categorical data, OLS is an appropriate method for examining the hypothesized relationships (Aulakh, Kotabe and Teegen, 2000). With the interest of understanding the relationships in this study, the research model of these relationships is illustrated as follows.

Equation 1: $BPE = \beta_{001} + \beta_1 NBIG + \beta_2 CWI + \beta_3 CMA + \beta_4 SRF + \beta_5 SSA + \beta_6 (FA) + \beta_7 (FC) + \varepsilon$

Equation 2: $BPE = \beta_{002} + \beta_8 NBIG + \beta_9 CWI + \beta_{10} CMA + \beta_{11} SRF + \beta_{12} SSA + \beta_{13} GS$
$+ \beta_{14}(NBIG*GS) + \beta_{15}(CWI*GS) + \beta_{16}(CMA*GS) + \beta_{17}(SRF*GS)$
$+ \beta_{18}(SSA*GS) + \beta_{19} (FA) + \beta_{20} (FC) + \varepsilon$

Equation 3: $VCE = \beta_{003} + \beta_{21} NBIG + \beta_{22} CWI + \beta_{23} CMA + \beta_{24} SRF + \beta_{25} SSA + \beta_{26} (FA) + \beta_{27} (FC) + \varepsilon$

Equation 4: $VCE = \beta_{004} + \beta_{28} NBIG + \beta_{29} CWI + \beta_{30} CMA + \beta_{31} SRF + \beta_{32} SSA$
$+ \beta_{33} GS + \beta_{34}(NBIG*GS) + \beta_{35}(CWI*GS) + \beta_{36}(CMA*GS) + \beta_{37}(SRF*GS)$
$+ \beta_{38}(SSA*GS) + \beta_{39} (FA) + \beta_{40} (FC) + \varepsilon$

Equation 5: $OIE = \beta_{005} + \beta_{41} NBIG + \beta_{42} CWI + \beta_{43} CMA + \beta_{44} SRF + \beta_{45} SSA + \beta_{46} (FA) + \beta_{47} (FC) + \varepsilon$

Equation 6: $OIE = \beta_{006} + \beta_{48} NBIG + \beta_{49} CWI + \beta_{50} CMA + \beta_{51} SRF + \beta_{52} SSA + \beta_{53} GS$
$+ \beta_{54}(NBIG*GS) + \beta_{55}(CWI*GS) + \beta_{56}(CMA*GS) + \beta_{57}(SRF*GS)$
$+ \beta_{58}(SSA*GS) + \beta_{59} (FA) + \beta_{60} (FC) + \varepsilon$

Equation 7: $VCE = \beta_{007} + \beta_{61} BPE + \beta_{62} (FA) + \beta_{63} (FC) + \varepsilon$

Equation 8: $VCE = \beta_{008} + \beta_{64} OIE + \beta_{65} (FA) + \beta_{66} (FC) + \varepsilon$

Equation 9: $SA = \beta_{009} + \beta_{67} BPE + \beta_{68} VCE + \beta_{69} OIE + \beta_{70} (FA) + \beta_{71} (FC) + \varepsilon$

Equation 10: $CP = \beta_{010} + \beta_{72} BPE + \beta_{73} VCE + \beta_{74} OIE + \beta_{75} (FA) + \beta_{76} (FC) + \varepsilon$

Equation 11: $CP = \beta_{011} + \beta_{77} SA + \beta_{78} (FA) + \beta_{79} (FC) + \varepsilon$

Equation 12: $FS = \beta_{012} + \beta_{80} SA + \beta_{81} (FA) + \beta_{82} (FC) + \varepsilon$

Equation 13: $FS = \beta_{013} + \beta_{83} CP + \beta_{84} (FA) + \beta_{85} (FC) + \varepsilon$

Equation 14: $NBIG = \beta_{014} + \beta_{86} OVSG + \beta_{87} CLC + \beta_{88} MCI + \beta_{89} PRR + \beta_{90} (FA) + \beta_{91} (FC) + \varepsilon$

Equation 15: $NBIG = \beta_{015} + \beta_{92} OVSG + \beta_{93} CLC + \beta_{94} MCI + \beta_{95} PRR + \beta_{96} OBE$
$+ \beta_{97}(OVSG*OBE) + \beta_{98}(CLC*OBE) + \beta_{99}(MCI*OBE) + \beta_{100}(PRR*OBE)$
$+ \beta_{101}(FA) + \beta_{102} (FC) + \varepsilon$

Equation 16: $CWI = \beta_{016} + \beta_{103} OVSG + \beta_{104} CLC + \beta_{105} MCI + \beta_{106} PRR + \beta_{107} (FA) + \beta_{108} (FC) + \varepsilon$

Equation 17: $CWI = \beta_{017} + \beta_{109} OVSG + \beta_{110} CLC + \beta_{111} MCI + \beta_{112} PRR + \beta_{113} OBE$
$+ \beta_{114}(OVSG*OBE) + \beta_{115}(CLC*OBE) + \beta_{116}(MCI*OBE) + \beta_{117}(PRR*OBE)$
$+ \beta_{118}(FA) + \beta_{119}(FC) + \varepsilon$

Equation 18: $CMA = \beta_{018} + \beta_{120} OVSG + \beta_{121} CLC + \beta_{122} MCI + \beta_{123} PRR + \beta_{124} (FA) + \beta_{125} (FC) + \varepsilon$

Equation 19: $CMA = \beta_{019} + \beta_{126} OVSG + \beta_{127} CLC + \beta_{128} MCI + \beta_{129} PRR + \beta_{130} OBE$
$+ \beta_{131}(OVSG*OBE) + \beta_{132}(CLC*OBE) + \beta_{133}(MCI*OBE) + \beta_{134}(PRR*OBE)$
$+ \beta_{135}(FA) + \beta_{136} (FC) + \varepsilon$

Equation 20: $SRF = \beta_{020} + \beta_{137} OVSG + \beta_{138} CLC + \beta_{139} MCI + \beta_{140} PRR + \beta_{141} (FA) + \beta_{142} (FC) + \varepsilon$

Equation 21: $SRF = \beta_{021} + \beta_{143} OVSG + \beta_{144} CLC + \beta_{145} MCI + \beta_{146} PRR + \beta_{147} OBE$
$+ \beta_{148}(OVSG*OBE) + \beta_{149}(CLC*OBE) + \beta_{150}(MCI*OBE)$
$+ \beta_{151}(PRR*OBE) + \beta_{152}(FA) + \beta_{153} (FC) + \varepsilon$

$Equation\ 22$: $SSA = \beta_{022} + \beta_{154}\,OVSG + \beta_{155}\,CLC + \beta_{156}\,MCI + \beta_{157}\,PRR + \beta_{158}\,(FA) + \beta_{159}\,(FC)$
$+ \varepsilon$

$Equation\ 23$: $SSA = \beta_{023} + \beta_{160}\,OVSG + \beta_{161}\,CLC + \beta_{162}\,MCI + \beta_{163}\,PRR + \beta_{164}\,OBE$
$+ \beta_{165}(OVSG{*}OBE) + \beta_{166}(CLC{*}OBE) + \beta_{167}(MCI{*}OBE)$
$+ \beta_{168}(PRR{*}OBE) + \beta_{169}(FA) + \beta_{170}\,(FC) + \varepsilon$

4. RESULTS AND DISCUSSION

Tables 3, 4 and 5 show the descriptive statistics and correlation matrix for all variables of SMEs in auto parts and electronic parts, and pooled sample. With respect to potential problems relating to multicollinearity, variance inflation factors (VIF) were used to provide information on the extent to which non-orthogonality among independent variables inflates standard errors. The VIFs range from 1.00 to 4.19, well below the cut-off value of 10 recommended by Neter, Wasserman and Kutner (1985), meaning that the independent variables are not correlated with each other. Therefore, there are no substantial multicollinearity problems encountered in this study.

TABLE 3
DESCRIPTIVE STATISTICS AND CORRELATION MATRIX FOR SMEs in AUTO PARTS

Variables	NBIG	CWI	CMA	SRF	SSA	BPE	OIE	VCE	SA	CP	FS	OVSG	CLC	MCI	PRR	OBE	GS	FC	FA
Mean	4.05	4.18	3.85	4.06	4.15	3.74	3.65	3.86	3.60	3.61	3.62	4.14	4.06	3.90	3.90	4.00	3.37	0.29	0.48
s.d.	0.68	0.77	0.65	0.61	0.58	0.62	0.71	0.59	0.70	1.05	0.76	0.55	0.65	0.64	0.78	0.65	0.70	0.46	0.50
NBIG	1																		
CWI	.80**	1																	
CMA	.72**	.60**	1																
SRF	.53**	.58**	.60**	1															
SSA	.67**	.77**	.52**	.54**	1														
BPE	.33**	.32**	.36**	.45**	.35**	1													
OIE	.59**	.55**	.38**	.46**	.60**	.58**	1												
VCE	.37**	.32**	.18	.32**	.52**	.61**	.75**	1											
SA	.37**	.36**	.24*	.41**	.48**	.71**	.73**	.73**	1										
CP	.50**	.49**	.37**	.38**	.43**	.74**	.57**	.58**	.68**	1									
FS	.52**	.54**	.37**	.47**	.51**	.71**	.71**	.66**	.76**	.81**	1								
OVSG	.66**	.61**	.54**	.43**	.69**	.40**	.66**	.58**	.41**	.53**	.61**	1							
CLC	.64**	.65**	.51**	.38**	.55**	.44**	.56**	.56**	.36**	.67**	.64**	.83**	1						
MCI	.73**	.70**	.56**	.47**	.64**	.49**	.69**	.55**	.55**	.65**	.69**	.75**	.70**	1					
PRR	.64**	.60**	.45**	.42**	.55**	.48**	.66**	.66**	.59**	.58**	.65**	.72**	.74**	.83**	1				
OBE	.72**	.67**	.56**	.40**	.46**	.26*	.59**	.41**	.41**	.48**	.55**	.70**	.76**	.72**	.74**	1			
GS	.36**	.30**	.23*	.29**	.26*	.50**	.48**	.47**	.30**	.42**	.53**	.38**	.48**	.32**	.34**	.32**	1		
FC	-.15	-.12	-.15	-.14	-.14	-.12	-.16	-.17	-.08	-.04	-.13	-.19	-.13	-.11	-.15	-.16	-.20*	1	
FA	-.13	-.02	-.03	.01	-.01	-.05	.03	-.01	.03	-.02	-.01	-.12	-.03	-.07	-.12	.02	.03	.19	1

**p<.05, ***p<.01

TABLE 4
DESCRIPTIVE STATISTICS AND CORRELATION MATRIX FOR SMEs in ELECTRONIC PARTS

Variables	NBIG	CWI	CMA	SRF	SSA	BPE	OIE	VCE	SA	CP	FS	OVSG	CLC	MCI	PRR	OBE	GS	FC	FA
Mean	4.15	4.15	3.84	4.01	4.09	3.60	3.52	3.80	3.53	3.48	3.33	3.92	3.88	3.94	3.76	3.94	2.88	0.27	0.50
s.d.	0.54	0.55	0.67	0.48	0.68	0.60	0.69	0.54	0.67	0.79	0.60	0.65	0.74	0.53	0.69	0.71	0.85	0.45	0.50
NBIG	1																		
CWI	.65**	1																	
CMA	.60**	.70**	1																
SRF	.24*	.47**	.53**	1															
SSA	.55**	.77**	.67**	.42**	1														
BPE	.38**	.44**	.57**	.42**	.55**	1													
OIE	.41**	.59**	.59**	.35**	.60**	.78**	1												
VCE	.16	.40**	.36**	.35**	.46**	.70**	.73**	1											
SA	.37**	.55**	.58**	.33**	.64**	.70**	.80**	.77**	1										
CP	.38**	.51**	.52**	.32**	.53**	.59**	.63**	.49**	.69**	1									
FS	.45**	.53**	.48**	.37**	.53**	.62**	.63**	.51**	.60**	.78**	1								
OVSG	.32**	.53**	.55**	.41**	.68**	.59**	.60**	.63**	.58**	.43**	.56**	1							
CLC	.35**	.61**	.51**	.42**	.61**	.51**	.52**	.57**	.52**	.42**	.60**	.84**	1						
MCI	.46**	.55**	.52**	.50**	.59**	.56**	.51**	.48**	.56**	.45**	.62**	.54**	.58**	1					
PRR	.21	.39**	.44**	.33**	.53**	.59**	.52**	.63**	.68**	.52**	.51**	.59**	.56**	.58**	1				
OBE	.48**	.65**	.66**	.37**	.75**	.60**	.62**	.56**	.65**	.51**	.58**	.74**	.78**	.73**	.74**	1			
GS	.20	.13	.26*	.11	.15	.33**	.34**	.14	.20	.31**	.46**	.19	.14	.25*	.20	.32**	1		
FC	-.01	.09	-.04	.05	.01	-.09	.01	.08	.06	.00	.06	.01	-.03	.10	-.02	-.01	-.16	1	
FA	-.10	-.09	-.14	.01	-.05	-.12	-.04	-.06	-.06	-.06	.01	-.01	-.06	-.05	-.13	-.11	.08	.18	1

**p<.05, ***p<.01

TABLE 5
DESCRIPTIVE STATISTICS AND CORRELATION MATRIX FOR POOLED SAMPLE

Variables	NBIG	CWI	CMA	SRF	SSA	BPE	OIE	VCE	SA	CP	FS	OVSG	CLC	MCI	PRR	OBE	GS	FC	FA
Mean	4.10	4.17	3.85	4.04	4.12	3.67	3.59	3.83	3.57	3.55	3.48	4.03	3.98	3.92	3.84	3.97	3.13	0.28	0.49
s.d.	0.61	0.68	0.66	0.55	0.63	0.61	0.70	0.57	0.69	0.94	0.70	0.61	0.70	0.59	0.74	0.68	0.81	0.45	0.50
NBIG	1																		
CWI	.74**	1																	
CMA	.66**	.63**	1																
SRF	.42**	.55**	.57**	1															
SSA	.60**	.75**	.60**	.48**	1														
BPE	.33**	.36**	.46**	.44**	.45**	1													
OIE	.50**	.56**	.47**	.42**	.60**	.67**	1												
VCE	.28**	.35**	.25**	.34**	.48**	.65**	.74**	1											
SA	.36**	.43**	.40**	.38**	.56**	.71**	.77**	.75**	1										
CP	.45**	.50**	.42**	.36**	.46**	.68**	.59**	.55**	.68**	1									
FS	.46**	.53**	.40**	.43**	.51**	.67**	.68**	.60**	.69**	.80**	1								
OVSG	.47**	.55**	.53**	.41**	.68**	.50**	.62**	.59**	.49**	.47**	.59**	1							
CLC	.48**	.61**	.50**	.40**	.58**	.48**	.54**	.56**	.44**	.55**	.62**	.84**	1						
MCI	.62**	.64**	.54**	.48**	.60**	.51**	.61**	.51**	.56**	.58**	.64**	.62**	.63**	1					
PRR	.46**	.52**	.43**	.39**	.54**	.53**	.60**	.65**	.64**	.56**	.60**	.66**	.65**	.73**	1				
OBE	.60**	.65**	.60**	.39**	.62**	.42**	.60**	.48**	.53**	.48**	.55**	.71**	.77**	.72**	.74**	1			
GS	.24**	.22**	.24**	.20**	.21**	.42**	.41**	.30**	.25**	.36**	.52**	.31**	.31**	.26**	.28**	.31**	1		
FC	-.09	-.03	-.10	-.05	-.06	-.10	-.07	-.05	-.01	-.02	-.04	-.07	-.08	-.01	-.09	-.09	-.16*	1	
FA	-.11	-.05	-.09	.01	-.03	-.08	-.01	-.03	-.01	-.04	-.01	-.06	-.04	-.06	-.12	-.04	.05	.18*	1

**p<.05, ***p<.01

TABLE 6
INDEPENDENT SAMPLES TEST BETWEEN SMEs in AUTO PARTS AND ELECTRONIC PARTS

Variables	SMEs in Auto Parts (n=94)		SMEs in Electronic Parts (n=86)		t	p
	Mean	s.d.	mean	s.d.		
BPE	3.74	0.62	3.60	0.60	1.51	0.13
OIE	3.65	0.71	3.52	0.69	1.21	0.23
VCE	3.86	0.59	3.80	0.54	0.85	0.39
SA	3.60	0.70	3.53	0.67	0.60	0.55
CP	3.61	1.05	3.48	0.79	0.89	0.38

**p<.05

Table 6 shows the results of independent samples test between auto parts and electronic parts SMEs in consequence variables. The results indicate that there are no significant differences between auto parts and electronic parts SMEs on BPE, OIE, VCE, SA, CP consequence variables. Hence, these can imply that the results of SMEs in auto parts and electronic parts are not differently significant so researcher tests regression with pooled sample only.

4.1 Influence of SEMC and SEMC consequences

TABLE 7
RESULTS OF OLS REGRESSION ANALYSIS[a]

Independent Variables	Dependent Variables					
	1 BPE	2 BPE	3 VCE	4 VCE	5 OIE	6 OIE
New business idea generation	0.00	-0.02	0.04	0.15	0.15	0.20**
(NBIG)	(0.10)	(0.10)	(0.11)	(0.11)	(0.09)	(0.09)
Continuous working	-0.15	-0.11	-0.08	-0.09	0.09	0.09
improvement (CWI)	(0.12)	(0.11)	(0.13)	(0.12)	(0.11)	(0.11)
Change mindset adaptation	0.22**	0.19**	-0.15	-0.18	0.04	-0.02
(CMA)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
Stakeholder response focus	0.25***	0.20***	0.20**	0.17**	0.11	0.10
(SRF)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.07)
Social survival awareness	0.31***	0.26***	0.51***	0.49***	0.37***	0.33***
(SSA)	(0.09)	(0.09)	(0.10)	(0.10)	(0.09)	(0.09)
Government support (GS)		0.30***		0.19***		0.28***
		(0.07)		(0.07)		(0.06)
NBIG x GS		0.05		0.28***		0.26***
		(0.09)		(0.10)		(0.09)
CWI x GS		-0.13		-0.10		-0.08
		(0.13)		(0.14)		(0.12)
CMA x GS		0.17		-0.02		-0.09
		(0.09)		(0.09)		(0.09)
SRF x GS		0.20**		0.09		0.12
		(0.09)		(0.10)		(0.09)
SSA x GS		-0.19		-0.01		-0.15
		(0.09)		(0.10)		(0.09)
FC	-0.11	0.05	-0.04	0.08	-0.08	0.04
	(0.15)	(0.14)	(0.15)	(0.14)	(0.13)	(0.13)
FA	-0.11	-0.12	-0.06	-0.07	0.08	0.04
	(0.13)	(0.12)	(0.13)	(0.13)	(0.12)	(0.11)
Adjusted R^2	0.28	0.40	0.24	0.32	0.39	0.48

**p<.05, ***p<.01, [a] Beta coefficients with standard errors in parenthesis

Table 7 presents the effects of all dimensions of SEMC on business practice effectiveness, value creation excellent, and operational innovation efficiency. Furthermore, this table shows the moderating effect of government support on SEMC and its consequence. Surprisingly, new business idea generation has no positive influence on business practice effectiveness, value creation excellent, and operational innovation efficiency. ***Therefore, Hypotheses 1a, 1b, 1c are not supported.***

Furthermore, continuous working improvement has no a positive influence on business practice effectiveness, value creation excellent, and operational innovation efficiency. ***Therefore, Hypotheses 2a, 2b, 2c are not supported.***

Next, change mindset adaptation has a significant positive influence on business practice effectiveness (b_3=0.22, p<.05), similarly to Rangarajan et al. (2004) purposed that readiness to change influence on operation effectiveness. ***Thus, Hypotheses 3a is supported.*** On the contrary, change mindset adaptation has no positive influence on value creation excellent and operational innovation efficiency. ***Therefore, Hypotheses 3b and 3c are not supported.***

Also, stakeholder response focus has a significant positive influence on business practice effectiveness (b_4=0.25, p<.01) and value creation excellent (b_{24}=0.20, p<.05) that consistent with the study of Cullen

and Calvert (1995) which reveals that university which focuses on stakeholder leads to the effectiveness and value creation of library. ***Therefore, Hypotheses 4a and 4b are supported.*** Whereas, stakeholder response focus has no positive influence on operational innovation efficiency. ***Thus, Hypotheses 4c is not supported.***

Interestingly, social survival awareness has a significant positive influence on business practice effectiveness, value creation excellent, and operational innovation efficiency (b_5=0.31, p<.01; b_{25}=0.51, p<.01; b_{45}=0.37, p<.01), similarly with Lichtenstein et al. (2004) argued that the firm which has socially responsible can improve their firms' performance. ***Therefore, Hypotheses 5a, 5b, and 5c are fully supported.***

According to the role of government support as moderator in Table 7, the results report that government support has significant effect on the relationship among new business idea generation, value creation excellent, and operational innovation efficiency (b_{34}=0.28, p<.01; b_{54}=0.26, p<.01). These findings consist with Moffat and Auer (2006) suggested that the regulation from government can help firms for operation and better performance. ***Therefore, Hypotheses 22b and 22c are supported.*** Whereas, government support has no effect on the relationship among new business idea generation and business practice effectiveness. ***Thus, Hypotheses 22a is not supported.***

Surprisingly, government support has no effect on the relationships among continuous working improvement, business practice effectiveness, value creation excellent, and operational innovation efficiency. ***Thus, Hypotheses 23a-23c are not supported.***

Next, government support has no effect on the relationships among change mindset adaptation, business practice effectiveness, value creation excellent, and operational innovation efficiency. ***Thus, Hypotheses 24a-24c are not supported.***

Interestingly, government support has significant effect on the relationship among stakeholder response focus and business practice effectiveness (b_{17}=0.20, p<.05), similar to Moffat and Auer (2006). ***Therefore, Hypothesis 25a is supported.*** In contrast, government support has no effect on the relationship among stakeholder response focus, value creation excellent, and operational innovation efficiency. ***Thus, Hypotheses 25b and 25c are not supported.***

Furthermore, government support has no effect on the relationships among social survival awareness, business practice effectiveness, value creation excellent, and operational innovation efficiency. ***Thus, Hypotheses 26a-26c are not supported.***

4.2 Influences of business practice effectiveness, value creation excellent, operational innovation efficiency, strategic advantage, corporate profitability, and firm success

Table 8 reports the influence of business practice effectiveness, value creation excellent, operational innovation efficiency, strategic advantage, corporate profitability, and firm success. The results provide that Operational innovation efficiency and business practice effectiveness have a significant positive influence on value creation excellent (b_{64}=0.56, p<.01; b61=0.28, p<.01 respectively) consistent with Hurley and Hult (1998) who suggested that organizational innovation influenced the potential for good performance. Also, Rapp et al. (2008) reveals that value creation of the firm is positive effect from business practice effectiveness. ***Therefore, Hypotheses 6 and 7 are supported.***

TABLE 8
RESULTS OF OLS REGRESSION ANALYSIS[a]

Independent Variables	Dependent Variables						
	7 VCE	8 VCE	9 SA	10 CP	11 CP	12 FS	13 FS
Business practice effectiveness (BPE)	0.28*** (0.07)		0.27*** (0.06)	0.49*** (0.08)			
Operational innovation efficiency (OIE)		0.56*** (0.07)	0.35*** (0.07)	0.20** (0.09)			
Value creation excellent (VCE)			0.32*** (0.07)	0.08 (0.08)			
Strategic advantage (SA)					0.69*** (0.06)	0.27*** (0.06)	
Corporate profitability (CP)							0.62*** (0.06)
FC	0.05 (0.11)	0.25 (0.16)	0.12 (0.09)	0.11 (0.12)	-0.02 (0.12)	-0.07 (0.09)	0.12 (0.15)
FA	-0.04 (0.09)	-0.05 (0.15)	0.03 (0.08)	-0.01 (0.11)	-0.06 (0.11)	0.06 (0.09)	0.11 (0.14)
Adjusted R^2	0.59	0.58	0.70	0.49	0.46	0.68	0.62

**p<.05, ***p<.01, [a] Beta coefficients with standard errors in parenthesis

Next, Hypotheses 8a and 8b predict a positive influence of business practice effectiveness on strategic advantage and corporate profitability. Supporting Hypotheses 8a and 8b, the results in Table 8 shows that business practice effectiveness has a significant positive influence on strategic advantage (b_{67}=0.27, p<.01) and corporate profitability (b_{72}=0.49, p<.01). This result suggests that firms which success in operation can increase profit of firms and strategic advantage to competitor (Kumar and Gulati, 2010). *Therefore, Hypotheses 8a and 8b are supported.*

Also, value creation excellent has a significant positive influence on strategic advantage ($b68$=0.32, p<.01), similar to Chu (2001) who suggested that if firms can provide superior customer value, firms must be successful and gain advantage in the industry. *Therefore, Hypothesis 9a is supported.* On the contrary, value creation excellent has no influence on corporate profitability. *Thus, Hypotheses 9b is not supported.*

Then, operational innovation efficiency has a significant positive influence on strategic advantage (b_{69}=0.35, p<.01) and corporate profitability (b_{74}=0.20, p<.05), similar to Lemon and Sahota (2004) revealed that effective operational innovation is the key to maintain competitive in a constantly changing environment and increase profitability. *Therefore, Hypotheses 10a and 10b are supported.*

Interestingly, strategic advantage has a significant positive influence on corporate profitability (b_{77}=0.69, p<.01) and firm success (b_{80}=0.27, p<.01), similar to Bendoly et al. (2009) explained that firms with high strategic advantage have a positive influence on corporate profitability and firm success. *Therefore, Hypotheses 11 and 12 are supported.* Also, corporate profitability who has a significant positive influence on firm success, similar to Lin and Shen (2009) suggest that corporate profitability leads to firm success. *Therefore, Hypothesis 13 is supported.*

4.3 Influence of SEMC antecedents and SEMC

Table 9 on next page provides the results of OLS regression analysis for the relationships among organization vision for sustainable growth, competitive learning capability, market culture implementation, potential resources readiness, and all dimensions of SEMC. The results found that organization vision for sustainable growth has a significant positive influence on change mindset adaptation (b_{120}=0.29, p<.05) and social survival awareness (b_{154}=0.55, p<.01), similar to Namaki (1992) suggested that organization vision is a mental awareness of the kind of environment and individual. *Therefore, Hypotheses 14c and 14e are supported.* On the contrary, organization vision for sustainable growth has no positive influence on new business idea generation, continuous working improvement, and stakeholder response focus. *Thus, Hypotheses 14a, 14b, and 14d are not supported.*

TABLE 9
RESULTS OF OLS REGRESSION ANALYSIS OF ANTECEDENTS[a]

Independent Variables	Dependent Variables									
	14 NBIG	15 NBIG	16 CWI	17 CWI	18 CMA	19 CMA	20 SRF	21 SRF	22 SSA	23 SSA
Organization vision for sustainable growth (OVSG)	0.05 (0.11)	0.03 (0.11)	-0.03 (0.11)	-0.01 (0.10)	0.29** (0.12)	0.30** (0.12)	0.15 (0.13)	0.19 (0.12)	0.55*** (0.10)	0.53*** (0.09)
Competitive learning capability (CLC)	0.13 (0.11)	-0.03 (0.12)	0.38*** (0.11)	0.22 (0.11)	0.07 (0.12)	-0.15 (0.13)	0.04 (0.13)	0.02 (0.13)	-0.07 (0.10)	-0.21 (0.10)
Market culture implementation (MCI)	0.58*** (0.09)	0.45*** (0.09)	0.46*** (0.08)	0.35*** (0.10)	0.37*** (0.09)	0.26*** (0.09)	0.36*** (0.10)	0.30*** (0.10)	0.31*** (0.08)	0.31*** (0.08)
Potential resources readiness (PRR)	-0.09 (0.09)	-0.22** (0.09)	-0.04 (0.09)	-0.14 (0.09)	-0.09 (0.10)	-0.23** (0.10)	0.01 (0.11)	-0.01 (0.11)	-0.01 (0.09)	-0.14 (0.08)
Outstanding business experience (OBE)		0.43*** (0.11)		0.35*** (0.10)		0.48*** (0.11)		0.04 (0.12)		0.20** (0.09)
OVGS x OBE		0.16 (0.12)		0.08 (0.11)		-0.11 (0.12)		0.25 (0.13)		-0.18 (0.10)
CLC x OBE		-0.16 (0.12)		-0.02 (0.12)		0.13 (0.13)		-0.14 (0.14)		-0.10 (0.11)
MCI x OBE		-0.19** (0.09)		-0.26*** (0.08)		-0.06 (0.09)		-0.44*** (0.09)		-0.07 (0.08)
PRR x OBE		0.11 (0.09)		0.10 (0.08)		0.02 (0.09)		0.19 (0.11)		0.18** (0.08)
FC	-0.15 (0.13)	-0.13 (0.13)	-0.01 (0.12)	-0.01 (0.12)	-0.15 (0.14)	-0.13 (0.13)	-0.10 (0.15)	-0.12 (0.14)	-0.05 (0.12)	-0.08 (0.11)
FA	-0.14 (0.12)	-0.19 (0.11)	-0.03 (0.11)	-0.06 (0.11)	-0.09 (0.12)	-0.12 (0.12)	0.09 (0.13)	0.06 (0.13)	0.04 (0.11)	0.01 (0.10)
Adjusted R^2	0.40	0.46	0.48	0.52	0.35	0.39	0.23	0.31	0.51	0.58

**p<.05, ***p<.01, [a] Beta coefficients with standard errors in parenthesis

Interestingly, competitive learning capability has a significant positive influence on continuous working improvement only (b_{104}=0.38, p<.01), similar to Teece et al. (1997) who argued that learning capability is an important interface driving the creation and working improvement. *Therefore, Hypothesis 15b is supported.* Also, competitive learning capability has no influence on new business idea generation, change mindset adaptation, stakeholder response focus, and social survival awareness. *Thus, Hypotheses 15a, 15c, 15d, and 15e are not supported.*

Very interestingly, market culture implementation has a significant positive influence on all dimensions of SEMC (b_{88}=0.58, p<.01; b_{105}=0.46, p<.01; b_{122}=0.37, p<.01; b_{139}=0.36, p<.01; b_{156}=0.31, p<.01 respectively), similar to Sashittal and Wilemon (1996) who explained that market implementation is an important driving entrepreneurship management competency. *Therefore, Hypotheses 16a-16e are fully supported.* Surprisingly, potential resources readiness has no influence on all dimensions of SEMC. *Thus, Hypotheses 17a-17e are not supported.*

Subsequently, outstanding business experience is added as the moderator in five models. In Table 9, the findings provide the moderating effect of outstanding business experience on the relationship between antecedents (organization vision for sustainable growth, competitive learning capability, market culture implementation, and potential resources readiness) and SEMC (new business idea generation, continuous working improvement, change mindset adaptation, stakeholder response focus, and social survival awareness). Surprisingly, the moderating effect of outstanding business experience on the relationship between potential resources readiness and social survival awareness is only significant (b_{168}=0.18, p<.05). The finding is consistent with the study of Bennett et al. (2005). *Therefore, Hypothesis 21e is supported.* On the contrary, the moderating effect of outstanding business experience on the relationships among all antecedents and SEMC except potential resources readiness and social survival awareness relationship are not positively significant. *Thus, Hypotheses 18a-18e, 19a-19e, 20a-20e, and 21a-21d are not supported.*

5. CONTRIBUTIONS AND DIRECTIONS FOR FUTURE RESEARCH

5.1 Theoretical Contributions and Future Directions for Research
This study is intended to provide a clearer understanding of the relationships among organization vision for sustainable growth, competitive learning capability, market culture implementation, SEMC, business

practice effectiveness, value creation excellence, operational innovation efficiency, strategic advantage, corporate profitability, firm success, government support, and outstanding business experience. It provides important theoretical contribution and modification on previous knowledge. For advancing the field theoretically, this study is one of the first known studies to directly link organization vision for sustainable growth, competitive learning capability, market culture implementation, SEMC, business practice effectiveness, value creation excellence, operational innovation efficiency, strategic advantage, corporate profitability, firm success via government support, and outstanding business experience as moderators of auto parts SMEs and electronic parts SMEs in Thailand. It attempts to comprehend these variables in the same model and investigate these relationships. Future research is needed to collect data from a larger population and/or a comparative other population in order to increase the level of reliable results.

5.2 Managerial Contributions

This study can help CEO's (managing director/ managing partner/ top executive director) particularly, in SMEs auto and electronic parts to understand how their firms can complete corporate profitability and achieve firm success by using appropriate strategy for competition. Therefore, SEMC has become an important issue for executives in SMEs sector. Moreover, social survival awareness has a strong impact on business practice effectiveness, value creation excellent, and operational innovation efficiency. These can imply that social awareness of SMEs increases benefit of them and social. Therefore, SMEs at the present should emphasize more in social awareness. In addition, market culture implementation has a strong influence with SEMC. Hence, CEO's of SMEs can lead market culture implementation to increase SEMC and firm success.

6. CONCLUSION

The purpose of this study is to examine the relationships among organization vision for sustainable growth, competitive learning capability, market culture implementation, SEMC, business practice effectiveness, value creation excellence, operational innovation efficiency, strategic advantage, corporate profitability, firm success via government support, and outstanding business experience as moderators. The model is tested by using data collected from mail survey of 480 SMEs in auto parts and 332 SMEs in electronic parts in Thailand. The results reveal partial support for hypotheses derived from the conceptual model. In general, it provides empirical evidence that that market culture implementation has a strong impact on all dimensions of SEMC for pooled samples. Also, social survival awareness has a strong impact on business practice effectiveness, value creation excellent, and operational innovation efficiency. Operational innovation efficiency and business practice effectiveness has a significant positive effect on value creation excellence. Operational innovation efficiency and business practice effectiveness have a significant positive influence on strategic advantage and corporate profitability, whereas value creation excellence has a significant positive influence on strategic advantage only. Finally, both strategic advantage and corporate profitability have a significant positive influence on firm success.

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CORPORATE SOCIAL RESPONSIBILITY, STRATEGY AND CULTURE: BATI ANADOLU GROUP CASE

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ABSTRACT

Corporate Social Responsibility (CSR) is an important phenomenon that has recently received increasing attention both from academia and the business world. This paper first provides the evolution of the concept by providing the definitions outlined by major scholars in the field and then discusses how the alignment of CSR with strategy and organizational culture serves effective functioning of an organization. Moreover, Bati Anadolu Group (BAG), a Turkish corporation, is explored in depth to evaluate its CSR projects especially regarding energy and environment and how the strategy and culture of BAG is involved in pursuing those projects is discussed.

Keywords: Corporate social responsibility, strategy, organizational culture

1. INTRODUCTION

Corporate Social Responsibility (CSR) consists of actions that appear to further some social good beyond the interests of the firm and that which is required by law (McWilliams & Siegel, 2001). Although the concept has received growing attention from business scholars in recent years, Bowen provided the first modern definition of the concept as early as 1953, stating that businesses are responsible for their actions beyond profit and loss statements. However, at those days there were opposing ideas arguing whether organizations should be socially responsible or not. According to Friedman (1970), managers are the agents of shareholders whose major concern should be increasing shareholder value by maximizing profits. Hence, any investment to serve social interests beyond economic rules is the breach of this principle-agent relationship. In this view, managers' actions for the good of society should be at their own expense. In 1979, the term gained an ethical dimension with the definition of Carrol: "the social responsibility of business encompasses the economic, legal, ethical and discretionary expectations that society has of organizations at a given point in time." Also, it has been recognized that the stakeholders are not limited to shareholders alone. In order for a company to succeed, the impact of external and internal factors on all stakeholders should be considered (Freeman, 1984). Accordingly, Frederick et al. (1992) defined CSR as "a principle stating that corporations should be accountable for the effects of any of their actions on their community and environment." Moreover, Van Marrewijk (2003) provided further clarification by stating that "in general, corporate sustainability and CSR refer to company activities – voluntary by definition – demonstrating the inclusion of social and environmental concerns in business operations and in interactions with stakeholders". Finally, the most preferred definition of CSR according to the study of Dahlsrud (2008) is made by the European Commission in 2001 as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis". According to Dahlsrud (2008), CSR definition encompasses five major dimensions: the environmental dimension (the natural environment), the social dimension (he relationship between business and society), the economic dimension (socio-economic or financial aspects, including describing CSR in terms of a business operation), the stakeholder dimension (stakeholders or stakeholder groups) and the voluntariness dimension (actions not prescribed by law). For the rest of the study, where the alignment of CSR with strategy and culture will be reviewed, the definition of the European Commission (2001) will be referred to as a guide since it includes all five dimensions in a clear manner.

2. CSR AND STRATEGY

Due to globalization, competition has increased all around the world. Since corporate social responsibility and competitive advantage have gained importance, the global tendency has become "being socially responsible to gain competitive advantage". Hence, companies started to consider society's advantages

and benefits besides company's own advantages while forming and implementing their strategies. This has caused a relationship to occur between strategic management and CSR. In fact, CSR is potentially a "strategic matter" because it can change the frame of the organizations either partially or totally. Therefore, regardless of company motives for integrating CSR into strategy-making processes, there is a strong argument that CSR should be considered a strategically important concept for organizations (Carrol & Shabana, 2010).

Strategic management is a decision making process in a corporation which helps to determine the plans to achieve goals. The strategies would include economic and non-economic actions and contributions for both shareholders and stakeholders (Andrews, 1987). The strategic decisions of a company should include social and economic consequences for both the society and the company. Lately, strategists and managers have started to take into account societal expectations to meet the needs of society and stakeholders as well. Social responsibility is included as a main component of strategy formulation in the Harvard Business School's strategy model. All these are briefly described as four main activities of organizations that are managed by socially responsible strategies in the study of Katsoulakos & Katsoulakos (2007). Accordingly, CRS policies, strategies and performance/ risk indicators need to be developed as an integral part of the overall corporate strategy to reflect the requirements and priorities of the key stakeholders. Strategies should clarify corporate responsibility positioning decisions in light of benchmarking information. Business strategy alignment should then be periodically validated. Governance structures, transparency standards and controls should be reviewed and adjusted as necessary to support the agreed CSR policies and strategies which may take a number of iterations to reach proper alignment. A CSR capability development program should be specified to support the implementation of the strategies in the context of the specified governance design.

As mentioned above CSR projects are able to create a positive effect on reputation as well as the motivation and loyalty of employees. (Pearce & Doh, 2005) Therefore, CSR is included in most of the strategies and strategy formulation models. According to Husted and Allen (2001), CSR strategies can create competitive advantages, pointing out that there is a positive association between strategic social responsibility actions and competitive advantage.

Barney (1991) states that the creation of competitive advantage can be achieved through the implementation of strategies which add value and create benefits for one company when another company fails to do so. Competitive advantage can be achieved through internal resources. However, to obtain this advantage, the resources should be valuable, rare, inimitable and not-substitutable (Barney, 1991). Thus, CSR can be seen an internal resource of the company from the lens of "Resource Based View" (RBV) of organizations which is introduced by Wernerfelt (1984). Since CSR addresses different dimensions that can be taken into account as internal resources; such as corporation values, business ethics and the relationship with stakeholders (Donaldson & Preston, 1995; Freeman, 1984), CSR can be stated as a group of resources. In some of the theoretical papers RBV of strategic management is combined with CSR activities. For example, Hart (1995) explored that in industries where environment is critical, "environmental responsibilities" bring sustainable competitive advantage, additional resources and capabilities to the firms. Russo and Fouts (1997) had made an empirical research about this phenomenon and found out that environmentally responsible firms generate more profit than the ones who pay little or no attention to environmental issues. Thus by adding a small detail representing the CSR responsiveness of the firm may increase both the reputation and profitability of that corporation (McWilliams & Siegel,2001).

By creating valuable, rare and inimitable social projects which are connected to its core business, a company is able to create competitive advantage by differentiating itself from its competitors (Burke & Logsdon, 1996; Husted, 2003; McWilliams et al., 2006). Therefore McWilliams et al. (2006) define the term CSR as a strategic investment which differentiate the company's product from those of competitors'. However, it should be noted that CSR is an internal resource that can generate competitive advantage, once it becomes part of corporate culture and values (Castelo, & Rodrigues, 2006). In other words, as CSR becomes part of corporate strategy, organizational culture should be shaped accordingly to support having CSR projects as part of the strategy.

3. CSR AND ORGANIZATIONAL CULTURE

Culture is defined as the "collective programming of the mind which distinguishes the members of one human group from another" where it includes the systems of values and these values are among the

building blocks of culture (Hofstede, 1980:21). Thus the word culture is rather related to the human made face of the world which is constructed by the collective mind of individuals due to long years of living, communicating and perceiving together (Hofstede, 1980). On the other hand, Schein (1990) has defined culture as a pattern of basic assumptions, which is invented, discovered, or developed by a given group. He argued that as long as the organizations learn to cope with their problems of external adaptation and internal integration they transformed into well organized and valid mechanism which has to be transferred to new members in order to let them perceive, think and feel correctly about those problems. For years scholars and academia have been trying to define the "organizational culture", which was once defined by an executive as "I cannot define it, but I know it when I see it" (Robbins and Judge, 2007). However there seems to be an agreement on the organizational culture as "a system of shared meanings held by members that distinguishes the organization from other organizations" (Robbins and Judge, 2007).

So after long years of working together, organizations create an identity which has to be protected and transferred to the new employees. These shared values, common way of doing a task, the way they cope with uncertainties and all other issues that create the collective mind help the organizations to survive in the changing environment. Economic development, sustainability, efficiency, effectiveness and all in between are the subtitles of different organizational cultures which distinguish one firm from another. Organizational culture is the only resource of a firm which can't be imitated easily and most of the time it is the core of competitive advantage. The vital point is how and through which actions organizational culture is reflected in everyday practice. Hence, this is the point where organizational culture and CSR are entangled.

Due to increased public demand for accountability and transparency in the business arena, the term CSR is becoming more and more popular in the recent years. Thus, in other words companies need to recognize their responsibility for the social and environmental impact of their operations. Especially for the organizations that operate in an environment which is negatively affected by the operations of the industry, CSR becomes the leading competitive advantage. Hence, majority of the organizations started to embed CSR in their organizational culture and in some cases, this new formulation started to dominate the broader culture and organizational culture turned out to be a "CSR culture" (Duarte, 2010). Accordingly, Duarte (2010) has defined the CSR culture as "subjective interpretations of ideational (values and mission) and material (decoration and uniform) manifestations informed by the notion of social responsibility".

As mentioned above, CSR has become embedded in the practices of many corporations particularly those operating in sectors which have negative environmental and social track record such as mining, chemicals and timber (Duarte, 2010). By implementing CSR values in organizational practices, corporations have managed to create a CSR culture which pervades the broader culture of the organization. Personal values which consist of ethical ideals and beliefs of individuals, also contribute to the creation and maintenance of CSR culture or organizational cultures formed of values which are associated with environmental and social sustainability (Duarte, 2010). Duarte (2010) suggests that personal values of managers have the specific role in shaping and sustaining CSR cultures. The core of CSR cultures consist of organizational values, values of individual managers and their commitment to keep these values alive in the organization.

Hancock's (2005) definition of CSR culture also emphasizes the importance of organizational values and their role in creating CSR culture: "A CSR culture is fundamentally values–driven as opposed to being purely financially-driven and invariably involves widespread and systemic change in the way that companies do business; from recruitment and human resources to manufacturing processes and supplier relationships". According to Smircich (1983), organizational members both create and sustain their view of the world and identity through CSR culture. The environmental and social values shared by organizational members create identity, purpose and direction.

As a result, it can be stated that it is managers' responsibility to implement CSR initiatives in order to develop and sustain CSR cultures in the corporation. Since they embed their values and are the most influent actors in forming CSR cultures, they are important players in the creation of CSR culture which are in congruence with organizational culture and values of the corporation. Within this framework, CSR culture, becoming an important tool for gaining competitive advantage, are crucial for effective functioning of organizations. Bati Anadolu Group (BAG), a corporation located in Turkey, provides a remarkable example for how CSR culture, especially one involving environmental projects, serves the success and sustainability of such a corporation.

4. BATI ANADOLU GROUP

The foundations of Bati Anadolu Group (BAG)[1] were laid with Bati Anadolu Cimento Sanayii A.S. (Baticim) established in 1966 with 100% Turkish capital. First company of the group, Baticim grew rapidly and became one of the powerful companies of Turkish cement industry in a short time. In line with the principles of "continuous renewal and constant improvement", the company started doing business in the areas of clinker, cement, ready-mixed concrete, aggregate, fly ash, electric power generation and port administration in the following years and thus the six companies forming BAG of today initiated their operations one by one. Current financial status of the BAG is also remarkable. For instance, total value of Baticim, the first company of the BAG, as of 31.12.2010 shows a 5% increase compared to the end of year 2009. In addition, compared to the end of year 2009, net profit of the company has increased around 200% as of end of year 2010.

The mission of the group reflects its major values such that they undertake to;
- Review and improve management systems continuously.
- Run the auditing mechanism necessary for the purpose of improving the effectiveness of management systems continuously.
- Review periodically the effectiveness evaluation of the major goals and objectives.
- Give importance to education.
- Create effective human resources by giving importance to and supporting education.
- Comply with the relevant legal conditions and product standards.
- Comply with the national and international regulations and other requirements with regards to the group's activities as well as with product compliance and safety standards.
- Prevent environmental pollution, damages to health and occupational accidents.
- Take the risks regarding health, safety and environment under control by using technological developments and field improvements.
- Put into practice all the measures required to avoid occupational accidents and diseases.
- Protect employees from damages to health.
- Ensure recycling and removal of wastes in compliance with the laws.
- Avoid air, water and soil pollution before they occur.

5. BAG APPROACH TOWARDS CORPORATE SOCIAL RESPONSIBILITY

BAG fulfills some of its social responsibilities with services in education and health. However, these activities are mainly philanthropic. In addition to those, the group pursues other projects in order to achieve the balance between economic prosperity, social integrity and environmental responsibility. One of the most important values for the group is "to protect the ecological balance of nature and to avoid harming the environment we live in". They undertake different projects that are in line with this prominent value in order to have corporate sustainability.

Accordingly, the group has already made environmental investments in the following fields: Biologic treatment facility with a capacity of 80 m³/day; gas and dust analyzers measuring and recording continuously; facility and equipment for separating solid and hazardous wastes at their sources and regularly storing them; vapor production by using waste heat removed to atmosphere; silencers for minimizing environmental noise; vacuum sweepers and sprinklers for preventing dustiness in open area.

They are planning to undertake some more environmental investment projects such as a project on belt type thermal drying facility with a wet mud capacity of 330 tons; drying treatment mud of İzmir and preventing the transfer of mud to landfill areas, burning the mud in rotary kilns as an alternative fuel and contribution to the reduction of greenhouse gas. They are also planning to convert the electro-filters available in rotary kilns within the plant into dust bag filters and thus preventing dust emission impossible to take prior precautions in case of energy fluctuations, interruption and initial activation and deactivation. In addition they will attempt to produce electric energy from waste heat.

In order to reduce its carbon footprint, the BAG obtains the entire vapor required for heating and production from the hot gas in their chimneys. Thus, they do not use additional fossil fuels for providing the energy necessary for heating and production and they ensure carbon emission reduction of 4.500

tons as equivalent to plantation of 13.000 trees per year. Moreover, they obtain some of the fuel necessary for production process from their wastes. Thus, they reduce the rate of fossil fuel they have to use and they prevent carbon emission of 9.600 tons per year as equivalent to plantation of 28.000 trees and as may develop due to random removal of such wastes to the environment or their accumulation. In order to abide by national and international standards in favor of reducing fossil fuel consumption, they increase the production of blended cement and encourage their customers to use blended cement and concrete. Beyond and in addition to all such activities, they set off to produce electricity from hot gas in their chimneys. While they fulfill their responsibility for reducing the effect of greenhouse gas on living and non-living beings through "energy production from waste heat" which is one of the best technologies to ensure energy production that would decrease carbon emission against global warming, they also contribute in national energy production. Owing to their facility for producing energy from waste heat, they will realize electricity production of 65.000.000 kwh/year from waste heat and ensure carbon emission decrease for 35.000 tons as equivalent to plantation of 31.000 trees per year. For this purpose, all the facilities of group have been equipped with electro-filters and jet filters of latest technology. Although the currently available System Filters run with high productivity under the standards, they are turning to Pulse-Jet Bag Filter in order to reduce dust concentration under 10 mg/Nm³ because of their sensitivity about the environment. The negotiations and operations with FLS Airtech company in this respect are going on at full speed and it is scheduled to complete the transition of both System Filters in 2012.

Under the scope of the contract concluded with Chinese public company Sinoma EC, they started to generate electricity from waste heat emerging from their plant. This project, having ongoing engineering and production oriented operations, is scheduled to be commissioned in 2012. Estimating that such facility would produce for 7.700 Hours/Year with a capacity of 8.9 MW, they aim at generating approximately 68.500.000 kWh electricity power per year. The most important gain with such amount covering about 30% of their annual electricity power consumption would be on the "environment". They aim at ensuring a reduction in carbon dioxide (CO2) emission of 35.000 tons equivalent to plantation of 31.000 trees per year owing to the electricity power they will generate from waste heat. Use of such wastes as an alternative fuel avoids the transfer of solid and hazardous wastes to landfill areas and/or receiving environments without control and prevents environmental pollution; and on the other hand, thermal energy of such wastes are used and this ensures saving from coal, being the primary fuel of cement production, at specific rates. Their entire solid and hazardous waste burning process is performed under legal requirements. Emissions created during the burning process are monitored simultaneously through exhaust gas analyzers; and also accredited organizations perform periodical measurements and report the results to the General Directorate of Environmental Management of the Ministry of Environment and Forestry of Republic of Turkey. Ash, being developed in conclusion to burning the wastes as an alternative fuel, stays within the clinker and mixes here into the cement and thus avoids the development of an external waste.

Under the contract concluded with a German company Gebr. Pfieffer, they started operations for Vertical Raw Material Mill. With this Vertical Raw Material Mill, scheduled to be commissioned in 2012, they intend to ensure a reduction of almost 25% in the electricity power use for their raw material production.

One of the striking examples of the group's sensitivity towards the environment is their Rehabilitation works in limestone mines of Baticim located in Belkahve area. The purpose of rehabilitation and re-cultivation works performed in open mines where mining activities are terminated may be outlined as making the present topography of mine field as harmonious as possible with the natural topography and then preparing such piece of land for agricultural or forestry use (unless the mine will not be used for any other purpose), in other words seeking to develop the ecological balance in the area again. For this purpose, slopes in the activity area are arranged with the studies for regaining the fields for nature; holes and channels are opened on the steps and such holes are filled with vegetal soil and thus the area is ensured to have harmony with the environment in terms of landscaping in time as the plants and trees grow. In consideration of the step widths of mine, channels and holes are opened by means of construction equipment as holes of 1x1m and 120 cm deep in every 4 meters at the end of step for those which are 10 m and wider and holes of 100 cm deep and 120 cm wide through the step as 2 m inside from the edges on the front of step. Since the material is limestone, firstly the holes and channels were broken by means of construction equipment with hydraulic breakers and then the holes and channels were opened again with construction equipment. 30 cm thick soil was laid on the bottom of channels and holes and then 10 cm thick coarse grained pearlite was laid on such soil. The remaining section after this is filled with soil again. Laying pearlite increases the ability of soil to hold water and thus its rate of holding

the plants but on the other hand, irrigation time intervals are significantly reduced. Primarily plants were used that grow rapidly, roots go deep and help vertical drainage and other plants go deep, strengthen the plant life especially by enriching the soil in terms of nitrogen, have the chance to grow in very sunny, very hot, dry, calcareous ground, some developing relatively in a short time and prepare and leave the area to other plant varieties and some supporting each other as resistant to different extreme conditions. Baticim, in addition to environmental rehabilitation of areas where it is performing, acts also for the purpose of leaving more green world for the next generations and continues to provide support to many environmentalist non-governmental organizations believing that every shade of green would enrich the world. Donations to Aegean Forestry Associations are just to name them.

On the other hand, Batıenerji, one of the BAG companies, plans to establish enterprises to produce energy from renewable sources, namely wind, solar and hydro. Within this framework, they have applied for establishing a hydropower plant and a wind power plant and established a facility to test solar power. Batıenerji aims to be able to have an established capacity of 300 mwh by 2015. They first aim to supply their own energy needs and then serve free customers.

6. DISCUSSION

CSR is one of the requirements of today's competitive landscape. Undertaking CSR projects and making it part of corporate strategy and organizational culture increase a company's competitive advantage and provides it a unique resource that cannot be transferred or imitated. The BAG, operating in Turkey which is a developing country, have foreseen this advantage and implemented it by making it a part of its strategy and culture. They are also aware that corporate sustainability depends on considering social, economic and environmental actions simultaneously. Thus, the BAG provides a remarkable success story where many CSR projects are pursued especially that have an environmental benefit and where CSR is aligned with its strategy and culture resulting in a positive reputation and a long-term financial benefit for the company.

NOTES
1. All information regarding BAG is accessed through the company website: http://www.batianadolu.com/

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THE DIALECTIC OF CONTROL CULTURE IN SMES: A CASE STUDY

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ABSTRACT

This study aims to expatiate on critical theory of the influence of information asymmetry and the inconvincibility of the control culture in the Small and Medium Enterprises. It consists of examining the relevance of management control procedures and tools in order to consolidate the sustainable control culture,that mitigates the risks of trust in small business taking the case study of CAL - an SME in the Municipality of São Caetano do Sul, Brazil by explaining how information communication works among the stakeholders. To reach the mentioned goals, we explored previous researcheas such as Imoniana and Nohara (2005); Chervany (2001) and . Ojukwu and Georgiadou (2007). *Based on our results, information asymmetry expresses significant influences on family business as well as control culture in SMEs and also attracts a discuss not only in terms of what convinces the managements in regard to environmental critical theories but alss what puts the business into the right track through interventionist structure proffered by consultants restructural programme for the SMEs while taking advantage of the provision for the* judicial business recovery, which protects businesses in difficulties. *Finally, results confirm the impacts of information asymmetry on all the echelon of the organization chart of the small business, particularly within the governance structure, therefore; in essence it affects the maintenance of harmony in the control environment of SMEs.*

Keywords: *Information, Asymmetry, Control, SMEs, Governance*

1.   INTRODUCTION

This study aims to shed more light into the critical theory of information asymmetry and the control culture in the Small and Medium Enterprises (SMEs) in Brazil taking as a guide the importance that proprietors or top-managers of these enterprises pay to controls.

Information and controls in the SMEs have always been issues of greater concerns to all stakeholders. A proof of this concern can be found in the economic magnitude of the SMEs for USA, Japan and the EU. Japanese economy does not consist only of major banks and companies. On the contrary, some 70% of Japanese workers are employed by SMEs and half the total value added in Japan is generated by SMEs, Uesugi (2006). About this we observe in figure 1 the importance of the SMEs in the USA, Japan and the EU and this is not different in the emerging economies.

Figure1 : Economic Magnitude of SMEs: U.S.A, Japan and the E.U.

	Number of Businesses (x1000)			G.D.P. / Turnover (£ billion)		
	SME	Large	Total	SME	Large	Total
U.S.A	23,630	71	23,701	8,116	7,332	15,448
Japan	4,690	13	4,703	17,248	6,019	23,267
E.U	19,270	40	19,310	130,150	64,680	203,850

The essential element of control when inexistent generating information asymmetry, either debars SMEs from growth or hinders profitability and accountability to the fiscal bodies and the users at large. Besides, such businesses are tied to perennial negotiation with suppliers and clients who dictate the tune of their business transactions.

Who should take the lead, the board of director or family council? The proprietors or top managers of the SMEs should be orientated toward implementing a consistent control framework, but does the organizational chart with a sluggish information flow or exclusion of some people during dissemination of such information allow this? Researches have shown that this is as a result of the control culture of the SMEs, where those who retain information tend to feel powerful in detriment of the entire business.

In light of this burning issue, those at the helm of affairs are reactive and want to find immediate solutions. Thus, the consulting services could have rescued the situation but, as we are aware that there is a stumbling block between the consulting organizations and the small businesses, as they would not buy the ideas of the consultants so easily. Contrary to this, the larger organizations are already conversant with the works of consultants and the benefits arising from such services and would create little or no restriction.

It happens that the big consulting firms who have structured methodologies to rescue the said situation are sceptical about the volume of jobs the SMEs give, which are not always compensated for when it comes to the terms of professional fees, thereby leaving their faith to the 2nd tier consulting firms who are yet to make image. Another thing is the pain it takes to sell such consulting jobs to the SMEs.

If this is not the case, can we then attribute all problems of controls in this environment to information asymmetry? Well, probably we might have found an object to be crucified. However, we know that it is not totally true because, information asymmetry in the SMEs is a complex issue since it involves communication in a hybrid environment, where underground conflicts gains feet from one generation to another. This leaves more nuts to be untied that generates more research initiatives of our kind.

2.   LITERATURE REVIEW

In order to expatiate on the theme, we demonstrate a conceptual framework on which our discuss is anchored as in Figure 2.1. The referred framework as we can see presents summarized thematic about information asymmetry, culture, internal control, control culture and the SMEs. Additionally, it includes a description of control in small businesses and problems of its inconvincibility.

Figure 2.1 Synthetic conceptual frameworks for the study
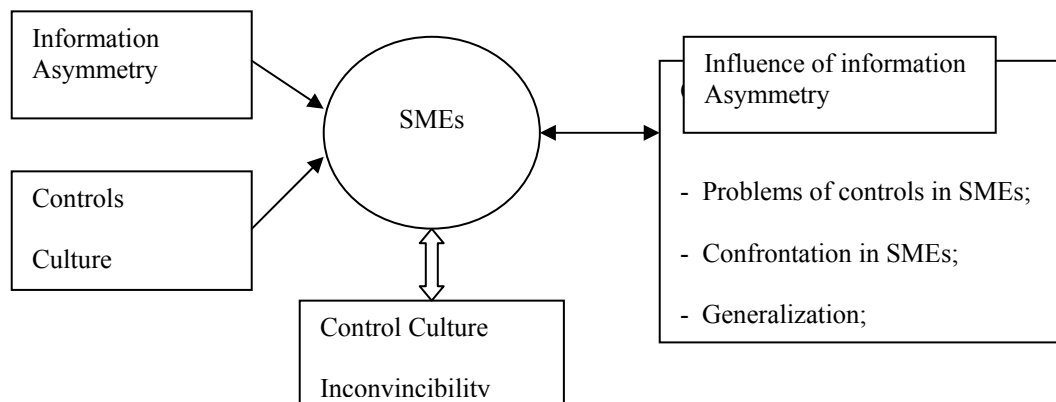
2.1   Information asymmetry

If we can quickly define information asymmetry, we would say that it signifies basically uneven dominium of information through the organization chart and along the communication line among stakeholders.

Information asymmetry is one of the major factors that make the control environment of SMEs to look somehow less conducive, particularly when there are various groups who are interested in the information that is being generated. Say, different families who own a business but with apparent distrust and imbalanced information for decision-taking being generated and disseminated. As Dierkens (1991) observe, "managers can gain substantially at the expense of market by hiding information".

In the bigger companies the stakeholders, government, pension funds, service providers and employers play a pivotal role in reducing information asymmetry but, the smaller enterprises for not having all these regulations totally binding on them relaxes in terms of information and therefore brings about organizational malfunction.

Asymmetric information concerns become significant when valuation and corporate decisions have to be made. In cases of decentralized firms, for instance, independently traded units have to produce information that consistently reflect their operations being monitored by the headquarters for consolidation, but in the final analysis when shareholders receive imbalanced information they could attribute their forecast errors on inferences concerning bias.

D'Cruz and Kini, (2007) observe, "the disconnect between what consumers can learn and how they can use what they learn, results in this inability for them to truly be the drivers in their own. It is believed that existence of such asymmetry in the availability of information to the consumers and other stakeholders, understood as information asymmetry, is one of the major factors that make healthcare delivery in the United States and perhaps the world".

2.2 Control
Control is an important element of the managerial function as it enhances a proper dispensation of administrative, operation and in general functional activities. It can be internal or external to the business. While internal, controls are the mechanisms (policies, procedures, practices and organisational structures) that management implement to minimize risks in the business environment. When it is external, it is a line of command that comes from outside the business or organizational unit. This type of control is much more common in the public administration when the National Congress externally controls the budget.

In a more explicit manner, one would identify that controls could be dependent and also independent. On one side when they are dependent, the recommendation is such administrative procedures should be adhered to before moving to the next administrative function else, their could be a disruption in the transaction flow, on the other side the independent controls are such that does not stop transaction flow as a result of any transgression. (IMONIANA and NOHARA, 2005). Independent controls are normally monitoring controls executed by the managers to enable them explain accounting trends.

2.3 Inconvincibility
The conjecture cited above brings about the implicitly or explicitly of the pre-conclusions which users are made to draw, controls and reporting processes are not convincing. Absolutely, the uncertainties that permeate the SMEs and the lack of expectations regarding the ameliorating of the processes are part of it.
In this respect, even though shareholders are not fully convinced about the level of control relating to information received, they have to draw a level of trust in order to continue with operational transactions.

Without *Inter-organisational trust* (IOT) there is no likelihood for concretising business. Trust is a *sine qua non* in every interpersonal and commercial relationship. Such that McKnight and Chervany (2001) observe, "it (trust) is crucial whenever (and wherever) risk, uncertainty, or interdependence exist". It is even so if such a relationship is business oriented. Ojukwu and Georgiadou (2007). In particular when we discuss issues relating to SMEs this becomes very vital.
However, since the family board dictates the rules for the business and the boards of directors' aims at reaching their expectation, checks and balances ought to be laid down by them in order to assist accountability. Also, the line of reporting to active members and inactive members of the board should be strengthened thereby reducing the level of uncertainties.

2.4 Culture
Culture is an embedded personal approach towards things. Understanding people and their cultures entails comprehending their backgrounds and their collective programming of minds and powers as it distinguishes them from the others.
According to Peters and Waterman (1982) organizations culture have often been presented as a matter of values. The confusion arises because this literature does not distinguish between the values of the founders and leaders and those of the ordinary employees. Founders and leaders create the symbols, the heroes and the rituals that constitute the daily practices of the organization's members. Hofstede (1994). What became evident in authors sayings here is members of staff have to adapt themselves to the organization's needs.

When it comes to the time to address cultural differences, one must be ready to have a lot of patience. It does mean that, you had either had in your plans almost a broader perspective in things or have a flop in your target. Meaning to say, you must be prepared for things to take a little longer that you would normally expect them to happen when you are outside your dynamic culture. For instance, as a European, you do not have to take into account that people are not necessarily going to reach a conclusion in a meeting but, as a preliminary and a tentative conclusion you should prepare your agenda for another meeting. In another culture, as an American, they are different and that makes them tick. This notwithstanding, as a culture, what convinces is the ability to be effective since interdependence and harmony of the control environment makes an efficient group of work as the case of Japan sounds such to be emulated.

2.5   Control culture
Control culture in nowadays organizations; be it SMEs or larger organizations show the consciousness of personal rights and obligations by all employees, be it top management or staff, that could be inserted in an organizations chart. It enables people to know (what to do and not to do) procedures to follow in order to attain efficiency in such organization. Management's role in converting labour power into labour has functional and political dimensions (SARAVANAMUTHU, and TINKER, 2003, pp. 39). In effect, in the dimensions of control and cultural relationships, there is a bit of politicizing of control in the SMEs, particularly when it comes to the terms of maintaining powers in the hand of those who dictates the business or in case of distancing those in the higher echelon to those at the lower operational level.

If the medium or line-managers in an organization believe in and subscribe to this culture, they are likely to take a consistent decision that is in-line with organizational strategy without being questioned by the top management. (Imoniana, 2006). In this line of thought, control culture in most institutions is a base for rethinking management paradigm. This seems to suffer some setbacks as a result of poor planning, lack of programmatic dispensation of activities, monitoring procedures and reporting in the traditional business environment. In the small businesses it is not different as control problems retards profitability (IMONIANA, 2008).

2.6 Controls in SMEs
The concept of enterprise size for control reasons can be expressed in official classification by a quantitative or qualitative profile. In the first approach the dimension refers to the volume of production factors, market share, revenues and production volume and in the second approach we can consider the level of decision making (controlled enterprises or independent) and the organizational structure. (BIANCHI, M et al., 2008).
In a bid to expatiating on this issue, we present in figure 2.6.1 a reflection upon controls features and profiles met in the SMEs.

Figure 2.6.1 Controls in SMEs

Controls	Features in SMEs
Strategic and planning controls	Most of the family business proprietors go by their feeling and convinced that they will never fail: - Vision stated haphazardly - Rigid mission statement, objectives, values, etc. - Enterprises development of project and/or business plan dull; - Strategically have little or no power within the localization. - Late Movers if on international levels
Administrative controls	A good percentage of the SMEs founders do not generally have administrative knowledge, they are technicians who have the business know-how and scared about administrative procedures such as: - Maintenance of bookkeeping - Definition of policies and administrative procedures - HR management and definition of rules - Documentation of competence needs - External engagements with government agencies

	- Miscellaneous procedures
Organizational and financing controls	Without the knowledge of business financing, some owners have stressed personal savings in detriment of their family finances: - Unable to prepare daily cash-flow - Roughly matching days of sales and days of purchases outstanding cycles. - Relaxing the investments records and trusting on the sweet words from the bank managers - High interest rates, - Insufficient bank financing
Business Operational controls	Family Business owners acting on impulse when they belief that they have seen it work in a success story: - Convinced about the workability of the project in his region even though work-force study, technical knowledge, market management and the information about competitiveness is not readily at hand. - Threats, risks and continuity controls rest on personal commitment.
ICT and e-commerce controls	Most of the family business dive into the use of ICT and e-commerce as a result of imitations even though the payback period is not compatible with the volume of transactions: - Copy competitors - Forced by suppliers and clients to implements information systems resources but their volumes of transactions are not commensurable to strategies to take advantage of this investments.

In essence, if one is allowed to group all these problems in one word, one would say governance is at stake. Various literatures associate control issues in SMEs to governance and Lanberg (1999) presents result from a research showing the statistics as in figure 2.6.2.

Figure 2.6.2 Role of family in governance of SMEs

Control Exercise	**Role of family in Governance**
Family (council) Board	67.85%
Boards of Directors	24.0%
Management	7.0%
Others	12.0%

Adapted from Lanberg (1999)

Therefore, considering path dependence, the SMEs are complexity accommodated as they heavily rely on the government institutions that generally do not fully work in their favour, thus, a greater part of governance issue is a control problem from and within the business.

3.   RESEARCH METHODOLOGY

The adopted method for this study is descriptive. It effectively assumed a participatory observation as a result of a close involvement of the authors in a consulting activity and interventionist as it instates changes sanctioned by the owners to correct the course of the business. This study being a descriptive one, tried to explain the variables, relationships and influences that exist when information asymmetry and inconvincibility of control culture as confronted in SME operating environment.

Also, we described in a qualitative format, information relating to classification of SMEs and their general problems warranting uncertainties of controls in the small businesses.
        In the end, we perform a detailed analysis of a Case that influences the inconvincibility of controls in the operating environments of CAL Ltd.

4. ANALYSIS AND RESULTS

In order to facilitate data analysis, first and foremost we present the case named CAL- Cushion Material Manufacturer Ltd. which nurtures a broader analysis of the influence of information asymmetry on the control culture.

The authors having a participatory observation in the case sorted a written permission to use the data of the firm which was restricted to the need of disguising names of key actors of the case as can be seen in the organization chart figure 4.1.

CAL is a SME who operates in the industrial sector of bedding and cushion appliances by manufacturing staple pins and also provide a wide range of services relating to tooling for the staple machines.
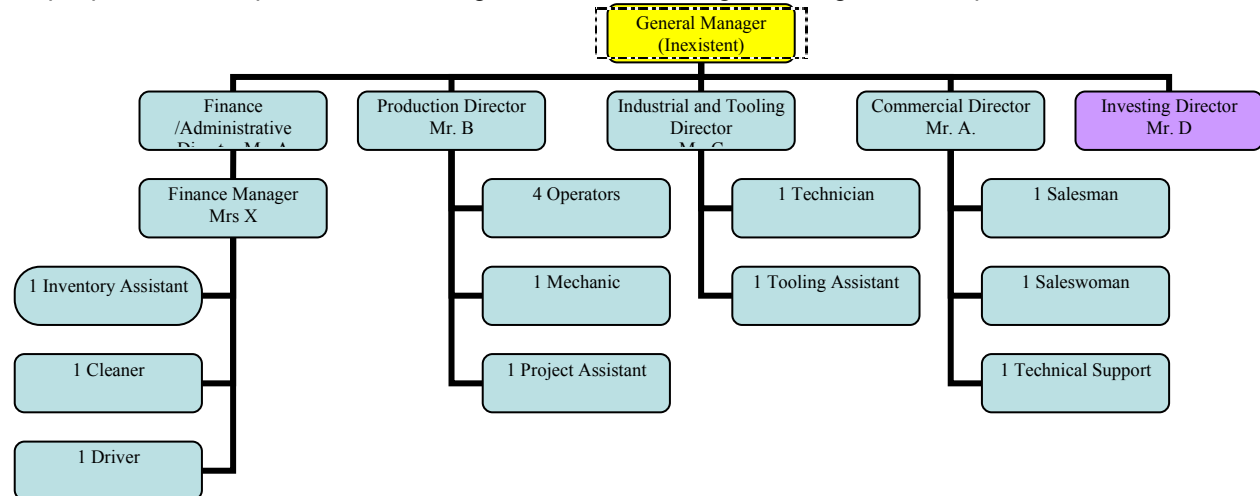

Figure 4.1 Organization Chart for CAL-Cushion Apparatus Ltd.

CAL is 6 years old, created by Messers A, B, C, and D with the objective of producing staple pins for the cushion industry. Directors A, B and C were operators in a competitor's industry and Mr. D was only invited to participate in the project because he was an importer of one of the major materials for the sector (cushion mats, cushion foot mountings, upholstery fabrics, etc) and had the funds to complete the necessary investing capital; and as we can see in the chart, he does not participate actively in the day to day activity of CAL. As such, he receives half of the monthly compensation of the active directors. During Start-up, no business plan was drawn and right from inception the directors had not developed a budget. The monthly sales of CAL is approximately USD $200,000. It is an industry that does not have problems with fetching consumers for its products as competition is not so severe, but the clients are the majority SME who does not have formal bookkeeping, as exempted by the local law and prefer to operate out of formalities. Major suppliers of its raw materials are the larger steel industries who dictate the quality and payable days.

In order to further understand the control structure of CAL and be able to proceed the analysis we narrate additional information under the classification of administrative, financial, accounting, industrial, tooling and commercial processes:

a) Administrative process

As per administrative processes concerning human resources, directors normally signal the needs and competencies for filling up a vacant post and this is made known to the entire staffs who generally recommend a family member. During dismissal, these same directors come together to deliberate collectively. Decision about outside contractors is also taken collectively, but recently a small business ERP system has been contracted exclusively by the Finance/Administrative Manager before communication to the directors.

b) Financial and Accounting process

The financial manager is the Finance/Administrative Director's cousin. She was hired based on trust and at reduced salary they could afford, having worked as a secretary to the finance director of a larger organization but have no former experience in the finance/accounting tasks. As a result, no policies exist

as to treating accounting and financial transactions and to assist her, they have decided jointly with the directors to use the services of a little accounting firm. The Finance Manager prepares a daily cash-flow even though no details for expenses such as Telephone Bills, Water, Electricity Bill, Banks Interests, etc. are provided. No financial statement is prepared and the accounting firm is only used to calculating taxes and prepared payrolls. CAL debts has grown from USD$ 36,000.00 to USD$ 750,000.00 within two years as a result of bad controls and no cogent reasons have been given. As a result of manipulation of information by the finance director and the finance manager the industrial and tooling directors are unable to explain the origin of the debts and how it grown to the present volume. No fixed asset control is maintained and the inventory postings involve the recording of ins and outs but not for costing purposes as a result, no information about break-even is known.

c) Commercial process

The Finance/Administrative director accumulated the position of a commercial director, handles the purchases, pays through the finance manager and also maintains the contact with the investing director who imports some of its raw material for CAL. We observe that the director's daughter gives him support in this task. CAL has not attempted to import raw materials directly from Chinese suppliers as the investing director intermediates this transaction.

d) Production process

All the production is by order, even the tooling services rendered by CAL has to come by order. However, there have been delays in the fulfilment of client's orders. What tend to be interesting are the absolute linear trends of production. Even with the announced crisis in the globe, CAL as at 30 December 2008 have stable orders and production plans. What aches is as a result of debts, no investment has been planned in order to increase production and boost profitability.

e) Industrial and Tooling process

The tooling process practically develops new tools for the clients and provides additional services for maintenance of the staple machines. Revenue from the tooling constitutes 10% of CAL monthly sales. The tooling department is involved in the project development for new products but as a result of financial handicap, no new projects have been discussed recently.

In this respect, as we continue our analysis, we crave an indulgence of Bardin (1977) which permits us to perform a qualitative analysis by using the following categories: Inconvincibility, Governance and Information Asymmetry; that characterized it as a qualitative approach.

Inconvincibility - Taking CAL case at hand, one would identify uncertainties about information used in all spheres of its business; this no doubt creates an inconvincibility of the control environment to the internal stakeholders. Business partners might have discovered this loophole and have started to perpetrate it. A good example of the problem relates to the absence of control relating to accounts receivables. By observation, we noted that no procedures are in place to follow-up past-dues. The finance manager's allegation is, CAL is fragile in terms of negotiation with its clients and would not like to create any injury to the relationships already established. Upon inference therefore, a mere analysis of this case is not enough to conclude about the general population under study however, the apparent lack of trust among the directors probably might have triggered asymmetric information which in some cases generate information hiking. What is likely to happen in the future is with the implementation of Sarbanes Oxley by various organizations including SMEs and the global propagation of IFRS, there is the likelihood of increased control consciousness that will reduce the level of the inconvincibility of controls in SMEs.

Governance - As can be identified in the Case, underground conflict seems to exist. This is unfortunate because these directors were friends; they used to work together at the floor of the factory of their former employer. There is no clear evidence of a misappropriation of funds but the directors are convinced that they lack information to assist adequate governance. There seems to be imbalanced information about the trends of their business as the Finance Manager and the Accounting firm is unable to provide them with vital information for decision-making. The company being 6 years old is yet to experience succession problems even though no plans exist. In this regard, considering average monthly turnover of the SMEs one would risk to signal one of the peculiar problems experienced by the SMEs when there seems to be a shift from the adolescent age of the SMEs to maturity. CAL is stepping into maturity but the apparatus that substantiates the age have not been adequately moulded, thus posing uncertainties to its continuity. This also might have generated an absolute distrust among the directors. As observed by Lanberg,

(1999) "various family businesses have their personal governance mechanisms" this somehow is tied to control and promotes accountability. But since CAL does have neither family board nor boards of directors, with the trend of things it will probably continue to have control problems. A plan to installing a general manager's responsibility will also bring about accountability and provide for adequate reporting considering the immediate solution given by the consultants.

Information Asymmetry - The Finance and Administrative Director who monopolizes information with his cousin (Finance Manager) has generated an uncomfortable control environment in CAL. The finance manager with the domination of finance and operating information seems to be more powerful than even the Industrial and Tooling directors who detain the technical knowledge. As a result, there is no gain saying that animosity in the environment has reflected stress in interpersonal relations and there does not seem to be any element of motivation to stimulate productivity and increase revenue which will put the company in a right track. It is unfortunate that CAL (like many other SMEs) has not started to use e-commerce in full fledge, that would have been a way out to reducing information asymmetry as the users would gain access to the reports from the ERP in a homogenous format. As observed by Ojukwu and Georgiadou (2007) "in today's business environment where the operational boundaries between firms have become fluid, it is often both pragmatically and analytically unfruitful to separate inter-organisational and intra-organisational business processes" not to talk about information that stakeholders receive in order to enhance decision making.

5.   DISCUSSION

In a nutshell, as an advisory interventionist suggestion given to the managing directors, the following steps have been agreed up. After the diagnostics of the problems and the preliminary reports presented to the stakeholders, it was agreed that strategic positioning be made and priorities be defined. This was followed by absolute housekeeping to enable the SME stabilize its cash flow. An exercise that preceded this call was the meeting with the bank managers with whom a plan was streamlined for refinancing the debts of CAL. Suffice it to mention the SMEs restructuring plans to avoid the winding up of business is supported by the Federal Act that eliminate concordats and institutes judicial business recovery, which protects businesses in difficulties. This was however not known to the directors of CAL. These restructuring measures implemented follows figure 5.1. According to Brazil (2005) Federal Law 11.101 (Brazilian Law of Recovery and Bankruptcy) that institutes the corporate social role to use of all means before celebration of bankruptcy of an SME, that is, companies near fold up should be restructured until proved in contrary.

In addition to the aforementioned steps, in the intervention process, the consolidation and value recognition that states compensation scheme was brought to place. This orientated the management to value the employees' effort that will in turn bring about greater productivity and higher returns. This extends to expansion of business, optimization of results and loss prevention. At the end, corporate governance engines were put in place to monitor succession and or stages for growth that ascends to a larger organization.

6.   CONCLUSION

The results of this exploratory study offer a rich portrait of how organizational models are affected by its control cultures, information asymmetry and it governance structure. Because a good number of the entrepreneurs are conservative and so reluctant in accepting consulting activities, showing that trust is low, rescuing the situation of the SMEs is a case that does not only need institutional decisions but governance reframing.

The information needs by users in SMEs is constrained by lack of knowledge concerning what exactly their needs are and also asymmetric as power tussle is very rampant. Our continued analysis of this study by reflecting of the factor analysis which happens in the tail end of the research would bring robust information for further discussion.

Finally, as the line of study considered in the research could be associated with the epistemological approach in treating problems relating to managerial studies in SMEs, one would recommend future studies in the area relating to measurement of the loss of information and the impact on businesses.

Figure 5.1 interventionist approach to restructuring SME
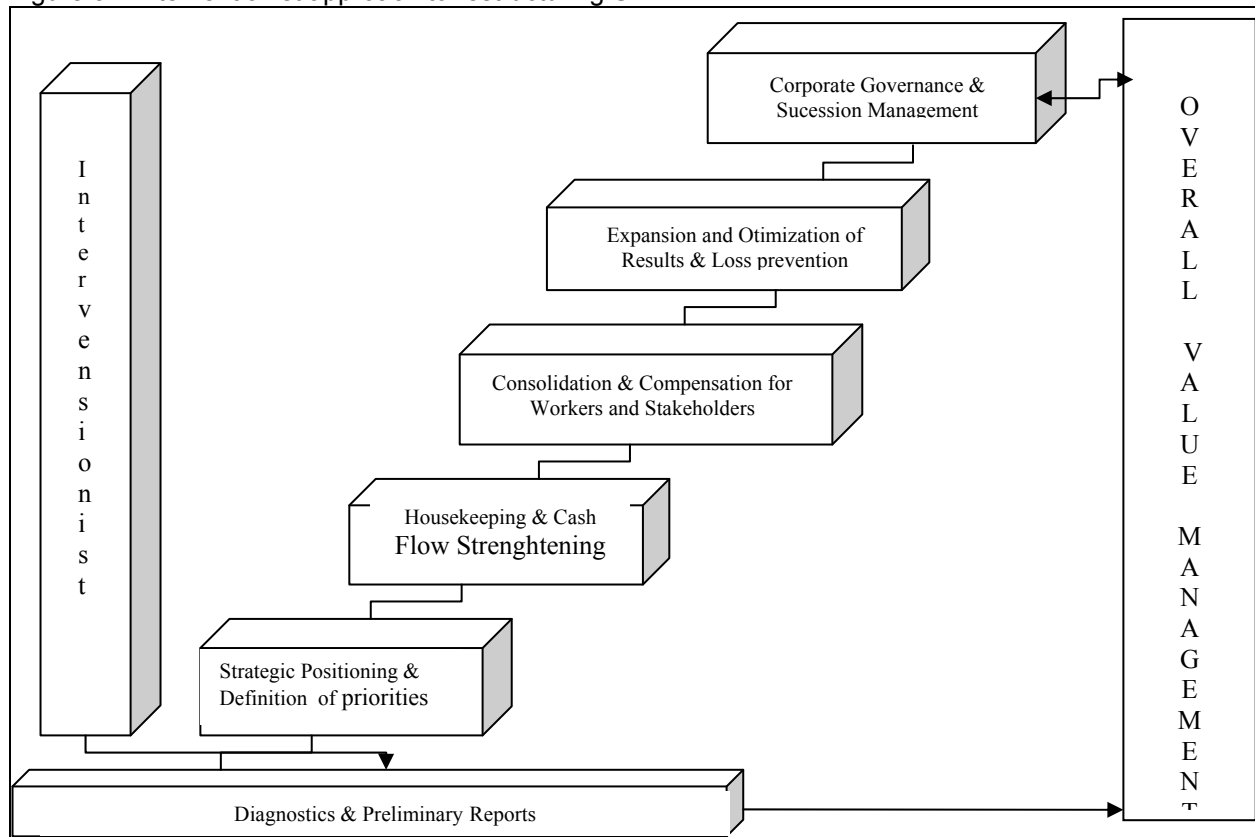
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DYNAMIC MARKETING CAPABILITY, MARKETING OUTCOMES AND MARKETING GROWTH: EVIDENCE FROM FOODS AND BEVERAGES BUSINESSES IN THAILAND

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ABSTRACT

This study aims at investigating the impacts of dynamic marketing capability on marketing growth through mediating influences of marketing intelligence, marketing excellence and customer responsiveness. It also examines the moderating effects of market learning and environmental munificence. Dynamic marketing capability consists of market orientation and strategic flexibility. Here, 139 foods and beverages businesses in Thailand were chosen as the sample of the study. The results indicate that dynamic marketing capability is partially supported for the hypotheses derived from the model. Marketing outcomes include marketing intelligence, marketing excellence, and customer responsiveness has a significant relationship with marketing growth. Accordingly, only market learning is the moderator between market orientation and marketing intelligence. Furthermore, the environmental munificence does not moderate the relationships among dynamic marketing capability, marketing outcomes, and marketing growth. Therefore, further study may consider finding practical reasons why it is so by reviewing extensive literature. Potential discussion with the research results is effectively implemented in the study. Theoretical and managerial contributions are described. Conclusion, suggestions, and directions for future research are also presented.

Keywords: *Dynamic Marketing Capability; Market Orientation; Strategic Flexibility; Marketing Intelligence; Marketing Excellence; Customer Responsiveness; Marketing Growth; Market Learning; Environmental Munificence*

1. INTRODUCTION

Nowadays, the global economy has extensive growth and several countries must improve trade policy or develop procedure of operational for survival. The environment is with complexity and change over time. Shipley et al. (1998) mentions the effects of privatization on marketing capability and activity Central and Eastern Europe. The majority of privatization leads to increased marketing capability to more proactive marketing activities, such as the adoption of longer term priorities, to an emphasis on delivering superior quality to customers and to more active new product development. Therefore, it is important to the development of marketing capability. Additionally, Morgan et al. (2009) describes the firms' revenue growth and margin growth which demonstrates the success of the firms that associated with the marketing capabilities. In addition, to increase ability and enhancing to dynamic capability for dominant in competition, a firm's functional capabilities consist of operations and marketing capability is the key determinant for superior financial performance (Nath et al., 2010). They help firms understand the constantly changing customer needs. Similarly, Bramasrene et al. (2004) suggests that marketing capabilities help firms efficiently and effectively survive in a crisis and they are successful in doing business. For that reason, firms with adaptability generate ability and reduce problems in business, understand the environment, attempt to seek new opportunity, and especially how their firm can achieve a sustainable competitive advantage and be able to cope with the changing environment more effectively.

In addition, the dynamic marketing capability has played an important role in explaining and considering the effectiveness of the firm. The major goal of our theory extension is that, dynamic marketing capability is different from regular marketing capability via specific and idiosyncratic cross-functional business procedures to create and deliver superior customer value in response to variation markets (Fang and Zou, 2009). It is a key implementation in helping firms enhance competitive advantage and survive in fast changing markets and unpredictable environments. Recent dynamic marketing capability literature has focused on how firms should have managerial capabilities for executives used to build and integrate market knowledge such as customer orientation, competitor focus activities, R&D capabilities, technological knowledge (Bruni and Verona, 2009). Indeed, it consists of market orientation and strategic

flexibility. First, market orientation is emphasized on business processes to deliver better products and services to customer with identifying core capability of marketing and organizing networks of relationships with suppliers and customers (Workman et al., 1998). Second, strategic flexibility is a firm's ability to respond promptly to market opportunities and adapt to environmental uncertainty continuously (Grewal and Tansuhaj, 2001).

Interestingly, in the rapid growth in industry sector, Thailand is a major exporter of foods and beverages of the world. The Food Intelligence Center, Ministry of Industry of Thailand reports the value of food exports in 2008, representing 8.5 percent of gross domestic product value. The export of food products represents 13.3 percent of total export value of Thai products, and represent 2.3% of the value of world exports of food (estimated) (http://www.fic.nfi.or.th) and tends to grow continuously. Consequently, this study examines the relationships among dynamic marketing capability, marketing intelligence, marketing excellence, customer responsiveness, and marketing growth via market learning and environmental munificence are moderator. To explicitly verify the aforementioned relationships, the population and sample in this study are the exporting businesses focusing on foods and beverages businesses in Thailand. This is because the foods and beverages sector makes a major contribution to Thailand's economic recovery. Thus, the industry must develop a model of continuous product, adapted to changing market. It is essential to development dynamic marketing capability that assists in the environment changing and increases ability in superior response to customer needs and satisfaction.

The purpose of this study is to investigate the influences of dynamic marketing capability on marketing growth. The key research questions are as follows: (1) how does dynamic marketing capability have an influence on marketing growth?, (2) how do marketing intelligence, marketing excellence, and customer responsiveness have an influence on marketing growth?, (3) how does market learning moderate the relationships between dynamic marketing capability and marketing intelligence, marketing excellence, customer responsiveness, and marketing growth?, and (4) how does environmental munificence moderate the relationships between dynamic marketing capability, marketing intelligence, marketing excellence, customer responsiveness and marketing growth?.

This study is organized as follows. The first section reviews relevant literature in the area and streams of two dimensions of dynamic marketing capability, marketing intelligence, marketing excellence, customer responsiveness, market learning, environmental munificence, and marketing growth, and develops key research hypotheses of those relationships. The second describes and details research methods, including sample selection, data collection, measurement, and statistics. The third gives the analysis of results and discussion. The final summarizes the findings of the study, provides both theoretical and managerial contributions. Suggestions for future research and limitations of the study are also presented.

2. DYNAMIC MARKETING CAPABILITY AND MARKETING GROWTH

This study attempts to conceptually link two dimensions of dynamic marketing capability, marketing intelligence, marketing excellence, customer responsiveness, market learning, environmental munificence, and marketing growth. In addition, the study investigates external environment (i.e. market learning and environmental munificence) as a moderator of the research relationship. In this study, we propose that all hypotheses have a positive effect and likewise expect that the moderator effect is positive as well. Thus, the conceptual and linkage model presents the associations of all constructs as shown in Figure 1 on next page.

2.1 Dynamic Marketing Capability
2.1.1 Market Orientation
Market orientation is the first dimension of dynamic marketing capability. It refers to three behavioral components, namely customer orientation, competitor orientation, and inter-functional coordination (Narver and Slater, 1990). This study also defines market orientation as the organization wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization wide responsiveness to it (Kohli and Jawarski, 1990).

FIGURE 1
RELATIONSHIP MODEL OF DYNAMIC MARKETING CAPABILITY
AND MARKETING GROWTH
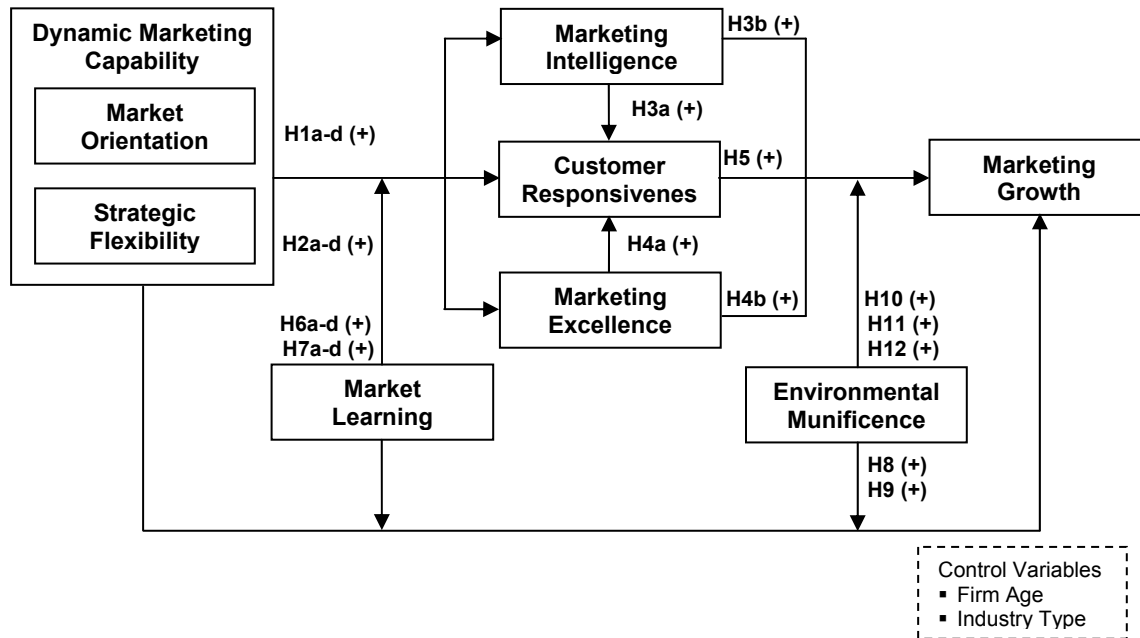
Moreover, Borges et al. (2009) defines market orientation as the generation of market intelligence regarding current and potential customers, the dissemination of intelligence among departments, and the response to the market (responsiveness). Further, Dibrell et al. (2010) explains that market orientation is innovation that is changing rapidly, focusing on the market demands. Firms will take advantage from the study in behavior of customers and competitors and then, bring that information to create new products to market to meet the needs of customers. Trainor et al. (2010) interprets market orientation as an organization capability to develop innovation continuously, with regard to corporate culture, belief, and norm that should be congruence with each market. In addition, an organization will consider customer needs, rivals, readiness of marketplace, and environment. However, market orientation is a source of learning about information technology used to combine business strategy. Hsieh and Tsai (2007) explains that market analysis is of two views: market growth and competitiveness. Hence, a review of researchers found that of market orientation has a positive relationship on firm performance (Dibrell et al., 2010) and enhancing competence of profitability as a consequence of market orientation (Narver and Slater, 1990).

Interestingly, market orientation becomes a key determinant of competitive advantage and performance. Besides, customer orientation and competitor orientation consist of all activities relevant to acquiring information regarding the buyers and competitors in the target market and disseminating it throughout organization. Also, it is important for business and inter-functional coordination including information of customers and competitors for coordination of all organization and creation of customer value (Narver and Slater, 1990). It is a necessary factor of firms to know what customers and markets want and have abilities to fulfill their needs (Brahmansrene et al., 2004). Therefore, market orientation is likely to influence firms to enhance their marketing intelligence, marketing excellence, customer responsiveness and marketing growth. Thus, the aforementioned relationships are hypothesized as shown below.

Hypothesis 1a: The higher the market orientation is, the more likely that firms will gain greater marketing intelligence.

Hypothesis 1b: The higher the market orientation is, the more likely that firms will gain greater marketing excellence.

Hypothesis 1c: The higher the market orientation is, the more likely that firms will gain greater customer responsiveness.

Hypothesis 1d: The higher the market orientation is, the more likely that firms will gain greater marketing growth.

2.1.2 Strategic Flexibility

Strategic flexibility is the second dimension of dynamic marketing capability, and it is defined as an organization's capability to identify major changes in the external environment, to quickly commit resources to new courses of action in response to change, and to recognize and act promptly when it is time to halt or reverse such resource commitments (Shimizu and Hitt, 2004). Also, strategic flexibility is associated to products and market adaptability the firm's achieve and superior performance (Johnson et al., 2003). Furthermore, it demonstrates a significant determinant of a firm's productivity and has a positive relationship to firm accomplishment (Matthyssens et al., 2005). Similarity, the nature of strategic flexibility requires continuous improvement such as reconsidering current strategic actions, reengineering, reorganization, corporating culture, investing strategies, and so on. Accordingly, it refers to "the capability of the firm to proact or respond quickly to changing competitive conditions and thereby develop and/or maintain competitive advantage" (Hitt et al., 1998). Moreover, strategic flexibility is defined as capability of firm to respond and successively accommodate to environmental change (Combe and Greenley, 2004). A firm has strategic flexibility as "a key success factor in creating continuously customer value and generating competitive advantage" (Matthyssens et al., 2005, p.547) and has characteristics of dynamic or adaptation consistently.

In addition, strategic flexibility is an ability of firm to predict tendency of dynamism marketing in export expansion. It refers to dynamics in the export product market portfolio (Pauwels and Matthyssens, 2003). The firm proposes to create superior value for customer and sustainable competitive advantage. Then, it should apply conceptualization of strategic flexibility to combine with marketing (Javalgi et al., 2005). In addition, strategic flexibility is defined as the firm's intent and capabilities to generate firm-specific real options for the configuration and reconfiguration of appreciably superior customer value propositions (Johnson et al., 2003). Firms expect strategic flexibility to focus on resource flexibility, coordination flexibility (Sanchez, 1995) and operational flexibility (Fredericks, 2005) are integration greatly influence firm success. Therefore, strategic flexibility is likely to influence firms to enhance their marketing intelligence, marketing excellence, customer responsiveness and marketing growth. Thus, the aforementioned relationships are hypothesized as shown below.

Hypothesis 2a: The higher the strategic flexibility is, the more likely that firms will gain greater marketing intelligence.

Hypothesis 2b: The higher the strategic flexibility is, the more likely that firms will gain greater marketing excellence.

Hypothesis 2c: The higher the strategic flexibility is, the more likely that firms will gain greater customer responsiveness.

Hypothesis 2d: The higher the strategic flexibility is, the more likely that firms will gain greater marketing growth.

2.2 Marketing Intelligence

Marketing intelligence is defined as firm's capability that focuses on marketing information, collecting customer information and competitor information which is high quality and good information available and enough to develop marketing strategies, leading to analyzing market conditions, and dissemination of market information (Meunier-FitzHugh and Piercy, 2007). Likewise, learning improves the organization by developing both marketing and sales simultaneously. Besides, Martinez-Lopez and Casillas (2009)

mention that marketing intelligence system is managerial decisional tools that support marketing decision by considering on the base of how our customers behave. This method is appropriate to support decision making and to solve problems of top management. Moreover, marketing intelligence is defined as information gained from external sources that can be used for the precise identification of problems, changes and opportunities in the external marketing environment (Talvinen, 1994). The importance of marketing intelligence is emphasized in provide the internal and external information needed to make good marketing decisions such as monitoring the business environment accurately, and conducting customer-oriented research. Moreover, functions can be carried out at minimal costs, speed and effectiveness from the use of informal marketing information systems (AL-allak, 2010).

Accordingly, marketing intelligence will be able to achieve competitive advantage. The key determinant to competitive advantage depends on the firm's ability to utilize this comprehensive, flexibility, and integrate obtained from internal-external information within group target to usefulness concern decision marketing (AL-allak, 2010). Indeed, both marketing and sale are joint generated mutually beneficial and will support organizational learning through sharing knowledge, capabilities, and experience (Meunier-FitzHugh and Piercy, 2007). Hence, marketing intelligence is likely to influence firms to enhance their customer responsiveness and marketing growth. Therefore, the aforementioned relationships are hypothesized as shown below.

Hypothesis 3a: The higher the marketing intelligence is, the more likely that firms will gain greater customer responsiveness.

Hypothesis 3b: The higher the marketing intelligence is, the more likely that firms will gain greater marketing growth.

2.3 Marketing Excellence
Marketing excellence is defined as firm's ability to enhance potential market excellence, superior competitive market in matters of products and services. It can achieve marketing success, and the firm has the resources apart from the competition. There are always new products, including the ability to reach consumers predominant competitors. Caruana et al. (1999) mentions that an excellent firm and service quality is difficult to generate if it is not market oriented and excellence should be seen as the extreme point on a continuum. Moreover, Doyle (1992) suggests that the excellent firm should therefore not seek to excel on any single goal, but rather look for a balanced performance over time on a set of goals. Previous research suggests that marketing excellence practically has a superior ability to define and understand markets which firms must be closer to customers and the environment needed to know and can respond to them over the customer wants (Smith, 2007). Firms required superior strategic marketing skills are now a necessary precondition for competitive advantage in markets.

Therefore, marketing excellence is likely to influence firms to enhance their customer responsiveness and marketing growth. Thus, the aforementioned relationships are hypothesized as shown below.

Hypothesis 4a: The higher the marketing excellence is, the more likely that firms will gain greater customer responsiveness.
Hypothesis 4b: The higher the marketing excellence is, the more likely that firms will gain greater marketing growth.

2.4 Customer Responsiveness
Customer responsiveness refers to firm ability to quick response and helpfulness of the services to customers (Lee and Lin, 2005). The firm proposes the effectiveness of customer response as firm seeking and keeping in mind of all customer needs, wants, expectation, and then provide them to support products and services (Jadesadalug and Ussahawanitchakit, 2009). Previous research demonstrated customer responsiveness that a firm has the product differentiate and service from rivals, maintains the privilege customer and add valued for customers (Magretta, 1998). Therefore, the ability of the firm will be emphasized on collecting and distributing market information to respond to customer needs and to create satisfaction. In addition, the firm development of customer databases in the systematic way increases

efficiency in operations leads to strategic excellence and enhance business growth (Zahay and Griffin, 2004).

Consequently, Agarwal et al. (2010) describes an importance of responsiveness as providing customer focus, willingness to rapid service, and timely service. Therefore, companies should allocate resources and time across to do activities for more effectiveness. Likewise, customer responsiveness is defined as firm's ability to finding real need of customer and insight to respond quickly. Hence, customer responsiveness is likely to influence firms to enhance their marketing growth. Therefore, the aforementioned relationships are hypothesized as shown below.

Hypothesis 5: The higher the customer responsiveness is, the more likely that firms will gain greater marketing growth.

2.5 Moderating Effects of Relationships

Market learning. Market learning refers to the firm's expertise in and knowledge stores of key marketing activities such as new product development, creating a brand image, sensemaking customers' current and potential needs, and other (Menon et al., 1999). The market learning is significantly identified that superior knowledge stores and organizational learning lead to enhancement financial and market performance (Luo et al., 2006). Firms with performance will be strengthened when firms engage in organizational learning activities emphasize on social, technology, and market learning such as experiential knowledge collected and disseminated will be more likely to build competitive advantage relative to their competitors (Hsu and Pereira, 2008). Thus, market learning is likely to promote firms to achieve their marketing intelligence, marketing excellence, customer responsiveness, and marketing growth. Therefore, the aforementioned relationships are hypothesized as shown below.

Hypothesis 6: The market learning will positively moderate the market orientation on (a) marketing intelligence, (b) marketing excellence, (c) customer responsiveness, and (d) marketing growth.

Hypothesis 7: The market learning will positively moderate the strategic flexibility on (a) marketing intelligence, (b) marketing excellence, (c) customer responsiveness, and (d) marketing growth.

Environmental munificence. Environmental munificence is the scarcity or abundance of critical resources needed by one or more of firms operating within an environment. Environmental munificence refers to an environment's ability or capability to support sustained growth of the firm (Goll and Rasheed, 2004). It is also defined as the abundance and availability of critical resources that influences the firm survival and growth (Specht, 1993). In addition, it distinguishes three kinds of munificence as follows: capacity is level of resource pool or advantageous to the firm, growth or decline is change to capacity, and opportunity or threat is the extent of unexploited or undeveloped capacity (Castrogiovanni, 1991). Three kinds of environmental munificence depend on condition when resources are abundant; it is relatively easy for firms to survive and increase achievement despite scarcity resources; it is relatively difficult to survive. Similarly, Irwin et al. (1998) described to environmental munificence as having positive relationships with performance. Accordingly, the environment is a combination the resource and the degree of resource productiveness. Similarly, the munificence may have relationship complex and dynamic rather than a direct effect on firm performance. Rajagopalan et al. (1993) argued that munificent environment is consistent with high growth industries with various resource sources more than those with less munificence environment. Indeed, the environmental munificence has a positive relationship with the range of strategies and organization options available to firms (Castrogiovanni, 1991). Hence, the environmental munificence is likely to promote firms to achieve their marketing growth. Therefore, the aforementioned relationships are hypothesized as shown below.

Hypothesis 8: The environmental munificence will positively moderate the market orientation – marketing growth.

Hypothesis 9: The environmental munificence will positively moderate the strategic flexibility – marketing growth.

Hypothesis 10: The environmental munificence will positively moderate the marketing intelligence – marketing growth.

Hypothesis 11: The environmental munificence will positively moderate the marketing excellence – marketing growth.

Hypothesis 12: The environmental munificence will positively moderate the customer responsiveness – marketing growth.

3. RESEARCH METHODS

3.1 Sample Selection and Data Collection Procedure

This study selects exporting firms from foods and beverages businesses in Thailand as the sample. The population was obtained from list on database of Thailand's exporter directory of Department of Export Promotion, Ministry of Commerce of Thai government as of January, 2011 (http://www.depthai.go.th). 933 questionnaires were mailed to systematic random sampling from the list. The key participants in this study were marketing executive or marketing managers. With regard to the questionnaire mailing, 77 surveys were undeliverable because some firms were no longer in business or had moved to unknown locations. Deducting the undeliverable from the original 933 mailed, the valid mailing was 856 surveys, from which 152 responses were received. Of the surveys completed and returned, only 139 were usable. The effective response rate was approximately 16.24%. It is important to note that the low response rate because of realistic considering the length of the questionnaire, and some businesses may close down or relocate.

Furthermore, to estimate the non-response bias was appraisal by comparison with early and late response. The several aspects of the characteristics of the firm comprise industry type, amount of capital funding, duration of the business, and number of employees, key informant self-reported all constructs (Armstrong and Overton, 1977). As for non-response bias, t-test statistics were performed, the results exhibited no significant differences. Therefore, non-response bias is not the concern in our data.

3.2 Variables

All variables were obtained from the survey. The measurement of each variable in the model was estimated with multiple-item scales. All items are measured by five-point Likert-type scale, ranging from 1 is strongly disagree to 5 is strongly agree. The variable measurement of dependent, independent, mediating, moderating, and control variables are described as follows:

First, *marketing growth (MG)* is the dependent of the study, and it is defined as the continuous growth rate of the markets, and considered with market share and sales growth as measured by achievement of the firm (Shergill and Nargundkar, 2005). Moreover, Pleshko and Heiens (2010) suggest that both service growth and market growth, the fit between market orientation and the selected strategy is relevant to perceived market share. The variable is developed as a new scale from the related literature and its definition. Five-item scale was implemented to measure the degree to which firm is able to accomplish and capable making profitability, for instance, gaining market share, sale increase, and so on to use marketing insights across the organization to drive growth.

Second, *dynamic marketing capability* (DMC) is an ability of the firm to respond to external market changes efficiently and promptly (Fang and Zuo, 2009). Also, dynamic capability is a firm's ability to build, integrate, and reconfigure internal and external competencies to address quickly changing environments (Teece et al., 1997). Therefore, *dynamic marketing capability (DMC)* refers to firm's ability to respond to changes rapidly and continuously. To integrate knowledge of the market, firms emphasize developing knowledge and technology capabilities in research and market development. Reflecting human capital, social capital, is recognized as a leader in the creation when including knowledge of marketing resources. To ensure the appropriateness of creates something new. And it can be responded to market demand for products and services quickly and efficiently. Accordingly, dynamic marketing capability consists of two dimensions as follows: market orientation and strategic flexibility which are independent variables of the

study. Firstly, *market orientation (MO)* refers to the organizational culture that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyer, then it consists of three principles for continuous superior performance business as follows: customer orientation, competitor orientation, and inter-function coordination (Narver and Slater, 1990), and maintenance of superior customer value. Three-item scale is used to estimate the market outcomes and marketing growth. The variable is developed from definitions of Narver and Slater (1990). Secondly, *strategic flexibility (SF)* is defined as an ability of firm to respond and successively accommodate to environmental change (Combe and Greenley, 2004). Three-item scale is used to estimate the market outcomes and marketing growth. The variable is developed from definitions of firms are proposed strategic flexibility, including resource flexibility, coordination flexibility (Sanchez, 1995) and operational flexibility (Fredericks, 2005).

Third, mediating variables in the model comprise marketing intelligence, marketing excellence, and customer responsiveness. Firstly, *marketing intelligence (MI)* is defined as a set of procedures and sources used to obtain everyday information about pertinent developments in the marketing environment (Kotler, 2002). Therefore, marketing intelligence provides a continuous flow of information about very diverse market events that might affect the firm's competitive position (Bon and Merunka, 2006). The variable is developed as a new scale from the related literature and its definition. Four-item scale was implemented to measure the degree to which firm's ability to collecting, integrating and disseminating both internal and external market information and usefulness to make good marketing decisions. Secondly, *marketing excellence (ME)* is defined as firm's ability to potential market excellence superior competitive market in matters of products and services that can achieve marketing success, and the firm that has the resources apart from the competition. The variable is developed as a new scale from the related literature and its definition. Five-item scale was implemented to measure the degree to which firm's ability to generate marketing specialization superiority the competitors and maintain competitive advantage. Thirdly, *customer responsiveness (CS)* refers to effective of customer response as firm seeking and keeping in mind of all customer needs and wants, expectation, and then provide to support products and services (Jadesadalug and Ussahawanitchakit, 2009). The variable is developed as a new scale from the related literature and its definition. Four-item scale was implemented to measure the degree to which firm's ability to respond quickly to customers need and support the marketing growth.

Fourth, the moderating variables including market learning and environmental munificence. *market learning (ML)* refers to the firm's expertise in and knowledge stores of key marketing activities (i.e., new product development, creating a brand image, sensemaking customers' current and potential needs) (Menon et al., 1999). The variable is developed as a new scale from the related literature and its definition. Four-item scale was implemented to measure market learning. It was developed as a new scale. *Environmental munificence (EM)* refers to an environment's ability or capability to support sustained growth of the firm (Goll and Rasheed, 2004). Moreover, it is defined as the abundance and available of critical resources that influences the firm survival and growth (Specht, 1993). The variable is developed as a new scale from the related literatures and its definition. Four-item scale was implemented to measure environmental munificence.

Fifth, the control variables consist of firm age and industry type which previous research suggests that they may affect the ability of dynamic marketing capability, the market share and sales increase leading to marketing growth. *Firm age (FA)* is measured by number of years firms are in business (Zhou et al., 2005). Also, firm age (FA) is represented by dummy variable including 1 (more than 10 years) and 0 (less than 10 years). *Industry type (IT)* is defined as industry characteristic of firm-specific factors necessary in the analysis successful of firm (Shergill and Nargundkar, 2005). Industry type is represented by dummy variable including 1 (reference by canned food sector) and 0 (all other sector). Therefore, firm age and industry type are appropriately chosen as control variables.

3.3 Methods
Factor analysis was firstly utilized to investigate the understanding relationships of a large number of items and to determine whether they can be reduced to a smaller set of factors. Also, to provide confirmatory factor analysis (CFA) to test validity of constructs, this analysis for all factor loading are 0.71-

0.91 as being greater than 0.40 cut-offs and are statistically significant that the rule-of-thumb (Nunnally and Bernstein, 1994), the results are as shown in Table 1 below.

The reliability of the measurement was evaluated by Cronbach alpha coefficients. The value of Cronbach alpha coefficients for all constructs is higher than the 0.7 cut-off value (Nunnally and Bernstein, 1994), ranging from 0.74 to 0.93, the results are as shown in Table 1. To evaluate, all measures of scale are considered appropriate for further analysis and accepted for validity and reliability in this study.

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TABLE 1
RESULTS OF MEASURE VALIDATION

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Items	Factor Loadings	Cronbach Alpha
Marketing Growth (MG)	0.78-0.91	0.93
Market Orientation (MO)	0.80-0.84	0.74
Strategic Flexibility (SF)	0.79-0.88	0.80
Marketing Intelligence (MI)	0.82-0.90	0.88
Marketing Excellence (ME)	0.71-0.83	0.85
Customer Responsiveness (CR)	0.78-0.87	0.83
Market Learning (ML)	0.81-0.88	0.87
Environmental Munificence (EM)	0.71-0.85	0.79

The hypothesized relationships and factors affecting each relationship are estimated by the ordinary least squares (OLS) regression analysis, that all dependent, independents, and control variables in this study were neither nominal data nor categorical data, OLS is an appropriate method for the regression model which is analyzed separately for each of the dependent variables as follows:

Equation 1: $MI = \beta_{01} + \beta_1 MO + \beta_2 SF + \beta_3 FA + \beta_4 IT + \varepsilon$

Equation 2: $MI = \beta_{02} + \beta_5 MO + \beta_6 SF + \beta_7 ML + \beta_8(MO*ML) + \beta_9(SF*ML) + \beta_{10}FA + \beta_{11}IT + \varepsilon$

Equation 3: $ME = \beta_{03} + \beta_{12}MO + \beta_{13}SF + \beta_{14}FA + \beta_{15}IT + \varepsilon$

Equation 4: $ME = \beta_{04} + \beta_{16}MO + \beta_{17}SF + \beta_{18}ML + \beta_{19}(MO*ML) + \beta_{20}(SF*ML) + \beta_{21}FA + \beta_{22}IT + \varepsilon$

Equation 5: $CS = \beta_{05} + \beta_{23}MO + \beta_{24}SF + \beta_{25}MI + \beta_{26}ME + \beta_{27}FA + \beta_{28}IT + \varepsilon$

Equation 6: $CS = \beta_{06} + \beta_{29}MO + \beta_{30}SF + \beta_{31}MI + \beta_{32}ME + \beta_{33}ML + \beta_{34}(MO*ML) + \beta_{35}(SF*ML) + \beta_{36}FA + \beta_{37}IT + \varepsilon$

Equation 7: $MG = \beta_{07} + \beta_{38}MO + \beta_{39}SF + \beta_{40}FA + \beta_{41}IT + \varepsilon$

Equation 8: $MG = \beta_{08} + \beta_{42}MO + \beta_{43}SF + \beta_{44}ML + \beta_{45}(MO*ML) + \beta_{46}(SF*ML) + \beta_{47}FA + \beta_{48}IT + \varepsilon$

Equation 9: $MG = \beta_{09} + \beta_{49}MO + \beta_{50}SF + \beta_{51}EM + \beta_{52}(MO*EM) + \beta_{53}(SF*EM) + \beta_{54}FA + \beta_{55}IT + \varepsilon$
Equation 10: $MG = \beta_{10} + \beta_{56}MI + \beta_{57}ME + \beta_{58}CS + \beta_{59}FA + \beta_{60}IT + \varepsilon$

Equation 11: $MG = \beta_{11} + \beta_{61}MI + \beta_{62}ME + \beta_{63}CS + \beta_{64}EM + \beta_{65}(MI*EM) + \beta_{66}(ME*EM) + \beta_{67}(CS*EM) + \beta_{68}FA + \beta_{69}IT + \varepsilon$

4. RESULTS AND DISCUSSION

Table 2 exhibits the descriptive statistics and correlation matrix for all variables. With respect to possible problems relating to multicollinearity, the correlation between the independent variables includes the regression analysis. Variance inflation factors (VIFs) range from 1.01 to 3.82 which was below the cut-off value of 10 as recommended by Neter et al. (1985), meaning the independent variables are not correlated with each other. Therefore, multicollinerity is not a problem in this study.

TABLE 2
DESCRIPTIVE STATISTICS AND CORRELATION MATRIX

Variables	MO	SF	MI	ME	CS	ML	EM	FA	IT
Mean	4.03	3.84	3.63	3.67	3.66	3.73	3.52	0.69	0.17
S.D.	0.64	0.70	0.75	0.65	0.64	0.68	0.68	0.46	0.37
MO	1								
SF	0.57**	1							
MI	0.56**	0.44**	1						
ME	0.50**	0.51**	0.64**	1					
CS	0.47**	0.52**	0.63**	0.77**	1				
ML	0.50**	0.53**	0.64**	0.68**	0.65**	1			
EM	0.38**	0.50**	0.51**	0.61**	0.60**	0.67**	1		
FA	-0.01	-0.20*	0.05	-0.08	0.04	-0.11	-0.10	1	
IT	0.12	0.13	0.11	0.11	0.09	0.13	0.10	-0.08	1

*** $p<0.01$, ** $p<0.05$

4.1 The effects of dynamic marketing capability, marketing intelligence, and marketing excellence
Table 3 presents the results of OLS regression of the relationships among dynamic marketing capability, marketing intelligence, marketing excellence, customer responsiveness, and marketing growth as presented in Models 1 to 5. Dynamic marketing capability consists of two dimensions: market orientation and strategic flexibility. Here, market orientation has a significant positive influence on marketing intelligence (b_{01} = 0.43, $p < 0.01$) and marketing excellence (b_{12} = 0.32, $p < 0.01$). Indeed, Narver and Slater (1990) suggest that firms developed capability with market orientation have appropriate tactics and investments to prevent competitors from overcoming a firm's competitive advantage. Also, firms emphasized on market orientation will help to enhance marketing intelligence (Jaworski and Kohli, 1993). Firms with marketing intelligence will generate learning relevant market developments, sharing markets information, and adapting offerings to meet customer needs and preference which all of the above is excellent marketing of the firm. *Therefore, Hypotheses 1a and 1b are supported.* Interestingly, strategic flexibility has an important positive impact on marketing intelligence (b_{02} = 0.12, $p < 0.05$), and marketing excellence (b_{13} = 0.32, $p < 0.01$). The finding is consistent with Johnson et al. (2003) who demonstrated that characteristics of strategic flexibility are able to respond successfully to unforeseen environment change. Sometimes, we may need to collaborate with other agencies to exchange information, specific-resources, and coordination across department or inter-firm to potential in short-term and financial performance in long-term (i.e., market share and growth) (Narver and Slater, 1990). *Hence, Hypotheses 2b and 2b are supported.*

4.2 Effect of dynamic marketing capability, marketing intelligence, marketing excellence, and customer responsiveness
Table 3 presents the results of OLS regression of the associations among dynamic marketing capabilities which comprise market orientation and strategic flexibility, marketing intelligence, marketing excellence, and customer responsiveness (Hypotheses 1c, 2c, 3a, and 4a). The results identify strategic flexibility, marketing intelligence, and marketing excellence have significant positive influence on customer responsiveness (b_{24} = 0.18, $p < 0.05$), (b_{25} = 0.20, $p < 0.01$), (b_{27} = 0.57, $p < 0.01$). Prior research described that firms provide for market-focused strategic flexibility to sustain competitive advantage is a strategic solution and firms adaptability will be at higher level of customer relationship marketing, retention, satisfaction and loyalty (Young, 2005). It is assumed that flexibility of the firm became intelligence and excellence of the market and increasing ability to respond to customer needs more effectively. *Thus, Hypotheses 2c, 3a, and 4a are supported*. While, we found that the market

orientation has no significant effect on customer responsiveness (b_{23} = -0.02, p < 0.05). However, market orientation firms are in a better position to prefer the needs of their customers; the result is opposite to that hypothesized, suggesting that market orientation has a negative influence on firm performance after crisis (Grewal and Tansuhaj, 2001). Therefore, we conjecture that the response needs of customers may depend on the context of the environment. ***Hence, Hypothesis 1C is not supported.***

4.3 Effects of dynamic marketing capability, marketing intelligence, marketing excellence, customer responsiveness, and marketing growth

Table 3 presents the results of OLS regression of the relationships between two dimensions of dynamic marketing capability and marketing growth via market outcomes (marketing intelligence, marketing excellence, customer responsiveness) (Hypotheses 1d, 2d, 3b, 4b, and 5). In addition, to exhibit the relationship of market orientation, strategic flexibility, marketing excellence, and customer responsiveness have significant positive effects on marketing growth (b_{40} = 0.27, p < 0.05), (b_{41} = 0.34, p < 0.01), (b_{59} = 0.47, p < 0.01), (b_{60} = 0.31, p < 0.05). Congruence with Shergill and Nargundkar (2005) who describe that market orientation has affected firm performance indicating the success of firm from three aspects, namely profitability, sale growth, and market share. Especially, strategic flexibility is a key success factor in creating continuously customer value and building competitive advantage as well as flexibility of the firm which increases absorptive capacity in business (Matthyssens, Pauwels, Vandenbempt, 2005). The evidence suggests that firms with higher degree of marketing excellence and customer responsiveness have greater marketing growth. Because firms that have superior marketing can meet the needs of customers more and more likely that firms will gain greater marketing growth. ***Thus, Hypotheses 1d, 2d, 4b and 5 are supported.*** Furthermore, marketing intelligence has no significant positive effects on marketing growth, (b_{58} = 0.02, p < 0.05). The results show that non-significant or less likely to be successful may be possible that information is not jointly discussed and disseminated to the rest of the firms (Meunier-FitzHugh and Piercy, 2007). Likewise, marketing intelligence is assumed that it may be measuring the success of the company well in other aspects. In addition to the market share increased. ***Hence, Hypotheses 3b is not supported***.

4.4 The interaction effects

Table 4 presents the results interaction effect by OLS regression analysis of the relationships among dynamic marketing capability, marketing outcomes, and marketing growth. This study has market learning and environmental munificence as the role of moderating effect on marketing outcomes and marketing growth which is shown in the Models 6 to 11. The results show that only one effect of the market learning as positively moderates between the market orientation and marketing intelligence (b_{08} = 0.13, p < 0.05) whereas the market learning does not moderate with marketing excellence (b_{19} = -0.06, p < 0.05), customer responsiveness (b_{34} = 0.00, p < 0.05), and marketing growth (b_{47} = 0.20, p < 0.05). ***Hence, Hypothesis 6a is supported but Hypotheses 6b, 6c, and 6d are not.*** Moreover, the results suggest that market learning does not moderate the associations among strategic flexibility and marketing intelligence, marketing excellence, customer responsiveness, and marketing growth (b_{09} = -0.05, p < 0.05), (b_{20} = 0.02, p < 0.05), (b_{35} = 0.06, p < 0.05), (b_{48} = -0.03, p < 0.05). ***Therefore, Hypotheses 7a, 7b, 7c, and 7d are not supported***.

In addition, the results exhibit the moderator effects of environmental munificence among dynamic marketing capability, marketing intelligence, marketing excellence, customer responsiveness, and marketing growth as shown in Models 10 and 11. Interestingly, environmental munificence has a negative significant between marketing excellence and marketing growth (b_{68} = -0.21, p < 0.05). It is opposite to what expected because munificence may actually be raising market share and market growth decreased rather than increased. Accordingly, environmental munificence does not moderate market orientation, strategic flexibility, marketing intelligence, and customer responsiveness with marketing growth (b_{54} = -0.03, p < 0.05), (b_{55} = -0.00, p < 0.05), (b_{67} = 0.02, p < 0.05), (b_{69} = 0.16, p < 0.05). ***Thus, Hypotheses 8, 9, 10, 11, and 12 are not supported***. In conclusion, environmental munificence is reflected in social, economic, political, market, and infrastructural resource (Specht, 1993) which encourage dynamic marketing capability to influence marketing growth via marketing outcomes which may depend on conditions in the environments.

TABLE 3: **RESULTS OF OLS REGRESSION ANALYSIS**

Independent Variables	Dependent Variables				
	Model 1	Model 2	Model 3	Model 4	Model 5
	MI	ME	CS	MG	MG
Market orientation (MO)	0.43***	0.32***	-0.02	0.27**	
	(0.09)	(0.09)	(0.07)	(0.09)	
Strategic flexibility (SF)	0.12**	0.32***	0.18**	0.34***	
	(0.09)	(0.09)	(0.07)	(0.09)	
Marketing intelligence (MI)			0.20***		0.02
			(0.07)		(0.08)
Marketing excellence (ME)			0.57***		0.47***
			(0.07)		(0.10)
Customer responsiveness (CS)					0.31**
					(0.10)
Firm age (FA)	0.22	-0.03	0.23	0.11	0.02
	(0.16)	(0.16)	(0.12)	(0.16)	(0.13)
Industry type (IT)	0.10	0.07	-0.02	-0.25	-0.27
	(0.19)	(0.19)	(0.14)	(0.20)	(0.16)
Adjusted R^2	0.32	0.31	0.63	0.27	0.52

**p<.05, ***p<.01, [a] Beta coefficients with standard errors in parenthesis.

TABLE 4: RESULTS OF MARKETING OUTCOMES, MARKETING GROWTH AND EFFECT

Independent Variables	Dependent Variable					
	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
	MI	ME	CS	MG	MG	MG
Market orientation (MO)	0.34***	0.13	-0.03	0.13	0.20**	
	(0.08)	(0.08)	(0.07)	(0.09)	(0.08)	
Strategic flexibility (SF)	0.02	0.15	0.16**	0.16	0.17	
	(0.08)	(0.08)	(0.07)	(0.09)	(0.09)	
Marketing intelligence (MI)			0.15			0.00
			(0.08)			(0.08)
Marketing excellence (ME)			0.51***			0.36***
			(0.08)			(0.10)
Customer responsiveness (CS)						0.25**
						(0.10)
Market learning (ML)	0.47***	0.53***	0.18**	0.51***		
	(0.08)	(0.08)	(0.08)	(0.08)		
Environmental munificence (EM)					0.44***	0.24**
					(0.08)	(0.08)
MO x ML	0.13**	-0.06	0.00	0.02		
	(0.06)	(0.06)	(0.05)	(0.06)		
SF x ML	-0.05	0.02	0.06	-0.03		
	(0.06)	(0.06)	(0.05)	(0.06)		
MO x EM					-0.03	
					(0.07)	
SF x EM					-0.00	
					(0.07)	
MI x EM						0.02
						(0.08)
ME x EM						-0.21**
						(0.10)
CS x EM						0.16
						(0.10)
Firm age (FA)	0.20	0.03	0.26**	0.14	0.14	0.09
	(0.14)	(0.14)	(0.12)	(0.15)	(0.15)	(0.13)
Industry type (IT)	0.04	-0.00	0.03	-0.32	-0.28	-0.29
	(0.17)	(0.17)	(0.14)	(0.16)	(0.18)	(0.16)
Adjusted R^2	0.49	0.49	0.64	0.43	0.40	0.55

**p<.05, ***p<.01, a Beta coefficients with standard errors in parenthesis.

5. CONTRIBUTIONS AND FUTURE DIRECTIONS FOR RESEARCH

5.1 Theoretical Contribution and Directions for Future Research

This study is intended to provide a clearer understanding of the relationships between dynamic marketing capability and marketing growth via marketing outcome include marketing intelligence, marketing excellence, and customer responsiveness. Dynamic marketing capability consists of market orientation and strategic flexibility. It provides unique theoretical contributions expanding on previous knowledge and literature of dynamic marketing capability. Furthermore, three theories, namely, resource-base view, dynamic capability perspective, and contingency theory, are integratively explained the overall association of constructs in this model. This study provides contribution to theories in new dimension of dynamic marketing capability and empirical testing. It examines the moderating effects of variables such as market learning and environmental munificence. According to the results of this study, the need for further research is apparent. Market learning and environmental munificence support the operation of market and enhance ability to respond to dynamic environment, but they create opposite effect on hypotheses. Both market learning and environment munificence have no associations with market orientation, strategic flexibility, marketing intelligence, marketing excellence, and customer responsiveness have no relationships with marketing growth. Then, future research is needed to conceptualize the measurement of dynamic marketing capability and develop new dimension of dynamic marketing capability to increase marketing growth. Moreover, the paper is proposed the objective to measure the success of the firm in other aspects than from market growth as following sale growth, financial performance, product quality, service performance, and each other. Likewise, future research is needed to collect data from different groups of sample and/or a comparative population in order to verify the generalizability of the study and to increase reliability.

5.2 Managerial Contribution

This study helps executives in marketing or managers in marketing in particularly in foods and beverages businesses to underlying how their firms can achieve marketing growth over their competitors. Specially, the marketing excellence is necessary factor to make market capability for the firms and enhance adaptability and respond to competition in the dynamic environment. Therefore, dynamic marketing capability becomes an important issue for dealing with different situations. In the context of industry sector, industry has continued to grow and develop new products regularly and in intense competition. Thus, marketing executives must be adapting themselves to respond to environment changing, to understand real needs of customers, to know activity of the rivals, help to decrease problem of cross-

functional and to increase capability to compete and deal with situations that could affect the firm. They should clearly understand and expand other marketing strategies to advanced business operation in order to continuously maintain and increase the levels of business excellence, corporate performance, competitive advantage, organizational growth, and sustainability. To maximize the benefits of dynamic marketing capability, executives should provide other resources to support their effectiveness and create new opportunities in new markets. The limitation of this study is on the sample size which may influence the power of statistical test and focus on conduct data from single industry (from foods and beverages business in Thailand). Hence, future research may choose other industries for generalization or comparison of the results of this paper with longitudinal study.

6. CONCLUSION

This study proposes the influence of dynamic marketing capability on marketing growth via marketing outcomes which include marketing intelligence, marketing excellence, and customer responsiveness as mediating effect of foods and beverages business in Thailand. Moreover, the study examines external environment (i.e. market learning and environmental munificence) as a moderator of the research relationship. Here, 139 foods and beverages businesses were chosen as the sample of the study. The results reveal that dynamic marketing capability consists of two dimensions. First, market orientation has a significant positive effect on marketing outcomes and marketing growth. Second, strategic flexibility has a significant positive effect on marketing outcome and marketing growth. Indeed, marketing outcomes (marketing intelligence, marketing excellence, and customer responsiveness) have a significant positive influence on marketing growth. While, market learning and environmental munificence are moderating effects that have no relationship among dynamic marketing capability, marketing outcomes, and marketing growth. Indeed, the market learning moderates only the relationships between market orientation and marketing intelligence. In summary, the marketing excellence is a key determinant to achieve and full mediators of aforementioned relationships between dynamic marketing capability and marketing growth. Thus, further study is needed to conceptualize the measurement of dynamic marketing capability and derived new dimension of dynamic marketing capability to expand research perspectives. Accordingly, the evidence will offer suggestions for foods and beverages businesses in Thailand to successfully enhance dynamic marketing capability.

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ASSET DEVALUATIONS:
THE MOTIVATION BEHIND MANAGEMENT DECISIONS EVIDENCE FROM NEW ZEALAND FIRMS

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ABSTRACT

This study investigates the motivation behind management decisions to devalue fixed assets of New Zealand listed companies over the period 1999 to 2003.

Prior research on fixed asset write-downs (e.g., Moore, 1973; Strong and Meyer, 1987; Francis et al., 1996; Cotter et al., 1998*) were found to be influenced by a company's capacity to absorb write-downs, declining financial performance, and management changes. This study provides no evidence to support the findings of the earlier research. It therefore finds no account of manipulation related to fixed asset devaluations.*

Keywords: *Fixed assets; Revaluation; Devaluation; Write-down*

1. INTRODUCTION

Although historical cost remains the dominance practice, fixed asset revaluations are common practice in Australia, New Zealand, the United Kingdom and the Netherlands. Fixed asset revaluations are also permitted in Belgium, France, Spain and Italy (Walton et al., 2003). In contrast, they are not permitted in United States, Germany or Japan (Easton et al., 1993). In Canada revaluations were permitted until December 1990 (White et al., 2003). International Accounting Standards No.16 (Property, Plant and Equipment) now allows entities to choose between measuring assets at cost (the cost model) or at fair value (the revaluation model). While New Zealand Financial Reporting Standard FRS-3 "Accounting for Property, Plant and Equipment" requires historical cost to be used for reporting non-current assets, it does allow the alternative treatment of revaluing assets to fair value at regular intervals. FRS-3 became effective on or after 31 March 2002. It replaced the Statement of Standard Accounting Practice No.28 (SSAP-28)"Accounting for Fixed Assets" which was issued in July 1991. FRS-3 is now superseded by New Zealand Equivalent to International Accounting Standard - NZIAS16 (Property, Plant and Equipment) which became effective on or after 1 January 2007. Why, then, have fixed asset revaluations been allowed in New Zealand and elsewhere? The purpose of undertaking fixed asset revaluation is to provide more relevant information about an organisation's financial position to users of financial statements. For example, a revaluation of fixed assets will improve the information available to security analyst by providing a more current valuation of the firm's assets. In most countries whose accounting rules allow revaluation of assets, however, the decision to revalue assets is optional upon managers' discretion. The considerable inconsistency between the timing, frequency, and methods of revaluation practice raises the question as to whether the "relevance" is the sole reason of companies' asset revaluation decisions (Lin and Peasnell, 2000). Understanding the underlying motives of the management's asset revaluation decision is essential for the accounting profession. Since the optional accounting rules lead to discretionary revaluation behaviour, the management may make a revaluation policy on an opportunistic basis, and as a result the reliability of the financial statements will be affected, and users of financial statement might be misled (Aboody, Barth and Kasznik, 1999). Auditors also need to better understand management incentives of accounting choices in order to appropriately assess the reliability of the information provided to them by their clients.

Earlier research (e.g. Brown et al., 1992; Strong and Meyer, 1987; Francis et al., 1996; Cotter et al., 1998; Holgate and Ghosh, 2000) revealed that a firm's decision as to whether or when to revalue fixed assets upwards or downwards could be partially explained by management incentives relating to commercial or political influences. This study attempts to investigate only the underlying management decisions to devalue fixed assets of New Zealand listed companies over the period 1999 to 2003.

The results provide no evidence to support the hypotheses that downward asset revaluations are motivated by a firm's financial capacity to absorb write-downs, declining financial performance and management changes.

The remainder of this study is organised as follows. Section 2 presents the prior literature and hypotheses development. The research design is developed in section 3 while section 4 presents the results of univariate and multivariate tests. Section 5 provides the discussion of the results and section 6 contains the conclusions.

2. PRIOR LITERATURE AND HYPOTHESES DEVELOPMENT

Prior studies tend to focus on upward revaluations only. However, in practice, the amount of revaluation can be either increments or decrements. Therefore, downward revaluation should also be considered in conjunction with upward revaluation to provide a fuller picture of New Zealand companies' revaluation practice from an overall perspective (see Seng and Su, 2010, on upward asset revaluations). It is therefore the objective of this paper to investigate only the underlying management decisions to devalue fixed assets. It is necessary to recognise that there are two kinds of asset write-downs. One is the downward asset revaluation (or devaluation) and another is the write-off of the impairment of non-revalued assets directly to a firm's statement of performance. Devaluation is part of the asset revaluation and its amount is either to offset the asset revaluation reserve or to be written off as expense in the statement of financial performance when the amount of revaluation reserve becomes negative. This impairment write-off is not at all part of the asset revaluation (FRS-3, para.9.12). Although it may have some similar effects as asset devaluation such as reducing profits and assets base, it does not affect revaluation reserve. It usually applies to non-revalued assets only (FRS-3, para.9.2). Strong and Meyer (1987) also suggested that the concept of asset impairment had been applied primarily to discontinued operations rather than revaluation of assets that remain on the balance sheet. Accordingly, this study will include the devaluation of revalued assets only.

There has been limited research focused specifically on the incentives of downward asset revaluation. Most prior studies tend to focus on all asset write-down activities, which include both downward asset revaluations and asset impairment write-offs of non-revalued assets. Since asset write-off studies are the only research bases that can be related to the devaluation practice, their findings are assumed to be applicable to this study. Previous studies (e.g., Moore, 1973; Strong and Meyer, 1987; Francis et al., 1996; Cotter et al., 1998) have found that asset write-off decisions are related to asset capacity to absorb write-down, poor financial performance, and management changes.

2.1 Capacity to Absorb Write-Down

In contrast with the upward asset revaluations that reduce debt ratio and restore borrowing capacity, devaluation decreases asset and equity and therefore increases leverage. Cotter et al. (1998) documented that firms with a greater capacity to absorb the financial statement effects of the write-downs are more likely to disclose greater write-downs. Management may take advantage of the low-debt status in that year to absorb the revaluation decrement, and thus avoid reducing the asset base in years with higher leverage ratio. Therefore, it is predicted that there is a negative relationship between a firms' leverage level and their downward revaluation decision.

H1:   Firms with a lower leverage level have greater capacity to absorb asset write-downs, and therefore they are more likely to devalue their fixed assets.

2.2 Declining Financial Performance

Declining financial performance of a firm can be understood as a signal of associated decline in asset value (Cotter et al., 1998). If management compensation is earnings-based, and if pre-write-down earnings are short of target, management has incentives to shift future write-offs into current periods. The associated decrease in depreciation expense will lead to a higher profit. This argument suggests that a

negative correlation exists between pre-write-down earnings performance and write-offs (Francis et al., 1996). Therefore, a negative relationship is predicted between firms' performance and their devaluation decisions.

H2:   Firms experiencing declining financial performance are more likely to devalue their fixed assets.

2.3 Management Changes

It was believed that new managers and directors have greater incentives than their existing counterparts to write down poorly performing assets because they have no responsibility for the asset impairment that resulted from poor asset management decisions in the past (Weisbach, 1995, cited in Cotter et al., 1998). The devaluation of assets also improves investors' perceptions in terms of the firm's improved performance in later periods (Cotter et al., 1998). Therefore, it is believed that the greater number of management changes in a firm in the review year, the more likely the firm will have a downward asset revaluation in that year (Moore, 1973; Strong and Meyer, 1987; Francis et al., 1996; Cotter et al., 1998). However, empirical results were inconclusive (Fried et al., 1989, cited in Cotter et al., 1998).

H3:   Firms with a greater number of management changes are more likely to devalue their fixed assets.

3. RESEARCH DESIGN

3.1 Sample

The original sample consists of 170 firms listed on the New Zealand Stock Exchange (NZSE) for the financial years 1999 to 2003. This sample will be further refined by a number of exclusion criteria, as follows. First, previous studies of asset revaluation generally exclude companies in certain industries, such as banking, finance, and investment (Brown et al., 1992; Whittred and Chan, 1992). Generally, these companies do not need many fixed tangible assets to support their major business activities. The asset and capital structures of these companies are fundamentally different from industrials, and they may be regulated by industry-specific regulations which could potentially affect their asset revaluation policy (Whittred and Chan, 1992). Second, companies whose annual reports are not available in the data source are excluded from the sample. Third, new companies that provided only one year's annual report during the five review years are also excluded, as no comparison can be done for their revaluation behaviour in other years. The sample selection process is summarised as follows:

Original NZSE Listed Companies		170
Less: Bank, Investment, Finance	35	
Less: No Annual Report Available	16	
Less: Only One Year Report's Available	14	65
Final Adjusted Sample Companies		105

Thus, 105 firms are included in the sample. Over the five financial years from 1999 to 2003, a total of 411 company-years were collected. A single company-year is treated as one case in the study. The group classification as non-revaluer and devaluer during 1999 to 2003 is shown in Table 1.

TABLE 1
GROUP CLASSIFICATION

Year	Non-Revaluer	Devaluer	Total (cases)
1999	60	7	67
2000	65	9	74
2001	80	6	86
2002	87	6	93
2003	85	6	102
Total	377	34	411

Firms' annual reports are sourced from the Web site of Datex Services Ltd. (http://www.datex.co.nz). That Web site's archives provide electronic versions of the previous five years' annual reports of currently listed New Zealand companies since the 1999 financial year. Information on management changes is collected from the New Zealand Company Register.

3.2 Measurement of the Variables

The dependent variable is the management's decision to devalue fixed assets in any of the years under review. The word devaluation is used interchangeably with downward revaluation. Firms disclose their revaluation (upward and downward) activities in the notes of financial reports, with the net amount of revaluation recognised in asset revaluation reserve in the statements of movement in equity. The dependent variable is represented by D_N. The variable has two possible values. In any single review year, if the firm did not revalue assets (N), the value will be 0, and for firms that had a downward revaluation (D), the value will be 1.

3.2.1 Independent Variables

The independent variables for downward valuation are the capacity to devalue fixed assets, declining financial performance and management changes.

Capacity to devalue

The proxy for the capacity to devalue fixed assets is represented by firms' leverage level. The leverage level is measured by the ratio of total liabilities to total tangible assets (DEBT) prior to the revaluation adjustment. This ratio has been found as one of the commonly used ratios in debt contracts to limit the borrowing ability of a firm (Whittred and Zimmer, 1986; Emanuel, 1989; Law et al., 1993). Intangible assets are excluded from the calculation because they have no collateral value for the debts (Brown et al., 1992).

Declining financial performance

The decline in financial performance is captured by the change in return on total assets (ROA) over two years. Return is measured as the net profit before interest, tax, and other extraordinary items, as these items would bias the assessment of a firm's ability in generating profit from normal business routines. DEBT and ROA measures were used in the Cotter et al. (1998) study.

Management changes

Cotter et al. (1998) measured the management changes as the number of director, chief executive officer, and managing director changes in a sample year scaled by the total number of directors on the board. The term "changes" was not well explained in their study. Moore (1973) suggested that a management change should be deemed to have taken place if there has been changes involving top management positions, or managers described themselves as "new management." The latter is a rather ambiguous

concept for measurement purposes. Therefore, in this study, the net change in management (MGMT) is defined as the number of newly appointed directors to the board or the appointment of a new CEO in the review year. The data for this variable were primarily obtained from the New Zealand Company Register by comparing appointments between years. Some missing data are complemented by information in Directory or Board of Directors obtained from the Datex database.

The summary of the measurement of the variables is shown below.

Dependent Variable	Measured as	Represented by
Revaluation Decision	0, if no revaluation; 1, if downward revaluation	D_N

Independent Variables	Measured as	Represented by	Expected sign of relationship
Capacity to devalue	Total debts/Total tangible assets (before the revaluation adjustment)	DEBT	−
Declining financial performance	Change in profit before interest and tax over two years/Total assets	ROA	−
Management changes	Number of new CEO and director in review year /Number of board and CEO	MGMT	+

Table 2 presents the descriptive statistics of the independent variables.

TABLE 2
DESCRIPTIVE STATISTICS
(Pooled data from 1999 -2003)

Variable	N	Mean	Std. Deviation	First Quartile	Median	Third Quartile
DEBT	411	.5173	.4035	.2973	.4831	.6472
ROA	385	-.0016	.6135	-.0500	.0000	.0400
MGMT	411	.0811	.1509	.0000	.0000	.1400

DEBT is the leverage level that is measured by the ratio of total liabilities to total tangible assets prior to the revaluation adjustment. ROA is the return on total assets. The change in ROA over two years captures the decline in financial performance. Return is measured as the net profit before interest, tax, and other extraordinary items. MGMT is the net change in management and is defined as the number of newly appointed directors to the board or the appointment of a new CEO in the review year.

The correlation matrix of coefficients is presented in Table 3 on next page.

TABLE 3
SPEARMAN CORRELATION COEFFICIENTS
(Pooled data from 1999 -2003)

Variable	DEBT	ROA	MGMT
DEBT	1.000		
ROA	-.072	1.000	
Significant (2-tailed)	.156		
MGMT	.056	.013	1.000
Significant (2-tailed)	.256	.794	

It appears that none of the correlation coefficients is significant at the 0.05 level.

3.3 Statistical Tests

Both univariate and multivariate methods are used to test the hypotheses developed above. Univariate methods evaluate the relationships between the individual explanatory variables and the dependent variable. Because most of the variables are not normally distributed, the Mann-Whitney U test was used. The Mann-Whitney U test is used to test for differences in the explanatory variables between two different groups of non-revaluers and devaluers.

A logistic regression is used for the multivariate test. Logistic regression does not rely on assumptions of normality, and it is particularly useful for situations in which the dependent variable is a dichotomous variable.

The general form of the logistic regression model is as follows:

$$Y_i = \alpha_0 + \alpha_1 DEBT + \alpha_2 ROA + \alpha_3 MGMT + \varepsilon$$

Where:
DEBT: Leverage level
ROA: Change in return on total assets
MGMT: Net change in management
i = 0, 1 (0, if no revaluation was made; 1 if downward revaluation was made)
ε is an error term

The subscripts for firm j and for time t are omitted here for ease of exposition. Y represents the effect of accounting choice: zero if the firm chooses not to revalue its fixed assets (i.e., non-revaluer) and one if the firm chooses to revalue downward its fixed assets (i.e., devaluer).

4. RESULTS

4.1 Univariate Results

The Mann-Whitney U test is performed on the pooled sample. Brown et al. (1992) suggested that the estimation precision is improved by the increase in the pooled sample size, and since observations are pooled across a relatively short period (five years for this study), the non-stationary problem should not be serious for the pooling method. Anderson and Zimmer (1992) asserted that accounting choices are temporally independent in each year, and therefore the pooling method is reliable for research on accounting choice. The Mann-Whitney U test is also carried out on an individual year to provide comparison against the pooling results. Tests on year-to-year samples also provide consistent results with the pooled. For brevity, only pooled results are discussed here.

TABLE 4

UNIVARIATE TEST: MANN-WHITNEY U TEST

(Pooled data from 1999 -2003)

Variable	D_N*	N	Mean Rank	Test Statistics Significance (2-tailed)
DEBT	0	377	203.67	-1.324
	1	34	231.84	.185
	Total	411		
ROA	0	352	193.90	-.522
	1	33	183.35	.602
	Total	385		
MGMT	0	377	207.16	-.788
	1	34	193.16	.431
	Total	411		

* D_N = 0 No revaluation made by firms

  D_N = 1 Downward revaluation made by firms

Table 4 on previous page compares the results of the independent variables for non-revaluers and devaluers. None of the explanatory variables of the devaluation decision is found to be significant. The mean rank of ROA and MGMT for devaluers is lower than that of non-revaluers, but the difference is insignificant.

4.2 Multivariate Tests

The results of the logistic regression model for downward revaluation are shown in Table 5. They show that none of the three variables for devaluation was found to be significant. The results of multivariate tests are consistent with those obtained in univariate tests. However, it should be noted that the model's explanatory power is rather low as shown by the pseudo R^2 (Nagelkerke) of .6%.

5. DISCUSSION

5.1 Capacity to Devalue

There is no significant difference between the leverage level of non-revaluers and that of devaluers. Univariate tests indicated that devaluers tend to have a slightly higher leverage than non-revaluers (see Table 4). This could probably be explained by the reason that highly leveraged firms may suffer from deteriorating performance, and therefore their assets' value may decline. This will be further explained in section 5.2. Francis et al. (1996) argued that major debt holders might be involved in the firm's corporate governance processes, and they may force highly leveraged firms to write down overvalued assets, thus leaving little discretion for management to move the asset revaluation to periods of lower leverage.

In addition, most revaluations in New Zealand were undertaken regularly to comply with companies' revaluation policy (see Table 5 of Seng and Su, 2010). Therefore, in bad years managers of devaluer companies might not have any other choice but to write down the asset value.

TABLE 5

MULTIVARIATE TEST: LOGISTIC REGRESSION

Variable	Expected sign	Coefficient	Standard error	Wald-statistic	Significance level (2-tailed)
Constant	?	-2.468	.298	68.581	.000
DEBT	-	.317	.383	.685	.408
ROA	-	.004	.300	.000	.990
MGMT	+	-.875	1.364	.411	.521
Non-revaluer N =					377 (91.72%)
Revaluer N =					34 (8.28%)
Total N =					411
Test statistics					
-2 Log-likelihood					224.15
Chi-square					.621
Significance level					.431
% correctly classified					91.4%
Pseudo R^2 (Nagelkerke)					.6%

5.2   Declining Financial Performance

The average changes in ROA over two years for devaluers are lower than that of non-revaluers, but the difference is insignificant (see Table 5). Therefore, the hypothesis that devaluers tend to experience significantly lower performance is not supported by the results. This indicated that poor performance might not constitute a sufficient reason for firms to undertake devaluations.

5.3 Management Changes

The change in senior management was not found to drive the decision to devalue assets in this study. Again, this may be due to the firm's accounting policy and regularity of revaluation. If revaluer managers simply follow the required time interval of revaluation that was specified in a company's revaluation policy, then it leaves new managers little discretion over the timing of the downward asset revaluation.

6. CONCLUSIONS

This study examined the fixed asset devaluation behaviour of New Zealand companies during the period 1999 to 2003. It is hypothesized that downward revaluations are affected by companies' capacity to absorb write-downs, declining performance, and management changes.

The results did not support the three hypotheses and thus found no significant relationship between the explanatory variables and downward asset revaluation decisions. In conclusion, the study found no evidence of account manipulation related to fixed asset devaluations.

One of the limitations of this study is to consider the validity of the independent variables. These variables were used in previous studies for *all* asset write-downs while downward asset revaluation is only one form of them. As discussed earlier, devaluation is part of the revaluation practice, while asset impairment write-off is applied to non-revalued assets. In practice, the timing and valuation method of downward

asset revaluation may be subject to companies' revaluation policy; while the timing and amount of asset impairment write-off may generally depend on management's discretion. Therefore, although the management has discretion over both downward revaluation and asset impairment write-off, the degree of the discretion of these two activities is different. In addition, previous studies have used these variables to investigate the write-downs of *all* categories of assets on companies' balance sheets, while this study uses these variables to explain the devaluation of *fixed assets* only. Francis et al. (1996) analysed write-offs by type, and found that management incentives play little or no role in determining write-offs of inventory and plant, property, and equipment, but play a substantial role in explaining more discretionary items, such as goodwill write-offs and restructuring charges.

Future research may expand into revaluations of wider categories of assets. In addition to fixed assets revaluation, investments and intangible assets can be incorporated into the study to provide a whole picture of companies' current value reporting for assets. The comparison of revaluation behaviour among different asset groups may provide further insights into managerial motivations of making discretionary accounting choices.

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DYNAMIC GLOBAL MARKETING STRATEGY AND FIRM SURVIVAL: EVIDENCE FROM EXPORTING JEWELRY BUSINESSES IN THAILAND

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ABSTRACT

The objective of this research is to investigate the influence of dynamic global marketing strategy, namely, continuous innovation improvement concentration, flexible marketing channel focus, diversified customer behavioral learning, effective customer response orientation, and valuable marketing communication proactiveness on firm survival through customer participation efficiency, marketing advantage sustainability, market acceptance quality, marketing excellence, and marketing performance by using market munificence as the moderator. Additionally, executive vision for globalization, International entrepreneur culture, advance technology growth, and volatile competition forces are assumed to become the antecedents of dynamic global marketing strategy via the moderating effects of technology adaptation competency and international experience. The model testing is using the data collected from 154 exporting jewelry firms in Thailand by utilizing the resource advantage, dynamic capabilities and S-C-P paradigm to explain conceptual framework. The results of OLS regression show that the dynamic global marketing strategy has a positive influence on firm survival, customer participation efficiency, marketing advantage sustainability, market acceptance quality, marketing excellence, and marketing performance. Also, dynamic global marketing strategy antecedents have partial positive relationships with five dimensions of dynamic global marketing strategy. For moderating effects, technology adaptation competency, international experience, market munificence have a partial significant impact on the relationships. Both theoretical and managerial contributions are explicitly provided. Conclusion and suggestions for future research are presented accordingly.

Keywords: *Dynamic Global Marketing Strategy, Firm Survival, Customer Participation Efficiency, Marketing Advantage Sustainability, Market Acceptance Quality, Marketing Excellence, Marketing Performance, Executive Vision for Globalization, International Entrepreneur Culture, Advance Technology Growth, Volatile Competition Forces, Technology Adaptation Competency, International Experience, Market Munificence*

1. INTRODUCTION

Due to an increasing incorporation of the world's major economies, world trade, and the stepping forward of globalization, many organizations have become aware of the potential capability of gaining much income from the world market. Rapid advances in technology, increasing international trade and investment growing wealth across the globe, and a convergence of consumer tastes and preferences are convincing businesses to expand their globalization strategies and tactics (Javalgi and White, 2002). The intensification of competition on global scale has led to an increasing number of firms seeking opportunities in global markets to achieve their objectives, as well as to safeguard their market position so as to survive (Phromket and Ussahawanitchakit, 2009).

In the light of the significance of understanding exporting firms' operations, firms need to create and develop their strategies in dealing with changing organizational operations (Ussahawanitchakit, 2007).The success of a firm in a foreign market depends largely on the method that the company uses to venture into that market. Prior study argues that global marketing strategy plays a critical role in determining a firm's performance in the global market (Levitt, 1983; Porter, 1986; Zou and Cavusgil, 1996). It means that decisions on global marketing strategies will be an important issue for academic research and marketing practice. Accordingly, this research attempts to extend the literature by using dynamic capability paradigm. Dynamic capability explains why some firms gain more sustainable competitive advantage than others within dynamic markets. Teece et al., (1997) define dynamic capabilities as the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments.

Dynamic global marketing strategy is viewed as the degree to which a firm globalizes its marketing behavior in various countries through standardization of marketing activities, and the integration of

dynamic moves across the markets. The aim of the dynamic global marketing strategy is to enhance the firm's overall performance on a dynamic worldwide basis. This dynamic strategy enables the firm to anticipate, respond, and adapt to forces that are rapidly transforming the global marketplace (Douglas, 2000). This research focuses on dynamic global marketing strategy, which has five dimensions, namely continuous innovation improvement concentration, flexible marketing channel focus, diversified customer behavioral learning, effective customer response orientation and valuable marketing communication proactiveness.

The purposes of this research are, firstly, to examine the relationships among dynamic global marketing strategy (continuous innovation improvement concentration, flexible marketing channel focus, diversified customer behavioral learning, effective customer response orientation and valuable marketing communication proactiveness), customer participation efficiency, marketing advantage sustainability, market acceptance quality, marketing excellence, marketing performance and firm survival, secondly, to examine the effect of organizational antecedents (executive vision for globalization, international entrepreneurial culture, advanced technology growth, and volatile competition forces) on dynamic global marketing strategy. Finally, it is to test the moderating effects of technology adaptation competency, international experience and market munificence with in relationship in the model. In this study, the key research questions for the study are, firstly, how does dynamic global marketing strategy affect dynamic global marketing outcomes and firm survival? Secondly, how do antecedents (executive vision for globalization, international entrepreneurial culture, advanced technology growth, and volatile competition forces) affect dynamic global marketing strategy? Thirdly, how do technology adaptation competency and international experience moderate the relationships of antecedents and dynamic global marketing strategy? Fourthly, how does competitive munificence moderate the relationships among dynamic global marketing strategy and global marketing outcomes? Finally, how do innovation outcomes affect firm survival?

This research is organized as follows. In the next section, we review the relevant literature and develop the research statement. Then, we detail the methodology used to design the empirical study. Finally the results are presented and we conclude by discussing the findings, the contributions, and suggesting future research opportunities.

2. RELEVANT LITERATURE REVIEW AND RESEARCH HYPOTHESES

Relevant literature is developed for the conceptual framework shown in Figure 1 based on extant research. The framework depicts the impact of global marketing strategy on firm survival via customer participation efficiency, marketing advantage sustainability, market acceptance quality, marketing excellence, and marketing performance by using technology adaptation competency, international experience and competitive munificence as moderators.

The conceptual framework employed is derived from considerations of dynamic capabilities.
From the dynamic capabilities perspective, dynamic capabilities is defined as a firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments (Teece, Pisano, and Schuen, 1997). A firm's processes use resources by specifically processes to integrate, reconfigure, gain and release resources to match or even create market change (Eisenhardt and Martin, 2000). Many researchers find dynamic capabilities potentially powerful explanation for sustainable competitive advantage sources in dynamic environments (Teece and Pisano, 1994; Eisenhardt and Martin, 2000; Helfat and Peteraf, 2003; Dutta, Narasimhan and Rajiv, 2005). This research uses dynamic capabilities to explain the relationships among dynamic global marketing strategy, marketing outcomes and firm survival. Thereby, dynamic global marketing strategy as one of firm's capability can integrate, build, renew and reconfigure the core competencies in rapidly changing environment. For marketing outcomes, this research proposes customer participation efficiency, marketing advantage sustainability, market acceptance quality, marketing excellence and marketing performance which are explained by dynamic capabilities in terms of operational capability. Moreover, the R-A theory is a general theory of competition that describes the process of competition (Hunt and Morgan, 1995; Hunt, 1997). The assumption of R-A Theory is that resources of the firm leading to the best marketplace position where the firm can achieve superior performance (Hunt, 1997; Hunt and

Morgan, 1995; Hunt and Arnett, 2003). In this research, the R-A theory has been applied to dynamic global marketing strategy constructs of antecedents; executive vision for globalization and international entrepreneurial culture, and consequences; customer participation efficiency, marketing advantage sustainability, market acceptance quality, marketing excellence and marketing performance. In addition, Structure-conduct-performance (SCP) paradigm states that an industry structure is determined by circumstances. Thus, the competitive environment outcomes affect the firms and influence overall performance of the players in the industry (Bain, 1956; Mason, 1939). Dean, Brown and Chalres (1998) argue that change in external environment create different strategic and organizational formation. Hence, the SCP is chosen to explain how to the market structure or environment attempts affect firm marketing strategy, especially dynamic global marketing strategy, leading to marketing outcomes and firm survival (Farjoun, 2002).

Figure 1
Conceptual Model of Dynamic Global Marketing Strategy and Firm Survival
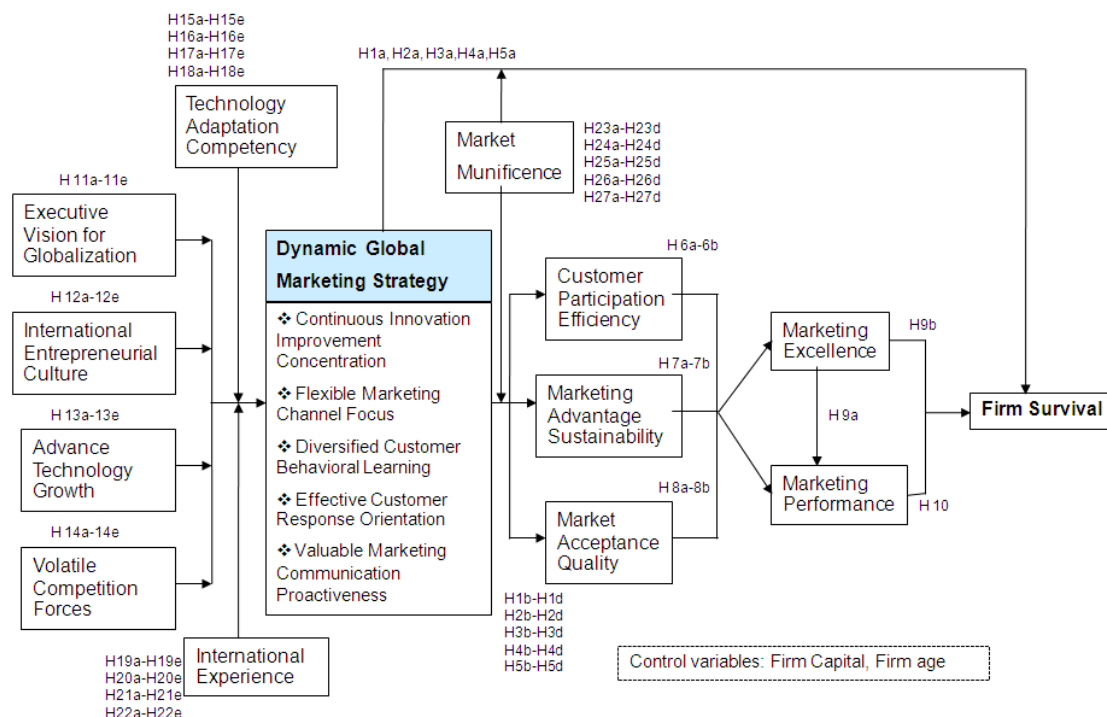
2.1 Dynamic global marketing strategy

Dynamic global marketing strategy is defined as activities to which a firm globalizes its marketing behavior in various countries through standardization of marketing activities and integration of dynamic moves across the markets (Cavusgil, Yeniyurt and Townsend, 2004; Zou and Cavusgil, 2002). Dynamic global marketing strategy is a key element of this research. The term "global marketing strategy" emphasizes the role of strategic management as the marketing activities coordinated and integrated across multiple country markets (Johansson, 2000). The term dynamic environment consists of changing surroundings in which the agent navigates. Grewal, Chandrashekaran and Dwyer (2008) indicate that the high level of dynamism offers great contingencies to organizations. A business creates its own unique marketing mix, which is directed specifically at their target market. There are several different factors that affect a firm's marketing plan by changing over time such as customer, supplier, competitor, technology and socio-political component (Duncun, 1972). In other words, dynamic global marketing strategy is viewed as strategy of using a common marketing plan and program for all countries in which a company operates, thus selling the product or services the same way everywhere in the world. Here, dynamic global marketing strategy consists of five dimensions enumerated as follows:

Continuous innovation improvement concentration. Continuous innovation improvement concentration refers to the ongoing intention to develop new creative idea and new ways of marketing themselves to potentially or to continuously existing customers (Dean and Bowen, 1994; Morgan, Clark and Gooner, 2002. According to Slater and Narver (1995), the most likely way in which service companies innovate is by developing new services or reformulating existing ones, creating new distribution channels and discovering new approaches for management. Also, the capability to innovate is an ability of the organization to adopt or implement new ideas, processes, or products successfully. Firms with greater capacity to innovate will be more successful in responding to their environments and developing new capabilities that lead to competitive advantage and superior performance (Hurley and Hult, 1998). The diffusion of innovations literature also confirms this view and suggests that firms must be innovative to gain a competitive edge in order to survive (Calantone, Cavusgil and Zhao, 2002). The study of Sheth and Parvatiyar (2001) proposes that the adoption of technology and emergence of an ideology-free world is a source of global competition. Furthermore, firms with continuous innovation improvement concentration tend to attain excellent marketing and are a leader in market resulting from the fact that firms have innovation to advance more over the rivals (Leede and Looise, 2005). Therefore, the hypothesis is proposed as below:

Hypothesis 1: The higher the continuous innovation improvement concentration is, the more likely that firms will gain greater (a) firm survival, (b) customer participation efficiency, (c) marketing advantage sustainability, and (d) market acceptance quality.

Flexible marketing channel focus. Flexible marketing channel focus refers to a set of rapid and adaptable practices or activities necessary to transfer the ownership of goods, and to move goods, from the point of production to the point of consumption and, as such, which consists of all the institutions and all the marketing activities (Bennett 1988; Zhang, Vonderembse, and Lim 2002). Organizations can achieve differentiation through their distribution channels. A marketing channel is a useful tool for management. Internet-based online technologies can dramatically reduce the cost of distribution, especially for products that can be digitized such as written material, music, and financial services. If reviewed products are made available to final customers, they can affect brand equity, product positioning, or customer service, thus, the channel of distribution can be crucial to successful global marketing. Consequently, channel managers seeking better and more coordinated global channel flowing by harnessing the power of the internet will need to pay special attention to its great potential (Rosenbloom and Larsen 2008). As revieweded above, the hypothesis is posited as follows:

Hypothesis 2: The higher the flexible marketing channel focus is, the more likely that firms will gain greater (a) firm survival, (b) customer participation efficiency, (c) marketing advantage sustainability, and (d) market acceptance quality.

Diversified customer behavioral learning. Diversified customer behavioral learning refers to an ability of firm to look for consciousness the difference in customer concerning requirement and expectation for creation response process in terms of product features and benefits (Jaworski et al., 2000; Li et al., 1999; Narver et al., 2004). The study of Li et al., (1999) show that customer learning is positively related to new product success. Likewise, Zahay and Griffin (2004) find that customer learning is associated to customer-based performance. Thus, if firms seek for information of customers and understand their differences, needs and expectation, they can respond to customers correctly by variety of products which increase competitive advantage (Ooncharoen and Ussahawanitchakit, 2009). Thus, it leads to the hypothesis proposed as below:

Hypothesis 3: The higher the diversified customer behavioral learning is, the more likely that firms will gain greater (a) firm survival, (b) customer participation efficiency, (c) marketing advantage sustainability, and (d) market acceptance quality.

Effective customer response orientation. Effective customer response orientation refers organization seeking and keeping in mind of all customer needs, wants, expectation, and then to get to support them (Johne, 1999). Daugherty, Sabath and Rogers (1992) found that customer responsiveness by quick response and speed is the delivery of positive effect user satisfaction. The work of Zahay and Griffin

(2004) suggests that firm that develops customer information system can increase customer-based performance and can move toward strategic excellence and increase business growth. In addition, Jadesadalug and Ussahawanitchakit (2009) show that the higher the effective customer response is, the more likely that firms will gain greater competent competitive advantage and greater corporate performance. In international marketing context, a number of studies have examined customer response across global markets as a factor affecting the ability of the marketing mix (Griffith et al., 2002; Throdosiou and Katsikeas, 2001). Thus, it leads to hypothesis proposed as follows:

Hypothesis 4: The higher the effective customer response orientation is, the more likely that firms will gain greater (a) firm survival, (b) customer participation efficiency, (c) marketing advantage sustainability, and (d) market acceptance quality.

Valuable marketing communication proactiveness. Valuable marketing communication proactiveness refers to a strategic process by communicating through different channels to produce one same result which consists of integrating different entities into working together to achieve a goal by producing and delivering a message to consumers with effective attitude (Kliatchko, 2008; Mendez, 2009). Continuous marketing communications can integrate all the communication factors inside and outside firm in which the brand represents itself through the multi-facets of communication with a consistent and preferable brand image (Tsai, 2005). The study of Tsai (2005) suggests that marketing communication as strategy can improve consumer awareness of the brand, increase consumer trial of brand and strengthen consumer recognition of product quality that, ultimately, provide consumer experience toward brand loyalty. Tuten and Urban's (2001) research confirmed the role of communication as a key factor of company achievement. Mohr and Spekman (1994) showed that when communication quality in supplier-customer relationships measured in terms of accurateness, timeliness, adequacy, and credibility is higher, the satisfaction with supplier-customer relationships is higher as well. Moreover, the interpersonal level identified that accuracy of communication was positively related with performance (Penley et al., 2009). Thus, the hypothesis is posited as follows:

Hypothesis 5: The higher the valuable marketing communication proactiveness is, the more likely that firms will gain greater (a) firm survival, (b) customer participation efficiency, (c) marketing advantage sustainability, and (d) market acceptance quality.

2.2 Customer Participation Efficiency
Customer participation efficiency can be defined as the specific behaviors, degree of consumer's effort and involvement, both mental and physical that relate to the production and delivery of a service (Cermak, File and Prince, 1994; Silpakit and fisk, 1985). Silpakit and Fisk (1985) have hypothesized that the more participation, the easier it is for customers to evaluate services. Youngdahl et al., (2003) explained that customer participation is service customer's satisfaction-seeking behaviors. In order to increase the likelihood of satisfactory service experience or to salvage failing service encounters, service customers expend significant effort through a variety of behaviors, before, during, and after encounters. An-Tien Hsieh et al., (2004) find that customer participation is positively related to service providers' perceived worked, which implies that it is inappropriate to decrease the number of service employees based on service design that includes customer participation. In addition, prior study concludes that customer satisfaction leads to marketing outcomes (Saekoo and Ussahawanitchakit, 2010) and market performance (Sansook and Ussahawanitchakit, 2009). Hence, it implies that customer participation efficiency is associated with marketing outcomes as well. As mentioned above, the hypothesis is, thus, posited as follows:

Hypothesis 6: The higher the customer participation efficiency is, the more likely that firms will gain greater (a) marketing excellence, and (b) marketing performance.

2.3 Marketing Advantage Sustainability
Marketing advantage sustainability is defined as an ability of firm to sustain and to coordinate the deployment of assets to achieve competition in terms of compare with competitor both in short and long term (Talke, 2007). Marketing advantage also concerns with new product offering high quality and appropriate prices, outstanding and up-to-date, new strange, unique identity, and reputation over

competitors (Thipsri and Ussahawanitchakit, 2009). Then, firm can be offering products to meet requirement of customer and as a consequence, it achieves satisfaction of customer through performance in the market. This implies that firm can create unique image for market offering, it is reflecting market differentiation advantage that obtains satisfaction of customers (Anderson, Fornell, and Lehmann, 1994) and ultimately, gaining superior performance (Thipsri and Ussahawanitchakit, 2009). So, from what discussed above, this study proposes the hypothesis as follows:

Hypothesis 7: The higher the marketing advantage sustainability is, the more likely that firms will gain greater (a) marketing excellence and (b) marketing performance.

2.4 Market Acceptance Quality
Market acceptance quality refers to the successful development and market enhancements to new products and services that respond to technological change, evolving industry standards or customer requirements (Chung and Holdsworth, 2009). Prior research shows that customer accepted derives from customer's perception about capability and social responsibility of the company (Brodie, Whittome and Brush, 2009). Several studies show that the benefits of a strong image and reputation of products and services can create market acceptance by increasing customer repurchases (Yoon, Guffey and Kijewski, 1993) promoting higher rate of customer retention (Preece, Fleisher and Toccacelli, 1995) and helping a firm survive (Shrivastava and Siomkos, 1989). Furthermore, the study of Chailom and Ussahawanitchakit (2009) asserts that customer acceptance is positively related to   E-commerce performance. Thus, this research proposes the following hypothesis:

Hypothesis 8: The higher the market acceptance quality is, the more likely that firms will gain greater (a) marketing excellence and (b) marketing performance.

2.5 Marketing Excellence
Marketing excellence refers to an ability of the firm to encompass superiority in understanding markets, making strategic choice, delivering value and monitoring value greater than the competitors (Jagersma, 2006). Smith (2007) asserts that a firm with excellent practice is addressed in terms of customer-need-oriented and places a premium on understanding what opportunities and threats arise from the external environment. In addition, Pieter (2006) argues that the marketing excellence at the value delivery is characterized by a concern with how the marketing mix creates value for the customer, rather than just selling the product. Stuart-Kregor (2006) conclude that the key drivers of company achieving true marketing excellence are related to levels of market performance. Thus, the firms are more likely to survive in business environment at that time such as growth rate of sales volume, market share, continual business growth etc (Eckert and West, 2008; Esteve-Perez and Manez-Castillejo, 2008). Thus, it leads to the hypothesis proposed as follows:

*Hypothesis 9: Marketing excellence has a positive relationship with (a) market performance and (b) firm surviva*l.

2.6 Marketing Performance
Marketing performance refers to a firm's perception about the outcomes that the firm can achieve the goal in terms of sales growth, profitability, market share, ability to introduce innovation, customer satisfaction, and customer acceptance (Mishra and Shan (2009). Townsend et al., (2004) find that global product standardization and global marketing structure drive the implementation of global product processes which are positively related to marketing performance. In addition, O'Donnell and Jeong (2000) show that global standardization is positively related to organizational performance in global market. Also, Zou and Cavusgil (2002) reveal that global marketing strategy is positively associated with firm performance. Thus, it leads to the hypothesis proposed as follows:

Hypothesis 10: Marketing performance has a positive relationship with firm survival.

2.7 Executive Vision for Globalization
Executive vision for globalization refers to an idealized goal or image which leaders create to achieve in the future that emphasizes to achieve organizational outcome from opportunity of globalization

(Ussahawanitchakit, Intakhan and Sumritsakun (2009); Jones, 2002). The study of Zou and Cavusgil (2002) asserts that globalization is positively related to global marketing strategy. In addition, the study of Cavusgil, Yeniyurt and Townsend (2004) shows that visionary leadership is the key driver to integrate the motives and facilitators of global companies. Likewise, Townsend et al., (2004) reveal that leadership's global orientation has a positive effect on the implement of a global marketing structure. Therefore, vision of leader can promote dynamic global marketing strategy to moving from current to future desirable state in response to rapid environment change. Hence, this research proposes that executive vision for globalization is associated with dynamic global marketing strategy. Thus, the hypothesis is proposed as follows:

Hypothesis 11: The higher the executive vision for globalization is, the more likely that firms will gain greater (a) continuous innovation improvement, (b) flexible marketing channel focus, (c) diversified customer behavioral learning, (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

2.8 International Entrepreneur Culture
International entrepreneur culture refers to a combination of innovative, proactive, and risk-seeking behavior that crosses or is compared across national borders and is intended to create value in business organizations (McDougall and Oviatt, 2000). McDougall (1989) and Bloodgood et al. (1996) found that international new ventures de-emphasize a distribution and marketing strategy. Bloodgood et al. (1996) found a positive and marginally significant relationship between international entrepreneurship and firm incomes. Oviatt and McDougall (1995) connected international entrepreneurship to market share, while Zahra et al., (2000) related international entrepreneurship to technological learning and acquisition of new knowledge. Firms with principal founders drawn from managerial parental backgrounds were significantly more likely to export than firms with other types of founders. Also, its consequences are associated with organizational survival, growth, and performance (Hitt et al., 2005). As mentioned above, international entrepreneurial culture tends to gain greater dynamic global marketing strategy. Therefore, the hypothesis is proposed as follows:

Hypothesis 12: The higher the international entrepreneurial culture is, the more likely that firms will gain greater (a) continuous innovation improvement, (b) flexiblemarketing channel focus, (c) diversified customer behavioral learning, (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

2.9 Advanced Technology Growth
Advanced Technology growth is defined as the skip advance and speed of forward change of technology associated with new technology products with an impact on firm operation procedures (Glazer and Weiss, 1993). Firms must face technology changes in the growth of technology enterprise from external organizations continued (Allred and Swan, 2004). Moreover, technological network is higher for status and degree of internationalization new firms that spend high with R&D (Zahra et al., 2000). Hence, the firms will scan the environment and then filter and consider novel technologies so as to suggest future actions. In addition, technological innovation is strongly supported global marketing (Chuebang and Ussahawanitchakit, 2009). Similarly, Sheth and Parvatiyar (1995) propose that technology advances is one of the key major forces on the determinants of global marketing practices. Based on our earlier discussion, the continuous technology growth helps to increase a firm's ability to increase global marketing strategy. Then, advance technology growth is a potential factor of global marketing strategy. This, then, leads to the hypothesis posited as follows:

Hypothesis 13: The higher the advance technology growth is, the more likely that firms will gain greater (a) continuous innovation improvement, (b) flexible marketing channel focus, (c) diversified customer behavioral learning, (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

2.10 Volatile Competition Forces
Volatile competition forces are defined as the power from unpredictability external events that may affect the competitive environment (Chuntarung and Ussahawanitchkit, 2010; Aldrich, 1979; Porter, 1985). The

study of Samiee and Roth (1992) proposes that firms in such volatile environments are more likely to rely on one or very few manufacturing facilities and operate globally by exporting a standard product. In global industries, many external forces such as the competitive pressure in the global market may speed rapidly a firm to adopt the global marketing strategy (Porter 1986). Also, the study of Zou and Cavusgil (2002) shows that integration of competitive moves is positively associated with global marketing strategies. In conclusion, under the conditions of high competitive volatility, firms must seek for the way to be a readiness with new opportunity such as global market strategy. Thus, the hypothesis is proposed as follows:

Hypothesis 14: The higher the volatile competition forces are, the more likely that firms will gain greater (a) continuous innovation improvement, (b) flexible marketing channel focus, (c) diversified customer behavioral learning, (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

2.11 Technology Adaptation Competency
Technology adaptation competency is defined as the capability of the firm to adopt and change information technology in business operations; emergence of an ideology-free world as a global competition (Hitt, Ireland and Hoskison (2005; Phillips and Wright, 2009). Technology-intensive firms may exploit opportunities in a more flexible way than firm depending on their capital (Casillas, and others, 2009). Moreover, the new technology is specialized to commercialize to improve performance if the complementary (Pandza and Holt, 2007). Therefore, marketers must recover their cost as soon as possible. It implies that in dynamic global marketing strategy, marketers have to introduce product almost concurrently all over the world as soon as possible by using technology as a major tool for develop market (Sheth and Parvatiyar, 2001). Hence, technology adaptation competency becomes a key success factor for entering global marketing strategy one country at any time and any where. Likewise, Osaki (2008) discusses that the success of global marketing strategy in the digital age is based on competency to adapt technology. Therefore, the hypotheses are proposed as follows:

Hypothesis 15: Technology adaptation competency positively moderates the relationships between the executive vision for globalization and (a) continuous innovation improvement, (b) flexible marketing channel focus, (c) diversified customer behavioral learning, (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

Hypothesis 16: Technology adaptation competence positively moderates the relationships between the international entrepreneurial culture and (a) continuous innovation improvement, (b) flexible marketing channel focus, (c) diversified customer behavioral learning, (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

Hypothesis 17: Technology adaptation competency positively moderates the relationships between the advance technology growth and (a) continuous innovation improvement, (b) flexible marketing channel focus, (c) diversified customer behavioral learning, (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

Hypothesis 18: Technology adaptation competency positively moderates the relationships between the volatile competition forces and (a) continuous innovation improvement, (b) flexible marketing channel focus, (c) diversified customer behavioral learning, (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

2.12 International Experience
International experience is composed of experience with transnational operations and in specific foreign markets and experience represents knowledge that could be turned into a capability (Luo, 2000). The experience gained from a foreign marketplace can be translated into knowledge that may be used to resolve problems or select alternative options that relate to develop the global manufacturing and marketing networks that are required for long-term success (Hsu and Arun, 2008). In addition,

international experience of firm when interacts with responsibilities to society in foreign markets of firm that detects errors, acts to correct, and create to achieve commercials (Salmones, Crespo and Bosque, 2005). Also, Dong, Zou and Taylor (2008) suggest that international experience is a key factor in explaining the degree of control in implementing global marketing strategy in MNCs. Many studies also conclude that international experience plays a critical role as a driver in firm's global expansion (Douglas and Craig, 1989; Cavusgil and Zou, 1994). Experienced international firms are more likely to identify strategic markets to enter, respond to changing global market environment (Hill, 1996). According to Zou and Cavusgil (2002), global marketing strategy is positively influenced by its international experience. Thus, it leads to the hypotheses proposed as follows:

Hypothesis 19: International experience positively moderates the relationships between the executive vision for globalization and (a) continuous innovation improvement, (b) flexible marketing channel focus, (c) diversified customer behavioral learning, (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

Hypothesis 20: International experience positively moderates the relationships between the international entrepreneurial culture and (a) continuous innovation improvement, (b) flexible marketing channel focus, (c) diversified customer behavioral learning, (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

Hypothesis 21: International experience positively moderates the relationships between the advance technology growth and (a) continuous innovation improvement, (b) flexible marketing channel focus, (c) diversified customer behavioral learning (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

Hypothesis 22: International experience positively moderates the relationships between the volatile competition forces and (a) continuous innovation improvement, (b) flexible marketing channel focus, (c) diversified customer behavioral learning (d) effective customer response orientation, and (e) valuable marketing communication proactiveness.

2.13 Market Munificence
Market munificence is defined as an ability or capacity of the environment to support sustained growth (McArthur and Nystrom, 1991). Munificence can measure both the extent to which the environment provides sufficient resources for firms and the degree of competition for resources (Dess and Beard, 1984). Grewal, Chandrashekaran and Dwyer (2008) indicate that munificence markets makes it feasible and beneficial for MNCs to adapt product offering and strategies to the unique needs of local environment; an emphasis on global efficiency as a strategic motive precludes the possibilities of local adaptations of both product offerings and marketing strategy. Previous research supports an interaction effect between munificence and strategy with regard to firm performance (Payne et al., 2009). Furthermore, the study of Porka and Ussahawanitchkit (2010) suggests that market munificence moderated the relationships between excellent service innovation and marketing outcomes. Similarly, firms in munificent markets are likely to make good decisions, perceive low market risks, raise the opportunity to acquire resources for increasing capabilities (Decarolis and Deeds, 1999; McEvily and Zaheer, 1999). Furthermore, Grewal et al., (2008) conclude that munificence is the environmental factors that positively influence on global strategies. Thus, it tends to explicitly moderate the relationships. Therefore, it leads to the hypotheses proposed as follows:

Hypothesis 23: Market munificence positively moderates the relationships between the continuous innovation improvement and (a) customer participation efficiency (b) marketing advantage sustainability (c) market acceptance quality, and (d) firm survival.

Hypothesis 24: Market munificence positively moderates the relationships between the flexible marketing channel focus and (a) customer participation efficiency (b) marketing advantage sustainability (c) market acceptance quality, and (d) firm survival.

Hypothesis 25: Market munificence positively moderates the relationships between the diversified customer behavioral learning and (a) customer participation efficiency (b) marketing advantage sustainability (c) market acceptance quality, and (d) firm survival.

Hypothesis 26: Market munificence positively moderates the relationships between the effective customer response orientation and (a) customer participation efficiency (b) marketing advantage sustainability (c) market acceptance quality, and (d) firm survival.

Hypothesis 27: Market munificence positively moderates the relationships between the valuable marketing communication proactiveness and (a) customer participation efficiency (b) marketing advantage sustainability (c) market acceptance quality, and (d) firm survival.

3. RESEARCH METHOD

3.1 Sample and Data Collection Procedure
Firms obtained data for sample from the database of Department of Export Promotion of Thailand. The survey instruments administrated to 925 jewelry firms. The key participant in this study is marketing directors, marketing managers or chief executive officers of each firm. They are conversant with overall strategic direction of their business and play key roles in the strategic decision-making process. With regard to the questionnaire mailing, 199 surveys were undelivered because they were no longer in business or had moved to unknown locations. Deducting the undelivered from the original 925 mailed, the valid mail was 726 surveys. In total, the mailing yields of 175 responses received. There were 21 unusable questionnaires due to relatively high portion of missing data making the total valid useable were 154. The effective response rate was approximately 20.10%. According to Aaker et al. (2001), the response rate greater than 20% is considered acceptable. Additionally, non-response bias was investigated by t-test, comparison of first and second wave, the results were not significant. Hence, it implied that nonresponse bias does not pose a significant problem for this study.

3.2 Variables
Research instrument was questionnaire developed by reviewing of the relevant literature. All constructs in the model were with multiple-item scales. Each of these variables was measured by five point - Likert scale ranging from 1(strongly disagree) to 5 (strongly agree).

For dependent Variable, *firm survival* is measured by stability, sustainable economic growth and long-term business. This construct is adapted from Persson (2004).

Dynamic global marketing strategy is measured by five dimensions as follows: *Continuous innovation improve concentration* is measured with the perception of new products or production process improvement by period of time in the market and sustainability. This construct is developed as a new scale including five-item scale. *Flexible marketing channel focus* is measured by firm being able to apply activities necessary to transfer the ownership of goods, and to move goods from the point of production to the point of consumption for all institutions and marketing activities. This construct is developed as a new scale including five-item scale. *Diversified customer behavioral learning* is measured by the perception which requires a different set of cognitive activities to learn and understand market, customer current and potential needs for new products that create high customer satisfaction. This construct is developed as a new scale including five-item scale. *Effective customer response orientation* is measured by the ability of firm to seek and keep in mind of customer needs and wants, expectation, and can support them. This construct is developed as a new scale including five-item scale. This construct is developed as a new scale including five-item scale. *Valuable marketing communication proactiveness* is measured by an ability of firm to introduce and motivate customer's needs in new products or new services and make customer desire to purchase the new product or new service comprising effective attitude. This construct is developed as a new scale including five-item scale.

Customer participation efficiency is measured by the degree of consumer's effort and involvement related to the production and delivery of a service. This construct is developed as a new scale including five-item scale.

Marketing Advantage Sustainability is measured by an ability of firm to that enables quickly and continuously achieves competition in terms of compare with competitor both in short and long term. This construct is developed as a new scale including five-item scale.

Market acceptance quality is measured by the quality of products and services, the recognized reputation increasing customer repurchases, higher rate of customer retention. This construct is developed as a new scale including five-item scale.

Marketing Excellence is measured by Firm is able to launch new strategy or new product more than rivals and tends to be the first mover in business. This construct is developed as a new scale including five-item scale.

Marketing Performance is measured by sales growth, profitability, market share, ability to introduce innovation, customer satisfaction, and customer acceptance. This construct is developed as a new scale including five-item scale.

Executive Vision for Globalization is measured by the Idealized goal focusing on an adjustment of strategy and policy to get better fit with globalization. This construct is developed as a new scale including five-item scale.

International Entrepreneur Culture is measured by firm expressing to initiate, risk taking, exploring new opportunities, and performing proactiveness action. This construct is developed as a new scale including five-item scale.

Advance technology growth is measured by the perceptions of forward changes in IT environment, innovation, and communication system. This construct is adapted from Konthong and Ussahawanitchakit (2010).

Volatile competition forces is measured by the unpredictability external events that may affect the competitive environment, number of competitors and difficult to predict of strategic moves. This construct is adapted from Chuntarung and Ussahawanitchakit (2010).

Technology adaptation competency is measured by the activities of adopted and changed technology in business operations; emergence of an ideology-free world as a global competition. This construct is developed as a new scale including five-item scale.

International experience is measured by firm continually exports all local markets, high skillful and expertise staffs who can respond to customers' needs and wants and social factors in the international markets efficiency. This construct is adapted from Kaleka and Berthom (2006).

Market munificence is measured by the extent to which the environment provides sufficient resources for firms. This construct is adapted from Tang (2008).

Control Variables consist of firm capital and firm age. Firm capital was measured by the money or asset on investment operation in organization (0 = 10,000,000 Baht or less than 10,000,000 Baht and 1 = more that 10,000,000 Baht). Firm age was measured by the number of year that a firm has been in operation (0 = Less than 10 years and 1 = more than ten years). Firm success may be influenced by firm capital and firm age because it tends to achieve superior performance (Ussahawanitchakit, 2007).

3.3 Methods

The validity of data in questionnaire was checked by factor analysis. That is used to test whether multi-item measures of each construct unidimensionality. One item of customer uncertainty is below cut-off then we removed from our analysis. After removing one item factor loading of each construct, the result presents a value higher than 0.5. All factors loading are 0.67-0.95 as being greater than the 0.4 cut-off and are statistical significant (Hair et al., 2006). That is, factor loading of each construct should not be less than 0.4. Reliability of the measurement was assessed by Cronbach Alpha coefficients. In the scale

reliability, Cronbach Alpha coefficients range from 0.71 to 0.95 as being greater than 0.7, therefore, above acceptable threshold (Nunnally and Bernstein, 1994). Table 1 below shows the results for both factor loadings and Cronbach Alpha for multiple-items scales used in this study.

TABLE 1
RESULT OF MEASURE VALIDATION

Items	Factor Loadings	Cronbach Alpha
Firm survival (FSV)	.929-.956	.958
Continuous innovation improve concentration (CII)	.695-.852	.862
Flexible marketing channel focus (FMC)	.809-.863	.909
Diversified customer behavioral learning (DCB)	.784-.885	.856
Effective customer response orientation (ECR)	.778-.896	.843
Valuable marketing communication proactiveness (VMC)	.759-.852	.868
Customer participation efficiency (CPE)	.643-.922	.745
Marketing Advantage Sustainability (MAS)	.708-.881	.812
Market acceptance quality (MAQ)	.849-.905	.854
Marketing Excellence (ME)	.790-.893	.800
Marketing Performance (MP)	.845-.933	.845
Executive Vision for Globalization (EVG)	.727-.836	.712
International Entrepreneur Culture (IEC)	.719-.913	.759
Technology adaptation competency (TAC)	.981-.981	.960
International experience (IEX)	.928-.961	.943
Advance technology growth (ATG)	.844-.941	.887
Volatile competition forces (VCF)	.959-.959	.912
Market munificence (MMU)	.842-.933	.858

3.4 Statistical Technique

All variables are the metric scales, thus the Ordinary Least Square (OLS) regression analysis is appropriate statistical technique to investigate the hypothesized associations and estimate coefficients affecting of the dynamic global marketing strategies, marketing outcomes and firm survival (Hair, Black, Babin, Anderson and Taltham, 2006). The established research models were presented as follows:

Equation 1: $CPE = \beta_{01} + \beta_1 Fc + \beta_2 Fa + \beta_3 CII + \beta_4 FMC + \beta_5 DCB + \beta_6 ECR + \beta_7 VMC + \beta_8 MMU +$

$$\beta_9 (CII*MMU) + \beta_{10} (FMC*MMU) + \beta_{11} (DCB*MMU) + \beta_{12} (ECR*MMU) +$$

$$\beta_{13} (VMC*MMU) + \beta_{14} (FSV*MMU) + \varepsilon$$

Equation 2: $MAS = \beta_{02} + \beta_{15} Fc + \beta_{16} Fa + \beta_{17} CII + \beta_{18} FMC + \beta_{19} DCB + \beta_{20} ECR + \beta_{21} VMC +$

$$\beta_{22} MMU + \beta_{23} (CII*MMU) + \beta_{24} (FMC*MMU) + \beta_{25} (DCB*MMU) +$$

$$\beta_{26} (ECR*MMU) + \beta_{27} (VMC*MMU) + \beta_{28} (FSV*MMU) + \varepsilon$$

Equation 3: $MAQ = \beta_{03} + \beta_{29} Fc + \beta_{30} Fa + \beta_{31} CII + \beta_{32} FMC + \beta_{33} DCB + \beta_{34} ECR + \beta_{35} VMC +$

$$\beta_{36} MMU + \beta_{37} (CII*MMU) + \beta_{38} (FMC*MMU) + \beta_{39} (DCB*MMU) +$$

$$\beta_{40} (ECR*MMU) + \beta_{41} (VMC*MMU) + \beta_{42} (FSV*MMU) + \varepsilon$$

Equation 4: $ME = \beta_{04} + \beta_{43} Fc + \beta_{44} Fa + \beta_{45} CPE + \beta_{46} MAS + \beta_{47} MAQ + \varepsilon$

Equation 5: $MP = \beta_{05} + \beta_{48} Fc + \beta_{49} Fa + \beta_{50} CPE + \beta_{51} MAS + \beta_{52} MAQ + \beta_{53} ME + \varepsilon$

Equation 6: $FSV = \beta_{06} + \beta_{54} Fc + \beta_{55} Fa + + \beta_{56} CII + \beta_{57} FMC + \beta_{58} DCB + \beta_{59} ECR + \beta_{60} VMC +$

$$\beta_{61} MMU + \beta_{62} (CII*MMU) + \beta_{63} (FMC*MMU) + \beta_{64} (DCB*MMU) +$$

$$\beta_{65} (ECR*MMU) + \beta_{66} (VMC*MMU) + \beta_{67} (FSV*MMU) + \beta_{68} ME + \beta_{69} MP + \varepsilon$$

Equation 7: $CII = \beta_{07} + \beta_{70} Fc + \beta_{71} Fa + \beta_{72} EVG + \beta_{73} IEC + \beta_{74} ATG + \beta_{75} VCF + \beta_{76} TAC +$

$$\beta_{77}\ (EVG^*TAC) + \beta_{78}\ (IEC^*TAC) + \beta_{79}\ (ATG^*TAC) + \beta_{80}\ (VCF^*TAC) +$$

$$\beta_{81}IEX + \beta_{82}\ (EVG^*IEX) + \beta_{83}\ (IEC^*IEX) + \beta_{84}\ (ATG^*IEX) + \beta_{85}\ (VCF^*IEX) + \varepsilon$$

Equation 8: $FMC = \beta_{08} + \beta_{86}Fc + \beta_{87}Fa + \beta_{88}EVG + \beta_{89}IEC + \beta_{90}ATG + \beta_{91}VCF + \beta_{92}TAC +$

$$\beta_{93}\ (EVG^*TAC) + \beta_{94}\ (IEC^*TAC) + \beta_{95}\ (ATG^*TAC) + \beta_{96}\ (VCF^*TAC) +$$

$$\beta_{97}IEX + \beta_{98}\ (EVG^*IEX) + \beta_{99}\ (IEC^*IEX) + \beta_{100}\ (ATG^*IEX) +$$

$$\beta_{101}\ (VCF^*IEX) + \varepsilon$$

Equation 9: $DCB = \beta_{09} + \beta_{102}Fc + \beta_{103}Fa + \beta_{104}EVG + \beta_{105}IEC + \beta_{106}ATG + \beta_{107}VCF +$

$$\beta_{108}TAC + \beta_{109}\ (EVG^*TAC) + \beta_{110}\ (IEC^*TAC) + \beta_{111}\ (ATG^*TAC) +$$

$$\beta_{112}\ (VCF^*TAC) + \beta_{113}IEX + \beta_{114}\ (EVG^*IEX) + \beta_{115}\ (IEC^*IEX) +$$

$$\beta_{116}\ (ATG^*IEX) + \beta_{117}\ (VCF^*IEX) + \varepsilon$$

Equation 10: $ECR = \beta_{010} + \beta_{118}Fc + \beta_{119}Fa + \beta_{120}EVG + \beta_{121}IEC + \beta_{122}ATG + \beta_{123}VCF +$

$$\beta_{124}TAC + \beta_{125}\ (EVG^*TAC) + \beta_{126}\ (IEC^*TAC) + \beta_{127}\ (ATG^*TAC) +$$

$$\beta_{128}\ (VCF^*TAC) + \beta_{129}IEX + \beta_{130}\ (EVG^*IEX) + \beta_{131}\ (IEC^*IEX) +$$

$$\beta_{132}\ (ATG^*IEX) + \beta_{133}\ (VCF^*IEX) + \varepsilon$$

Equation 11: $VMC = \beta_{011} + \beta_{134}Fc + \beta_{135}Fa + \beta_{136}EVG + \beta_{137}IEC + \beta_{138}ATG + \beta_{139}VCF +$

$$\beta_{140}TAC + \beta_{141}\ (EVG^*TAC) + \beta_{142}\ (IEC^*TAC) + \beta_{143}\ (ATG^*TAC) +$$

$$\beta_{144}\ (VCF^*TAC) + \beta_{145}IEX + \beta_{146}\ (EVG^*IEX) + \beta_{147}\ (IEC^*IEX) +$$

$$\beta_{148}\ (ATG^*IEX) + \beta_{149}\ (VCF^*IEX) + \varepsilon$$

4. RESULTS AND DISCUSSION

TABLE 2
DESCRIPTIVE STATISTICS AND CORRELATION METRIX

	CII	FMC	DCB	ECR	VMC	FSV	CPE	MAS	MAQ	ME	MP	EVG	IEC	ATG	VCF	TAC	IEX	MMU
Mean	4.17	3.98	4.05	4.13	4.06	3.42	3.78	3.98	3.77	3.80	3.65	3.79	3.88	3.88	3.75	3.89	3.78	3.54
S.D.	.563	.812	.761	.778	.653	.874	.785	.665	.825	.701	.706	.559	.631	.726	.818	.789	.782	.723
CII	1																	
FMC	.66**																	
DCB	.41**	.76**																
ECR	.64**	.78**	.70**															
VMC	.71**	.71**	.60**	.73**														
FSV	.39**	.47**	.34**	.48**	.44**													
CPE	.47**	.69**	.58**	.71**	.57**	.48**												
MAS	.41**	.50**	.40**	.62**	.54**	.70**	.67**											
MAQ	.63**	.58**	.44**	.65**	.69**	.73**	.64**	.68**										
ME	.53**	.55**	.49**	.60**	.70**	.63**	.52**	.69**	.78**									
MP	.51**	.49**	.45**	.55**	.61**	.77**	.60**	.63**	.796**	.76**								
EVG	.49**	.44**	.40**	.55**	.61**	.46**	.51**	.55**	.56**	.58**	.60**							
IEC	.60**	.53**	.46**	.60**	.69**	.58**	.42**	.61**	.65**	.65**	.61**	.71**						
ATG	.52**	.30**	.24**	.39**	.50**	.48**	.16*	.43**	.54**	.48**	.39**	.58**	.75**					
VCF	.66**	.53**	.54**	.63**	.67**	.60**	.45**	.60**	.70**	.67**	.64**	.60**	.76**	.72**				
TAC	.63**	.49**	.39**	.65**	.64**	.59**	.38**	.60**	.63**	.61**	.57**	.70**	.77**	.75**	.76**			
IEX	.56**	.37**	.31**	.42**	.51**	.59**	.25**	.47**	.59**	.55**	.48**	.55**	.73**	.76**	.69**	.74**		
MMU	.43**	.37**	.25**	.32**	.47**	.64**	.32**	.50**	.59**	.55**	.55**	.52**	.54**	.54**	.48**	.64**	.74**	
FC	-.02	-.02	.00	.02	-.08	.25**	-.02	.12	.14	.08	.17*	-.04	.03	.10	.15	.14	.18*	.10
FA	-.08	-.12	-.14	-.10	-.03	-.25**	-.05	.00	-.07	-.01	-.13	.02	-.11	-.04	-.04	-.09	-.20*	-.18*

***p<0.01, **p<0.05,

In Table 2, the descriptive statistics and correlation matrix for all variables are presented. With respect to potential problems relating to multicollinearity, variance inflation factors (VIF) were used to provide information on the extent to which non-orthogonality among independent variables inflates standard errors. The VIFs range from 1.24 to 6.77, well below the cut-off value of 10 as recommended by Neter, Wasserman and Kutner (1985), meaning the independent variables are not correlated with each other. Therefore, there are no substantial multicollinearity problems encountered in this study.

TABLE 3
RESULTS OF REGRESSION ANALYSIS OF
DYNAMIC GLOBAL MARKETING STRATEGY [a]

Independent Variables	Dependent Variables							
	1 FSV	2 FSV	3 CPE	4 CPE	5 MAS	6 MAS	7 MAQ	8 MAQ
CII	.129 (.099)	-.060 (.103)	-.092 (.083)	-.066 (.096)	-.114 (.099)	-.321*** (.107)	.078 (.086)	.040 (.096)
FMC	.243* (.125)	.274** (.125)	.299*** (.106)	.305*** (.116)	.111 (.125)	.195 (.130)	-.190* (.109)	-.183 (.117)
DCB	-.118 (.108)	-.146 (.115)	.023 (.091)	.341*** (.108)	-.172 (.108)	-.139 (.120)	-.130 (.094)	-.130 (.108)
ECR	.112 (.117)	.306*** (.117)	.492*** (.099)	.240** (.109)	.555*** (.117)	.688*** (.122)	.451*** (.101)	.503*** (.110)
VMC	.268** (.107)	.005 (.100)	.093 (.091)	.094 (.093)	.250** (.107)	.044 (.104)	.537*** (.093)	.356*** (.094)
MMU		.483*** (.075)		-.047 (.070)		.335*** (.078)		.281*** (.070)
CII x MMU		-.028 (.104)		-.045 (.097)		-.069 (.108)		.176* (.097)
FMC x MMU		.087 (.120)		-.024 (.112)		.129 (.124)		.069 (.112)
DCB x MMU		-.031 (.103)		.553*** (.096)		.103 (.107)		.003 (.096)
ECR x MMU		.199* (.103)		-.375*** (.096)		.205* (.107)		.040 (.096)
VMC x MMU		-.131 (.099)		-.069 (.092)		-.168 (.103)		-.174* (.093)
FC	.469*** (.126)	-.163 (.116)	.129 (.109)	-.053 (.103)	.102 (.129)	.166 (.114)	.059 (.112)	.123 (.103)
FA	-.340*** (.129)	.315*** (.110)	.067 (.106)	-.071 (.108)	.276** (.126)	.222* (.120)	.233** (.109)	.177 (.108)
Adjusted R^2	.409	.577	.580	.632	. 411	.543	.556	.629

[a] *Beta coefficients with standard errors in parenthesis, ***p<0.01, **p<0.05, *p<0.10*

Table 3 presents the results of OLS regression of the relationships among dynamic global marketing strategies with five dimensions, namely, continuous innovation improvement concentration, flexible marketing channel focus, diversified customer behavioral learning, effective customer response orientation and valuable marketing communication proactiveness, customer participation efficiency, marketing advantage sustainability, market acceptance quality, and firm survival. Here, continuous innovation improvement concentration has no significant influence on all consequences. ***Therefore, Hypotheses 1a-1d are not supported.*** Consequently, flexible marketing channel focus has a positive effect on firm survival (b_{57} = 0.243, p < 0.10), and customer participation efficiency (b_4 = 0.299, p < 0.01). This finding is similar to that of Kickert (1985) which argued that flexibility can increase in variety, speed, and amount of responses as a reaction to uncertain future environmental development that creates a sustainable competitive advantage for the supply chain. Thus, ***Hypotheses 2a, and 2b are supported.*** Surprisingly, the result shows that flexible marketing channel focus is negatively significant with market acceptance quality (b_{32} = -0.190, p < 0.10). It implied that the negative effect may find in initial stage because the greater of flexibility channel occurs, the more firm adapts and changes standards to new competitive behavior in the market. In addition, diversified customer behavioral learning has no positive influence on marketing outcomes constructs. ***Thus, Hypotheses 3a – 3d are not supported.***

Interestingly, effective customer response orientation has a significant positive influence on customer participation (b_6 = 0.492, p < 0.01), efficiency, marketing advantage sustainability (b_{20} = 0.555, p < 0.01), and market acceptance quality (b_{34} = 0.451, p < 0.01). This finding indicates that firm with customer response focus can allow an organization to differentiate its products and services from competitors, sustain customer loyalty, extend the value to its customers   and gain greater performance (Magretta,1998). *Therefore, Hypotheses 4b, 4c, and 4d are supported.* Moreover, valuable marketing communication has a significant positive association with firm survival (b_{60} = 0.268, p < 0.05), marketing advantage sustainability (b_{21} = 0.250, p < 0.05), and market acceptance quality (b_{35} = 0.537, p < 0.01). This finding is consistent with Tuten and Urban (2001) who argues that market communication capability is a set of abilities and knowledge related to communication that enables a firm to introduce and motivate customer's needs in new products or new services and make customer desire to purchase the new products or new services. Therefore, *Hypotheses 5a, 5c and 5d are supported.*

For the control variables, firm capital has a significant positive influence on firm survival (b_{54} = 0.469, p < 0.01), efficiency, marketing advantage sustainability (b_{15} = 0.267, p < 0.05), and market acceptance quality (b_{29} = 0.233, p < 0.05) while firm age has a significant negative influence on firm survival (b_{55} = -0.340, p < 0.01).

Accordingly, Market munificence is added as a moderator in the relationships as shown in table 3. The results show that the relationships between continuous innovation improvement concentration and market acceptance quality are significant positively moderated by market munificence (b_{37} = 0.176, p < 0.10) whereas other relations have no significant effect on the relationships. *Therefore, Hypothesis is 23d is supported but Hypotheses 23a-23d are not.* It indicates that the relationship between continuous innovation improvement and market acceptance quality increase when market munificence is high. Next, flexible marketing channel focus has no significant relationships with moderating effect of market munificence, thus *Hypotheses 24a-24d are not supported*. However, the result reveals that market munificence moderates the relationships between diversified customer behavioral learning and customer participation efficiency (b_{11} = 0.553, p < 0.01) but shows no effect with other relationships. *Thus, Hypothesis 25b is supported whereas hypotheses 25a, 25c, 25d are not.* Interestingly, market munificence positively moderates the relationships between effective customer response orientation and firm survival (b_{65} = 0.199, p < 0.10), and marketing advantage sustainability (b_{26} = 0.205, p < 0.10) but shows no impact with market acceptance quality. *Thus, Hypotheses 26b and 26c are supported.* Surprisingly, the relationships between effective customer response orientation and customer participation efficiency is significant negatively moderated by market munificence (b_{12} = -0.375, p < 0.01). *Therefore, Hypotheses 26a and 26b are not supported.* In addition, with the moderating effect of market munificence, the relationships between valuable marketing communication proactiveness is negatively related to market acceptance quality (b_{41} = -0.174, p < 0.10) while there is no impact on other relationships. It explains that when market munificence is high, the negative effect between valuable marketing communication proactiveness and market acceptance quality is stronger than it is in less market munificence. *Therefore, Hypotheses 27a-27d are not supported.*

Table 4 reports the results of the relationship among customer participation efficiency, marketing advantage sustainability, market acceptance quality, marketing excellence, marketing performance and firm survival. The findings show that customer participation efficiency has a significant positive influence on market performance (b_{50} = 0.204, p < 0.05). *Therefore, Hypothesis 6b is supported whereas Hypothesis 6a is not.* However, marketing advantage sustainability has no significant association with both market excellence and market performance. *Hence, Hypotheses 7a, and 7b are not supported.* In contrast, market acceptance quality has a significant positive influence on market excellence (b_{47} = 0.713, p < 0.01) and market performance (b_{52} = 0.577, p < 0.01). *Thus, Hypotheses 8a and 8b are supported.* Furthermore, market excellence has a positive relationship with marketing performance (b_{53} = 0.682, p < 0.01) and firm survival (b_{68} = 0.212, p < 0.01). This finding was similar to Jirawuttinunt and Ussahawanitchakit (2011) who found that marketing excellence is positively related to marketing performance. *Hence, Hypotheses 9a and 9b are supported*. In addition, market performance is positively related to firm survival (b_{69} = 0.606, p < 0.01). This evidence suggests that firms with excellent marketing tend to gain sustainable marketing performance (Charpavang and Ussahawanitchakit, 2010). *Therefore, Hypothesis 10 is supported.*

TABLE 4
RESULTS OF REGRESSION ANALYSIS OF CONSEQUENCES[a]

Independent Variables	Independent Variables			
	9 ME	10 MP	11 MP	12 FSV
Customer participation efficiency (CPE)	.112 (.068)	.204** (.079)		
Marketing Advantage Sustainability (MAS)	.012 (.089)	-.021 (.103)		
Market acceptance quality (MAQ)	.713*** (.082)	.577*** (.096)		
Marketing Excellence (ME)			.682*** (.059)	
Marketing Excellence (ME)				.212*** (.067)
Marketing Performance (MP)				.606*** (.603)
Firm Capital (FC)	.029 (.100)	.087 (.109)	.102** (.117)	.251 (.096)
Firm Age (FA)	-.097** (.101)	.119 (.116)	-.199* (.119)	-.250** (.099)
Adjusted R^2	.628	.505	.482	.652

[a]*Beta coefficients with standard errors in parenthesis, ***p<0.01, **p<0.05, *p<0.10*

Next, Table 5 presents the result of the relationship of all antecedents (executive vision for globalization, international entrepreneurial culture, advanced technology growth, and volatile competition forces) and five dimensions of dynamic global marketing strategy. The results shows that executive vision for globalization has a positive relationship with diversified customer behavioral learning (b_{104} = 0.260, p < 0.05), effective customer response orientation (b_{120} = 0.196, p < 0.05) and valuable marketing communication proactiveness (b_{136} = 0.188, p < 0.05). **Therefore, Hypotheses 11c, 11d, and 11e are supported.** In addition, the findings reveal that international entrepreneur culture has a significant positive association with only valuable marketing communication proactiveness (b_{137} = 0.361, p < 0.01) but finds no effect with other relationships. **Thus, Hypothesis 12e is supported.**

Furthermore, advance technology growth has a positive significant relationship with continuous innovation improve concentration (b_{74} = 0.436, p < 0.01), flexible marketing channel focus (b_{90} = 0.315, p < 0.05), effective customer response orientation (b_{122} = 0.553,
p < 0.01), and valuable marketing communication proactiveness (b_{138} = 0.288, p < 0.01). **Therefore, Hypotheses 13a, 13b, 13d, and 13e are supported but Hypothesis 13e is not.** Moreover, volatile competition forces has a positive relationship with continuous improvement concentration (b_{75} = 0.194, p < 0.05). **Thus, Hypothesis 14a is supported whereas other relationships are not.**

Surprisingly, with technology adaptation competency as a moderator shows the contrast results of the research. Volatile competition forces has a negative effect on continuous innovation improve concentration (b_{123} = -0.178, p < .10) and effective customer response orientation (b_{80} = -0.178, p < 0.10). These results indicate that a number of competitors in market increase while competitors can imitate product or service very quickly providing very short life cycle of products and services into difficult market leaders (Chuntarung and Ussahawanitchkit, 2010). **Therefore, Hypotheses 14b and14d are not supported.**

In addition, Table 5 summarizes the interaction effects of technology adaptation competency as moderator, the results show that technology adaptation competency moderates the relationships among international entrepreneur culture and flexible marketing channel focus (b_{94} = 0.664, p < 0.01), diversified customer behavioral learning (b_{110} = 0.723, p < 0.01), effective customer response orientation (b_{126} = 0.652, p < 0.01), and valuable marketing communication proactiveness (b_{142} = 0.474, p < 0.01). **Therefore, Hypotheses 16b, 16c, 16d and 16e are supported.** In addition, technology adaptation competency positively moderates the relationships among volatile competition forces and continuous

innovation improve concentration (b_{74} = 0.618, p < 0.01), flexible marketing channel focus (b_{90} = 0.582, p < 0.01), and effective customer response orientation (b_{128} = 0.416, p < 0.05). ***Therefore, Hypotheses 18a, 18b, 18c and 18d are supported.***

Furthermore, international experience is added as moderator. The finding shows that international experience moderates the positive relationship between international entrepreneur culture and effective customer response orientation (b_{131} = 0.260, p < 0.05). ***Therefore, Hypothesis 20d is supported.*** Also, with adding international experience as moderator, advanced technology growth increases the relationships between advance technology growth and effective customer response orientation (b_{132} = 0.260, p < 0.05). ***Hence, Hypothesis 21d is supported.*** Likewise, volatile competition forces has a positive relationship with continuous improvement concentration (b_{80} = 0.618, p < 0.01) and flexible marketing channel focus (b_{96} = 0.582, p < 0.01) by the moderating effect of international experience. ***Thus, Hypotheses 22a and 22b are supported.***

Surprisingly, the findings reveal that international experience as a moderator has a negative significance effect between international entrepreneur culture and continuous improvement concentration (b_{83} = -0.260, p < 0.05) and flexible marketing channel focus (b_{99} = -0.664, p < 0.01). ***Therefore, Hypotheses 20a and 20b are not supported.*** It indicates that if international experience is high, firm may face with a negative effect between international entrepreneur culture and continuous improvement concentration and flexible marketing channel focus is stronger than it is in less international experience which is similar to Chuntarung and Ussahawanitchakit (2010) who find that international experience may have a negative moderating effect in the relationship of corporate eminence and export performance.

5. CONTRIBUTIONS AND DIRECTIONS FOR FUTURE RESEARCH

5.1 Theoretical Contribution

This study integrated three theories to explain dynamic global marketing strategy conceptual model. Three theories consist of dynamic capability, the R-A theory, and S-C-P Paradigm. According to the study, each employed theory could clearly explain the conceptual model. First, dynamic capability explained that firm was underlying described the relationships among each dynamic global marketing strategy and firm survival. Second, the R-A theory explained the relationship among dynamic global marketing strategy dimensions and the consequences. Third, S-C-P- Paradigm explained the external environments affected the relationships among studied variables. According to the results, this research is intended to provide a clearer understanding of the relationships among dynamic global marketing strategy on firm survival through customer participation efficiency, marketing advantage sustainability, market acceptance quality, marketing excellence, and marketing performance. Dynamic global marketing strategy consists of continuous innovation improvement concentration, flexible marketing channel focus, diversified customer behavioral learning, effective customer response orientation and valuable marketing communication proactiveness. It provides unique theoretical contributions expanding on previous knowledge and literature of dynamic global marketing customer participation efficiency, marketing advantage sustainability, market acceptance quality, marketing excellence, marketing performance and firm survival. According to the results of this study, the need for further research is apparent. Both continuous innovation improvement concentration and diversified customer behavioral learning have no associations with customer participation efficiency, marketing advantage sustainability and market acceptance quality. Also, marketing advantage sustainability has no relationships with marketing excellence and marketing performance. Then, future research is needed to conceptualize the measurement of continuous innovation improvement concentration, diversified customer behavioral learning and marketing advantage sustainability that does not have an effect on the relationships.

5.2 Managerial Contribution

This study provided CEO many practices under the globalization context. With global marketing strategy, a firm should composed of at least four dimensions, namely, continuous innovation improvement concentration, flexible marketing channel focus, diversified customer behavioral learning, effective customer response orientation and valuable marketing communication proactiveness. Moreover, firms should understand, manage, and utilize dynamic global marketing strategy to provide marketing

excellence and marketing performance. Also, both marketing excellence and marketing performance influence firm survival. The executives must put more emphasis on flexible marketing channel focus, effective customer response orientation and valuable marketing communication proactiveness than on other variations. They should clearly understand and exploit them within the organization in addition to expanding other strategies to include or graduate to an advanced business operations in order to continuously maintain and increase the levels of business excellence, corporate performance, competitive advantage, organizational growth, and sustainability. To maximize the benefits of dynamic global marketing strategy, executives should provide other necessary resources to support their effectiveness and create new opportunities in competitive markets and environments.

5.3 Limitation and Future Directions for Research
The limitation of this research concerning with the sample is drawn from exporting jewelry business in Thailand. Since organization cultural differences may be influenced by cultural difference among other industries, hence future research is needed to collect data from other businesses to understand more fully the nature of dynamic global marketing strategy. Also, the limitation concerning with sample size may affect the results. Although it can be accepted, the larger sample size may make the result distinct. Future research should collect data from larger population and/or a comparative population in order to verify the generalizability of the study and increase the level of reliability. Finally, the cross-sectional nature of this research does not allow examining the intriguing issue absolutely. Related dynamic environment changes over time, thus, using longitudinal designs should result in a more comprehensive understanding in further research.

6. CONCLUSION

Nowadays, the exporting has become a key driver the firms' performance, success and sustainability. The objective of this study is to examine the effects of dynamic global marketing strategy on firm survival of exporting jewelry businesses in Thailand via customer participation efficiency, marketing advantage sustainability and market acceptance quality to marketing excellence and marketing performance as mediators. Dynamic global marketing strategy includes continuous innovation improvement concentration, flexible marketing channel focus, diversified customer behavioral learning, effective customer response orientation and valuable marketing communication proactiveness. Here, 154 exporting jewelry businesses in Thailand were chosen as the sample of the study. The results show that the relationships between dynamic global marketing strategy and firm survival have significant positive impact on customer participation efficiency, marketing advantage sustainability and market acceptance quality to marketing excellence and marketing performance. Likewise, the mediator has a positive effect to firm survival. The antecedent variables including executive vision for globalization, international entrepreneur culture, advance technology growth, volatile competition force relationships to dynamic global marketing strategy under the two moderators namely technology adaptation competency and international experience. Similarly market munificence does not moderate between dynamic global marketing strategy and consequences. This study also contributes to the understanding on the role of marketing in the strategy dialogue. For practitioners, the results of the study provide a feasible path for developing competitive advantage in complex environment. In addition to its empirical contribution, it is hoped that this research will focus the attention of researchers and managers on the crucial issues that dynamic global marketing strategy plays in developing market-driven capabilities and shaping the firm's competitive advantages and survival.

TABLE 5
RESULTS OF REGRESSION ANALYSIS OF ANTECEDENTS[a]

Independent Variables	Dependent Variables														
	13 CII	14 CII	15 CII	16 FMC	17 FMC	18 FMC	19 DCB	20 DCB	21 CDB	22 ECR	23 ECR	24 ECR	25 VMC	26 VMC	27 VMC
FC	-.218 (.127)	-.171 (.114)	-.278*** (.147)	-.119 (.117)	-.105 (.117)	-.192 (.139)	-.007 (.153)	.051 (.130)	-.065 (.144)	-.028 (.128)	-.064 (.108)	-.133 (.118)	-.250 (.119)	-.238** (.112)	-.307*** (.114)
FA	.002 (.128)	.039 (.116)	-.002 (.122)	-.188 (.148)	-.158 (.119)	-.181 (.142)	-.280 (.154)	-.249* (.32)	-.323*** (.147)	-.149 (.129)	-.151 (.110)	-.196 (.120)	.021 (.120)	.026 (.114)	-.025 (.117)
EVG	.002 (.091)	.102 (.083)	.024 (.089)	.163 (.106)	.020 (.085)	.208** (.103)	.260* (.110)	.118 (.095)	.228** (.107)	.196** (.092)	.125 (.079)	.249*** (.087)	.188** (.086)	.116 (.082)	.184*** (.085)
IEC	.108 (.112)	.161 (.112)	-.195 (.129)	.122 (.130)	.363 (.115)	-.268* (.149)	.144 (.135)	.434*** (.128)	-.071 (.155)	.107 (.112)	.309** (.107)	-.154 (.127)	.361** (.105)	.543*** (.110)	.211* (.123)
ATG	.436*** (.115)	.464*** (.107)	.359*** (.119)	.315** (.134)	.337*** (.110)	.253* (.137)	.144 (.139)	.237* (.122)	-.051 (.142)	.553*** (.116)	.520*** (.102)	.459*** (.117)	.288*** (.108)	.322** (.106)	.144 (.113)
VCF	.194*** (.102)	.185* (.098)	.299** (.121)	-.048 (.118)	.030 (.100)	.130 (.139)	-.078 (.123)	-.001 (.112)	-.120 (.145)	-.178* (.103)	-.111 (.093)	-.132 (.119)	-.053 (.096)	.009 (.097)	-.038 (.115)
TCA		.053 (.107)		-.366*** (.110)				.419** (.122)			-.265** (.102)			-.252** (.106)	
EVG*TCA		-.010 (.085)		-.268*** (.087)				-.048 (.097)			-.357*** (.081)			-.116 (.084)	
IEC*TCA		.165 (.134)		.664*** (.137)				.723*** (.153)			.652*** (.128)			.474*** (.132)	
ATG*TCA		-.578*** (.124)		-.732*** (.127)				-.914*** (.141)			-.319** (.118)			-.426*** (.122)	
VCF*TCA		.618*** (.121)		.582*** (.124)				.416** (.136)			.224* (.115)			.138 (.119)	
IEX			.277*** (.103)			.248** (.119)			.570*** (.124)			.285*** (.101)			.339*** (.098)
EVG*IEX			.028 (.087)			.012 (.101)			.083 (.104)			-.130 (.086)			-.054 (.083)
IEC*IEX			-.374*** (.139)			.526*** (.161)			-.179 (.167)			.299** (.137)			-.156 (.133)
IEC*IEX			.111 (.135)			.182 (.156)			.012 (.162)			.326** (.133)			.089 (.129)
VCF*IEX			.266** (.134)			.361** (.155)			.054 (.161)			.169 (.132)			.048 (.128)
Adjusted R²	.442	.562	.515	.247	.539	.352	.185	.430	.303	.434	.603	.531	.507	.573	.560

[a] Beta coefficients with standard errors in parenthesis, ***$p < 0.01$, **$p < 0.05$, *$p < 0.10$

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STOCK PRICES IN AN ARTIFICIAL STOCK MARKET WITH OPTIMISTIC AND PESSIMISTIC AGENTS

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ABSTRACT

This research aims to investigate, through simulation models, how the interaction among agents in an artificial stock market can affect the dynamics of asset prices. Thus, the study follows a different methodology for the analysis of prices by exploring the simulation of agents' behavior in an artificial stock market. From the defining characteristics of heterogeneous agents, we set up an artificial stock market in which individuals interact, by demanding and supplying assets, driving the price of a stock to an equilibrium value. The results suggest that, under the assumption of utility maximizers agents with different expectations about future dividends, asset prices may under-react. The gradual change of prices observed in the sub-reaction confronts the efficient market hypothesis, in which all information is instantly reflected in the price.

Keywords: artificial stock market, dynamics of asset prices, interaction of agents behavior

1. INTRODUCTION

This research aims to investigate, through simulation models, how the interaction among agents in an artificial stock market can affect the dynamics of asset prices. Thus, the study follows a different methodology for the analysis of prices by exploring the simulation of agents' behavior in an artificial stock market. Commonly used approaches in finance involve induction and deduction. Thus, mechanisms of analysis that relies on simulation of an artificial market are relevant methodological alternatives that can bring new perspectives to the study of asset prices. It is important to highlight that the approach based on simulation is considered a recent methodology to assess economic phenomena (Tesfatsion, 2006).

From the defining characteristics of agents, we set up an artificial stock market in which individuals interact, by demanding and supplying assets, driving the price of a stock to an equilibrium value. In this artificial stock market, one can structure a controlled environment to study specific phenomena, isolated from other external effects. As suggested Ehrentreich (2007), the study of stock prices in an artificial market is important because it allows the elimination of various restrictive assumptions required for the analytic investigation of asset prices. Additionally, empirical analysis of real markets may be compromised due to the influence of several variables that are difficult to control or measure. In the case of a real stock market, given that each observation is influenced by specific situations that are unlikely to occur again, mechanisms of artificial market simulation provide an analysis of variables under controlled conditions that can be repeated.

In this study, we evaluate a particular process of diffusion of dividends and its impact on the equilibrium of price of assets. More particularly, using a dynamic in which the dividends follow a mean reversion process, as suggested in the artificial market described by Ehrentreich (2007), this study analyzes heterogeneous agents that interact in an environment where the dividends of a period depend on the realization of a dividend in the previous period. The results suggest that, under the assumption of utility maximizers agents with different expectations about future dividends, asset prices may under-react. Thus, the gradual change of prices observed in the sub-reaction confronts the efficient market hypothesis, in which all information is instantly reflected in the price.

2. AGENT BASED MODELS

Agent Based Modeling (ABM) is a technique that is being increasingly used in various applications in social sciences (Gilbert, 2007). Agent-based models have origins in the 1940s, with the study of cellular

automata. However, the ABM had a higher growth only beginning in the 1990s, when advances in computer processing have made feasible more realistic simulations of social phenomena (Buchanan, 2009).

Gilbert (2007) defines agent-based modeling as a computational method that allows a researcher to create, analyze and experiment with models in which agents interact in a controlled environment. Thus, the ABM is an abstract representation of reality in which: (i) a variety of objects interact with each other and the environment, (ii) the objects are autonomous and therefore do not follow a central control and (iii) the result of their interactions is numerically computed (Richiardi, 2011).

In this context, agent-based modeling is an important type of simulation, characterized by the existence of several agents that interact with little or no central direction, facilitating the emergence of general properties through a bottom-up process (Axelrod, 2006). Thus, from the definitions of the specific characteristics of each individual or agent and of the ways agents interact, one can study general behavior of the group as a whole.

Therefore, through ABM, one can evaluate situations in which individuals have different behaviors from those established by traditional financial models, enabling the identification of new phenomena. Using computer simulations, ABM allows (i) to formalize theories about complex processes, (ii) to conduct experiments and (iii) to observe the emergence of some occurrence or event (Gilbert and Terna, 2000), representing an important methodology to investigate asset prices.

3. MODELING THE BEHAVIOR OF STOCK PRICES

In this artificial stock market, we simulate the behavior of N traders or agents that have (i) an amount of cash, which yields the risk free interest rate, and (ii) a specified number of shares of a single stock, with risky returns. The equilibrium model for dividends is based on Ehrentreich's (2007) description of the Santa Fe Artificial Stock Market Model, in which the stock pays dividends that are generated by a stochastic Ornstein-Uhlenbeck autoregressive mean reversion process given by:

$$d_{t+1} = \mu_d + \rho(d_t - \mu_d) + \varepsilon_{t+1} \tag{1}$$

where d_{t+1} and d_t are, respectively, dividends in periods $t+1$ and t, μ_d is the average dividend, ρ is the mean reversion parameter and ε represents the random shocks in dividends. These shocks are normally distributed with zero mean and variance σ^2 (Ehrentreich, 2007).

Note that in the model, dividends follow a process of mean reversion, suggesting therefore the existence of a negative correlation between one-period lagged returns of the asset. It is important to establish that when ρ is zero, the dividend in the next period is defined by the average dividend plus a random variable ε_{t+1} with a normal distribution with zero mean, and is therefore independent from the dividend of the previous period. As ρ increases in the range of positive numbers, the dividend of the next period $t+1$ is adjusted, taking into account not only a stochastic component ε_{t+1}, but also the difference $(d_t - \mu_d)$ between the dividend of the previous period t and the average dividend. In the model, all agents have the same expected utility function that reflects a constant absolute risk aversion:

$$U(W_{i,t+1}) = -\exp(-\gamma W_{i,t+1}) \tag{2}$$

where γ is the degree of risk aversion and $W_{i,t+1}$ is the expected wealth by agent i in the next period

$t+1$. Agents are therefore homogeneous with respect to their risk aversion.

Considering equation 2, agents make decisions based only on expectations of wealth for the subsequent period. According to Ehrenthreich (2007), given that $x_{i,t}$ is the number of shares that the agent i holds in period t, the budget constraint is:

$$W_{i,t+1} = x_{i,t}(p_{t+1} + d_{t+1}) + (1 + r)(W_{i,t} - p_t x_{i,t})$$

(3)

In this context, the optimum quantity of shares $\hat{x}_{i,t}$ that each agent must have in the portfolio, assuming normal distribution of returns, is given by (Le Baron, Arthur and Palmer, 1999):

$$\hat{x}_{i,t} = \frac{1}{\gamma \sigma_{i,p+d}^2} E_{i,t}[p_{t+1} + d_{t+1}] - p_t(1 + r)$$

(4)

where $E_{i,t}[p_{t+1} + d_{t+1}]$ is the expectation of agent i about the sum of the stock price and the value of the dividend in period $t+1$, $\sigma_{i,p+d}^2$ is the variance at time t of price changes, including gains or losses associated with dividends, and γ is a measure of risk aversion, equal to all agents.

In this study, for simplicity of analysis, it is established that the only source of randomness of the model involves dividends and thus $E_{i,t}[p_{t+1} + d_{t+1}] = p_t^* + E_{i,t}[d_{t+1}]$, where p_t^* represents the realization of the asset price at time t. It should be noted that, in the model described in equation 4, the higher the risk aversion, the lower the quantity demanded, since the agents would be less willing to acquire a risky asset. Similarly, the higher the volatility of the asset, the lower the quantity demanded. In contrast, when the expectation of an individual on the price plus the dividend is high, the quantity demanded will increase. Eventually, depending on the model parameters and expectations about future prices and dividends, individuals should seek combination of risk free and risky assets that maximize their expected utility.

Therefore, although individuals have the same utility function, the portfolio depends on particular expectations about the stock price and its dividend in the next period. If $x_{i,t} \neq \hat{x}_{i,t}$, then the individual will have incentives to change the composition of its portfolio. If $x_{i,t} < \hat{x}_{i,t}$, the agent will demand more stocks. If $x_{i,t} > \hat{x}_{i,t}$, the agent will seek to sell some of the shares. Thus, individual expectations of each agent influence the supply and demand for assets and therefore the stock price. The equilibrium price is obtained through an iterative process in which (i) the forces of supply and demand change the stock price p_t^* and (ii) the price changes alleviate the imbalance between supply and demand, changing the value of $\hat{x}_{i,t}$.

In the model developed in this research, different expectations about the position $\hat{x}_{i,t}$ in the risky asset at time $t+1$ depend on a behavioral characteristic of the individual: the agents are divided into groups of optimistic, pessimistic or neutral investors. So while the model of the Santa Fe Institute depends on a mechanism based on a genetic algorithm to set the expectations of each agent on future dividends, in this study the heterogeneity of expectations is the result of the existence of agents that are optimists and pessimists.

Agents establish optimistic expectations by giving a positive bias on the behavior of future dividends of

the asset, while agents that have pessimistic expectations are negatively biased. Neutral agents set expectations without bias. To address the optimistic and pessimistic agents, the expected value of the total price and the dividend in next period is given by:

$$E_{i,t}[p_{t+1} + d_{t+1}] = p_t^* + E_{i,t}[d_{t+1}] + Sign_i \cdot \beta \cdot u_{i,t+1} \tag{5}$$

where $u_{i,t+1}$ represents an increase or decrease in the dividend estimated by agent i for period $t+1$, with uniform distribution between 0 and 1, β is an adjustment factor to maintain the forecasted dividend within an appropriate range, and $Sign_i = 0$ if the agent is neutral, $Sign_i = 1$ if the agent is optimist and $Sign_i = -1$ if the agent is pessimist. Therefore, if the agent is optimist, there is a positive correction in the expected dividends of the next period and if the agent is pessimist, there is a negative adjustment and the projected dividend is decreasing.

4. ANALYSIS OF RESULTS

Initially, we arbitrarily set the base values for model parameters, as denoted in Table 1. From these initial values are carried out comparative statics analysis to identify the sensitivity of model results in relation to the main parameters.

TABLE 1. INITIAL PARAMETERS OF THE MODEL

Initial parameters of agents		
Number of agents	N	100
Initial number of shares by each agent	X	1
Initial wealth of each agent	W_0	20000
Initial parameters of stock market		
Initial price of stock	p_0	10
Risk free interest rate	R	0.01
Parameters of dividend dynamics		
Average dividend	μ_d	0.5
Mean reversion parameter	ρ	0.3
Standadr deviation of shocks	σ	0.5
Characteristics of agents		
Risk aversion parameter	λ	0.4
Percentage of optimists	p_o	0.2
Percentage of pessimists	p_p	0.2
Dividend adjustment parameter	β	0.1

Results are less sensitive to changes in the initial wealth of each individual ($W_{i,0}$), the initial price of the asset (p_0^*) and risk free interest rate (r). Importantly, although the results are not significantly sensitive to the risk free interest rate, calibration of this parameter is critical. The risk-free interest rate should be set at a value lower than the expected profitability of the risky asset, reflecting the fact that the higher the risk, the higher the expected return. Other parameters such as, for example, the initial cost of the stock, the initial wealth of agents, the average dividend, were also calibrated to be compatible with the other model parameters. Since each simulation leads to different results, the following tables summarize average values of ten simulations. To simplify notation, F denotes results for a fair price or intrinsic value and M, results for market prices or equilibrium value due to a balance between supply and demand. Thus, the fair value is based solely on realizations of the dividends and the market value represents equilibrium prices.

The first analysis shows that the parameter of risk aversion, common to all agents in the model, does not influence the characteristics associated with the returns, considering separately fair prices ($_F$) and market prices ($_M$). However, the dynamics of the proposed artificial capital market implies interesting results.

Regardless of the degree of risk aversion of agents, the average return of assets calculated from the fair prices, i.e., from the prices defined by the stochastic Ornstein-Uhlenbeck autoregressive mean reversion process that generates dividends, is positive and substantially greater than the average return of the asset considering the equilibrium price, in which agents with different profiles interact on the artificial stock market.

Considering equation 1, it is expected that, on average, the fair value of assets shows an increase in price over time, since $\mu_d \succ 0$. The positive returns in Table 2 for the fair price ($_F$) confirm the model dynamics. However, when agents with different expectations about dividends interact in the market, average returns of market prices become negative. This result differs substantially from expected values if the price was set only by dividends generated by equation 1.

In addition to reducing the average returns of the asset, the presence of agents in the market decreases the level of volatility. Although volatility is high relative to average returns, mainly due to the calibration of the initial parameters, the results indicate that the interaction among agents can lead to an under-reaction reflected in lower variability of returns. Table 2 also shows that the auto-correlation between lagged returns in one period also suffers considerable influence of the presence of heterogeneous agents.

Although in this simulation the percentage of pessimistic and optimistic agents are equal and therefore, not favoring any market trend, the interaction among agents induces market returns with small but positive auto-correlation. This result contrasts with the negative auto-correlation that would be expected when considering only the fair price. In fact, the characteristic of mean reversion of the dividend, as reflected in equation 1, would imply a negative auto-correlation. Importantly, the model also reinforces the under-reaction of the market, given the reduction in volatility and the positive auto-correlation between returns of subsequent periods. One can also observe that the auto-correlation of a period is not significantly influenced by the parameter of risk aversion.

TABLE 2. RESULTS FOR DIFFERENT VALUES OF THE RISK AVERSION PARAMETER λ

λ	Average return		Standard deviation		Auto-correlation	
	F	M	F	M	F	M
0.1	0.47%	0.11%	14.58%	11.43%	-0.45	0.26
0.2	0.38%	-0.10%	14.83%	10.99%	-0.47	0.24
0.3	0.30%	-0.03%	13.84%	10.99%	-0.44	0.28
0.4	0.20%	-0.18%	13.62%	10.01%	-0.44	0.11
0.5	0.22%	-0.22%	13.88%	10.04%	-0.48	0.20
0.6	0.61%	-0.05%	16.57%	11.35%	-0.46	0.25
0.7	0.32%	-0.22%	14.28%	10.38%	-0.46	0.23
0.8	0.38%	-0.11%	13.71%	9.71%	-0.49	0.20
0.9	0.53%	-0.09%	15.60%	10.60%	-0.51	0.18
1.0	0.65%	-0.01%	16.83%	12.03%	-0.46	0.26
1.1	0.58%	-0.03%	16.20%	12.11%	-0.45	0.25
1.2	0.39%	-0.10%	15.96%	11.58%	-0.53	0.16

By comparing the market value and the fair value, similar results on the average return, on the auto-correlation and on the standard deviation of returns are obtained when the coefficient β varies, as outlined in Table 3. The parameter β is representative of the adjustment factor of optimistic and pessimistic agents

established in equation 5. The higher the β, the more optimistic or pessimistic agents are, adding or subtracting a larger value in their estimates of dividends.

TABLE 3. RESULTS FOR DIFFERENT VALUES OF THE ADJUSTMENT IN DIVIDENDS PROVIDED BY OPTIMISTS AND PESSIMISTS

β	Average return		Standard deviation		Auto-correlation	
	F	M	F	M	F	M
0.1	0.42%	0.00%	13.19%	10.43%	-0.44	0.26
0.2	0.42%	-0.05%	13.52%	9.82%	-0.47	0.20
0.3	0.56%	0.17%	15.12%	12.27%	-0.45	0.24
0.4	0.57%	0.08%	14.71%	10.78%	-0.52	0.21

Results regarding the composition of optimistic and pessimistic agents in the market are summarized in Table 4 and also support the reduction of the standard deviation of returns of the market price and the exchange of signal in the auto-correlation of returns on lagged periods. Average returns are substantially higher when one considers fair prices in contrast to market prices that are obtained by balancing supply and demand for stocks.

It should be noted, however, that the isolated analysis of the fair market data does not reveal that the variation in the parameter β and the change in the composition of optimists and pessimists in the market impact the characteristics of simple returns. For example, the apparent lack of a positive relationship between β and average return, or between the percentage of optimists and the standard deviation in Tables 3 and 4, suggests the need for further analysis.

In particular, future studies should investigate possible nonlinear relationships, as intuition would suggest that the higher the percentage of optimistic agents in the market, the more likely the average returns to be positive. However, the dynamics of dividends, due to a mean reversion feature, may, for example, imply estimates for subsequent periods have characteristics that reduce the average return.

TABLE 4. RESULTS FOR DIFFERENT COMPOSITION OF OPTIMISTS AND PESSIMISTS IN THE MARKET

O	P	Average return		Standard deviation		Auto-correlation	
		F	M	F	M	F	M
0.0	0.2	0.26%	-0.12%	12.57%	9.37%	-0.44	0.19
0.1	0.2	-0.60%	0.62%	25.36%	18.48%	-0.39	0.23
0.2	0.2	0.31%	-0.17%	13.30%	9.47%	-0.53	0.18
0.3	0.2	0.60%	0.21%	15.61%	13.29%	-0.47	0.18
0.4	0.2	0.26%	-0.12%	12.57%	9.37%	-0.44	0.19
0.2	0.0	0.26%	-0.11%	11.74%	8.41%	-0.46	0.25
0.2	0.1	1.08%	0.36%	18.00%	13.34%	-0.46	0.18
0.2	0.3	0.33%	-0.20%	14.48%	10.36%	-0.52	0.21
0.2	0.4	0.48%	-0.04%	14.88%	11.07%	-0.47	0.19

The smoothing of the variability of returns can also be seen in the analysis of the influence of the parameter of mean reversion of dividends, as shown in Table 5. The results suggest that the higher the value of ρ, the greater the observed auto-correlation in the returns of the asset based on market prices. Thus, the greater influence of the difference between the dividend in the previous moment and the average dividend in the next period are reflected in a higher auto-correlation. Note that this trend of increasing correlation is observed also in fair prices that take into account only the behavior of dividends, without interaction among agents.

TABLE 5. RESULTS FOR DIFFERENT VALUES OF DIVIDEND MEAN REVERSION ρ

ρ	Average return		Standard deviation		Auto-correlation	
	F	M	F	M	F	M
0.1	0.67%	-0.11%	15.68%	9.64%	-0.61	0.03
0.2	0.36%	-0.15%	13.96%	9.43%	-0.56	0.11
0.3	1.84%	-0.27%	31.90%	17.00%	-0.42	0.24
0.4	1.81%	0.06%	24.46%	15.92%	-0.36	0.30
0.5	0.49%	0.15%	15.68%	12.94%	-0.29	0.33

Finally, the model also allows the analysis of the impact of shocks of dividends ε_t on prices. Following Ehrenthreich (2007), the shocks to dividends have a normal distribution with zero mean and variance σ^2. The higher the σ, the greater the degree of dispersion of the dividends. Table 6 illustrates the results when σ varies. As might be expected, the standard deviation of the asset returns, for the fair price and the market price, rises as the parameter related to variability of dividends increases. Not surprisingly, the more volatile the dividend, the more volatile the price of the stock. This increase in the volatility of returns is accompanied by an increase in the returns themselves. However, at least for a lag of just one period, it is not possible to explore the auto-correlation, which is different from zero, to obtain extraordinary gains.

TABLE 6. RESULTS FOR DIFFERENT VALUES OF VOLATILITY OF DIVIDEND SHOCKS

σ	Average return		Standard deviation		Auto-correlation	
	F	M	F	M	F	M
0.1	-0.52%	-0.56%	2.70%	2.27%	-0.22	0.35
0.2	-0.40%	-0.47%	4.93%	3.75%	-0.44	0.27
0.3	-0.26%	-0.41%	7.96%	6.24%	-0.47	0.26
0.4	0.05%	-0.27%	11.34%	8.34%	-0.52	0.21
0.5	0.29%	-0.22%	13.66%	10.23%	-0.49	0.23

5. FINAL COMMENTS

In this study, we investigated how different expectations about future prices affect market dynamics, taking into account a mean reverting process for the diffusion of dividends. In the simulation model, agents have access to different information. The information asymmetry is based on the fact that the projected probability distributions for dividends differ from the intrinsic or real probability distribution of dividends. Moreover, agents are heterogeneous and are classified into different groups of individuals: neutral, optimistic and pessimistic, as their average expectations about future dividends may differ.

Besides information asymmetry and heterogeneity of agents, the model incorporates the assumption that dividends follow an Ornstein-Uhlenbeck autoregressive mean reversion. Thus, the dividend in a given period is, by construction, dependent on the dividend of the previous period. Dividends projected by agents also follow similar process, but with a setting that reflects their optimism or pessimism.

The presence of heterogeneous agents in the market brings interesting results, especially with regards to auto-correlation between subsequent returns. Through the process of generating dividends, based on mean reversion, the fair price of the asset should theoretically lead to returns with negative one-period auto-correlation. However, the equilibrium prices when agents interact in the market, make auto-correlations of returns positive, although low.

These results suggest an under-reaction that eventually could be exploited by agents. However, we should emphasize that the model does not include momentum agents, who could influence the behavior of market prices by trading stocks based solely on past returns. In this case, the presence of an auto-correlation different from zero does not guarantee the possibility of strategies that lead to extraordinary gains, since the very implementation of momentum strategies can distort market prices.

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COST INFORMATION EFFECTIVENESS OF THAI ELECTRONIC BUSINESS: EFFECT ON DECISION MAKING ADVANTAGE

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ABSTRACT

This article is about the effect of cost information effectiveness on decision making advantage. The study examines the relationships among cost information effectiveness and decision making advantage, whereas personal mastery, system quality, network linkages, information equality are hypothesized to become the antecedents of cost information effectiveness. Also, IT support is a moderator of the relationships. The results show that cost information effectiveness has a positive association with decision making advantage. All antecedents (personal mastery, system quality, network linkages, and information equality) definitely play an important role in explaining cost information effectiveness. Finally, contributions and suggestions are also provided for further research.

Keywords: *Cost Information Effectiveness; Decision Making Advantage; Personal Mastery; System Quality; Network Linkages;* Information Equality; IT support

1. INTRODUCTION

In the recent year, many firms around of the world have developed accounting information underlying computerized systems to provide information for organization users, particularly the manager. Accounting information is processes information that is essentially employed by information users to managing and increasing potential business competitions. The main process of accounting information for support decision making is cost information (Trkman, 2010). Thus, cost information of firm is designed to be successful in various perspectives, such as producing information quality, system quality and creating information satisfaction (Jacobs, Marcon et al., 2004). Technology, innovation, and customer behavior are changed rapidly that the firms have been pressed by these situations to find out new strategies to be sustaining competitive advantage (Zhang and Lado, 2001).

Cost information effectiveness is a system to provide accounting information about cost information quality and satisfaction of perceived users to support organization activates and managerial functions to achieve organizational goal (Love and Irani, 2003). The information is employed to planning, controlling, evaluation, and decision making. Moreover, Cost information show system quality, information quality, user satisfaction, use individual impact and organization impact (Piontkowski and Hoffjan, 2009). Cost information effectiveness is to apply the cost management techniques to provide cost information to add competitive advantage for implement firm. Form value chain analysis, the manufacturing firm has information of customer needs, qualities and descriptions and raw materials of supplier for production planning and control including delivery to customers (Christopher and Gattorna, 2005).

The information interchanged among firms in value chain, vendors, manufacturers and customers, is to be competitive advantage of the manufacturing firm due to reducing production cycle times, decreasing inventory levels, and responding customers needs on time (Chang and Hwang, 2002). Moreover, cost diver analysis is elicited to know causal factors that drive product costs (Ketchen, Rebarick et al., 2008). Next non-value added activities, not increasing value for customers, are separated and eliminated, reduced costs. Thus, this process can be value creation to customer.

Cost information effectiveness composition is critical for success. The position of a manager who must make a cost-based decision, such as setting a fee, evaluating the desirability of contracting a service out, determining the cost of expanding the delivery of a service, etc (Nagurney, 2010). As such, in contains a minimum of technical accounting terminology and makes few assumptions about the nature of the accounting system in use. The material provides tools and techniques that, coupled with a sufficient knowledge of accounting, allow for effective decision making in government (Nicolaou, 2002). Cost

Information and management decision making steps the reader through the background necessary to understand the basic concepts of cost accounting (the determination of true economic cost for organization services and then shows how these concepts can be applied to pricing services, costing labor relations settlements, evaluating contracting out and other cost-based organization decisions.

Cost information effectiveness tends to composed of three elements utility, integrity and objectivity. Quality will be ensured and established at levels appropriate to the nature and timeliness of the cost information to be disseminated (Jun Lin and Yu, 2002). Cost Information effectiveness is an integral part of the pre-dissemination review of information disseminated by system. Cost Information effectiveness is also integral to information collections conducted by process system, and will be incorporated into the clearance process.

The Cost information effectiveness is as ability of a system to provide cost information quality and satisfaction of perceived users to support organization activities and managerial functions to achieve organization goal (Jun Lin and Yu, 2002). The information is employed to planning, controlling, evaluating, and decision making. cost information effectiveness framework which is measured by system quality, information quality, user satisfaction, use, individual impact and organization impact (Chang and Hwang, 2002). Besides, cost information effectiveness also influences on decision making advantage. Relevance of information is a content of reports or documents that serve purpose; therefore, it can support decision making of users in all levels of organization. In additional, cost information effectiveness depend on organization configuration as good working process.

Developing models for the effects of cost information effectiveness on effective decision making advantage whereas personal mastery, system quality, network linkages, information equality are hypothesized to become the antecedents of cost information effectiveness is a challenge as the literature on cost information effectiveness is vast, varied, and evolving. Yet, there was not any systematic testing about effects of cost information effectiveness on effective decision making advantage whereas personal mastery, system quality, network linkages, information equality are hypothesized to become the antecedents of cost information effectiveness within Thailand and abroad. These have motivated researches to continue to develop improved models with research question.

The purpose of this study is to test the effect of cost information effectiveness on decision making advantage. Second, this research tests personal mastery, system quality, network linkages, information equality are hypothesized to become the antecedents of cost information effectiveness. Finally, offering a validated instrument to measure cost information effectiveness, and by providing empirical evidence of the importance of cost information effectiveness on effective decision making advantage via IT support as moderator.

This research will offer useful guidance for measuring and implementing cost information effectiveness and facilitate further research in this area. The research question of this work is how does cost information effectiveness affect effective decision making advantage whereas personal mastery, system quality, network linkages, information equality are hypothesized to become the antecedents of cost information effectiveness?


2. RELEVANT LITERATURE REVIEWS

The research model of this study is illustrated in Fig. 1. It shows that the effect of cost information effectiveness on decision making advantage whereas personal mastery, system quality, network linkages, information equality are hypothesized to become the antecedents of cost information effectiveness.

2.1 The effects of cost information effectiveness on decision making advantage
Cost information effectiveness is an accounting information system which determines the costs of products manufactured or services provided and record these costs in the accounting records (Nagurney, 2010). Generally the purposes or functions of cost accounting information system fall into four

categories. These include providing information for; external financial statements, planning and controlling activities or processes, short term strategic decisions and long term strategic decisions (Piontkowski and Hoffjan, 2009). These four functions relate to different audiences, emphasize different types of information, require different reporting intervals and involve different types of decisions.

FIGURE1
COST INFORMATION EFFECTIVENESS ON DECISION MAKING ADVANTAGE
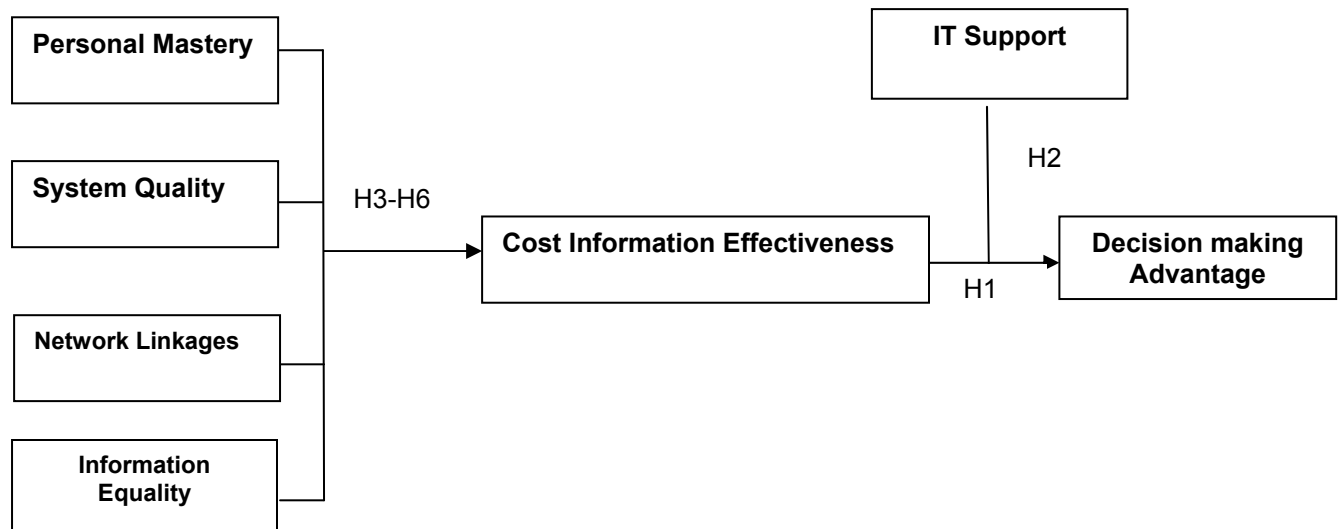
Therefore, this study defines the meaning of cost information effectiveness that techniques to provide cost information which is supported by process and organizational system to add competitive advantage for implemented firm (Ketchen, Rebarick et al., 2008). The cost information can be used to enhance strategic position of the firm and reduced costs. Form value chain analysis, the manufacturing firm has information of customer needs, qualities and descriptions and raw materials of supplier for production planning and control including delivery to customers (Wang and Tai, 2003). The manager can make strategic decision process to success with cost information quality. Thus, cost information effectiveness seems to have a positive relationship with decision making advantage. Therefore, researcher posits the hypothesis as follows:

H1: The higher cost information effectiveness is the more likely that firms will achieve decision making advantage.

2.2 The effects of IT support as moderator
IT support refers to ability of the general support (e.g. computer, internet, network) or a major application that run on a general support system and whose use of information resources satisfies a specific set of user requirements to effectively use resources (Gayialis and Tatsiopoulos, 2004). IT supports is also identified to guiding principles relevant to an organization when it decides to choose the best coordination mechanisms and select, design, and implement organizational system (Becker and Rauber, 2010).

Moreover, IT support can be used to collaborate among firms in the same industry network that the information is shared in value chain. A manufacturer receives information customer needs on goods and services and supporting materials capacity from suppliers (Wang, Lau et al., 2009). This information is elicited for production plans, purchases, productions, and deliveries which are efficient and effective from cost accounting information provided. Thus, IT support seems to have a positive relationship with decision making advantage. Therefore, researcher posits the hypothesis as follows;

H2: IT support will positively moderate the cost information effectiveness to decision making advantage.

2.3 Antecedents of cost information effectiveness

Antecedents of cost information effectiveness are employed to explain that cost information should be designed to make according to its features are to support using information, and to achieve organization goals. Certainly, cost information will be established to success, and depends on organization configuration as working process, resources tangible and intangible assets, including exclusive aspirations. That is, the study examines to proof what and how antecedents of cost information effectiveness crucially influence cost information effectiveness. The factors of this conceptual model comprise of personal mastery, system quality, network linkages, and information equality relevant variables to guide in implementing cost information effectiveness.

2.3.1 The effect of personal mastery

Personal mastery is about approaching accountant from a different perspective. Sometimes accountant would refer to it as a journey towards continuous improvement (García-Morales, Lloríns-Montes et al., 2007). Personal mastery is guided with key principles like vision, purpose, creative tension, commitment to truth and understanding the subconscious mind (Ben-Zur, 2002).

Personal mastery also helps organization growth and developments are the concepts encouraged by personal mastery. When accountant are working to attain personal mastery, their personal vision clears and starts getting fulfilled. There are changes that can happen when organization members work for personal mastery like easy resolution even in hard issues and cases, teams and groups work easily even if they do not belong in the same department and accomplishments are starting to be common in the organization (Donaldson, Earl et al., 2009). The important of management accounting information is timeliness and support to decision making, so for useful cost information the accountant will have personal mastery. Thus, personal mastery seems to have a positive relationship with cost information effectiveness. Therefore, this research posits the hypothesis as follows:

H3: The higher personal mastery is the more likely that firms will achieve cost information effectiveness.

2.3.2 The effect of system quality

In getting started, an organization will benefit from establishing an effective system quality. The cornerstone of a quality organization is the concept of the customer and supplier working together for their mutual benefit. For this to become effective, the customer-supplier interfaces must extend into, and outside of, the organization, beyond the immediate customers and suppliers (Gorla, Somers et al., 2010).

System quality is defined as a set of co-ordinated activities to direct and control an organization in order to continually improve the effectiveness and efficiency of its performance. These activities interact and are affected by being in the system, so the isolation and study of each one in detail will not necessarily lead to an understanding of the system as a whole (Ormandjieva, Alagar et al., 2008). The main thrust of a system quality is in defining the processes, which will result in the production of quality products and services, rather than in detecting defective products or services after they have been produced. System quality enables an organization to achieve the goals and objectives set out in its policy and strategy (Deslandres and Pierreval, 1997). It provides consistency and satisfaction in terms of cost methods, materials, equipment, etc, and interacts with all activities of the organization, beginning with the identification of customer requirements and ending with their satisfaction, at every transaction interface. Thus system quality seems to have a positive relationship with cost information effectiveness. Therefore, this research posit the hypothesis as follows:

H4: The higher system quality is the more likely that firms will achieve cost information effectiveness.

2.3.3 The effect of network linkages

Network linkage is refer to explain the foundation of cooperation, network linkage, whose conceptual structure has gradually matured, has been widely discussed and applied on significant issue such as strategic organization, oversea investment, cost management, etc (Chung, Won et al., 2007). In addition, the impact that cost information based on network linkage has on the evolution of a firm is a new issue, and also a valuable field of management accounting research (Barlow and Li, 2005). Moreover, network

linkage refers to the cooperative relationship between firms in their mutual support to efficiently enhance the resources and, therefore increase their firm value include processing and costing information.

Network linkages are defined as a global learning community designed to develop the next generation of business leaders. It connects high performers virtually through a global online learning community and locally through in-person events while focusing on the individuals personal development goals (Kang, 2007). Thus network linkages to have a positive relationship with cost information effectiveness. Therefore, we posit the hypothesis as follows:
H5: The higher network linkage is the more likely that firms will achieve cost information effectiveness.

2.3.4 The effect of information equality
Information equality refers to the high quality if they are fit for their intended uses in operations, decision making and planning. Alternatively, information are deemed of high quality if they correctly represent the real-world construct to which they refer (Hall, Inoue et al., 2007). Furthermore, apart from these definitions, as information volume increases, the question of internal consistency within information becomes paramount, regardless of fitness for use for any external purpose (Ferrante, 2006).

Information equality is defined as a measure of the value which the information provides to the user of that information. "Quality" is often perceived as subjective and the quality of information can then vary among users and among uses of the information (Demski, FitzGerald et al., 2009). Nevertheless, a high degree of quality increases its objectivity or at least the intersubjectivity. Accuracy can be seen as just one element of information equality but, depending upon how it is defined, can also be seen as encompassing many other dimensions of cost information quality (Huefner and Largay Iii, 2008). Thus information equality to have a positive relationship with cost information effectiveness. Therefore, we posit the hypothesis as follows;
H6: The higher information equality is the more likely that firms will achieve cost information effectiveness.

3. RESEARCH METHODS

3.1 Sample
For this research, the sample was selected from the electronic manufacturing firms of Thailand. A mailed survey was used for data collection. The questionnaire was sent to 838 electronic manufacturing firms of Thailand. The key participants in this study were Chief Accounting Executives (CAEs). With regard to the questionnaire mailing, 75 surveys were undeliverable because some firms were no longer in business or had moved to unknown locations. Deducting the undeliverable from the original 838 mailed, the valid mailing was 763 surveys, from which 162 responses were received. Of the surveys completed and returned, all 162 were usable. The effective response rate and usable was approximately 21.23%. According to Aaker, Kumar and Day (2001), the response rate for a mail survey, without an appropriate follow-up procedure, is less than 20%. The means of demographic variable, firm size, of two waves were tested by t-test whether the means are different, but its result was not significant. Thus, the response rate of this study is considered acceptable.

To detect possible problems with non-response error, CAEs-specific T-tests between early and late respondents showed no statistically significant differences according to the test for non-response bias by Armstrong and Overton (1977) and special efforts were made to increase the response rate. Using a T-test comparison of the means of all variables for the random sample versus all other respondents, there was no statistically significant difference. Hence, non-response bias did not appear to be a problem in the study for an overall basis.

3.2 Measure
All of the variables were obtained from the survey. Independent variable includes cost information effectiveness. Cost information was measured on 5-point Likert scales (e.g., 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree). Most of the scales employed have been adopted from the existing and validated scales used in the extant literature to fit the current situation.

Dependent variables was measure was measured on 5-point Likert scales (e.g., 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree). Most of the scales employed have been adopted in content about both accuracy and confidential for forecasting investment of Thai-electronic manufacturing businesses from stakeholders.

IT support is measured the moderator variable this deals with ability of the general support (e.g. computer, internet, network) or a major application that run on a general support system and whose use of information resources satisfies a specific set of user requirements to effectively use resources (Rezaei, Asadi et al., 2009).

The antecedents of cost information effectiveness was measured on 5-point Likert scales (e.g., 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree). Most of the scales employed have been adopted in content about personal mastery, system quality, network linkages, information equality.

In addition, using firm age were measured by the number of years a firm has been in existence with dummy variable (e.g. number of years since 1 – 10 = 1, other = 0) (Zahra, Ireland andHitt, 2000). Firm's size was measured with the number of employees in a firm with dummy variable (e.g. number of employees from 1 to 500 = 1, others = 0) (Arora and Fosfuri, 2000).

3.3 Method
Confirmatory factor analysis (CFA) is employed to investigate validity of constructs. Furthermore, factor scores are used to estimate for regression analysis. Table 1 demonstrates results of factor loading and Cronbach's alpha coefficients. All factor loadings are greater than 0.6 (Hair et al., 2006) and are statistically significant. Cronbach's alpha of all variable is greater than 0.7 (Nunnally and Berstein, 1994). Overall, the results from Table 1 indicating the reliability and validity of these constructs.
The ordinary least squares (OLS) regression analysis was employed to estimate parameters in hypotheses testing. Two equations models are shown following:
Equation 1: $DMA = \beta_{01} + \beta_1 CIE + \beta_2 ITS + \beta_3 (CIE*ITS) + \beta_4 FA + \beta_5 FS + \varepsilon$
Equation 2: $CIE = \beta_{02} + \beta_6 PM + \beta_7 SQ + \beta_8 NL + \beta_9 IE + \beta_{10} FA + \beta_{11} FS + \varepsilon$

Where CIE is Cost Information Effectiveness; DMA is Decision Making Advantage; ITS is Information Technology Support; PM is gives Personal Mastery; SQ is System Quality; NL is Network Linkages; IE is Information Equality; FA is team firm age; and TS is firm size as measured by equity; ε is error term.

TABLE 1
RELIABILITY AND VALIDITY ANALYSIS

Variables Factor	Loading Range	Cronbach's Alpha
Decision Making Advantage (DMA)	0.52-0.86	0.83
IT Support (ITS)	0.63-0.83	0.87
Firm Age (FA)	0.73-0.82	0.88
Firm Size (FS)	0.68-0.94	0.83
Cost Information Effectiveness (CIE)	0.78-0.86	0.84
Personal Mastery (PM)	0.87-0.88	0.85
System Quality (SQ)	0.75-0.83	0.82
Network Linkages (NL)	0.63-0.85	0.81
Information Equality (IE)	0.63-0.92	0.80

4. RESULTS AND DISCUSSION

Main point of the study is to examine the effect of cost information effectiveness on decision making advantage whereas personal mastery, system quality, network linkages, information equality are hypothesized to become the antecedents of cost information effectiveness. From table 2 and 3 shows the descriptive statistics and correlation matrix between variables analyzed by Pearson correlation

coefficients. Although it indicates high correlation between independent variables, it does not severe the multicollinearity problems according to VIF range from 1.12 to 5.23 (Hair et al., 2006). However, the exploratory results are only correlating between two variables and expecting direction of them so as to conduct hypothesis testing by OLS regression analysis in later.

4.1 Impacts of cost information effectiveness and its consequence

Table 4 presents the results of OLS regression analysis of the relationships between cost information effectiveness and decision making advantage. To inference hypothesis 1 whether examines the relationship between cost information effectiveness and decision making advantage. The result shows that there are all independent variables that a significant positive effect on decision making advantage (b_1 = .046, $P < 0.05$). That is, hypothesis 1 is supported. Similar to Wang and Tai, (2003)'s cost information effectiveness are techniques to provide cost information which is supported by process and organizational system to add competitive advantage for implemented firm. The cost information can be used to enhance strategic position of the firm and reduced costs.

4.2 Impacts of the moderating effect of IT support on cost information effectiveness and its consequence

Table 4 presents the results of OLS regression analysis of the relationships between cost information effectiveness and decision making advantage via IT support. To inference hypothesis 2 whether examines the relationship between cost information effectiveness and decision making advantage via IT support. The result shows that there are all independent variables that a significant positive effect on decision making advantage (b_3 = .038, $P < 0.1$). That is, hypothesis 2 is supported. Similar to Wang, Lau et al., (2009) identifies that a manufacturer receives information customer needs on goods and services and supporting materials capacity from suppliers. This information is elicited for production plans, purchases, productions, and deliveries which are efficient and effective from cost accounting information provided.

TABEL 2
DESCRIPTIVE STATISTICS AND CORRELATION MATRIX

Constructs	DMA	ITS	CIE	FA	FS
Mean	3.23	3.14	3.22	-	-
Standard deviation	0.52	0.61	0.42	-	-
Decision Making Advantage (DMA)					
IT Support (ITS)	0.45				
Cost Information Effectiveness (CIE)	0.55*	0.34			
Firm Age (FA)	0.12	0.43	0.33	0.15	
Firm Size (FS)	0.32	0.21	0.17	0.10	

* Correlation is significant at the 0.05 level (2-tailed)
[a] Beta coefficients with standard errors in parenthesis.

TABEL 3
DESCRIPTIVE STATISTICS AND CORRELATION MATRIX

Constructs	CIE	PM	SQ	NL	IE	FA	FS
Mean	3.44	3.46	3.22	3.37	3.16	-	-
Standard deviation	0.61	0.53	0.82	0.73	0.32	-	-
Cost Information Effectiveness (CIE)							
Personal Mastery (PM)	0.36						
System Quality (SQ)	0.41	0.34					
Network Linkages (NL)	0.34	0.15	0.43 *				
Information Equality (IE)	0.71**	0.23	0.32	0.34			
Firm Age (FA)	0.13	0.12	0.21	0.33	0.24		
Firm Size (FS)	0.25	0.32	0.37	0.25	0.27		

* Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)
[a] Beta coefficients with standard errors in parenthesis.

4.3 Impacts of the antecedents of cost information effectiveness on Its consequence

Table 5 presents the results of the relationships among personal mastery, system quality, network linkages, and information equality into cost information effectiveness. To inference hypothesis 3-6 whether examines the relationship between personal mastery, system quality, network linkages, information equality on cost information effectiveness. First perspective, the result shows that personal mastery is a significant positive effect on cost information effectiveness (b_6 = .034, $P < 0.05$). That is, hypothesis 3 is supported. Similar to Donaldson, Earl et al., (2009) find that the important of management accounting information is timeliness and support to decision making, so for useful cost information the accountant will have personal mastery. Second perspective, the result shows that System quality is a significant positive effect on cost information effectiveness (b_7 = .042, $P < 0.01$). That is, hypothesis 4 is supported. Similar to Deslandres and Pierreval, (1997) find that consistency and satisfaction in terms of cost methods, materials, equipment, etc, and interacts with all activities of the organization, beginning with the identification of customer requirements and ending with their satisfaction, at every transaction interface. Third perspective, the result shows that network linkages is a significant positive effect on cost information effectiveness (b_8 = .023, $P < 0.1$). That is, hypothesis 5 is supported. Similar to Kang, (2007) find that network linkages connect high performers virtually through a global online learning community and locally through in-person events while focusing on the individuals personal development goals. Final perspective, the result shows that information equality is a significant positive effect on cost information effectiveness (b_9 = .042, $P < 0.05$). That is, hypothesis 6 is supported. Similar to Huefner and Largay Iii, (2008) find that accuracy can be seen as just one element of information equality but, depending upon how it is defined, can also be seen as encompassing many other dimensions of cost information quality.

TABLE 4
RESULTS OF OLS REGRESSION ANALYSIS

Independent Variables	Dependent variable
	DMA
Cost Information Effectiveness (CIE)	.046**
	(0.035)
IT Support (ITS)	.014
	(0.016)
(CIE) x (ITS)	.038*
	(0.029)
Firm Age (FA)	.012
	(0.014)
Firm Size (FS)	.015
	(0.012)
Adjusted R-square	0.645

Note: Standard error is in parentheses.
** $p < .05$
* $p < .1$

5. CONTRIBUTIONS AND FUTURE RESEARCH

5.1 Theoretical Contributions and Future Directions for Research
This study provides important theoretical contributions extending on prior studies by incorporates all antecedent perspectives of cost information effectiveness includes personal mastery, system quality, network linkages, and information equality; in same model and links these to cost information effectiveness and then cost information effectiveness relates decision making advantage via IT support as moderator. Following the results of this study, future research is needed. Observably, personal mastery, system quality, network linkages, and information equality are the antecedent of cost information effectiveness. Moreover, the relationship between cost information effectiveness and decision making advantage via IT support as moderator is found in this research. Finally, further research should reexamine this research model in other group for more generalized.

5.2 Managerial Contributions
For executive managers and/or firms' owners, this study helps them to understand and know that cost information effectiveness is an important factor that enhances their decision making advantage under IT support. Moreover, executive managers and/or firms' owners understand and know that the antecedent of cost information effectiveness includes personal mastery, system quality, network linkages, and information equality.

6. CONCLUSION

This study investigates the relationships among cost information effectiveness and decision making advantage, whereas personal mastery, system quality, network linkages, information equality are hypothesized to become the antecedents of cost information effectiveness. Data are collected from 838 electronic manufacturing firms of Thailand. The findings show that personal mastery, system quality, network linkages, and information equality are the most power antecedents on cost information effectiveness. Furthermore, the relationship between cost information effectiveness and decision making advantage is high positive in this empirical research.

TABLE 5
RESULTS OF OLS REGRESSION ANALYSIS

Independent Variables	Dependent variable
	CIE
Personal Mastery (PM)	.034**
	(0.022)
System Quality (SQ)	.042***
	(0.031)
Network Linkages (NL)	.023*
	(0.012)
Information Equality (IE)	.042**
	(0.011)
Firm Age (FA)	.032
	(0.021)
Firm Size (FS)	.022
	(0.014)
Adjusted R-square	0.741

Note: Standard error is in parentheses.
*** $p < .01$
** $p < .05$
* $p < .1$

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COUNTRY BRANDING: A DEVELOPING ECONOMY PERSPECTIVE

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ABSTRACT

Country branding, has become a strategic tool for attaining country competitiveness. Emphasizing country branding as a social construction, this paper presents a conceptual branding model for Ghana, based on the identity brand management approach. Focusing on the role of the country citizenry, the first construct involves articulating country brand identity to purposefully affect country macro leadership, governance structures, country and product brand value delivery and communication. The second construct involves developing country brand mind-set and citizenship behaviours through purposeful brand knowledge and commitment. The third construct explains the country brand equity and citizens well being likely to be engendered through purposeful brand supporting behaviours, conscious creation of supporting country realities, and coordinated and harmonized nation and product communication. This approach emanates from and is supported by insights generated through exploratory interviews and group discussions involving Ghanaians as well as identity based brand management literature.

Keywords: Branding, Country Branding, Brand Equity, Brand Identity, Social Constructionism

1. INTRODUCTION

According to Anholt (2002), much of the wealth of the developed world has been generated, at least, in part through the ability to effectively position their individual nations utilizing sophisticated marketing techniques in a competitive environment. Countries will compete daily with neighbors, economic blocks for tourism, investment and export products. Therefore, countries that start with unknown or poor reputation will be limited or marginalized and they cannot feature in the minds of global audience to boost their commercial successes (Brymer, 2003). It thus makes sense for developing economy governments to do everything possible to benefit from the synergy a strong nation brand generates. For example, India's Bangalore technology cluster led by Wipro and Infosys is rapidly modernizing the image of India, as an innovative, entrepreneurial and global market.

Country branding will seem to offer the most to countries that have some undesirable national image and/or reputation which they seek to change or improve (Olin, 2002). The West African sub-region has an even more compelling reason to brand their individual nations as it grapples with its negative image as politically unstable and failing states, with poverty, disease, fraud and corruption. Ghana's past history is that of instability and revolutions however, recent developments will suggest that the nation can now be perceived as unique, having experienced continuous peaceful multiparty politics for more than two decades, attained significant infrastructure projects and maintained a safe enclave in the West African region. Moreover, making ordinary citizens feel important in shaping and realizing the international aspirations of the country may help to create a strong sense of national identity and promote social inclusion (Anholt, 2003).

Unfortunately, there has been very little research on the branding of developing economies. The need for current knowledge for the purposes of enabling the appropriate positioning of individual developing economies such as Ghana to compete in the global marketplace for a share of mind, income, voice and attention, cannot be overemphasized. A behavioral approach to country branding provides the opportunity to engage Ghanaians in crafting a shared vision, aspirations and consensus on a compelling national image positioning that energizes and shapes the behavior of the citizens. It is, therefore, imperative that a formal research study is conducted to solicit the views of a cross-section of Ghanaians on a wide range of areas pertinent to developing a national brand positioning platform.

This study, therefore, aims to capture stakeholder perceptions of Ghana, in order to answer the urgent call to evolve and establish a more compelling positioning for the country. Specifically, it seeks to (a)

identify the overall perceptions of Ghanaians about Ghana; (b) establish current image associations and attitudes among Ghanaians towards their country; and (c) identify the components of the desired compelling positioning platform for Ghana; and (d) perceptions of the Brand Ghana Identity. On completion, the study will add to existing knowledge of literature on the subject matter including a conceptual model for initiating country branding in developing economies and help provoke further debate and discussion among stakeholders on how Ghanaians perceive their country. It will also generate information required to build a powerful national brand positioning that enhances national competitiveness.

The rest of the study examines the literature on country branding and describes the study context. Thereafter, a conceptual model for branding is proposed. The methodology section discusses the respondent sampling, the data collection and analysis process. The study concludes with a review of the findings, conclusions and implications for decision making.

2. COUNTRY BRANDING AND SOCIAL CONSTRUCTIONISM

Two philosophical approaches to defining a brand were identified by Ambler and Styles (1996), the product-plus approach, which views the brand as an addition to the product or service and the holistic perspective which focuses on the brand itself. Derived from the latter perspective, Kapferer (2004) defines a brand as a name with power to influence buyers. Its source of influence is derived from mental associations and relationships a brand builds overtime among customers and stakeholders.

The basic assumption in country branding is that country names constitute brands and as a result evoke meanings and images, assisting audiences to evaluate her services and products, and helping customers make their purchasing decisions. Delorie (2004) defines a country brand as a national identity that has been proactively distilled, interpreted, internalized among the citizens and projected for international recognition to construct a favorable national image, and enhance a nation's competiveness. In other words, a country brand has the capacity to influence the behavior of the people it is targeting. It is about employing strategic marketing to promote a country's identity to gain a competitive edge (Anholt, 2003) and a symbolic construct, which emphasizes the positive, memorable, attractive, unique, relevant and sustainable qualities of a nation (Allan, 2004).

In our discussion of country branding, a distinction between a nation's brand identity and its brand image is in order. The former precedes the latter. That is, for a nation to have a compelling image its true identity must be competitive in the first place. A nation's brand identity is a nation's true self essence and character, driven by a vision, which is both different from others and resistant to change. Like commercial brands, a nation must have an identity that is compelling to both domestic and foreign consumers in order to be competitive and resilient. The brand image on the other hand, is the way that the consumer, be they domestic or international, actual or potential, perceives the nation brand. A nation's image is the perception of the nation that exists in the mind of the consumer of that nation's products, both tangible and intangible. Consequently, central to a nation's identity and execution of a strategic marketing program to promote the nation, is the behavior of its citizens.

Consistent with the argument that citizens need to be understood, and that their feelings about national brand at an early stage of the project is valuable (Fan, 2005) from a social constructionist perspective, Wilder (2007), has criticized practitioners of country branding for not allowing citizens to play a significant role in the branding process. She states that "… If nation branding is meant to be a strategy on a national level…then there is no way around citizens' participation in the branding process." Wilder (2007, p.149). Furthermore, the role of people in a country and for that matter their behavior in crafting the reputation of the nation suggests that "…people only change their minds about places if the people and organizations in those places start to change the things they make and do, or the way they behave. And that is the only sense in which a nation can start to exercise some degree of control over its image …" (Anholt, 2007, p. 29). Consequently, the proposed conceptual model that follows takes a behavioral approach to country brand management. The rationale is to enable the engagement of the people of the country in the development of a shared vision, aspirations and national identity and to mobilize them to behave in ways that promote the desired identity and facilitate the realization of the vision.

3. COUNTRY BRANDING: A CONCEPTUAL MODEL

In emphasizing country branding as a socially-constructed phenomenon, the paper presents a conceptual branding model for Ghana (see Fig. 1), based on the identity-based brand management approach. Strong brands are built through identity-based brand management. Just like a person, for a brand to be strong, it must have a true self, a field of unique competence, driven by a vision, values and personality that are different from others and resistant to change (Kapferer, 2007). Focusing on the role of the country citizenry, the first construct in the proposed model involves articulating country brand identity to purposefully affect country macro leadership, governance structures, country and product brand value delivery and communication. The second, involves developing a country brand mind-set and citizenship behaviors through purposeful brand knowledge and commitment while the third, explains the country brand equity and citizens well-being likely to be engendered through purposeful brand supporting behaviors, conscious creation of supporting country realities, and coordinated and harmonized nation and product communication.

The reality of a multicultural Ghana requires an insight into an overarching oneness, of the qualities that are shared and how Ghana's cultural diversity can result in a single representative National Identity. Ghana aims for the well being for her citizens. Well-being may be understood as desirable economic, social and psychological attainments for individuals (personal well-being), communities and organizations (collective well-being) and their manner of relationship between and among persons and social groups (relational well-being).

To achieve these desirable outcomes for the citizens, Ghana must first identify, invest in and manage the drivers of wellbeing. The most critical of these drivers are: (a) Brand Ghana Identity levers, (b) Country leadership, promotion and communication, (c) Purposeful country culture and (d) Conscious country promotion. These drivers when invested in effectively create several country advantages such as citizenship equity and international consumer equity, which are the perquisites for sustainable country well-being.

3.1 Brand-driven Country Measures

As depicted in the visual (Figure 1 below), Country Competitive Identity (brand vision, values, behaviour, positioning, country symbols/properties) is espoused through country consensus. At independence the country's founding fathers decided on country values and behaviors as well as the country vision. These then have defined the Brand Ghana identity.

Brand Ghana management involves Brand Ghana identity directing a large number of country acts, behaviors of country leaders, communication, policies, structures, and country regulations to affect the citizens in a particular way that is desirable. These brand-directed actions, structures and communication are combined in the four levers, as follows: (a) Country Government: acts and communication of country political leadership, (b) Governance: Regulations & laws; Domestic & International Acts & Policies of State, (c) Country Civic Leadership: Business Community & Political leadership behaviors, actions & communication, and (d) Country Promotion: Tourism, Exports Brands, Cultural Exchange, Sports Promotion, Public Diplomacy, and Media Reportage.

3.2 Purposeful Country Culture

Purposeful country culture will be achieved through the involvement of the citizens in the nation brand development, dissemination of brand knowledge, engendering brand commitment and fostering appropriate behavior. This will be carried out through purposeful formal and informal socialization in homes, the school system, and work organizations, country clubs and in the communities. The rationale is to ensure that substantial numbers of the country citizens internalize the brand. Citizens then become brand conscious, committed, behaving and communicating in ways that support and promote the Brand Ghana values.

3.3 Country Brand Equity

Through conscious country promotion and projection, and the creation of brand supporting realities such as infrastructure and state policies to give meaning to the brand values and vision, several advantages may become spawned to benefit the country such as citizenship brand equity, international consumer equity and economic and financial equity

3.4 Citizens Well-being

Citizenship brand equity, International consumer equity and Economic equities then become the prerequisites for the realization of sustainable citizenship well-being and liberation for the people of Ghana.

Figure 1: Branding Model of Ghana 2010

Ghana: Conceptual Branding Model

Source: Developed by the authors
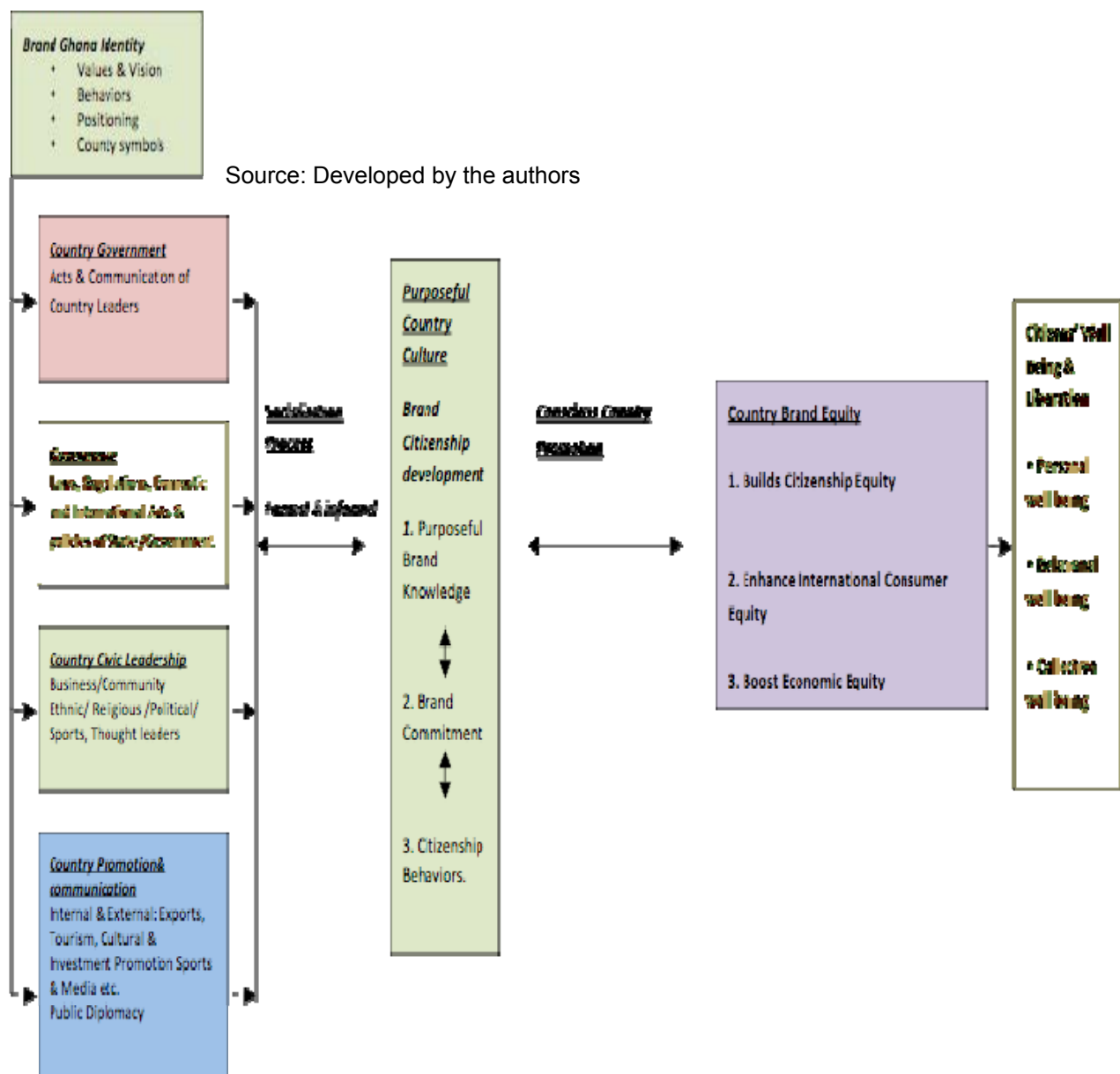
4. METHODOLOGY

To attain an understanding of how Ghanaians perceive their country today in relation to what they think it ought to be, an exploratory research design was employed. The rationale was to enable us gain deeper insight as to how branding strategies could be applied at the national level. Since qualitative research is well-suited to the goals of discovering new in-sights aimed at furthering the understanding of a phenomenon (Strauss and Corbin, 1990), a qualitative study involving individual interviewees and small informal groups were used to help elicit respondents' feelings and intentions about their country.

A respondent sample reflective of the population of the country, regional distribution, literacy in English and the relevant Ghanaian language spoken, was the goal. A total of 200 individual interviews and 30 informal group discussion sessions of between 8 and 10 participants per group and a moderator, were conducted across the ten regions of Ghana between April and May, 2010. All respondents were 18 years old and above. Individual respondents were contacted via the snowball sampling method, while the group sessions were conducted mostly in tertiary and second cycle institutions where people of similar age and language expression could be attracted to gather at one sitting for a discussion session. In all cases, research assistants recruited from local universities and taken through an orientation program prior to the execution of the fieldwork, utilized an interview guide with some specific questions such as "How do you want the country to be perceived?" and "What ought to make the country different?" to elicit responses from interviewees. Two of the authors served as the moderators for the group discussions. All responses were recorded and later transcribed by the research assistants. The transcripts were then grouped into three and assigned to two groups of analysts (each comprising 2 or 3 persons) to ensure interpretations were broadly consistent. The interview guides were pre-coded to assist in various groups in their analysis. Broad themes were identified, categorized, and subsequently integrated in a coherent report.

5. DISCUSSION OF FINDINGS

The first research objective was to find out perceptions of Ghanaians about Ghana. The findings from the analysis indicated both positive and negative perceptions about Ghana. Others had positive views but were also of the view that Ghana has the potential to be great, but is "…grossly performing below expectation and its potential." Some verbatim responses that illustrate the positive perceptions include "…Ghana is heading in the right direction, although slowly, because Governments can be changed through the ballot box peacefully and not through violence"; "…best country in Africa, hospitable and has the potential to become a successful and developed nation…" and "…bedrock of African identity and very independent from excessive external influences…"

Responses illustrating negative perceptions include "…Ghana is endowed with natural and human resources Ghana yet "is under-performing in several critical ways.", "…is a country "struggling to understand itself and find her bearing, a country over-dependent on donor countries for her development", a country with "rising level of insecurity, low per capita income, with high population growth, divisive partisan politics, growing corruption and violent crime".

Some of the striking themes of respondents included "Ghana today is a potentially prosperous nation full of corruption, nepotism and tribalism", "Ghana has not achieved much in terms of economic growth and there are no values that identify Ghanaians as a people", and "…where politicians have hijacked all the goodies to live in comfort: while the masses live in abject poverty, wealth is not shared equally and corruption is the order of the day",

With regards to perceptions relating to the major strengths of the nations, the dominant viewpoints were "Ghana is one of the best football nations on the African continent", and "Ghana has rich mineral and agricultural potential, fair quality human resource, emerging democracy and democratic values, peace and political stability, relatively good governance and a rich cultural heritage. On the other hand, respondents a greater multiplicity of phrases to express their perceptions of the weaknesses such as "too much corruption and poverty", "too politically polarized", "shambolic democracy", "lack of manufacturing companies", "over dependence on other countries", "lack of purposeful and functional education", "health and infrastructure", "people lack personal-responsibility/consciousness", "selfish citizens and leaders", "bad economic management", "unable to implement policies", "undisciplined society", "social vices among

the youth", "unmotivated workers", "brain drained", "tribalism", "nepotism", "confused priorities", "no time consciousness", "lack of strategic planning and skilled labor", and "inability to enforce law and order".

On Ghana's top priority for national development, the common perceptions expressed were the need to "keep the cities clean by ensuring that refuse is not dumped indiscriminately", "…develop our human resource especially in the rural areas", "…focus on manufacturing by producing finished products", "…become ITC leader in Africa by embarking on a massive technological project nationwide", "…embark on rapid rural development", and "focus on human development.(i.e. education, purposeful culture, fairness in income distribution)". Some respondents believe the country ought to focus on culture, tourism, proper use of natural resources, law enforcement, export promotion and discourage importation, the need for transparent and accountable leaders in every sector, the need to embark on major restructuring of the education systems to make students more innovative oriented' run through the responses of a good number of the participants and the need for an educational system which will "inculcate best values, teach children to be responsible and encourage them to be involved in national development" also emerged as an important viewpoint. Most of the respondents called for a system of education that not only teaches people how to read and write "but inculcate the values of society in children… to help us use the hand and brains".

The second objective was to find out the current image association among Ghanaians towards their country. In the view of the respondents a 'true Ghanaian' was described as "patient, kind, polite, and not violent…hospitable and always striving to improve self". However, it emerged strongly that Ghana was losing her 'true Ghanaianness'. The common associations expressed by the respondents are highlighted below:

That Ghanaians politicize everything and leave the real issues unattended to: "unpatriotic, reckless, undisciplined, irresponsible and arrogant...people who misuse state resources and property, self-centered and disrespectful of the law, afraid to take risk and avoid anything that is challenging…worship mediocrity and are apathetic to national development",

"Ethnocentric and politically polarized to the extent that whatever the government does is unduly criticized by the opposition".

"The Ghanaian today is only interested in identifying problems with no interest in finding solutions…in fact in some cases, some people benefit from our problems so they won't address the problem even when the solution is right beside them".

Leaders of the country are thought of as being mostly "selfish…people who make decisions for their own enlargement".

That the Ghanaian is "a pretender, always looking for excuses to avoid work". Respondents argued "we behave as if we are in a state of helplessness and over-dependent on the state to do almost everything for us, to even put food in our mouths".

That the Ghanaian "tends to spend too much of his/her resources on social activities such as funerals and marriage ceremonies…On top of this behaviour, they do not invest /save and have this concept of hand to mouth approach…"

The third research objective was to find out what Ghanaians perceive are the key challenges to Ghana's development. The key challenges to the development of the country identified were "…needing better management of resources", "secured nation with uneasy calm in part", "culturally-oriented, but not purposeful culture", "corruption", "apparently, well-intentioned people but great pretenders". "hospitable people who are not service conscious", and "excessive reliance on the production of raw materials not finished products". In spite of her challenges, some respondents expressed a strong belief that there is still more room for improvement. They proposed that Ghana needs to focus its development efforts on building democracy and a vibrant economy, human development, management of natural resources, providing quality education and health, manufacturing – production of finished products, industrialization and technological development, utilizing human resources, infrastructure development, and tourism development in order to improve on or boost her development.

The fourth research objective was to find out Ghanaians' perceptions about brand Ghana identity. The key perceptions expressed were "…heading towards accumulation of more debts…a country that does not seem to be going anywhere". In addition, the view that the country" is stagnant, wavering and always hovering around the same place, just moving in circles" was strongly voiced by the respondents. A

respondent provided poignant and apt perceptions as in the following: "It's difficult to determine the direction of the country since there is high level of corruption and divisiveness". An elderly statesman also reaffirmed these negative perceptions thus: "Ghana is not going anywhere" and that "Ghana as of now has no developmental plan. The President and the people we elected have good intentions, but good intentions are not enough. They must have a positive goal. For example, if I want everybody in Ghana to go to school, I cannot do that unless I have teachers in my classroom. I also know that if the standard of education is falling, I cann't change it overnight. I must first of all find out why the standard is falling and also find out how it can be changed. So there is the need for planning." Other less dominant but relevant and positive perceptions were that Ghana has realized her past mistakes and she is now taking steps to address people's attitudes. Some of these respondents saw Ghana as heading towards achieving "the millennium goal and also to become a developed country, "… a leading producer of oil in the world". Others also expressed the belief that the nation has also made some notable progress in the area of democracy and press freedom and that it should "achieve a clean environment, move forward and become a stronger democratic nation, feeding and providing security and health for her people". Thus, there appeared to be a strong belief among the respondents that Ghana can be developed into a well-developed state "like most of Western European countries". There was also a strong unanimity among the interviewees that Ghanaians should strive to be good to others and that the true Ghanaian must be associated with values that must be unifying, and driving Ghana's holistic development. The key values, which emerged, were democracy, freedom and justice, fairness, equality, equity & liberty, open society, national inclusiveness/solidarity/unity/national integration, peace and stability; safety and security, national excellence, achievement, altruism, support for the vulnerable, standing for our rights, bravery, fearlessness, leadership, hard-work, resilience, making a difference, honesty, truthfulness, sincerity, modesty, integrity, probity, transparency & accountable, public virtue/service, loyalty, patriotism, discipline, time consciousness, being service oriented, entrepreneurship, creativity, being adaptive, self-reliance. The distinguishing characteristic about Ghana, was the "peace she enjoys in the chaotic West African sub region", successful and peaceful general elections resulting in the smooth change of government from one political party to another. In terms of Ghana's contribution to the world, she was described as a major contributor to peacekeeping missions in war torn countries in Africa and around the world, supply of electricity and mineral resources to other countries. She has proven herself to be a hospitable country to refugees from other countries. However, Ghana has allowed itself to become "the centre for dumping of inferior goods by the world …involved in drug trade". That Ghana should position herself as a role-model using her natural resources more efficiently to the benefit of other countries, contribute to the world economy by producing and exporting finished products, provide economic assistance to other nations and stand out as a democratic country, be heavily involved in global policy making, be hosting world activities and also be involved in international cooperation so as to improve her image. Finally, with a high expectation, most respondents agreed on the view that Ghana ought to be distinguished on the following bases: Civilized and responsible people, vibrant economy, good infrastructure, modernized environment, quality health and education, job opportunities, disciplined country with good leaders. And that Ghana ought to have responsible and knowledgeable citizens as a differentiating factor, a nation with functional democracy.

6. CONCLUSION

The behavioral conceptual model for country brand management that Brand Office seeks to adopt in branding Ghana appears to be appropriate. This is because several issues and ideas raised by respondents in the interviews, in relation to branding Ghana are about behavior and attitude of the citizenry and political leadership. The following are some conclusions from the research work which support the approach of Brand Ghana Office:

Ghanaians have varied perceptions and concerns about Ghana as a nation and, therefore, embarking on any attempt at branding the country without understanding their views about the country would have been a folly.

Much as Ghanaians aspire for economic development and personal well being they perceive good behavior and attitudes of the citizenry such as discipline, responsible behavior, quest for knowledge and good leadership as central to establishing a differentiator for Brand Ghana.

Ghanaians are very clear that nation branding must be underpinned by appropriate policies that lead to the provision of infrastructure, quality education, quality health care and job creation. For them nation branding cannot be divorced from development. It should be the end result of such an initiative.

Ghanaians appear to be cynical and generally less satisfied about the conduct and performance of their political leaders. Any credible nation branding initiative and implementation will require behavior change. The political leadership and the elites must take the lead in modeling the desired behaviour.

Ghanaians have very high aspirations and seem to be impatient with the level and pace of development of the country.

7. MANAGERIAL IMPLICATIONS

A number of implications are worth mentioning. First, as the behavior of the citizenry is a key component of the country's branding effort, there is a need for a focus on internal marketing to engender the exhibition of responsible behavior and desirable attitudes. A well-publicized essay competition for students in Ghana on the theme, "Vision of a prosperous Ghana", may serve the above purpose. Secondly, stakeholder engagement to gain buy-in and support for the branding effort is critical, especially, where different people and/or institutions with different products and services may all be projecting the image or otherwise of Ghana through their action or inaction. Fourthly, political leaders should serve as genuine models for any behavior change that is required to move the nation towards realizing its brand essence. Politicians cannot afford to say one thing and do another. This will turn the nation branding effort into a political gimmick. Genuine political commitment will require some very tough and at times unpopular decisions from government.

Finally, building a strong country brand takes a relatively long time to achieve, especially, if a country is seeking to change an existing stereotype image. It is not a quick-fix tool for economic development and improvement in the well-being of the people. Thus, stakeholders need to be well-informed to allow the process adequate time for it to bear the desired returns.

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THE ROLE OF BUDGETING ETHIC ORIENTATION ON MANAGERIAL PERFORMANCE: AN EMPIRICAL INVESTIGATION OF THAILAND'S EXPORTERS

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ABSTRACT

Research themes and perspectives on ethical budgetary accounting have expanded in recent years. However, much of the prior and current researches in budgeting ethics often focus on budgetary slack and have been conducted in individual level. In addition, the constructs which prior studies use to measure budgeting ethics still vary. Therefore, the primary objective of this study is to investigate the effects of budgeting ethic orientation on managerial performance via accounting information reliability, decision making effectiveness, and employee commitment. Data are collected from 102 accounting managers in Thailand's exporters. The results reveal that both allocating resources fairness and participation budgeting process are the most powerful effect on its consequences. Furthermore, it also found that accounting information reliability, decision making effectiveness, and employee commitment are more related to increasing managerial performance. Finally, contribution, suggestions for future research and conclusions are presented.

Keywords: *Budgeting Ethics; Fairness; Budgetary Participation; Accounting Information Reliability; Decision Making Effectiveness; Employee Commitment; Managerial Performance*

1. INTRODUCTION

Budgeting system plays an important role to business management, especially in decentralized firms. A company needs budget to translate all the company's strategies into short-term and long-term plans and objectives (Murwaningsari, 2008). Budget is one of the important tools which all managerial levels use to plan, control firm's activities, and make the business achieve certain aim and appropriate operation. Budgeting processes has evolved from a main role in managerial planning and controlling (Ottley, 1994) to using for controlling and planning purposes and value added for the firms, which called strategic budgeting (Libby and Lindsay, 2009).

Strategic budget refers to a instrument that have the trend leading firm to organizational success (Abernethy and Brownell, 1999) and is also a long-run operational plan which is used for controlling and planning (Fadeeva, 2004; Gonzalez et al., 2003). Many prior researches indicated that strategic budgeting has positive affect firm success; (Pungboonpanich and Ussahawanitchakit, 2010; Libby and Lindsay, 2009; Murwaningsari, 2008; McKee and Varadarajan, 1995), while some studies found either no relationship or negative relationship (Ni et al., 2007; Lau and Buckland, 2001; Kren, 1992). These mixed results probably stem from the lack of concerning ethics (Jensen, 2003).

Budgeting ethics is a part of accounting ethics that firm should put more emphasis on. Budgeting ethic orientation is defined here as the extent in which a firm focuses on fairness concepts, which are transparency and justice, in budgeting process. The fundamental of budgeting ethic orientation is that firm should consider is the best way to fairly allocate resources to all departments and the best way to planning, control, and evaluate employees' performance and firm activities. According justice theory, there are three perspectives of organizational justice following: Procedural justice concerns the fairness of an organization, distributive justice emphasizes on the fairness of an outcome, and interactional justice focuses on the fairness of a supervisor (Adams, 1965). In budgeting process context, justice is related to the perception of employees in lower position of all processes used by their superiors to evaluate their performance and as a mean of communicating feedbacks and determining the reward that they should be received (Murwaningsari, 2008; McFarlin and Sweeney, 1992). Therefore, budgetary participation is also a component of budgeting ethic orientation. Subordinates' participation in the budget-setting process enables them to obtain information that is relevant to enhance their jobs (Magner et al., 1996). Firm that employs equally and consistency rules to all employees and reward them due to their performance and achievement without personal biases, employees will perceive positively (Tang and Sarfield-Baldwin, 1996). Consequently, when employees recognize procedural fairness, their morale and job attitudes will

increase, in turn, it will lead to satisfy their job as well as their job performance, entailing overall firm's performance (Parker and Kohlmeyer III, 2005).

Research themes and perspectives on ethical, social and environmental accounting and accountability have expanded in recent years, especially in budgeting field. Much of the prior and current researches in budgeting ethics often focus on budgetary slack. This topic has traditionally been viewed as an ethical issue and is widely examined for long time. Much of the prior and current researches in this field have been conducted in individual level (Hobson et al., 2011; Davis et al., 2006; Stevens, 2002). Unfortunately, empirical budgeting ethics researches at organizational level are limited (Douglas and Wier, 2000). Furthermore, the constructs which prior studies use to measure budgeting ethics still vary such as fairness, honesty, accountability and integrity (Menson, 1990). Overall, recent budgeting ethics researches demonstrate the need to investigate the role of budgeting ethic orientation additionally.

As discussed earlier, the primary purpose of this study is to examine the role of budgeting ethic orientation on managerial performance. In addition, the study purposes are as follows: (1) to examine the effect of budgeting ethic orientation on accounting information reliability, decision making effectiveness, and employee commitment and (2) to investigate the roles of accounting information reliability, decision making effectiveness, and employee commitment on managerial performance. Hence, the key research question is "How does budgeting ethic orientation relate to managerial performance?" Furthermore, the research questions are as follows: (1) how does budgeting ethic orientation influence on accounting information reliability, decision making effectiveness, and employee commitment?, and (2) how do accounting information reliability, decision making effectiveness, and employee commitment impact on managerial performance?

The study proceeds in the following steps. The first describes the theoretical framework of this study including presentation of the hypotheses. The next addresses research methods, i.e. participants, instruments, and variable measurement). The third shows results from regression analysis. Finally, findings, implications, and suggestions for future research are discussed.

2. THEORETICAL FOUNDATION

Previous researches in budgeting ethics field infer that nearly all budgetary studies are based on the following theories:

2.1 Economic Theory
This theory is based on the assumption that a budget provides a fair ground to select and share information about budgeting process (Murwaningsari, 2008). In other words, it is assumed that subordinates know information about their task and task environment more than superior (Douglas and Wier, 2000). This theory suggests that individuals engaged in a budgeting process are motivated by information sharing and task coordination. Therefore participative budgeting will help manager gain information and thereby reduce uncertainty.

2.2 Psychological Theory
This theory suggests that there are two reasons make budgetary participation necessary, which are uncertainty and information asymmetry. First, the involvement of top and lower manager in participative budgeting controls of asymmetric information and task uncertainty. Second, budgetary participation allows individuals to have reduced tasks and increase job satisfaction, and in turn lead to reduced budgetary gaps (Hopwood, 1976). In addition, psychological theory also introduces three main mechanisms, which are value attainment, motivation, and cognition (Locke and Latham, 1990).

2.3 Sociological Theory
This theory describes how organizational context, for example environmental uncertainty, and structure affect budgetary participation. Since organization's environment becomes more uncertain, such as decentralization and functional differentiation, more integrating mechanisms are required, i.e. participative budgeting to coordinate activities of subunits and align all activities in the organization (Shield and Shield, 1998).

2.4 Contingency Theory

Contingency theory is a part of behavioral theory which claims that there is no best way to organize a corporation, to lead a company, or to make decisions and that an organizational / leadership style that is effective in some situations may not be successful in others. Instead, the optimal action is contingent or dependent on the internal and external situation (Fiedler, 1964). In accounting research area, researchers interpreted that management accounting practices, the formal and informal information, and decision-making methods that govern the allocation of organizational assets as parts of organizational structure (Govindarajan, 1988). This study utilizes the contingency theory to identify two perspectives of budgeting ethic orientation, which are allocating resources fairness and participation budgeting process and to evaluate the relationships between budgeting ethic orientation and managerial performance, as described in the next section.

3. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The research model of this study is illustrated in Figure 1. It shows that budgeting ethic orientation is an independent variable while managerial performance is a dependent variable. In addition, there are three mediators of budgeting ethic orientation, including accounting information reliability, decision making effectiveness, and employee commitment.

FIGURE 1
CONCEPTUAL MODEL OF BUDGETING ETHIC ORIENTATION ON MANAGERIAL PERFORMANCE
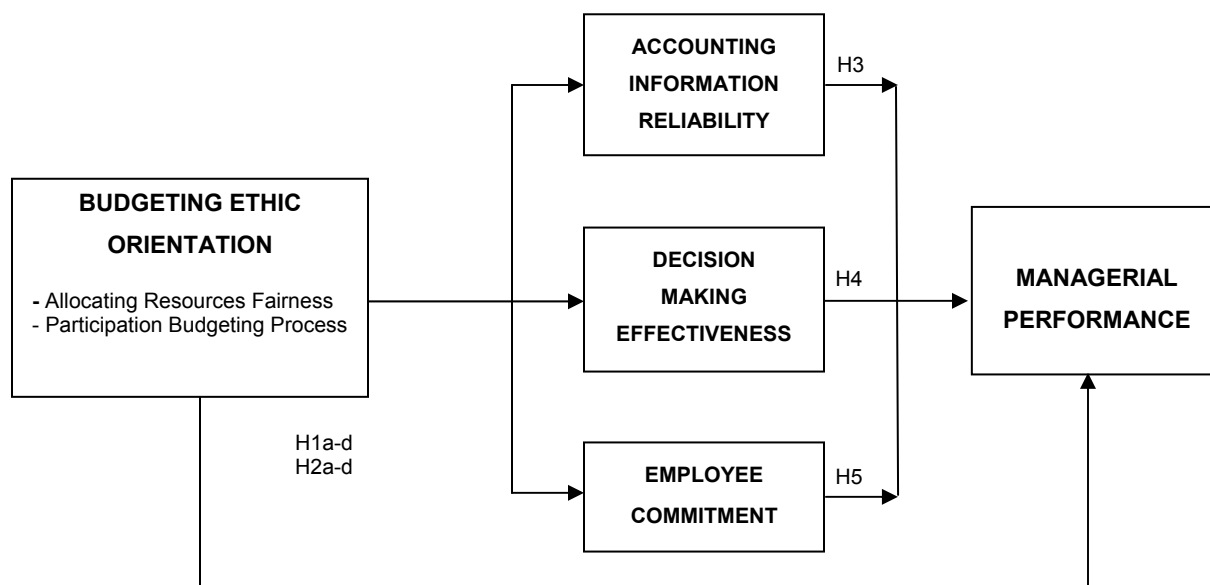
3.1 Budgeting Ethic Orientation

Budgeting ethic orientation in this research refers to the extent in which a firm emphasizes on fairness concepts, which are transparency and justice, in budgeting process. The primary principle of budgeting ethic orientation is firm should consider is the best way to fairly allocate resources to all departments and the best way to planning, control, and evaluate employees' performance and firm activities. In addition, firm should consider how selected policies and processes of budgeting affect all employees in each level of organization structure. Budgeting ethic orientation is considered a strategy of corporations, which are capable of implementing ethical codes and moral values, in budgeting process. Hence, this study propose budgeting ethic orientation which distinguishes two perspective following, allocating resources fairness and participation budgeting process.

Allocating resources fairness is referred to the extent in which a firm identify allocating resources policy and procedures with emphasizes on equity and transparency principles. Transparency can be defined as "the essential condition for a free and open exchange whereby the rules and reasons behind regulatory measures are fair and clear to all participants" (Roostalu and Kooskora, 2010). In another word, it implies to openness, communication and accountability. When transparency is achieved in budget reports, the reliability of information is enhanced; in turn decision-making is improved (Benito and Bastilda, 2007). According equity theory, it explains relational satisfaction in terms of perceptions of fair/unfair distributions of resources within interpersonal relationships (Huseman et al., 1987). Consistently, procedural justice concerns the fairness and the transparency of the processes by which decisions are made. It refers to the idea of fairness in the processes that resolve disputes and allocate resources (Adams, 1965). Procedural justice is also important in budgeting process because it is comprised of fair procedures, it allows the employees to have a say in the decision process and it gives employees fair treatment. Perception in procedural fairness is likely to result in favorable employee reactions including improved organizational commitment. Numerous empirical studies found a positive relation between perceived fairness and organizational commitment (Parker and Kohlmeyer III, 2005; Lau and Moser, 2008). Based on the above discussion, this research assumes that it is more likely that firms that oriented in budgeting ethics by allocating resources fairness will have greater accounting information reliability, decision making effectiveness, employee commitment, and managerial performance. Thus, the hypothesis is posited as follows:

Hypothesis 1: Allocating resources fairness will be positively related to (a) accounting information reliability, (b) decision making effectiveness, (c) employee commitment, and (d) managerial performance.

Regarding the second perspective of budgeting ethic orientation, *participation budgeting process*, it is defined here as the manner in which firm allow subordinate manager involve and influence in setting his or her unit's budgets (Brownell, 1982), which make an important aspect of budget planning (Derfuss, 2009). Previous researches reveal that budgetary participation setting benefits managers in various ways. According psychological theory, there are three main mechanisms, which are value attainment, motivation, and cognition (Locke and Latham, 1990), are utilized to explain how participative budgeting might affect budgetary and managerial performance. Regarding the cognitive role, participation increases trust in superiors (Rankin et al., 2008), better attitudes towards budgets, stronger organizational commitment, and managerial performance (Murwaningsari, 2008). According to the value-attainment role, the act of participation enables subordinate managers to feel equal and respected and offers them an opportunity to express their views (Derfuss, 2009).

However, previous empirical studies provide inconsistent results for the relationship between budgetary participations and performance. This study suggests that budgetary participation provides the communication opportunities between superiors and subordinates not only with improving managerial attitudes but also with enhancing managerial cognition, in turn improves their commitment, satisfaction and managerial performance. (Derfuss, 2009; Ni et al., 2007). As a result, the following hypotheses are proposed:

Hypothesis 2: Participation budgeting process will be positively related to (a) accounting information reliability, (b) decision making effectiveness, (c) employee commitment, and (d) managerial performance.

3.2 The Effects of Budgeting Ethic Orientation's Consequences on Managerial Performance

3.2.1 Accounting Information Reliability
In this research, accounting information reliability refers to the extent in which the quality of accounting information that firm provides in financial reporting or annual report and firm's website, which focus on the correctness, completeness, and neutrality and is able to reflect the real economic status of firm (Prempanichnukul and Ussahawanitchakit, 2010). Previous studies reveal that managerial performance will be enhanced with accounting information reliability (Deshpande et. al., 2008; Choe, 2004; Subramaniam and Ashkanasy, 2001).

Accounting information reliability expected to heighten managerial performance by providing accurate, complete, and information to manager. Accordingly, firm's manager will improve their decision making, i.e. planning, controlling, and evaluating. Thus, the hypothesis is posited as follows:

Hypothesis 3: Accounting information reliability will be positively related to managerial performance.

3.2.2 Decision Making Effectiveness
Decision making effectiveness in this study refers to the attainment in the selection among business alternatives that enables firms to achieve their business objectives or goals (Konthong and Ussahawanitchakit, 2010). Prior researches indicate that there is a positive relationship between decision making quality and performance (Douglas and Wier, 2005; Hunton et al., 2003). The competence of manager in planning, controlling and evaluating will be improved by the effectiveness of decision making, such as identifying firm's strategies or goals, selecting the best solution of capital budgeting. Therefore, the following hypotheses are proposed:

Hypothesis 4: Decision making effectiveness will be positively related to managerial performance.

3.2.3 Employee Commitment
In this study, employee commitment is defined in this study as employees' identification with and involvement in their task or responsibility (Prempanichnukul and Ussahawanitchakit, 2010; Mowday, Steers, and Porter, 1979). They love, are proud, and concentrate on their work and feel its value and importance for firm.

The topics about organizational commitment have been studied for long time. Numerous studies found positive relationships between organizational commitment and performance (e.g. Lau and Moser, 2008; Wentzel, 2002). Since employees who have high levels of organizational commitment, they will perform for firm's interest rather than self-interest. They want to stay and loyalty with their firm which these attitudes lead to improve their performance (Lau and Moser, 2008; Webb, 2004). Accordingly, this study implies that employees who commit with both their job and firm are more likely to support their superior and willing to do task and cooperate with managers. As a result, managerial performance will be enhanced. Based on the above discussion, the hypothesis is proposed as below:

Hypothesis 5: Employee commitment will be positively related to managerial performance.

4. RESEARCH METHODS

4.1 Data Collection
Data were collected with a field survey administered to accounting managers of Thailand's exporters. A cross-sectional population of 468 firms was selected and 102 useable questionnaires were returned resulting in the response rate of 21.79%. For checking non-response bias, Armstrong and Overton (1977) find that late respondents more closely similar non-respondents than do early respondents. The t-test result shows there are no significant differences between early and late respondents on key measures.

4.2 Variable Measurements
All variables of this paper are measured by questionnaire questions that comprise six sections. The first two parts are a participant's and a firm's demographic, respectively. The remaining sections are the measures of budgeting ethic orientation and its constructs. All measures are drawn from prior literature and utilized five-point Likert scales, with the highest score is "strongly agree" and the lowest score is "strongly disagree". Measurements of independent variables and dependent variable are described as following. Budgeting ethic orientation comprises of two aspects including allocating resources fairness and participation budgeting process which are measured using four-item. First, *allocating resources fairness* is designed to measure the degree of fair procedures are employed in the firm's budgeting process. The items included in the scale focused on allocating resources procedures designed to promote equity, accuracy, correctability, and transparency. Second, *participation budgeting process* is

measured by the manner in which firm allows its employees take part in planning and providing necessary information in budgeting process.

For the consequences of budgeting ethic orientation, which are accounting information reliability, decision making effectiveness, employee commitment and managerial performance. First, *accounting information reliability* is measured using the four-item scale which adapted from and Prempanichnukul and Ussahawanitchakit (2010). This measure evaluates the quality of accounting information that firm provides in financial statement and/or other reports which are able to reflect the real economic status of firm and emphasized on the correctness, completeness, and neutrality. Second, decision making effectiveness is assessed with four-item scale developed from Konthong and Ussahawanitchakit (2010) which asks the perceptions of the efficiency of planning, evaluating in new project investment, project selection, and achievement of strategic planning. Third, *employee commitment* is measured using the four-item scale of Mowday, et al. (1979) and adapted from Parker and Kohlmeyer III (2005). This measure assesses how respondents commit to and the extent to which they pay attention their job. Finally, *managerial performance* is measured with three-item scale which is related to the degree of the firm's ability or competence to utilize accounting information for planning, controlling, and evaluating efficiently.

In addition, this study includes firm's size and age as control variables. Firm's size is measured by total assets. Prior studies indicate that small firms are more likely to be under greater pressure to engage in unethical behaviors to remain competitive intensity (Vitell et al, 2000; Razzaque and Hwee, 2002). Firm age is measured by the number of years that a firm has been in operation. Firm success may be influenced by firm age and size because it may be able to achieve superior performance (Banker et al., 2008).

4.3 Method
Confirmatory factor analysis (CFA) is employed to investigate validity of constructs. Furthermore, factor scores are used to estimate for regression analysis. Table 1 depicts results of factor loading and Cronbach's alpha coefficients. All factor loadings are greater than 0.7 (Hair et al, 2006) and are statistically significant. Cronbach's alpha of all variable is greater than 0.8 (Nunnally and Berstein, 1994). Overall, the results from Table 1 indicating the reliability and validity of these constructs. The ordinary least squares (OLS) regression analysis was employed to estimate parameters in hypotheses testing. Four equation models are shown as follows:

Equation 1: AIR $= \beta_{01} + \beta_1 FAIR + \beta_2 PART + \beta_3 SIZE + \beta_4 AGE + \varepsilon$
Equation 2: DEC $= \beta_{02} + \beta_5 FAIR + \beta_6 PART + \beta_7 SIZE + \beta_8 AGE + \varepsilon$
Equation 3: COMMIT $= \beta_{03} + \beta_9 FAIR + \beta_{10} PART + \beta_{11} SIZE + \beta_{12} AGE + \varepsilon$
Equation 4: MP $= \beta_{04} + \beta_{13} FAIR + \beta_{14} PART + \beta_{15} AIR + \beta_{16} DEC + \beta_{17} COMMIT$
$\qquad\qquad\qquad + \beta_{18} SIZE + \beta_{19} AGE + \varepsilon$

Table 1
Reliability and Validity Analysis

Variables	Factor Loading Range	Cronbach's Alpha
Allocating Resources Fairness (FAIR)	0.77-0.91	0.88
Participation Budgeting Process (PART)	0.88-0.91	0.92
Accounting Information Reliability (AIR)	0.78-0.89	0.86
Decision Making Effectiveness (DEC)	0.84-0.88	0.89
Employee Commitment (COMMIT)	0.79-0.86	0.85
Managerial Performance (MP)	0.79-0.95	0.86

5. RESULTS AND DISCUSSION

Table 2 shows the descriptive statistics and correlation matrix between variables analyzed by Pearson correlation coefficients. Although it indicates high correlation between independent variables, the multicollinearity problem is not severe, according to VIF ranging from 1.00 to 3.29 (Hair et al., 2006).

Table 3 shows the multiple regression results of the relationships between budgeting ethic orientation (allocating resources fairness and participation budgeting process) and its four consequences (accounting information reliability, decision making effectiveness, employee commitment, and managerial performance) which are followed by Hypotheses 1-2. Moreover, this table also describes the effects of accounting information reliability, decision making effectiveness, and employee commitment on managerial performance which are followed by Hypotheses 3-5.

Table 2
Descriptive Statistics and Correlation Matrix

	FAIR	PART	AIR	DEC	COMMIT	MP	SIZE	AGE
MEAN	4.218	4.103	3.804	3.811	3.786	3.742	2.186	3.422
SD	0.604	0.781	0.736	0.674	0.707	0.753	0.761	0.694
FAIR	1.000							
PART	.726***	1.000						
AIR	.547***	.449***	1.000					
DEC	.572***	.495***	.757***	1.000				
COMMIT	.565***	.584***	.710***	.794***	1.000			
MP	.565***	.524***	.538***	.771***	.800***	1.000		
SIZE	.037	-.100	.270**	.152	.180	.156	1.000	
AGE	-.037	-.175	.155	-.003	-.023	-.017	.140	1.000

Note. *** Correlation is significant at the 0.01 level (2-tailed)
** Correlation is significant at the 0.05 level (2-tailed)

The evidence indicates that allocating resources fairness has significant positive effects on all four consequence, these are accounting information reliability (b_1 = .374, p < .01), decision making effectiveness (b_5 = .463, p < .05), employee commitment (b_9 = .259, p < .05), and managerial performance (b_{13} = .345, p < .01). ***Thus, Hypotheses 1a to 1d are supported.*** These results suggest that the more emphasized on allocating resources fairness, the greater accounting information reliability will be achieved. In addition, decision making effectiveness, employee commitment, and managerial performance also enhanced by high allocating resources fairness. It is consistent with equity theory which suggests that perceptions of fairness are a job-related motivation based that can influence the behavioral and affective responses of performance. When employees have positive attitude about their firms, including organizational fairness, it will lead to improving performance (Parker and Kohlmeyer III, 2005). In additions, these results are also consistent with recent studies (Sweeney and Quirin, 2008; Harris et al., 2007; Ni et al., 2007; Kim and Mauborgne, 1993). For example, Ni et al. (2007) found the relationships between fairness in budgeting process and performance. The procedure fairness induces managers' trust in superior (Kim and Mauborgne, 1993).

With regard to the second dimension of budgeting ethic orientation, the results reveal that participation budgeting process has significant positive impacts on almost its consequences, which are accounting information reliability (b_2 = .164, p < .10), employee commitment (b_{10} = .714, p < .01), and managerial performance (b_{14} = .332, p < .05). ***Thus, hypotheses 2a, 2c, and 2d are supported.*** The evidences confirm that firm should place more concern on budgetary participation as a medium of communications between higher and lower managers to discuss. It is consistent with prior studies that found the effects of participative budgeting on managerial performance. When the objectives of firm have been designed and approved in a participatory way, employees will have personal responsibility to achieve it due to their involvement in the budgeting process (Murwaningsari, 2008). Nevertheless, participation budgeting process has no significantly effect on decision making effectiveness. Possibly, if subordinates' objectives

diverge from those of the firm, they may withhold or misrepresent their private information. According agency theory, it assumes that in the absence of truth-inducing in contracts of budgeting process, subordinates will misrepresent their private information to serve their own interest, regardless of the effect on the firm (Rankin et al, 2008; Douglas and Wier, 2000). Consequently, managers will make decision in the wrong way and cannot use that information to run the business.

Table 3
Results of Effect of Budgeting Ethic Orientation on Its Consequences [a]

Independent Variables	Dependent Variables			
	Accounting Information Reliability	Decision Making Effectiveness	Employee Commitment	Managerial Performance
Budgeting Ethic Orientation :				
Allocating Resources Fairness (FAIR: H1a-d)	.374*** (.116)	.463** (.118)	.259** (.114)	.345*** (.119)
Participation Budgeting Process (PART: H2a-d)	.234** (.118)	.178 (.120)	.425*** (.115)	.295** (.121)
Accounting Information Reliability (AIR: H3)				.319*** (.091)
Decision Making Effectiveness (DEC: H4)				.489*** (.102)
Employee Commitment (Commit: H5)				.541** (.098)
Control Variable:				
SIZE	.538*** (.169)	.315** (.172)	.440*** (.165)	.137 (.123)
AGE	.435** (.202)	.107 (.205)	.109 (.198)	.125 (.143)
Adjusted R^2	.380	.362	.409	.711

For testing the relationships among the consequences of budgeting ethic orientation, accounting information reliability has a significant positive impact on managerial performance (b_{15} = .319, p < .01). **Therefore, hypothesis 3 is supported.** This result consistent with many researches those found the positive relationship between accounting information reliability and performance (Prempanichnukul and Ussahawanitchakit, 2009; Boritz, 2005; Ismail and King, 2005). Managers can make and improve the ability of managerial decision efficiently from obtaining more quality of accounting information which reflects the correctness, completeness, and neutrality. For Hypothesis 4, the result shows greater decision making effectiveness significantly increased managerial performance (b_{16} = .272, p < .05). **Thus, hypothesis 4 is supported.** Consistent with prior studies, decision making effectiveness is more important to managerial performance. Since managerial competence and/or performance are enhanced by the effectiveness of managerial decision making which results from planning and controlling efficiently (Konthong and Ussahawanitchakit, 2009; Douglas and Wier, 2005; Hunton et al., 2003). Finally, the result of Hypothesis 5 is testing, as shown in Table 3. The evidences demonstrate that employee commitment (b_{17} = .493, p < .01) has significant positive effect on managerial performance. **Therefore, hypothesis 5 is supported.** This finding consists with numerous studies which found positive relationships between employee commitment and performance (Prempanichnukul and Ussahawanitchakit, 2009; Lau and Moser, 2008; Wentzel, 2002). Since employees who have high levels of commitment in their firm and work, they will perform for firm's interest. They want to stay and loyalty

with their firm which these attitudes lead to cooperate and help together, then improve managerial performance.

6. CONTRIBUTIONS AND FUTURE RESEARCH

6.1 Theoretical Contributions and Future Directions for Research
The objective of this research is to gain a vivid understanding of the relationship between budgeting ethic orientation and its consequences which are accounting information reliability, decision making effectiveness, employee commitment, and managerial performance. This study provides important theoretical contributions extending on previous accounting ethics, especially in budgeting studies by using corporate level perspective. Following the results of this study, future research is needed. Obviously, participation budgeting process, one of budgeting ethic orientation's dimensions, does not impact on decision making effectiveness which further research is needed. Finally, all dimensions of the main variable in this study, budgeting ethic orientation, are developed as a new scale and measured by the definition of each construct. Thus, the future research should be considered providing other dimensions for fully understanding.

6.2 Managerial Contributions
In practical implication, this study helps firms to understand the benefits of budgeting ethic orientation on managerial performance. Moreover, emphasizing ethics in budgeting process will enhance the reliability of accounting information, the effectiveness of decision making, and employee commitment. The results of this research contributes to motivate more firm to emphasize on both fairness in allocating resources and participation budgeting process that lead to enhancing managerial performance finally.

7. CONCLUSION

This study investigates the effects of budgeting ethic orientation which comprise of allocating resources fairness and participation budgeting process, on its consequences which are accounting information reliability, decision making effectiveness, employee commitment, and managerial performance. Data are collected from 102 accounting managers in Thailand's exporters. The findings show that both allocating resources fairness and participation budgeting process are the most powerful effect on its consequences. However, only the relationship between participation budgeting process and decision making effectiveness has no significant impact. In addition, all accounting information reliability, decision making effectiveness, and employee commitment are more related to increasing managerial performance. These results confirm that firm should emphasis on budgeting ethics because it will enhance performance finally.

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COMPARING THE ECOLOGY OF SMES IN TAIWAN AND USA

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ABSTRACT

The purpose of this paper is to examine the effect of regulatory environment on the survival of SMEs in Taiwan and United States. More specifically, we empirically examine the relationship between key regulatory requirements such as tax burden and health care costs and SME Populations. Multiple regression analysis is used to examine the effect of five regulatory factors on the level of SMEs population in 50 states within the U.S. as well as in Taiwan. The empirical results reveal that the model used in the study have statistically and practically significant effect on predicting the size of SME population. The major limitation of this study is the lack of extended longitudinal data particularly in Taiwan. In addition, the inherent cultural and socio-political factors limit the extent of comparative analysis between the two countries. The result of this study sheds some light on some of the factors influencing the birth and death of SMEs. Policy makers and other small business support groups could use the results of this study to make relevant policy decisions and create a conducive environment particularly on legislating the tax rate imposed on SMEs. This study fills the gap in small business survival and growth research by focusing on the relatively ignored area of regulatory environment and its effects on the population of SMEs.

Keywords: *Population Ecology, Organizational Ecology, Small and Medium Enterprises, SME Survival, Market Entry, Taiwan*

1. INTRODUCTION

Taiwan's economic growth over the last few decades has been attributed to successful SMEs, which constitute about 98.7 per cent of the island's business entities (White Paper Book, 2006). 70% of Taiwan workforce is hired by SMEs and two-thirds of all employees in Europe work in SMEs. SMEs play a critical role in the global economy (Barad and Gien, 2001, Chen, 1999, Fiegenbaum and Karnani, 1991, Sherman, 1999, Sum et al., 2004). The U.S. Commerce Department defines SME as a company with less than 500 employees (Clark, 2005). Almost half of the U.S. workforce is employed by SMEs. About 97% of U.S. exporters are SMEs, and SMEs are responsible for more than one-fourth of U.S. exports. The number of SME exporters grew twice as fast as large exporters from 1992 to 2002 (Clark, 2005).

Despite their contribution to the local and global economy, large proportions of SMEs do not survive beyond their first 5 years (Ciavarella et al., 2004). This problem is especially obvious in the United States. A number of theoretical arguments have been made regarding the increasing SME failure rate. One common and prominent explanation, perhaps, is the population ecology theory. Population ecologists argue that population density (i.e. the number of firms in a certain niche environment) affects organization birth and death due to the resource limitations imposed by the environment (Aldrich, 1990, Hannan and Freeman, 1989). Aldrich (1990) proposes three processes that affect the organization birth rates (founding rates): intra-population, inter-population, and institutional processes. Intra-population processes "structure the environment into which new foundings are born." Inter-population processes are "the nature of relations between populations such as competing or cooperating". Institutional processes include "politics and governmental policies, spatial location, culture, and other events specific to particular periods in history." The regulatory environment often plays a critical role in facilitating or inhibiting the survival and growth of SMEs (National Small Business Poll, 2001).

In this study, we examine the effect of regulatory environment on the survival of SMEs in Taiwan and United States. More specifically, we empirically examine the relationship between key regulatory requirements such as tax burden and health care costs and SME Populations. We believe that studying the regulatory environment is important because (1) it can significantly limit or facilitate the founding rate of new businesses, and (2) it can impose substantial burden on the expansion and growth plans of existing SMEs. It is evident that national political, economic, legal and social environments differ in major ways from one country to another. We believe that a comparative study improves our understanding of

the business failure phenomenon that has become prevalent recently and also provides evidence on the potential influence of the regulatory environment on the survival and growth of SMEs.

2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

Population Ecology Theory
Population ecology theory was first introduced by Hannan and Freeman (1977) into organization studies and gradually developed a distinct research approach and widened its influence over organization theory with further work of Aldrich (1979) and Hannan and Freeman (1989). Stimulated by Stinchcombe's (1965) "insightful analysis of change in the world of organizations", population ecology focuses on the studies of population compared to the conventional focus of organization studies on organizations or personal behavior within organizations (Hannan and Freeman, 1989). Hannan and Freeman (1989) believe characteristics of organizations (including managerial behavior, processes, and corporate policies etc.) are "'imprinted' with the social, cultural and technical features that are common in the environment" (p. xiii) when the organization is founded. As a result, their research focuses on the rates of founding and mortality in organizational populations and takes into account of processes over long periods of time (Donaldson, 1995).

A number of empirical studies support the argument presented under the population ecology perspective. Nielsen and Hannan (1977) found that the environmental characteristics can explain the growth of educational institutions. Boeker (1991) used breweries as examples to test the relationship between the growth rate and the density of the local breweries and the results showed a positive relationship. Delacroix and Carroll (1983) found the similar relationship between firm performance and environmental characteristics when they used the Argentinean and Irish newspaper industry. Carroll and Huo (1986) replicated Delacroix et al's study and got similar results while using the American newspaper industry. Shane and Kolvereid (1995) used new ventures in Great Britain, New Zealand and Norway to test the relationships between performance of the startups and the national environment and performance and firm strategic fit. Results indicate that performance can be explained better by the national environment than by the firm strategic fit.

Therefore, the characteristics of environment do affect the firm performance in that particular environment. However, population ecologists only argue how environments affect organizations; they do not discuss the fact that environment can actually be designed or changed through human or organization activities. When Aldrich (1990) discusses the three processes to form populations: intra-population processes, inter-population processes, and institutional processes, he treats these three processes as given. However, some of the institutional processes can be designed ex ante. For example, the policy can be designed or changed to encourage certain type of businesses and accordingly build desired environment for that population. Anti-trust regulation split up AT&T and changed the ecology of phone industry. Many government policies intend to encourage development of SMEs and we do see SMEs' growing importance to economies. Next, we will discuss how government policies can affect the population of SMEs based on ecological perspectives and which related policies are considered in our model.

Equilibrium in SME populations
The population ecology perspectives initially focused only on particular populations and how individual members were selected to survive in the environments, while later neoclassical population ecologists also look at the competitions between and within populations (Hannan and Freeman, 1989). This paper will only focus on the perspectives of classical population ecology whose unit of analysis is single population, SMEs. Even though one SME population may contain various industries, SMEs could be treated as one population due to the fact that governments formed a special population for SMEs through special regulations. Most of time, SMEs face less legislative controls than large firms. For instance, large firms are required to disclose financial performance while SMEs need not. A very important concept in classical population ecology is the concept of the niche. In bio-ecology, where Darwinism and population ecology were originally from, niche is defined as "way of earning a living" (Elton, 1927 as quoted in Hannan and Freeman, 1989, p. 95). This concept explains how environmental variations affect the growth rates of populations. Every niche has its own resources and therefore has its carrying capacity-the amount of members the resources of this niche environment can support. In bio-ecology, the carrying capacity is

fixed. Hannan and Freeman (1989), on the other hand, think the carrying capacity in each environment is moving because there are many social conditions that will change the organizational ecology. Even though they did not argue how social conditions might change organizational ecology, they do believe the environments could change. In the beginning, when the population size is small, the birth rate is high, and mortality rate is low, these conditions make the growth rate increase exponentially initially. Then, the birth rate will be decreasing while the mortality rate correspondingly increases before reaching the carrying capacity. The growth rates overtime will form an S-shape curve. Therefore, if we can identify the carrying capacity of the SME population and determine whether to enter any specific environment at any given time, it would be prudent to estimate the survivals of SMEs. When the carrying capacity is reached, the mortality rate will be high while the birth rate is low. SMEs should be more cautious if they decide to enter this environment with fully filed carrying capacity. On the other hand, if governments really want to protect SMEs, they should provide an alternative haven when the populations of SMEs in their territories reach their carrying capacity.

Nevertheless, the carrying capacity is not fixed under the assumption of population ecology (Hannan and Freeman, 1989). How to identify the carrying capacity of SMEs become problematic since different environmental conditions may change such as policies, economic growth, or inflations. When the carrying capacity of certain SME population is reached, the carrying capacity is simply the numbers of SME in this particular environment.

SMEs and Regulatory Policies
Despite controversial arguments on governmental intervention aimed for assisting SME development, undoubtedly many governments specifically make policies to encourage or protect SMEs. Nowadays, the importance of SMEs to global economies is growing; it has become "political rhetoric" for governments to support SMEs (Perren and Jennings, 2005). There are quite a few studies discussing the relationship between SMEs' performances and various government policies (Bateman, 2000, Bennett et al., 2001, Nugent and Yhee, 2002, Parker, 2000, Rasiah, 2002, Riding and Haines, 2001, Roper and Hewitt-Dundas, 2001). Some support governments' interventions and some claim that we should let market drive the economy (Perren and Jennings, 2005). Nevertheless, it is a fact that governments of many countries pay special attention to policies related to SMEs. Perren et al. (2005) conducted a research in Australia, Hong Kong, Japan, Korea, Thailand, United Kingdom, and United States and found all these governments set up special offices and take special care for small businesses. From managerial perspectives, various environments can be evaluated by observing different government policies. Therefore, through different policies, managers can identify whether a particular environment is friendly for new investment or not.

Small Business and Entrepreneurship Council provides an index called Small Business Survival Index (SBSI) every year to compare the friendliness to small businesses in 50 states and the District of Columbia. Their index is comprehensive and covers substantial government's influence factors such as various types of taxes, health care regulations, electricity costs, crime rates and state government budgets. For example, state personal income tax rates affect individual investment decision-making. Roughly 90 percent of small businesses file taxes as individuals (e.g., sole proprietorship, partnerships and S-Corps.) and this makes the state individual tax even more important in SME environments.
This Index has not been tested whether or not the survival rate is higher in the friendliest state. Therefore, we will use five regulatory variables we think are more representative of our argument. These variables are state top personal income tax rate, unemployment tax, health care costs, workers' compensation, and bureaucratic efficiency. The regression model is presented in equation 1.0.

Total SME populations=b_0+b_1Top income tax rate+$b_2$unemployment tax+ $b_3$health care cost+ $b_4$workers' compensation+ $b_5$bureaucracy efficiency   (1.0)

We believe through this model, we will be able to predict the number of SMEs and accordingly provide SME practitioners a guideline whether or not entering this market.
    Hypothesis 1: The Number of SMEs can be predicted by the model presented in equation 1.0.
State Personal Income Tax Rate

State personal income tax rates impact individual investment decision-making. A high personal income tax rate raises the costs of working, saving, and investing. It would also influence investors' risk-taking attitudes. In addition to federal income tax, states have different personal income tax rate. There are obvious differences between Taiwan and the United States since the later has several states with their own jurisdiction and legislation power. Unlike the U.S., Taiwan has a single jurisdiction. Therefore, the differences among states will form different economic activities and accordingly the different populations of SMEs. In this study, we argue that the level of personal income tax levied by the government adversely impacts the population of SMEs. More specifically, the level of personal income tax rate can influence individuals' motivation to engage in entrepreneurial ventures. For instance, increase in personal income tax rate may lead some would-be entrepreneurs to reconsider their investment decisions. It could also result in enhancing the value of saving more than investment. Hence, we hypothesize that:

> *Hypothesis 2: State personal income tax rate is negatively correlated with the number of SME populations.*

Unemployment Tax

Another regulatory variable that might affect the survival of SMEs is unemployment tax. The unemployment tax on wages could be a burden on SME owners. High state unemployment tax rates increase the relative cost of labor and provide incentives for labor-intensive businesses to flee from high-tax states to low-tax states. Other factors being equal, an increase in unemployment tax by a state or country affects both start-up ventures and existing SMEs. Entrepreneurs that have already started their business in one state could be forced to relocate to other more conducive business environment. The additional operational cost associated with such tax could even drive SMEs out of business. For those entrepreneurs contemplating to start a new venture, the level of unemployment tax could adversely affect their assessment of alternative business locations. As such, we argue that there is adverse relationship between the level of unemployment tax rate and the number of SMEs in a given environment:

> *Hypothesis 3: Unemployment tax is negatively correlated with the number of SME populations.*

Health Care Costs

Health insurance represents a significant cost for businesses especially SMEs. A recent national survey of 750 SMEs by the National Federation of Independent Businesses (NFIB) research foundation found that 48% of SMEs offer health insurance coverage to their employees. In a related survey, 31% of SMEs reported that employee health insurance constituted their major business expense (Small Business Poll, 2001). Taxes and regulations increase health care costs, raise the cost of insurance, increase the number of uninsured, and act as another disincentive to starting up or locating a business in a high-cost state. The heavy burden of health cost coverage in general could be detrimental to the survival of SMEs. In Taiwan, employers are legally required to contribute to employee health insurance regardless of their size and resources. Hence, such requirement can affect the longevity and growth of SME as the resources could have been committed to growth and expansion activities. Accordingly, we argue that, ceteris paribus, health care cost has a negative relationship with the number of SMEs:

> *Hypothesis 4: Health care cost is negatively associated with the number of SME populations.*

Workers' Compensation Requirement

Last but not least, we believe that workers' compensation represents yet another regulatory tool that could determine the number of SMEs in a given environment. Workers' compensation rates impact the economy in the same way as high unemployment tax rates. The cost of labor in increased, and incentives for labor-intensive businesses to flee are clear.

> *Hypothesis 5: Workers' compensation cost is negatively correlated with the number of SME populations.*

Number of Bureaucrats

Bureaucratic efficiency represents how efficient state government employees can perform their work at cheaper costs. A proxy for the efficiency measure is the number of bureaucrats per 100 citizens. A large number of government employees shows that they are performing less productive work than if they were in the private sector.

> *Hypothesis 6: Number of bureaucrats is negatively correlated with the number of SME populations.*

3. METHODOLOGY

Method Overview
Multiple regression analyses are used to identify the practical and statistical significance of predictors. The dependent variable is the population size of SMEs in 51 states in the U.S. from 2002 to 2004. The independent variables are top personal state income tax rate, unemployment tax rate; health care costs, workers' compensation, and bureaucrat number per 100 citizens also in 51 states from 2002-2004. The initial sample size consists of 153 observations. However, our final sample size becomes 152 after adjusting for a missing observation. First, we used data from the U.S. to test our hypotheses and then we used data from Taiwan into the model built from the U.S. for comparison purposes.

All the data are gathered from Bureau of Census or Small Business Association in USA and Medium and Small Business Administration or Ministry of Economic Affairs in Taiwan. Due to the use of mandatory state taxes, measures for Taiwan are the differences between Taiwan's figures and US federal government's figures. For instance, the top personal income tax in Taiwan is 40% as compared to 35% in the U.S. We use 5% to compare with the "state" top personal income tax rate. The measurement of each variable is presented in Table I.

Table I: Measurement of Variables

US		
Variables	**Measurement**	**Source**
Y= Log (SME numbers)	Number of firms with less than 500 employees	US Census Bureau
X_1= Personal income tax rate	Top state personal income tax rate	Small Business Association
X_2= Unemployment tax	Latest maximum rate applied to average annual pay	US Department of Labor
X_3= Health care costs	Index of per capita personal health care spending in each state relative to U.S. average	US Census Bureau
X_4= Workers' compensation	State workers' compensation benefits as a percent of covered wages	Small Business Association
X_5= Numbers of bureaucrats	Government full-time-equivalent employees per 100 population	US Census Bureau
Taiwan		
Variables	**Measurement**	**Source**
Y= Log (SME numbers)	Number of firms with less than 200 employees	Medium & Small Business Administration
X_1= Personal income tax rate	Top personal income tax rate-US federal top rate	MOEA (www.moea.gov.tw)
X_2= Unemployment tax	Latest maximum rate applied to average annual pay	MOEA (www.moea.gov.tw)
X_3= Health care costs	No index applicable, so just use 1 as average index, but related information is available at source	MOEA (www.moea.gov.tw)
X_4= Workers' compensation	Workers' compensation benefits as a percent of covered wages	MOEA (www.moea.gov.tw)
X_5= Numbers of bureaucrats	Government full-time-equivalent employees per 100 population	DGBAS (www.dgbas.gov.tw)

The assumptions for conducting multiple regression analyses are met. The independent variables are normally distributed. The dependent variable is highly positively skewed so we performed a logarithmic data transformation. Collinearity of independent variables is also examined. The VIF is around 1, far less than the cut-off point (>3 or 4). Some outliers are identified but we decided to keep them in our analysis with precaution. Both entry method and stepwise method are used because our purpose is to test the predictive ability of the whole model and to test effectiveness of each predictor. The descriptive statistics

and correlation matrix for the independent and dependent variables are presented below in Table II and III respectively:

Table II: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Y= Log (SME numbers)	152	4.17	5.84	4.8636	.41350
X_1= Personal income tax rate	153	.000	9.900	5.26960	2.964349
X_2= Unemployment tax	153	.910	7.110	2.63758	1.483377
X_3= Health care costs	153	.730	2.050	.99902	.169421
X_4= Workers' compensation	153	.340	5.230	1.53144	.914634
X_5= Numbers of bureaucrats	153	4.130	8.250	5.67490	.754439

Table III: Correlation Matrix

		Y	X_1	X_2	X_3	X_4
Y= Log (SME numbers)	Pearson Correlation					
X_1= Personal income tax rate	Pearson Correlation	-.101				
X_2 = Unemployment tax	Pearson Correlation	-.307**	.096			
X_3= Health care costs	Pearson Correlation	-.153	.200*	-.211**		
X_4= Workers' compensation	Pearson Correlation	.013	.019	.034	.005	
X_5= Numbers of bureaucrats	Pearson Correlation	-.470**	.072	.119	.199*	-.046

** Correlation is significant at the 0.01 level (2-tailed)   * Correlation is significant at the 0.05 level (2-tailed).

4. ANALYSIS AND RESULTS

The regression analysis results are presented in Table IV below. The R^2 is 0.301 which means 30.1% of variations in SME population size can be predicted by the 5 predictors. Hypothesis 1 is statistically significant ($p<0.0001$) and hence is supported. The overall regression model is given as:
Log (total populations) = 6.663-0.003 (Top income tax rate) -0.079 (unemployment tax) -0.309 (health care cost) +.003 (workers' compensation) -.224 (bureaucracy efficiency). Hypothesis 2 is not statistically significant. In addition, even the correlation between SME population and personal income tax rate is negative. It indicates that most entrepreneurs do not take into account the personal income tax rate when they make decisions. Hypothesis 3 is statistically significant. This means that 1% of unemployment tax will result in the decrease of 765,493 SMEs holding other factors constant. Unemployment tax is significantly negatively correlated with the population of SMEs. Hypothesis 4 is moderately significant with $p<0.1$ when the correlation is -0.31, indicating practical significance. This indicates that 1 % more expensive than the US average health care costs will have the 32631 fewer numbers of SMEs. Hypothesis 5 is not statistically significant, nor is the correlation negative. Accordingly, it does not support our argument that it might be detrimental to the survival of SMEs. It could also indicate that most of business owners are generous about workers' compensation as long as they work hard. They are willing to share the profits with employees more than the state government requirement. Hypothesis 6 is statistically significant and hence is supported. This indicates that more efficient the government bureaucrats are, the higher the likelihood of SMEs survival.

Table IV: The Role of Regulatory Environment on SME Population

	B	S.E.	Significant	Hypothesis Test
(Constant)	6.663	.263	.000	
X_1= Personal income tax rate	-.003	.010	.757	H2: Not supported
X_2= Unemployment tax	-.079	.020	.000	H3: Supported
X_3= Health care costs	-.309	.181	.091	H4: Moderately supported
X_4= Workers' compensation	.003	.031	.917	H5: Not supported
X_5= Numbers of bureaucrats	-.224	.039	.000	H6: Supported
R^2= 0.301 with the significant level at 0.001, H1: supported				

Comparison with Taiwan Data

Table V presents the comparison between Taiwan and the U.S. average on the five independent variables. As mentioned before, the tax rate we used in our analysis is the difference between Taiwan's rates and US federal rates because Taiwan does not apply local rates. From Table V, we can see that Taiwan has lower personal income tax rate, lower unemployment tax, better bureaucratic efficiency and higher percentage of workers' compensation. If we use the model derived from the previous regression analysis, the predicted SME numbers will be higher for Taiwan than USA because, overall, we believe that Taiwan has friendlier regulatory environment. However, businesses in Taiwan face much bigger burden from workers' compensation, where the parameter is not significant (Table V). Another observation worth mentioning is that the actual SME population in Taiwan is much bigger than what our model predicted. One explanation is that more factors needed to be added to our model if we are comparing different countries such as demographic issues, cultural influence, or economic situations. It is clear that different countries do form different organizational ecology. In addition, Taiwan is a smaller country so usually one central regulatory structure can be applied to the whole island. Under this circumstance, people do not see the impacts of different tax rates, or other mandatory criteria. Even when they are aware of the high costs, they have lower mobility than the US small business owners. They do not have other "states" to flee to in case of adverse regulatory environment. This can also explain why Taiwan has much more SMEs than predicted by the US model.

Table V: Comparison between Taiwan and USA

	Taiwan 2004	Taiwan 2003	Taiwan 2002	US Mean
Y= Log (SME numbers)	5.74876	5.73756	5.7286	4.8636
X_1= Personal income tax rate	5	5	5	5.26960
X_2= Unemployment tax	0.62	0.62	0.62	2.63758
X_3= Health care costs	1.00	1.00	1.00	.99902
X_4= Workers' compensation	5.50	5.50	5.5	1.53144
X_5= Numbers of bureaucrats	2.58	2.54	2.54	5.67490
Predicted SME numbers	560738	546462	535303	73212
Actual SME numbers	1176986	1146352	1147200	114666

5. DISCUSSION

We used data from 50 states in the U.S. to test our model of predicting SME population size. The results indicate that this model can explain about 30% of variations of SME populations in the U.S. However, when we applied data from Taiwan to the regression model, the predictions are not substantially accurate. By comparing the government policies of two countries, Taiwan does not show much discrepancy in terms of forming a friendlier environment for SMEs. One explanation is that there could be other factors such as culture, economy, or demography that lead to this gap.

Also, would-be entrepreneurs in the U.S. have the option to move from one less friendly state to another based on the particular regulatory environment. This is not the case for Taiwanese entrepreneurs. In most instances, their mobility is limited to China. However, China represents a different regulatory environment for Taiwanese entrepreneurs. Therefore, even though the actual SME population is bigger than we predicted, this does not mean Taiwan has a bigger carrying capacity for SMEs. On the contrary, it could be a warning sign. It could be that SMEs in Taiwan are bearing much lower profit rates than those in the U.S. More studies need to be done to explore the factors leading to this difference such as using different countries.

Some of our hypotheses are supported by the empirical data while some are not. This goes back to the argument whether or not government should intervene. As we can see from the statistical results, not all government polices lead to the direction we expected. For instance, the workers' compensation theoretically would drag down the number of SMEs but the model indicates the opposite direction. This implies that when governments make any kind of decision, they should be more careful.

6. CONCLUSION

Donaldson (1995) criticized that population ecology is the radical challenge to structure contingency theory. In this study, however, we draw upon both the contingency and population ecology theories, since SMEs can also use the factors we suggested above to select a suitable investment environment. In addition, the major critique of population ecology is that it does not help managers to make better decisions and actually ignore managers' role in organization studies. Based on our studies, we provide a reference for SMEs to make investment decision and for governments to build a munificent environment for SMEs.

When an environment does not reached its carrying capacity, it may not guarantee survival of SMEs but only shows that this environment is easier to survive in than in other environments. Our study is only limited in the isolated population. We did not look at the interaction between populations. The Lotka-Volterra (LV) model of competitive interactions offers equations to explain the effects of competitive interactions as well as the birth and death rates. However, the equations do not have a known solution so far (Hannan and Freeman, 1989). Even though our argument ignores the competitive interactions, we still provide a useful insight for SMEs to make entrance decisions and for governments to make policy adjustments, if necessary. One future direction could be looking into the competitive interactions between small businesses and large firms and how this affects both populations.

Future research can also expand the concept of this paper to international environments and add cultural effects or economic conditions into the population size of SMEs. Some countries have substantial SME populations while others do not. It would be interesting to discover the antecedents leading to this phenomenon, in addition to government policies, the factors we brought up in this paper. Some cultures emphasize on entrepreneurship and this could affect the size of SME population in this environment. Another limitation of this study is that we did not discuss the interaction of government policy preferences and SMEs. We merely focused on how government policy impacts the SME population size. Future study could capture and discuss what leads the government to implement favorable policies for SMEs such as lobbying efforts from SMEs.

Population ecology uses organization population to explain founding rates and mortality rates. Even though they ignore the roles of managers in their studies, this does not mean that managers should do

nothing and wait for the "natural" selection by environment. On the contrary, we can use this characteristic in the environment, which resources are limited, as an indicator to find out where the better investment environment is for SMEs and where still have spare resources. Further empirical studies can be done to explore the relationship between population size and profitability or between the growth rate of population and profitability so that more direct benefits can be demonstrated to SMEs. By providing information derived from ecological perspectives, we help managers make better decisions in different contingencies.

This paper provides an innovative angle to adopt population ecology in SME study. We believe that the paper contributes to the field in various ways. First, we overcome two disadvantages of organizational ecology and expand its function. Second, we fill the gap between organizational ecology and contingency theory by providing managers with a reference tool derived from organizational ecology to make holistic and a better market entry decisions. Third, the methodology we use is considered a basic research tool. Therefore, we believe this can draw more discussions in order to refine our concepts and create more future contributions to the field.

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