Moderating Role of Business Strategies on the Relationship between Best Business Practices and Firm Performance

Rattana Seedee
Faculty of Management Sciences
Valaya Alongkorn Rajabhat University under the Royal Patronage,
Pahonyotin Road, Klongluang District, Pathumtani, Thailand. 13180

Abstract

This research attempts to investigate business strategies as a moderating role affecting the relationship between best business practices and firm's performance. Data were collected from 169 Thai manufacturing firms. The data in this study were analyzed using parametric statistical methods. Descriptive statistics and hierarchical regression analysis were used to analyze the data. The finding indicated that the firm's performance could be explained by 5 out of 9 categories of best business practices. Leadership practice, customer and market focus practice, human resource practices, process management practice and process innovation practice were five predictors of firm's performance. Besides, the results of this study indicated that the relationship between best business practices and firm's performance could be influenced by business strategies. Implications, recommendations and future research are discussed.

Key words: Business strategies, best business practices, firm performance, manufacturing Industry, Thailand.

1. Introduction

Many businesses have placed their faith in best practice, hoping that they will bring about desired improvements in business capabilities and performance. The linkages between business practices, capabilities, and performance, however, are complex and not well explained understood. The need to link best business practices with performance has become especially important for firms striving to achieve the goals of world-class manufacturing. However, there have been little documented evidences that existed for specific relationships between certain practices and performance. Thus, the relationship between best practices and performance remain blurred.

Furthermore, business strategy is an important firm's component. An appropriate strategy can drive a firm to enhance business performance and competitiveness. The Resource Based Theory states that a firm's unique resources and capabilities provide the basic for a strategy. The strategy chosen should allow the firms to best exploit its core competencies relative to opportunities in the external environment. Besides, most of researchers argued that firms that use different strategies would moderate the relationship between best business practices and performance (Baird & Meshoulam, 1988; Wright et al., 1995; Youndt et al., 1996). The fact is there were no previous researches that directly investigate the proposed moderating effect of generic business strategy variables on the relationship between best business practices and firm's performance. Specifically, the impact of best business practices on performance depends on firm's choice of business strategy. Therefore, the need to investigate business strategy as a moderating role affecting the relationship between best business practices and firm's performance is an important area to be searched.

During the last three decades, the manufacturing industry in Thailand becomes one of the most important sectors in Thai economics, contributing substantially growth to employment and GDP. In the 2010s, Thailand had export industrial products 123,575.6 million US dollars accounted for 77.10 % of total exports (Bank of Thailand, 2011).

This research is supported by Lampang Rajabhat University and Valaya Alongkorn Rajabhat University under the Royal Patronage.

However, under global markets competition where technological and transportation advances are making the worldview smaller and more near the market place, businesses, industries, and even governments must learn how to be competitive. Thus, the rationale for conducting this research is to investigate business strategies as a moderating role affecting the relationship between best business practices and firm's performance because there are inconsistencies, even controversies, in identifying these relationships as have been indicated in the available literature in this area.

2. Literature Review

2.1 Best business practices

A significant percentage of the recent literature in the areas of business and manufacturing makes reference to best practices (Davies & Kochhar, 2002). Voss and Blackmon (1996) stated that the introduction of new practices in manufacturing is normally associated with expected benefits in terms of improving performance in specified areas. Any investment of time or resources in a new practice will necessitate the provision of benefits in terms of improving performance. International Quality Study (1993) reported that "the ultimate result of management practices of an organization is performance – market performance, operational performance, financial performance". So, the best business practices are the key to unlocking the secrets of global competition moving companies into higher gear to achieve rewards for higher performance.

Over the last 20 years, the competitive significance of quality in the manufacturing sector has increased. It is clear that this increase has been paralleled by growing investment in improved quality performance. Total Quality Management (TQM) has developed in many countries into holistic frameworks, aimed at helping organizations achieve excellent performance, particularly in customer and business results. Between 1980s until now, there have been a lot of new quality practices that were introduced into the business world such as Six Sigma, ISO 9000, and the Malcolm Baldrige National Quality Award.

The Malcolm Baldrige National Quality Award (MBNQA) was started in the USA. This award continues to generate great interest and provide role models throughout the world. The MBNQA criteria were and are used for self-assessments by companies, to facilitate the communication of best practices, and as a model for understanding and managing quality. The MBNQA criteria represented the next step in the evolution of the quality movement. Internationally, many quality awards in various countries, such as: Japan National Quality Award, Singapore Quality Award, Australia Quality Award, Philippines Quality Award, Malaysian Prime Minister Quality Award (Petrick & Furr, 1995) and Thailand Quality Award is mostly based on the MBNQA program. Almost two million copies of the printed criteria have been distributed since the start of the award program (Calhoun, 2002). Many companies have benefited from the award criteria by using them as self-assessment tools to provide an objective framework, set a high standard, and helps compare units that have different systems or organization (Bemowski & Stratton, 1995; Calhoun, 2002; Davis & Standing, 2005). According to Baldrige National Quality Program (2009-2010), the criteria for MBNQA are as follows: leadership; strategic planning; customer focus; measurement, analysis, and knowledge management; workforce focus; process management; and business results.

Innovation has become an absolute necessity to survive and perform well in almost every industry (Hitt et al., 2005). The importance of innovation is established as a necessary ingredient for firms simply wanting to remain competitive (Walsworth & Verma, 2007) or pursue long-term advantages. Innovation is concerned with the development of a new product or process, or the improvement of an existing product or process. Successful organizational innovation is a multi-step process which involves development and knowledge sharing, a decision to implement, implementation, evaluation, and learning. The results of past studies have shown that innovation plays a major role in sustaining competitive advantage for industries (Aragon-Correa et al., 2007; Bhaskaran, 2006; Calantone et al., 2002; Keller, 2004; Pearce & Carland, 1996; Sher & Yang, 2005; Thornhill, 2005; Vazquez et al., 2001; Wright et al., 2005; Yamin et al., 1997). This is supported by Juran's (1989) argument that business practices and innovation are two complementary aspects of strategic management.

Therefore, for the purpose of this study, nine categories of best business practices are adapted from Baldrige National Quality Program (2009-2010).

Most of studies that adapted MBNQA model indicated that organizations which adopted best business practices achieve high performance (Arumugam, 2005; Lau et al., 2004; Prajogo & Sohal, 2003a, 2006b; Samson & Terziovski, 1999; Wilson & Collier, 2000). The categories included in this study are: leadership, strategic planning, customer and market focus, information and analysis focus, human resource, process management, ethic, product innovation, and process innovation.

2.2 Business strategy and performance

Porter (1980a, 1985b) suggested that two basic types of competitive advantage combined with the scope of activities for which the company seeks to achieve them lead to three generic strategies. Strategies for achieving above-average performance in an industry are cost leadership, differentiation, and focus. The focus strategy has two variants, cost focus and differentiation focus. Each of the generic strategies involves a fundamentally different route to competitive advantage, combining a choice about the type of competitive advantage sought with the scope of the strategic target in which competitive advantage is to be achieved.

The notion underlying the concept of generic strategies is that competitive advantage is at the heart of any strategy. Achieving competitive advantage requires the company to make a choice, if the company is to attain a competitive advantage it seeks to attain and the scope within which it will attain it. Being all things to all people is a recipe for strategic mediocrity and below-average performance. Because it often means that the company has no competitive advantage at all. Each of the three generic strategies is discussed below.

Cost leadership strategy

This strategy focuses on offering buyers a competitively low cost without sacrificing quality and service. The sources of cost advantage are varied and depend on the structure of the industry. Achieving a low overall cost position may require a high relative market share, favorable access to raw materials, designing products for ease in manufacturing, maintaining a wide line of related products to spread costs, and serving all major customer groups in order to build volume. In turn, implementing the low cost strategy may require heavy up-front capital investment in state of the art equipment, aggressive pricing, and start-up losses to build market share. Organization that can achieve and sustain overall cost leadership, lead to achieve an above-average returns in its industry despite the presence of strong competitive force.

Differentiation Strategy

When using this strategy the company seeks to be unique in its industry along some categories that are widely valued by buyers. It selects one or more attributes that many buyers in an industry perceive as important, and uniquely positions itself to meet those needs. It is rewarded for its uniqueness with a premium price. Achieving differentiation can take many forms: design and brand image, technology, features, customer service, dealer network, or other categories. The company that can achieve and sustain differentiation will be an above-average performer in its industry if its price premium exceeds the extra costs incurred in being unique.

Focus Strategy

In this strategy, the company concentrates on a particular group of customers, geographic markets, or product line segments (Dess & Davis, 1984). There are two variants of focus strategy. In cost focus, the company seeks a cost advantage in its target segment, while in differentiation focus the company seeks differentiation in its target segment. Both variants of the focus strategy rest on differences between a focuser's target segments and other segments in industry. If a focuser's target segment is not different from other segments, then the focus strategy will not succeed. If the company can achieve sustainable cost leadership (cost focus) or differentiation (differentiation focus) in its segment and the segment is structurally attractive, then the focuser will be an above-average performer in its industry.

A part of this study would rely on Porter's generic strategies to identify strategic components or dimensions of relevant strategic variables relevant to manufacturing factories in Thailand affecting firm's performance. Some of recent studies and researches that support on the use of generic strategies reliance indicated that business strategy – cost leadership; differentiation; cost leadership with focus; and differentiation with focus can lead organization to high performances (Campbell-Hunt, 2000; Cater & Pucko, 2005; Porter, 1980a, 1985b; Prajogo & Sohal, 2006b; Spanos & Lioukas, 2001; Yamin et al., 1999).

The fact is best business practices impact performance. Business strategies also contribute to performance. This study would focus more on best business practices without dismissing the effect of business strategies. For the purpose of this research, two generic strategies are used: differentiation and low cost. The third and fourth strategies of differentiation with focus and low cost with focus are left out because customer focus is one of the best practices

2.3 Moderating role of business strategies on the relationship between best business practices and performance

Best business practices have a great impact on firm's performance. But the strategy might improve or obstruct the practices. In order to understand the relationship between best business practice and performance, it much consider an important aspect of the context in what situation best business practices are implemented. Specifically, the impact of best business practice on performance depends on firms' choice of business strategy.
In the literature, only a few researchers have discussed directly on the relationship between best practices and business strategy, particularly in the context of generic strategy models developed by Porter (1980a). Most of studies investigated the context of total quality management (TQM) with strategy and human resource management (HRM) practices with strategy. For the context of HRM practices with strategy, Wright et al. (1995) reported that organizations exhibited higher performance when they recruited and acquired employees possessing competencies consistent with the organizations' current strategies. Reversing the causal arrow, they also found that organizations exhibited higher performance when they sought out a strategy that matched their current employees' competencies.

In a study conducted by Youndt et al. (1996) it was found that manufacturing strategy does in fact moderate the human resource practices and performance relationship. It has been underlined in the literature that, when adopting their HRM practices, firms must take into account the desirability of fit between these practices and firm strategy (Baird & Meshoulam, 1988). As a consequence, one of the main goals of strategic human resource management is to ensure that HRM is integrated with the strategy and the strategic needs of the firm in order to gain competitive advantage (Wright & Sherman, 1999). This contingency perspective leads to the expectation that the competitive strategy the firm pursues in the market moderates the relationship between HRM practices and performance (Miles & Snow, 1984; Schuler & Jackson, 1987).

However, the context of TQM with strategy, Reed et al. (1996) suggested that under process orientation, TQM implementation finally leads to a cost-based advantage that reflects a cost leadership strategy. Prajogo and Sohal (2006b) have posited that TQM could be used in different strategic contexts, including differentiation and cost leadership. A company will focus on improving the process to make it more efficient if its primary strategy is pursuing cost leadership (Porter, 1980a; Reed et al., 1996). Bou and Beltran (2005) found a significant interaction effect between TQM and a high-commitment strategy on financial results. That is, a high-commitment strategy acts as a moderator variable between TQM and organizational performance. In this context, it can be assumed that, organizations that use different strategies will moderate the relationship between best business practices and performance.

2.4 Firm performance

Performance is multidimensional, therefore, any single index about it may not be able to provide a satisfactory measure indicator. Performance implication is related to the subject of interest (Li & Simerly, 1998). Traditionally, firm's performance is measured by financial success and profitability (Daft et al., 1988). Previous researches seemed to conclude that firms' performance measurement includes many variables. The performance variables are: return on assets (ROA), return on equity (ROE), return on sales (ROS), and return on investment (ROI) (Daft et al., 1988; Li & Simerly, 1998).

Performance encompasses firm objective evaluation, customers' evaluation of organization's products and services, and overall financial and market performance. Measures refer to numerical information that quantifies input, output, and performance dimensions of processes, products, services, and the overall organization (outcomes). Performance might be expressed in non-financial and financial performance. Supported by the seventh criteria of the MBNQA criteria, which is a business results, it examines organization's performance and improvement in key business areas such as product and service outcomes, customer satisfaction, financial and marketplace performance, human resource results, operational performance, and social responsibility.

For the purpose of this study, financial performances were used to measure firm's performance. Financial performance is measured by the average annual sales growth, return on assets (ROA), return on sales (ROS), and return on investment (ROI).

2.5 The resource-based theory

The Resource Based Theory is based on the concept of economic rent and the view of the company as a collective of capabilities. The firm-specific resources and capabilities largely differentiate successful firms from failing ones (Peng, 2006). Of course, not all firms' resources and capabilities have the potential to be the basis for competitive advantage. This potentiality is realized when resources and capabilities are valuable, rare, costly to imitate, and not substitutable (Barney, 2001; Barney et al., 2001; Hitt, et al., 2005; Peng, 2006).

Firm's resource and capabilities can be viewed as bundles of tangible and intangible assets. Tangible resources are assets that can be seen and quantified. They can be broadly organized in four categories: (1) financial, (2) organizational, (3) physical, and (4) technological. Intangible resources include assets that typically are rooted deeply in the firm's history and have accumulated over time. Examples of intangible assets include (1) human, (2) innovation, and (3) reputation. Wernerfelt (1984) defined firm's resources as anything which could be notional as strengths or weaknesses of a firm and capability which can be defined as a part from firm's resources. Capability refers to a firms' capacity to deploy firm's resources, usually in combination, using organizational processes, to affect a desired ending. Thus, capability is firms' joint resources to produce any work or activity.

Based on the resource-based theory, best business practices is considered as capabilities of the firms that are used as the basis for competitive advantage which can lead firms to superior performance. The resource-based perspective highlights the need for a fit between the external market context in which a company operates and its internal capabilities. In contrast to the traditional Input-Output (I/O) Model, the resource-based view is grounded in the perspective that a firm's internal environment, in terms of its resource and capabilities, is more critical to the determination of strategic action than is the external environment. Instead of focusing on the accommodation of resource necessary and implement the strategy dictated by conditions and constraints in the external environment (I/O Model), the resource-based view suggests that a firm's unique resources and capabilities provide the basis for a strategy. The strategy chosen should allow the firms to best exploit its core competencies relative to opportunities in the external environment. Therefore, the resource-based theory was found to be a suitable theory to explain the research framework in the interrelationship between best business practices, business strategy and firm performance.

3. Research Objectives and Methodology

This research attempts to achieve four main objectives, firstly to investigate the extent to which best business practices are adopted by manufacturing firms in Thailand, secondly to examine the context of generic business strategy being employed by Thai manufacturing firms, thirdly to study whether the adoption of best business practices contribute to Thai manufacturing firm's performance, and finally to examine whether generic business strategies moderate the relationship between best business practices and performance. This study uses the list of manufacturing factories registered with the Department of Industrial Works under the Ministry of Industry in Thailand which published in 2010. Purposive pre-sampling was used to get the sample in which questionnaires were distributed to top executives of manufacturing industry who are the key informants. Thus, a total of 1200 Thai manufacturing firms were selected in answering the questionnaire from overall population of 4 industries (automotive/ auto parts and accessories, garment and textile, food and beverages, and gems and jewelry).

The questionnaire was used in a pre-test before being employed on the target sample. However, before pre-testing the questionnaire, the translation and back-translation technique (Brislin, 1970) was utilized accordingly on the adapted instrument. Results of the study were analyzed using the statistical package program. The statistical methods used for preliminary testing are: factor analysis, reliability analysis and descriptive statistics. Correlation and hierarchical regression analysis were used for hypotheses testing.

4. Results

The questionnaires were mailed to 1200 manufacturing factories. Only 174 questionnaires were duly returned. Five questionnaires were rejected as they did not contain answers to vital information.

This made available 169 usable questionnaires. The demographic profiles of respondents show that 68% of the respondents were males and 32% were females. The respondents' average age was 44 years. Respondents consisted of 53.3 % having manager position, followed by 24.3% senior manager and 22.5 % CEOs, MDs, and GMs. The ages of firms were between 11 to 20 years (36.7%), 10 years and less than (29.6%), 21- 30 years (19.5%), and 31 years or more (14.2%). The majority of respondents (39.6%) were Automotive/ Auto Parts and Accessories, followed by Food and Beverages (22.5%), Garment and Textile (18.9%), Gems and Jewelry (18.9%). For the type of management style, 46.2% of the firms were used both family and professional style to manage their business, followed by 39.6% professional style, and 14.2% Family business style.

Thai manufacturing firms targeted two market, Domestic and international. Overall, 55.6% focused on both markets, 44.4% on a single market only. Most of the responding firms were large firms 55.0%, and small and medium firms (SMEs) 45.0%. In term of firm's equity, Thai manufacturing firms had equity between 101 - 200 million baht (20.7%), above 500 million baht (20.1%) and between 11-50 million baht (20.1%). Most of them had average annual sales above 500 million baht (33.1%) and 18.9% between 51-100 million baht.

4.1 Factor analysis

Factor analyses were used to determine the factors of best business practices, business strategies and firms' performance. The process of factor analysis uses a principal components factor method and orthogonal rotation using a Varimax method. The criteria used to identify and interpret the factors that is a cutoff point of Eigenvalues of greater than 1, factor loading greater than .50 (Hair et al., 2006). Furthermore, reliability test were used with Cronbach's alpha coefficient as indicator, which identified the internal consistency and reliability of each item. Cronbach's alpha of above 0.70 is considered reliable (Nunnally, 1978). Table 1, 2, and 3 show the results of the factor analysis and the Cronbach's alpha of each factor which indicates acceptable reliability.

4.2 Descriptive analysis

Descriptive statistics was done to investigate the extent of the best business practices are adopted and the type of generic business strategy employed by ceramics firms in Thailand. The following are the results of descriptive analyses, which include mean values and standard deviations. Tables 4, shows that the seven categories , namely, leadership practice, strategic planning practice, customer and market focus practice, human resource practice, process management practice, information and analysis focus practice, and ethics practice, gave the mean scores ranging from 2.99 to 4.23. Information and analysis focus gave the highest overall mean score (4.21). This is followed by leadership (4.21), process management (4.05), human resource (3.98), ethics (3.70), strategic planning (3.26), and customer and market focus (2.99) the lowest. Two categories of innovation, product innovation gave the overall mean score of 13.95, while process innovation of 2.69. Thus, it can be argued that Thai manufacturing firms adopted the best business practices with a high degree of acceptance. Table 5, shows the mean score and standard deviation of the two business strategy variables used in this study. Cost leadership strategy obtained the highest overall means scores (4.12). Differentiation strategy obtained the overall mean scores (3.76) indicating that Thai manufacturing firms that employed cost leadership strategy put highly emphasize on strategy as important one.

4.3 Hierarchical regression analyses

The results of hierarchical regression analyses show that firm's age, size, and equity together were significantly related to firm's performance (R^2 = .09, $p < .01$). However, only firm's equity was found positively and significantly associated with firm's performance (β = .32, $p < .01$). For the relationship between best business practices and firm's performance, best business practices as a construct significantly predicted firm's performance and explained an additional 26% of the variance in financial performance (R^2 change = .26, $p < .01$). Leadership practice (β = .20, $p < .05$), customer and market focus practice (β = .22, $p < .01$), human resource practice (β = .24, $p < .01$), process management practice (β = .25, $p < .01$), and process innovation practice (β = .33, $p < .01$) were found to have significant positive relationship with firm's performance. The results of hierarchical regression analyzing the moderating effects of low cost strategy on the relationship between best business practices and firm's performance indicate that low cost strategy significantly influence the impact of best business practices on firm's performance. For the interaction term effect, the results indicated that the interaction term between information and analysis focus practice (β = 1.589, $p<.10$) and ethic practice (β = 1.368, $p<.01$) with low cost strategy were positive and statistically significant.

However, the interaction terms between the rest of best business practices, namely, leadership practice, strategic planning practice, customer and market focus practice, human resource practice, process management practice, product innovation practice, and process innovation practice were not significant. Therefore, it can be concluded that low cost strategy has moderate the relationship between information and analysis focus practice, and ethic practice respectively, and firm's performance. The results of hierarchical regression analyzing the moderating effects of differentiation strategy on the relationship between best business practices and firm's performance revealed that differentiation strategy play a moderating role in the relationships between product innovation practice and firm's performance (β = -1.844, $p<.10$) and between process innovation practice and firm's performance (β = .942, $p<.10$). It is also important to note that the standardized coefficients of interaction term between product innovation practice and differentiation strategy was negative. To understand the negative sign in the moderating effect of differentiation strategy, a more detailed investigation was necessary.

The graph in Figure 1 clearly illustrates the moderating effect of differentiation strategy in the relationship between product innovation practice and firm's performance. The effect of differentiation strategy in influencing firm's performance is very strong when firms use best business practices in product innovation. Furthermore, firms that employed high level of differentiation strategy and practice product innovation seem to have a higher level of firm's performance. Therefore, it can be concluded that differentiation strategy has moderate the relationship between product innovation practice and process innovation practice, respectively, and firm's performance.

5. Discussion

The first research question of this study is to investigate the extent to which the best business practices are adopted by manufacturing firms in Thailand. The finding of this study showed that the seven categories, namely, leadership practice, strategic planning practice, customer and market focus practice, human resource practice, process management practice, and ethics practice, gave the mean scores ranging from 2.99 to 4.23. Although, it is slightly lower than the level of TQM practices by Singaporean organizations, which gave scores from 3.85 to 4.35. But, it is slightly higher than the level of best business practices of ceramics firms in Thailand, the level of TQM practices by Malaysian SMEs, and Australian organizations, which gave scores between 3.46 to 4.16, 3.82 to 3.92 and 3.39 to 3.82 respectively (Arumugam, 2005; Feng et al., 2006). Thus, it can be argued that Thai manufacturing firms adopted the best business practices with a high degree of acceptance.

One observation can be derived from this study; the findings showed that the trend of development and improvement of product and process by Thai manufacturing firms were increased from 2008 to 2010. The study by Buranajarukorn (2006) indicated that Thai manufacturing companies were confronted with moderate to aggressive competition situation. It could be implied that these firms are aware of competition in the market. Some firms have spent effort and investment on both innovation practices; however, they did not register their patents. It is possible that they doubt about privilege of registering or may not understand correctly the procedure for registering.

The second research question of this study is to examine the context of generic business strategy being employed by manufacturing firms in Thailand. The finding showed that Thai manufacturing firms either employed cost leadership strategy or differentiation strategy place high emphasis on their implementation of the strategy. This can be implied that Thai manufacturing firms that employed cost leadership strategy or differentiation strategy put highly emphasize on strategy as important one. For low cost strategy, Thai manufacturing firms put highly emphasize on serving major customer groups, followed by cost reduction, availability of raw materials, low inventory levels, an operating efficiency, a wide line of related product, and broad product range was the lowest one. While, for differentiation strategy, Thai manufacturing firms put the highest emphasize on building reputation, followed by quality of products and high-price segments.

The third question of this study is about the relationship between best business practices and firm's performance. The findings of this study indicated that 26% of the variance of the firm's performance could be explained by the best business practices construct. Out of nine variables that are hypothesized to influence the firm's performance, five variables proved to process this impact.

Leadership practice, customer and market focus practice, human resource practices, process management practice and process innovation practice were the variables that are found to have a significant and positive effect on firm's performance as measured by the average annual sales growth, return on assets, return on sales, and return on investment. With a slight difference of its impact on firm's performance, process innovation practice was found to have the greatest impact on firm's performance ($\beta = .33$, $p < .01$) followed by process management practice ($\beta = .25$, $p < .01$), human resource practice ($\beta = .24$, $p < .01$), customer and market focus practice ($\beta = .22$, $p < .01$), and lastly, leadership practice ($\beta = .20$, $p < .05$). On the other hand, strategic planning practice, information and analysis practice, ethics practice, and product innovation practice were not strongly and positively related to firm's performance. Therefore, the relationship between best business practices and performance are still in argument, and offer an opportunity for in depth empirical examination.

Based on the findings of this study, it can be said that Thai manufacturing firms concentrate mostly on process innovation practice, process management practice, human resource practice, customer and market focus practice, and leadership practice. However, this is not to declare that the other four categories should be ignored but rather to note that in a cross-sectional study, these weaker categories did not powerfully distinguish the firm's performance. Because this study was descriptive of a given sample at a given point in time, whereas all the categories of best business practices are being used to measure and suggest categories of improvement in order to increase organizational practices, quality and performance.

The last objective of this study was about the impact of generic business strategy, namely, cost leadership strategy and differentiation strategy, may have on the relationship between best business practices and performance of Thai manufacturing firms. The finding of this study showed that, except for information and analysis focus practice and ethic practice, low cost strategy does not have any moderating effects on the relationship between best business practices categories and firm's performance. In other word, the study found that low cost strategy influences the relationship between information and analysis focus practice and ethics practice and firm's performance, respectively. These implied that low cost strategy when used with effective information and analysis focus practice or best ethics practices will enhance firm's performance.

The findings also found that differentiation strategy play a moderating role in the relationships between product innovation practice and firm's performance and between process innovation practice and firm's performance. In other word, the study found that firms which employed differentiation strategy and practice their product innovation or process innovation tended to increase their firm's performance. Yet, it was found that the effect of differentiation strategy in influencing firm's performance is very strong when firms use best business practices in product innovation. The results also showed firms that employed high level of differentiation strategy and practice their product innovation seem to have a higher level of firm's performance than those firms that employed low level of differentiation strategy. This happened because the fit between product innovation practice (improved and introduced new products) with differentiation strategy of which both of them could lead to increased customers satisfaction, then this could lead to high performance.

6. Conclusion

The finding shows that the extent of best business practices adoption is high. The finding revealed that Thai manufacturing firms that employed cost leadership strategy or differentiation strategy put highly emphasize on strategy as important one. This study found that five out of nine categories of best business practices, namely, leadership practice, customer and market focus practice, human resource practices, process management practice and process innovation practice were positively related to firm's performance. Results of this study indicate that the relationship between best business practices adoption and firm's performance could be influenced by business strategies. Finally, the results of this study provide some exploratory information that hoped to deepen the understanding of the interrelationship between best business practices, business strategy and firm's performance. It is hoped that this study can provide insights for future research in this area and help Thai manufacturing firms to foster and implement best business practices and business strategy as both are found to be the leading factors in enhancing the firm's performance.

Overall, it appears that the efforts by the Thai and various governments around the world to promote the use of best practices though MBNQA-Style awards are bearing fruit. Best business practices do lead to higher firm performance.

Table 1. Factor analysis results of best business practices

Factor	Cronbach's Alpha	Loading
Customer & Market Focus	.991	
CM6. Focusing on particular buyer groups		.969
CM8. Serving on a special geographic segment		.960
CM7. Focusing on a segment of the product line		.959
CM5. Monitoring market & business trends		.956
CM1. Knowing customers & market expectation		.953
CM3. Importance of customer satisfaction		.946
CM4. Attending customers' dissatisfaction fast		.931
Human Resource	.984	
HR6. Employees' salaries & benefits are competitive		.954
HR5. Rewarding employees' outstanding performance		.948
HR2. Teamwork encouragement		.947
HR4. Appraising employees' performance regularly		.919
HR3. Seeking employees' ideas for improvement		.916
Information & Analysis Focus	.972	
IA4. Monitoring delivery commitments to customers		.908
IA5. Tracking all critical business performance		.894
IA3. Monitoring suppliers on time-delivery performance		.893
IA2. Monitoring manufacturing processes closely		.875
IA1. Making business decision based on solid data		.843
Factor 4: Leadership	.960	
L4. Good relationship with stakeholders		.915
L3. Treatment employees fairly		.904
L1. Clearing job expectations for all staff		.900
L5. Listening to staffs' inputs & feedback		.880
L2. Commitment towards job responsibility		.681
Process Management	.991	
PM2. Efficiency of manufacturing processes		.942
PM3. Using Computers in organization		.941
PM4. Excellence of Inter-department cooperation		.932
PM1. Excellent of logistic system		.924
Strategic Planning	.994	
SP4. Reviewing business performance regularly		.936
SP1. Enlist staff inputs in strategic planning		.926
SP2. Setting business goals & objectives jointly		.925
SP3. Executing action plans with diligence		.920
Ethics	.880	
E5. Having high standards and ethics		.815
E4. Obeying laws and regulations		.804
E6. Helping employees help their community		.751
E7. Employees satisfaction with their jobs		.596
Process Innovation	.978	
New developed products 2010		.974
Improved products 2010		.969
Improved products 2008		.966
New developed products 2009		.956
Improved products 2009		.947
New developed products 2008		.884
Product Innovation	.951	
Introduced new processes 2009		.912
Improved processes 2009		.905
Introduced new processes 2010		.897
Improved processes 2008		.893
Improved processes 2010		.888
Introduced new processes 2008		.878

Table 2. Factor analysis results of business strategies

Factor	Cronbach's Alpha	Loading
Cost Leadership	.993	
CS2. Cost reduction		.989
CS4. Low inventory levels		.984
CS10. Broad product range		.974
CS1. Operating efficiency		.972
CS6. Serving major customer groups		.967
CS3. Availability of raw materials		.963
CS5. Wide line of related product		.961
Differentiation	.839	
DS13. Building reputation		.892
DS2. Quality of products		.878
DS10. High-price segments		.863
DS5. Channels of distribution		.676
DS4. Brand identification		.664

Table 3. Factor analysis results of firm performance

Factor	Cronbach's Alpha	Loading
Firm performance	.872	
ROS		.874
Sales growth		.867
ROI		.836
ROA		.823

Table 4. Descriptive Statistics of Best Business Practices

Best Business Practices	Mean	Standard deviation
Leadership (4.21)		
L1. Clearing job expectations for all staff	4.21	.77
L2. Commitment towards job responsibility	4.46	.76
L3. Treatment employees fairly	4.15	.77
L4. Good relationship with stakeholders	4.18	.76
L5. Listening to staffs' inputs & feedback	4.07	.78
Strategic Planning (3.26)		
SP1. Enlist staff inputs in strategic planning	3.25	.93
SP2. Setting business goals & objectives jointly	3.25	.92
SP3. Executing action plans with diligence	3.27	.93
SP4. Reviewing business performance regularly	3.25	.91
Customer & Market Focus (2.99)		
CM1. Knowing customers & market expectation	2.99	.73
CM3. Importance of customer satisfaction	2.97	.72
CM4. Attending customers' dissatisfaction fast	2.95	.71
CM5. Monitoring market & business trends	2.99	.73
CM6. Focusing on particular buyer groups	3.01	.72
CM7. Focusing on a segment of the product line	3.00	.72
CM8. Serving on a special geographic segment	3.03	.74
Information & Analysis Focus (4.23)		
IA1. Making business decision based on solid data	4.17	.73
IA2. Monitoring manufacturing processes closely	4.31	.71
IA3. Monitoring suppliers on time-delivery performance	4.20	.83
IA4. Monitoring delivery commitments to customers	4.25	.71
IA5. Tracking all critical business performance	4.22	.70
Human Resource (3.98)		
HR2. Teamwork encouragement	3.95	.83
HR3. Seeking employees' ideas for improvement	4.07	.86
HR4. Appraising employees' performance regularly	3.93	.83
HR5. Rewarding employees' outstanding performance	3.98	.85
HR6. Employees' salaries & benefits are competitive	3.97	.85
Process Management (4.05)		
PM1. Excellent of logistic system	4.08	.84
PM2. Efficiency of manufacturing processes	4.03	.84
PM3. Using Computers in organization	4.05	.83
PM4. Excellence of Inter-department cooperation	4.04	.84
Ethics (3.70)		
E4. Obeying laws and regulations	3.75	.90
E5. Having high standards and ethics	3.63	.75
E6. Helping employees help their community	3.65	.89
E7. Employees satisfaction with their jobs	3.78	.91
Product Innovation (13.95)		
New developed products 2008	11.21	23.67
New developed products 2009	11.81	24.84
New developed products 2010	15.62	30.99
Improved products 2008	15.62	30.10
Improved products 2009	13.30	24.96
Improved products 2010	16.14	30.87
Process Innovation (2.69)		
Introduced new processes 2008	2.43	2.68
Introduced new processes 2009	2.61	2.65
Introduced new processes 2010	2.95	2.67
Improved processes 2008	2.64	2.27
Improved processes 2009	2.59	2.15
Improved processes 2010	2.90	2.54

Note. Overall mean scores are in parentheses.

Table 5. Descriptive Statistics of Business Strategy

Business Strategy	Mean	Standard deviation
Cost Leadership (4.12)		
CS1. Operating efficiency	4.11	.83
CS2. Cost reduction	4.14	.84
CS3. Availability of raw materials	4.11	.85
CS4. Low inventory levels	4.11	.83
CS5. Wide line of related product	4.11	.83
CS6. Serving major customer groups	4.15	.85
CS10. Broad product range	4.11	.83
Differentiation (3.76)		
DS2. Quality of products	4.22	.78
DS4. Brand identification	3.04	1.19
DS5. Channels of distribution	3.11	1.27
DS10. High-price segments	4.17	.79
DS13. Building reputation	4.25	.82

Note. Overall mean scores are in parentheses.

Table 6 The moderating effect of business strategies on the relationship between best business practices and firm performance

	Firm Performance					
			CS as Moderator		DS as Moderator	
Variables	**Std Beta Step 1**	**Std Beta Step 2**	**Std Beta Step 3**	**Std Beta Step 4**	**Std Beta Step 3**	**Std Beta Step 4**
Control Variables						
Firm's Age	-.004	.003	.010	-.015	.003	.021
Firm's Size	-.079	-.051	-.058	-.004	-.051	-.044
Firm's Equity	**.315*** **	.280***	.298***	. 286***	.280***	. 312***
Predictors						
Leadership (L)		**.204** **	.203**	1.457**	.203**	.102
Strategic Planning (SP)		-.090	-.065	-.494	-.090	.557
Custer & Market Focus (CM)		**.216*** **	.209***	.706	.216***	-.592
Information & Analysis Focus (IA)		-.109	-.069	-1.046*	-.109	.636
Human Resource (HR)		**.240*** **	.214***	-.284	.240***	-.164
Process Management (PM)		**.247*** **	.238***	.625	.247***	-.148
Ethics (E)		.020	.004	-1.472***	.020	.615
Product Innovation (PdIn)		.029	.031	.646	.029	1.836***
Process Innovation (PcIn)		**.332*** **	.327***	-.021	.332***	.577
Moderator						
Cost Leadership(CS)			-.124*	-.710		
Differentiation (DS)					.001	.294
Interaction						
L x CS				-1.777		.343
SP x CS				.473		-.844
CM x CS				-.554		.836
IA x CS				**1.589***		-1.340
HR x CS				.586		.556
PM x CS				-.587		.430
E x CS				**1.368*** **		-.544
PdIn x CS				-.585		**-1.844*** **
PcIn x CS				.358		**.942***
R^2	.09	.36	.367	.447	.355	.444
R^2 change	.09	.26	.011	.081	.000	.089
F change	5.51	7.11	2.738	2.372	.000	2.595
Sig. F change	.001	.000	.100	.016	.993	.008

Note: * p<.10, ** p<.05, ***p<.01

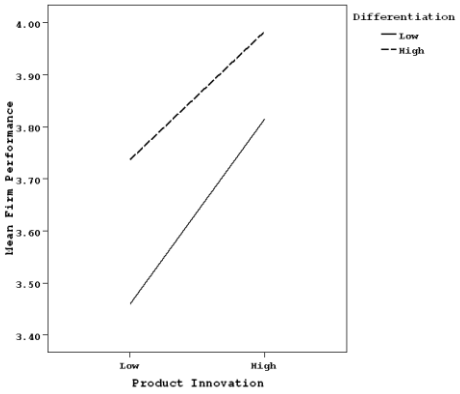

Figure 1. The Impact of Differentiation Strategy on the Relationship between Product Innovation Practice and Firm Performance

References

Aragon-Correa, J. A., Garcia-Morales, V. J., & Cordon-Pozo, E. (2007). Leadership and organizational learning's role on innovation and performance: Lessons from Spain. Industry marketing Management, 36(3), 349-359.

Arumugam, S. (2005). The impact of business practices and innovation on performance – An empirical study of SMEs in the Malaysian manufacturing sector. Unpublished DBA Thesis, University of South Australia, Adelaide.

Baird, L. & Meshoulam, I. (1988). Managing two fits of strategic human resource management, Academy of Management Review, 13(1), 116-128.

Baldrige National Quality Program. (2009-2010). Criteria for Performance Excellence. National Institute of Standards and technology, Technology Administration, U.S. Department of Commerce. Retrieved March 11, 2011, from http://www.tqa.or.th/files/2009_2010_Business_Nonprofit_Criteria_0.pdf

Bank of Thailand (2011), Key Economic Indicators, Bank of Thailand, Bangkok, Thailand. Retrieved January 9, 2010, from http://www.bot.or.th/Thai/Statistics/Indicators/Docs/indicators.pdf

Barney, J. (2001). Is the resource-based view a useful perspective for strategic management research? yes. The Academy of Management Review, 26(1), 41-56.

Barney, J., Wright, M., & Ketchen, D. J. (2001). The resource-based view of the firm: Ten years after 1991. Journal of Management, 27(6), 625-641.

Bemowski, K., & Stratton, B. (1995). How do people use the Baldrige Award criteria?. Quality Progress, 28(5), 43-47.

Bhaskaran, S. (2006). Incremental innovation and business performance: small and medium-size food enterprises in a concentrated industry environment. Journal of Small Business Management, 44(1), 64-80.

Bou, C. J., & Beltran, I. (2005). Total quality management, high-commitment human resource strategy and firm performance: an empirical study. Total Quality Management and Business Excellence, 16(1), 71-86.

Brislin, R. W. (1970). Back-translation for cross-cultural research. Journal of Cross Cultural Psychology, 1(3), 185-216.

Buranajarukorn, P. (2006). Human aspects of quality management in developing countries: A case study and model development for Thai manufacturing SMEs. Unpublished doctoral dissertation, University of Wollongong, New South Wales, Australia.

Calantone, R. J., Cavusgil, S. T., & Zhao, Y. (2002). Learning orientation, firm innovation capability, and firm performance. Industrial Marketing Management, 31(6), 515-524.

Calhoun, M. J. (2002). Using the Baldrige criteria to manage and assess the performance of your organization. The Journal for Quality and Participation, 25(2), 45-53.

Campbell-Hunt, C. (2000). What have we learned about generic competitive strategy? A meta-analysis. Strategic management Journal, 21(2), 127-154.

Cater, T., & Pucko, D. (2005). How competitive advantage influences firm performance: The case of Slovenian firms. Economic and Business Review for Central and South-Eastern Europe, 7(2), 119-135.

Daft, R. L., Sormunen, J., & Parks, D. (1998). Chief executive scanning, environmental characteristics and company performance: an empirical study. Strategic Management Journal, 9(2), 123-139.

Davies, A. J., & Kochhar, A. K. (2002). Manufacturing best practice and performance studies: a critique. International Journal of Operation & Production Management, 22(3), 289-305.

Davis, R. A., & Stading, G. L. (2005). Linking firm performance to the Malcolm Baldrige National Quality Award implementation effort using multiattribute utility theory. Managerial Finance, 31(3), 19-34.

Dess, G. G., & Davis, P. S. (1984). Porter's (1980) generic strategies as determinants of strategic group membership and organizational performance. Academy of Management Journal, 27(3), 467-488.

Feng, J., Prajogo, D. I., Tan, K. C., & Sohal, A. S. (2006), The impact of TQM practices on performance, a comparative study between Australian and Singaporean organizations. European Journal of Innovation Management, 9(3), 269-278.

Hair, J. F., Black, W. C., Babin, B. J. Anderson, R. E., & Tatham, R. L. (2006). Multivariate data analysis(6 th ed.). NJ: Prentice Hall.

Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2005). Strategic Management, South-Western, The United States of America: part of the Thomson Corporation.

International Quality Study (1993), Best Practices Report – an Analysis of Management Practices That Impact Performance, American Quality Foundation and Ernst & Young, New York, NY.

Juran, J. M. (1989). Juran on leadership for quality, an executive handbook, New York: Free Press.

Keller, R. T. (2004). A resource-based study of new product development: predicting five-year later commercial success and speed to market. International Journal of Innovation Management, 8(3), 243-260.

Lau, M. S. R., Zhao, X., & Xiao, M. (2004). Assessing quality management in China with MBNQA criteria. International Journal of Quality & Reliability Management, 21(7), 699-713.

Li, M., & Simerly, R. Y. (1998). The moderating effect of environmental dynamism on the ownership and performance relationship. Strategic Management Journal, 19(2), 169-179.

Miles, E. R. & Snow, C. C. (1984) Designing strategic human resource management systems. Organizational Dynamics, 13(1): 36-52.

Nunnally, J. C. (1978). Psychometric theory. NY: McGraw-Hill.

Pearce, J. W. & Carland, J. W. (1996). Intrapreneurship and innovation in manufacturing firms: An empirical study of performance implications. Academy of Entrepreneurship Journal, 1(2), 87-96.

Peng, M. W. (2006). Global Strategy, South-Western, The United States of America: part of the Thomson Corporation.

Petrick, J. A., & Furr, D. S. (1995). Total quality in managing human resources: St. Lucie Press.

Porter, M. E. (1980a). Competitive strategy, New York: Free Press.

Porter, M. E. (1985b). Competitive strategy, New York: Free Press.

Prajogo, D. I., & Sohal, A. S. (2003a). The relationship between TQM practices, quality performance, and innovation performance. The International Journal of Quality & Reliability Management, 20(8/9), 901-918.

Prajogo, D. I., & Sohal, A. S. (2006b). The relationship between organization strategy, total quality management (TQM), and organization performance-the mediating role of TQM. European Journal of Operational Research, 168(1), 35-50.

Reed, R., Lemak, J. D., & Montgomery, C. J. (1996) Beyond process TQM content and firm performance, Academy of Management Review, 21 (1), 173–202.

Samson, D., & Terziovski, M. (1999). The relationship between total quality management practices and operational performance. Journal of Operations Management, 17, 393-409.

Schuler, R. S., & Jackson, S. E. (1987). Linking Competitive Strategies with Human Resource Management Practices, Academy of Management Executive, 1(3): 207-219.

Sher, P. J., & Yang, P. Y. (2005). The effects of innovative capabilities and R&D clustering on firm performance: the evidence of Taiwan's semiconductor industry. Technovation, 25, 33-43.

Spanos, Y. E., & Lioukas, S. (2001). An examination into the causal logic of rent generation: Contrasting Porter's competitive strategy framework and the resource-based perspective. Strategic Management Journal, 22(10), 907-934.

Thornhill, S. (2005). Knowledge, innovation and firm performance in high- and low-technology regimes. Journal of Business Venturing, 21(5), 687-703.

Vazquez, R., Santos, M. L., & Alvarez, L. I. (2001). Market orientation, innovation and competitive strategies in industrial firms. Journal of Strategic Marketing, 9(1), 69-90.

Voss, C., & Blackmon, K. (1996). The impact of national and parent company origin on world-class manufacturing Findings from Britain and Germany. International Journal of Operations & Production, 16(11), 98-109.

Walsworth, S., & Verma, A. (2007), Globalization, Workplace Practices and Innovation: Recent Evidence from the Canadian Workplace and Employee Survey. Industrial Relations: A Journal of Economy and Society, 46(2), 222-240.

Wernerfelt, B. (1984). A resources based view of the firm. Strategic Management Journal, 5, 171-180.

Wilson, D. D., & Collier, A. D. (2000), An empirical investigation of the Malcolm Baldrige National Quality Award causal model. Decision Sciences, 31(2), 361-390.

Wright, L. D., Boudreau, W. J., & Milkovich, T. G. (1995). Research in Personnel and Human Resources Management, supplement 4, Stamford, CT: JAI Press, 53-74.

Wright R. E., Palmer, J. C., & Perkins, D. (2005). Types of product innovations and small business performance in hostile and begin environments. Journal of Small Business Strategy, 15(2), 33-44.

Wright, P. M., & Sherman, S. W. (1999). Failing to Find Fit in Strategic Human Resource Management: Theoretical and Empirical Problems, Research in Personnel and Human Resources Management, Supplement 4, 53-74.

Yamin, S., Gunasekaran, A., & Mavondo, F. t. (1999). Relationship between generic strategies, competitive advantage and organizational performance: an empirical analysis. Technovation, 19(8), 507-518.

Youndt, M. A., Snell, S. A., Dean, J. W. Jr, Lepak, D. P. (1996). Human resource management, manufacturing strategy, and firm performance. Academy of Management Journal, 39(4), 836-866.