

**BEST BUSINESS PRACTICES AND PERFORMANCE OF
CERAMICS FIRMS IN THAILAND: THE MODERATING ROLE
OF BUSINESS STRATEGY**

by

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**AMALAN TERBAIK DAN PRESTASI PERNIAGAAN DI KALANGAN
FIRMA SERAMIK DI NEGARA THAI: PERANAN STRATEGI
PERNIAGAAN SEBAGAI PENYEDERHANA**

ABSTRAK

Industri seramik memainkan peranan penting dalam ekonomi dan sektor industri Negara Thai. Ia merangkumi aktiviti pembuatan, pekerjaan, dan eksport. Banyak firma perniagaan menggunakan amalan yang terbaik untuk meningkatkan prestasi firma, tetapi kejayaannya bercampur-baur. Selain itu, hasil kajian terdahulu tentang perkaitan di antara amalan dan prestasi perniagaan yang terbaik tidak memberikan sebarang kesimpulan yang jitu. Dalam usaha menggalakkan industri seramik Thai, penyelidikan ini cuba mengkaji setakat manakah amalan ini diamalkan dan setakat mana sumbangannya terhadap prestasi industri seramik. Keduanya, penyelidikan ini juga mengkaji sama ada pilihan strategi perniagaan yang dipilih menyederhanakan hubungan di antara amalan dan prestasi perniagaan.

Data dikumpul daripada 141 buah firma seramik yang tersenarai di Jabatan Kerja Industri, Kementerian Industri, Thailand. Kaedah statistik bagi pengujian awal menggunakan analisis faktor, analisis kebolehpercayaan dan statistik deskriptif. Analisis korelasi dan regresi berhierarki digunakan untuk pengujian hipotesis. Keputusan menunjukkan bahawa kebanyakan firma seramik mempraktikkan amalan perniagaan yang terbaik dengan darjah penerimaan (*degree of acceptance*) yang tinggi. Keputusan juga menunjukkan bahawa firma seramik Thai lebih mempraktikkan strategi kepimpinan kos (*cost leadership strategy*) berbanding dengan strategi pembezaan (*differentiation strategy*). Walau bagaimanapun, kajian ini tidak

mendapati perbezaan statistik yang ketara dalam prestasi firma di antara kedua-dua strategi tersebut.

Di samping itu, daripada sembilan pembolehubah (variables) yang dihipotesiskan untuk mempengaruhi prestasi firma, hanya empat pembolehubah amalan terbaik terbukti memberikan impak ini. Amalan kepimpinan yang baik, pelanggan yang baik dan amalan tumpuan pasaran, amalan pengurusan proses yang baik, dan amalan inovasi produk yang baik adalah pembolehubah yang didapati mempunyai kesan yang signifikan dan positif terhadap prestasi firma

Di samping itu, kajian mendapati bahawa pilihan strategi perniagaan mempengaruhi hubungan di antara amalan sumber manusia yang baik, amalan inovasi proses terbaik dan prestasi firma. Dapatan kajian ini juga menunjukkan bahawa firma yang mempraktikkan strategi perniagaan (sama ada kepimpinan kos atau pembezaan) dan sumber manusia, didapati berjaya meningkatkan prestasi kewangan mereka. Tambahan pula, kajian mendapati bahawa hubungan di antara amalan sumber manusia dan prestasi firma yang mempraktikkan strategi pembezaan akan bertambah kuat apabila firma berkenaan berusaha gigih mempraktikkan serta mengukuhkan amalan sumber manusia dengan para pekerja mereka. Kini, dapatan kajian mendapati bahawa firma yang mempraktikkan strategi kepimpinan kos dan inovasi proses menunjukkan tahap prestasi yang lebih tinggi daripada firma yang mempraktikkan strategi pembezaan.

**BEST BUSINESS PRACTICES AND PERFORMANCE OF CERAMICS
FIRMS IN THAILAND: THE MODERATING ROLE OF BUSINESS
STRATEGY**

ABSTRACT

The ceramics industry has played a pivotal role in the economic and industrial sector of Thailand. It encompasses manufacturing, employment, and exports activities. Many businesses have applied best practice for improving performance, but with mixed success. In addition, the results of past studies on the relationship between best business practices and performance are inconclusive. In order to enhance Thai ceramics industry, this research attempts to find out the extent to which it has adopted the best business practices and whether these practices contribute to performance. Secondly, this research would determine whether choice of business strategy moderates the relationship between the best business practices and performance.

Data were collected from 141 ceramics firms listed in the Department of Industrial Works, Ministry of Industry in Thailand. Statistical methods for preliminary testing used factor analysis, reliability analysis and descriptive statistics. Correlation and hierarchical regression analysis were used for hypotheses testing. The results show that most of the ceramics firms adopted best business practices with a high degree of acceptance. The results also revealed that Thai ceramics firms employed cost leadership strategy more than differentiation strategy. However, this study did not find statistically significant differences in firm's performance between cost leadership strategy and differentiation strategy.

Additionally, out of nine variables that are hypothesized to influence the firm's performance, four variables proved to possess this impact. Best leadership

practice, best customer and market focus practice, best process management practice, and best product innovation practice were the variables that were found to have significant and positive effects on firm's performance.

Besides, the study found that the choice of business strategy influences the relationship between best human resource practice and best process innovation practice and firm's performance, respectively. The finding of this study also revealed that firms that employed business strategy (either cost leadership or differentiation) and practice their human resource tended to increase their financial performance. The study found that the relationship between human resource practice and performance of those firms that employed differentiation strategy would be stronger when firms exert more effort on practice and strengthen their human resource practices. Yet, the finding found that those firms that employed cost leadership strategy and practice their process innovation show a higher level of performance than those firms that employed differentiation strategy.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter provides an overview of the background of the study, problem statement, research questions, research objective, significance of the study, scope of the study, and definitions of variables. Organization of this thesis is explained at the end of this chapter.

1.2 Research Background

Ceramics industry is one of the most important industries in Thailand, producing goods both for domestic consumption and for export. In 2004 Thailand has exported over five billion US dollars' worth of ceramics goods, mainly tableware, sanitary ware, ceramics tiles, ornamental ware and electrical insulators. Thai ceramics industry exports its products to markets in Europe, Japan and the United States of America. This is in competition with those produced from China, Japan and neighboring Asian countries (Bureau of Sectoral Industrial Policy 2, 2004). The industry and its related businesses generate over 80,000 jobs country-wide (Sirisoonthon et al., 2004).

However, in an era where technological and transportation advances are making the worldview "smaller and smaller" and more near the market place, businesses, industries, and even governments must learn how to be competitive. The increasing use of the internet and telecommunications are causing goods, services, raw materials, jobs, and even direct labor to flow more rapidly from country to country making an accessible to the consumer. Consumers are always looking for better quality with lower prices. This makes many manufacturers in developing

countries (Thailand included) to be dependent on cheap labor as their competitive advantage. Subsequently, they find themselves stuck in a 'low-cost trap', in order to stay competitive with other developing countries in a way that actually keeps them poorer (Mooney, Murphy, Ford, Herink, & Hien, 2003).

Ceramics industry in Thailand is confronted with strong competition, especially from China after it became a member of World Trade Organization (WTO) (Bureau of Sectoral Industrial Policy 2, 2004). Chinese ceramics is gaining market share at both domestic and foreign markets which formerly belonged to Thailand. Business will become more competitive and difficult when China becomes a member of the ASEAN Free Trade Zone within next ten years. This could further increase competition in the ASEAN region. On the other hand, the United States (US) and the European Union (EU) are constantly imposing higher quality standards for ceramics products in the name of consumers' safety and environmental protection. The requirement posed by the United States will further ascend cost of exporting ceramics products from developing countries to developed countries (Bureau of Sectoral Industrial Policy 2, 2004). To keep with US and EU standards, this will further escalate the cost of production to Thai ceramics firms. This makes it less competitive.

The Thai government has been trying to enhance the performance of ceramics industry through a strategic master plan. This includes the soft interest loans for improving production performance. Although the government has provided significant funds for technological development, but the funds were not fully utilized. 70% of the funds been used to include new and modern technologies like electro ceramics, structural ceramics, magnetic ceramics, and optical ceramics (Bureau of Sectoral Industrial Policy 2, 2004). To be efficient these ceramics products require high-tech equipment, special techniques and knowledge which Thai ceramics industry

does not possess nor ready to adopt. This is because ceramics industry in Thailand is mostly small and medium firms (SMEs) concentrate on ceramics products for normal uses in everyday life such as tableware, ornamental ware, wall and floor tile, sanitary ware, and electrical insulators. While, new and modern ceramics need high capital investment and expensive machinery that they can not effort. Therefore, local producers are unable to reap benefits from R&D by the public sector (Bureau of Sectoral Industrial Policy 2, 2004), because of their complement attitude is not venture into other high products.

Thailand has approximately 400 of small, medium and large ceramics factories (Bureau of Sectoral Industrial Policy 2, 2004). Most ceramics factories in Thailand (especially those producing ceramic tiles and tableware) have been established for more than ten years. But since then, they have rarely developed or upgraded their management and technologies. Thus, most of them are in need of augmenting their productivity and quality. Some factories are doing very well but others are facing serious problems such as lack of product design development, outdated manufacturing process, lack of quality control, inefficient management and lack of business planning (Bureau of Sectoral Industrial Policy 2, 2004; Chiyannon, 1998). Therefore, there is a great need for the ceramics firms to look at best practices and business strategies to improve their performance.

1.3 Problem Statement

The Thai ceramics industry has played a pivotal role in the economic and industrial sector of Thailand. It encompasses manufacturing, employment, and exports activities. The total export value of Thai ceramics industry during 1998-2005 has grown (see table 1.1). However, the growth rate between these periods had not grown

considerably. In 2004 the growth was negative 0.58 percent. The average percentage of total export value for ceramics industry to Thailand's total exports during 1998 to 2005 was approximately 0.64%. Although, its value is very small but ceramics industry relies mainly on domestic raw materials and depends on a large labor contingent in its production processes, responds to government policies of work creation and income distribution throughout the country, so it is considered as an important industry in the Thai economy (Bureau of Sectoral Industrial Policy 2, 2004; Kaosa-ard et al., 2004).

Table 1.1 The Total Export Value of Thai Ceramics Industry

Year	Export value of Thai ceramics industry (million baht)	% increase	Thailand's total exports (million baht)	% increase	% of total export for ceramics industry to Thailand's total exports
1998	12,740.3	-	2,248,089.4	-	0.57
1999	13,540.0	6.28	2,214,248.7	-1.51	0.61
2000	19,814.8	46.34	2,768,064.8	25.01	0.72
2001	20,558.2	3.75	2,884,703.9	4.21	0.71
2002	20,878.0	1.56	2,923,941.4	1.36	0.71
2003	21,858.9	4.70	3,325,630.1	13.74	0.66
2004	21,732.5	-0.58	3,874,823.8	16.51	0.56
2005	25,366.0	16.72	4,436,676.4	14.5	0.57

Source: Bureau of Sectoral Industrial Policy 2 (2004); Ceramic Industries Development Center (2006).

Note. USD 1 = 38 baht, RM 1 = 10.6 baht

In addition, Thai ceramics industry is confronted with two groups of competitors (Bureau of Sectoral Industrial Policy 2, 2004). The first group is China and Indonesia which has labor and energy costs cheaper than Thailand. The second

group is Italy, Spain, Japan, Taiwan, and South Korea which have higher technology and skilled labor. Although, Thai ceramics industry stays sandwiched between these two groups they have high hope of future growth. But they need to change and devise a competitive strategy that is price oriented and able to develop manufacturing efficiency, technology, marketing, management, and human resource's knowledge and skill oriented (Bureau of Sectoral Industrial Policy 2, 2004).

Chairman of the Ceramics Industry Council of ASEAN, Somchai Wongarun, stated that in order to enhance long-term competitive ability, Thailand's ceramics industry must further develop the ability to use quality, products design, brand name, services, reputation, on-time delivery, and market knowledge ("Thailand's Ceramic Industry Club and ASEAN ceramic council join forces to host CICA 2005 as trade," 2005). So, this industry has many problems that need to be solved for the realization of greater potential among intensified competition in the global market.

A few numbers of researches in Thai ceramics industry during the past years had focused only on the functional operation (marketing, finance, and structure) and competition of ceramics industry. As a result, these researches provide very limited information in Thai ceramics industry to devise a unified strategic plan for overall competitiveness which is needed (see Table 1.2).

Table 1.2 The Summary of Ceramics' Studies in Thailand

Researchers	Topics	Findings
Pausiri (2005)	Financial statement disclosure of ceramics industrial SMEs in Lampang province	The study found that 9 out of 29 companies do not disclose data on a continuous operation of their businesses. The study reveals that 5 out of 25 companies show an income from sale in a profit loss sheet but do not show any detail of income from inside and out of the country in a remark of a financial statement report.
Boonsanong (2004)	Factors Affecting the Competitive advantage of Thailand's Ceramic Tiles Industry.	Factors affecting the competitive advantage in ceramic tiles industry are factor condition, demand condition, related and supporting industries, company strategy, structure and rivalry in an industry, government policies and the unexpected situation. The main problem in Thai ceramic tiles industry is the quality of materials.
Sirisoonthon et al. (2004)	Competitive Benchmarking for Ceramics and Glasses Industry.	The results found that Germany is the strongest country and United Kingdom, China, Thailand and Indonesia are in the second, third, fourth and fifth rank, respectively. It is to be noted that the best raw materials resource and lowest labor cost are not the critical factor strengthening the industry while the process control capability and labor skill are more important.
Chuenprasertsuk (2003)	Competitive in Handmade Ceramics Industry: Celadon.	The finding found that the advantages of factor conditions are availability of raw materials in local are a skilled labor and cultural foundation, while the disadvantages are inconsistent quality of raw materials, low-educated labor and the lack of designer and technology. The advantages of firm strategy, structure and rivalry are technique, intellect, e-commerce strategy, high competition in style and quality, while the disadvantages are the lack of knowledge in marketing and promotion strategy, and attitude in self-development and entrepreneurship.

Table 1.2 Continued

Researchers	Topics	Findings
Kaosa-ard et al. (2002)	Master Plan for the Ceramics and Glass Industry.	The finding showed the industry status, the role of government in this industry, SWOT analysis, and development directions in the next decade of industry.
Kritopakan (2001)	Relation between Capital Structure and the Financial Operation of Ceramic Tile Industry.	The results found that the increasing of domestic long-term loans, debentures and retained earnings relate to increasing of liquidity of ceramic tiles industry. For the activity, the increasing of foreign long-term loans and the decreasing of fund from common stock issuing relate to the increasing activity. Lastly for profitability earning, the decreasing of fund from common stock issuing relate to the increasing of profitability earning.
Na Thalang (2001)	Market structure and Consumers' Purchasing Behavior of Tableware Ceramics	The results showed that trend of this industry is oligopoly, the factors that affect purchasing decision making on tableware are occupation, brand name, consumers' status, consumers' average salary, buying frequency, and buying place.
Tosuto (2001)	The structure and Behavior of Ceramic Wall Tile and Floor Tile in Thailand.	The results showed that the structure of ceramic wall tiles and floor tiles are oligopoly, the products different but high substitute used. For the competition behavior, all manufacturers in this industry utilize pricing strategy and develop both quality and new designed product.
Watthanasarn (2000)	An Analysis of Domestic Demand and Export Demand in Ceramic Sinks in Thailand.	The finding found that average market prices of domestic ceramic sinks and domestic income per capital are important factors affecting the domestic demand. Export average prices and income per capital of ceramics importers are important affecting export demand.

Table 1.2 Continued

Researchers	Topics	Findings
Chiyannon (1998)	The Comparative Advantage of the Ceramics Industry in Thailand.	The results found that bowl ceramic products of small factories had low quality and most of them are produced for domestic consumption while those from medium and large factories had higher quality and were produced for export in the world market. Souvenir ceramic products were labor intensive production process which most factories were small factories could produce for export. Lastly, the finding found that the ceramics industry had comparative advantages
Tokamonthum (1992)	An analysis of Competitive Advantages of Thailand's Ceramics Industry.	The results showed that the structure of ceramics industry has changed from an import substitution industry to an export industry. Labor forces and raw materials are the key contributing factors to the industrial success in international specialization. Also, the degree of industrial linkages, both forward and backward, are high in number with regard to its competitive edge in the market.

Many studies on best practices have been done outside Thailand. Results of the research on best practices have been mixed. One group found positive relationships between best practices and performance (Lau, Zhao, & Xiao, 2004; Prajogo & Sohal, 2003; Rahman & Sohal, 2001), while another found less than convincing results (Anderson and Sohal, 1999; Arumugam, 2005; Beaumont, Sohal & Terziovski, 1997; Dow, 1999; Pannirselvam & Ferguson, 2001; Powell, 1995; Samson & Terziovski, 1999; Sila & Ebrahimpour, 2005).

Lau, Zhao, and Xiao (2004) found that firms practicing total quality management have superior performance. Prajogo and Sohal (2003) established that TQM practice has significantly exhibited positive relationship to organizational performance (quality performance, process innovation performance, and also product innovation performance). Rahman and Sohal (2001) found a significant relationship between business practices and firm performance as well as sales revenue, profitability and number of solid customers.

However, other studies have given the opposite results. Arumugam (2005) studying small and medium enterprises in Malaysia and found that two business practices: leadership and customer and market focus practices, as well as two innovation initiatives: adoption of employee innovative ideas and products developed were essential factors to achieve high performance. Sila and Ebrahimpour (2005) in their research found that only leadership and process management had positive, direct effects on business results (customer focused results, human resource results, organizational effectiveness results and financial and market results).

Pannirselvam and Ferguson (2001) found that the Malcolm Baldrige National Quality Award (MBNQA) Practices had a significant direct (customer focus and relationship management), and indirect (information management, human resources management and leadership) effect on company's performance (operational results and customer satisfaction). Moreover, they found that the indirect effect of strategic quality planning on performance was not significant where product and process management did not have any significant effects on customer satisfaction but its effect on business results. Anderson and Sohal (1999) established that customer focus, quality system or good information management, provided greatest positive influence on the quality of outputs. They also found that, strategic planning, information and

human resource management did not contribute to any one of business performance (sales, exports, cash flow, employment levels, overall competitiveness and market share). Dow (1999) reports that only three of nine quality practices (employee commitment, shared vision, and customer focus) contribute to performance. Also, in the same study it was found that, six quality practices (benchmarking, cellular work teams, advanced manufacturing technologies, personnel training, just-in-time principles, and close supplier relations) did not contribute to performance.

Samson and Terziovski (1999) in their research found that the categories of leadership, human resource management and customer focus proved to be strongly related to performance, but the other three categories; strategic quality planning, information and analysis and process management did not contribute to performance. Beaumont, Sohal and Terziovski (1997) studying differences in quality management practices between Australian manufacturing and service organizations found that quality management practices were not correlated with performance. Powell's (1995) indicated that not all elements of practices were related to performance, only three of twelve practices (executive commitment, open organization and employee empowerment) contributed to performance but nine elements of the practices (adopting the philosophy, closer to customers, closer to suppliers, benchmarking, training, zero defects mentality, flexible manufacturing, process improvement, and measurement) did not contribute to performance.

To sum up, the findings of studies on the relationship between best business practices and performance are still questionable and under investigated.

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. Based on the Resource-Based Theory, best business practices are considered as a capability of the firms that are using as the basis for competitive advantage which can lead firms to superior performance.

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, Boudreau, & Milkovich, 1995; Youndt, Snell, Dean, & Iepak, 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.

This research is motivated by the following:

1. There has been no research to find out the extent to which Thai ceramics industry has adopted the best business practices and whether these practices contribute to performance.
2. The results of past studies on the relationship between best business practices and performance are inconclusive.
3. There has been no research to determine whether the choice of business strategy moderates the relationship between the best business practices and performance.

4. The dearth of studies that comprehensively investigate the moderating effect of business strategy on the relationship between best business practices and performance.
5. There has been contradicting of management problems in Thai ceramics industry between Kaosa-ard et al. (2004) and Mooney et al. (2003). Management problems about attitude, technical quality, process control, labor skills and cleanliness that could relate to best practices and certainly reflect management concerns.

Based on literature reviews, there is a great need for better understanding the interrelationships between best business practices and business strategies with firm's performance. The research results are proposed as guideline to Thai ceramics industry for sustaining and improvement growth. Thus, in order to enhance Thai ceramics industry, this research attempts to find out the extent to which those ceramics firms adopted the best business practices and whether these practices contribute to performance. Secondly this research would determine whether choice of business strategy moderates the relationship between the best business practices and performance.

1.4 The Research Questions

Based on the above problem statement, the research questions of this study are as follows:

1. To what extent have Thai ceramics firms adopted the best business practices?

2. What overall competitive business strategies are being employed by Thai ceramics firms?
3. How does the adoption of best business practices contribute to Thai ceramics firm's performance?
4. Do generic business strategies moderate the relationship between best business practices and performance?

1.5 The Research Objectives

The objectives of this research are as follows:

1. To investigate the extent to which best business practices are adopted by ceramics firms in Thailand.
2. To examine the type of generic business strategy being employed by Thai ceramics firms.
3. To study whether the adoption of best business practices contribute to ceramics firm's performance.
4. To examine whether generic business strategies moderate the relationship between best business practices and performance.

1.6 Significance of the Study

This study is significant for the following reasons:

1. This study would be useful for entrepreneurs and managers in ceramics industry in Thailand as to help them realize the importance of adopting proven business practices and choosing business strategy to enhance business performance and competitiveness.

2. This study could highlight to Thailand ceramics industry's entrepreneurs and managers to take more proactive action by adopting these proven business initiatives to enhance their internal competencies and capabilities for sustainable performance and competitiveness.
3. A research on business practices, choice of business strategy and performance of ceramic firms in Thailand will provide information for Thai ceramics industry to devise a strategic plan to increase the performance.
4. There has been little research on both best business practices and business strategies in Thailand. Thus, this study added more literature in this area.
5. This study contributed to new learning on best business practices and business strategies in a third world environment with specific reference to ceramics industry in Thailand, which had not been studied before.

1.7 Scope of the Study

This research is confined only to the ceramics manufacturing firms in Thailand. It focuses on best business practices (independent variables) and business strategies (moderating variables) which are expected to affect firm performance (dependent variable). Only one industry i.e. the ceramics industry is chosen for this study to exclude differences in operating environments.

1.8 Definition of Variables

1. Ceramics firms: refers to ceramics manufacturing enterprises producing ceramics products which comprise wall and floor tiles, dinnerware/tableware, ornamental ware, sanitary ware, electrical insulators and utility items.

2. Best business practices: refer to the seven criteria adapted from the Malcolm Baldrige National Quality Award (MBNQA) and innovation. The definitions of the seven best business practices variables are as follows:

- a. Leadership:** refers to the firm senior leaders' role in setting and communicating vision, values, and performance expectations that address the need of customers and other stakeholders, its empowerment abilities, innovation, learning and its organizational directions (Baldrige National Quality Program, 2005).
- b. Strategic planning:** refers to the planning undertaken by the firm which among others, include how firms develop strategic objectives, action plans in relation to human resource plans, how the plans are deployed, and how performance is tracked (Baldrige National Quality Program, 2005).
- c. Customer and market focus:** refers to the development of knowledge about the customers, use of customer complaint data, processing to minimizing customer dissatisfaction and loss of repeat business. In addition, it focuses on identifying current and potential customers for existing new products (Baldrige National Quality Program, 2005).
- d. Human resource focus:** refers to how business's work systems and enable employee to develop and utilize their full potential in alignment with business's overall objectives, strategy, and action plans, also to examine business's efforts to build and maintain a work environment and employee support climate conducive to personal and business growth (Baldrige National Quality Program, 2005).
- e. Process management:** refers to the key aspects of business's process management, including key product, service, and business process for

creating customer and organizational value and key support process. This category encompasses all key process and all work units (Baldrige National Quality Program, 2005).

f. Information and analysis focus: refers to how business selects, gathers, analyzes, manages, and improves its data, information, and knowledge assets, also to examine how business reviews its performances (Baldrige National Quality Program, 2005).

g. Ethics: refers to the aim of demonstrating how well organization has been creating and maintaining a productive, learning, and caring work environment for all employees. In addition, it focuses on the aim of achieving organizational effectiveness and process efficiency. Also included societal responsibilities with the aim of maintaining a fiscally sound, ethical organization that is a good citizen in its communities (Baldrige National Quality Program, 2005).

3. Innovation: refers to the development of a new product or process, or the improvement of an existing product or process (Vries, 2006).

4. Business strategies: refer to the two types of strategies. cost leadership and differentiation (Porter, 1980).

a. Cost leadership strategy: refers to a strategy in which an organization attempts to gain a competitive advantage by reducing its costs below the costs of competing firms. This strategy emphasizes efficiency. By producing high volumes of standardized products, an organization hopes to take advantage of economies of scale and experience curve effects. The product is often a basic no-frills product that is produced at a relatively low cost and made available to a very large customer base.

b. Differentiation strategy: refers to a strategy in which an organization seeks to distinguish itself from competitors through the quality of its products by providing a unique product that is perceived industry wide. This strategy involves creating a product that is perceived as unique. The unique features or benefits should provide superior value for the customer if this strategy is to be successful.

5. Firm's performance: refers to business results as measured by both financial and non-financial indicators. Financial performance is measured by average annual sales growth, return on assets (ROA), return on sales (ROS), and return on investment (ROI). Non-financial performance is measured by employee morale which is represented by employee turnover rate.

1.9 The Content of the Study

The study is organized as follows: Chapter 1 explains the reasons for the study of ceramics industry in Thailand, problem statement, research questions, research objectives, significance of the study, scope of the study, and definition of variables.

Chapter 2 presents Thai ceramics industry in the aspect of its history, ceramics classifications, ceramics production process, export market, ceramics industry analysis, and GAP analysis.

Chapter 3 presents the literature review covering Resource-Based Theory, performance and the measures of business performance, best business practice, business strategy, and. The seven categories of The Malcolm Baldrige National Quality Award (MBNQA) criteria were adapted by this study and the reason of adding innovation as an important complementary variable to the MBNQA criteria. This chapter also reviews relationship between best business practices and

performance, relationship between business strategies and performance, relationship between business strategy and performance, and the moderating role of business strategy on the relationship between best business practices and performance.

Chapter 4 explains the theoretical framework of this research, hypothesis statements which show the relationship between business practices and firm performance, and the moderating effect of strategy on the relationship between business practices and firm performance. In addition, chapter 4 contains variables and measurements, the sampling method and procedure, and the statistical analyses which used in this study.

Chapter 5 presents the data analysis and findings. The results presented are respondent profiles, response bias test, goodness of measures, descriptive statistics and intercorrelation, modified theoretical framework and hypothesis testing. Goodness of measures shows the results of factor analysis and reliability analysis. The summary of the results of hypothesis testing is presented at the end of this chapter.

Chapter 6 contains the discussion of findings. This includes recapitulation of the study's results, contributions of the study, limitations and suggestions for future research. This chapter ends with the conclusion.

CHAPTER 2

THAI CERAMICS INDUSTRY

2.1 Introduction

This current chapter is divided into four sections. Section 1 presents a brief general picture of Thai economy, history of Thai ceramics industry, and Modern Thai ceramics industry. Section 2 explains ceramics production process. Section 3 covers export market and world market competition. Finally, section 4 discusses Thai ceramic industry analysis and GAP analysis.

2.2 General Picture of Thai Economy

Thailand is located in the center of Southeast Asia peninsular with Burma to the west, Laos to the north and east, Cambodia to the southeast, and Malaysia to the south. Thailand's population was estimated at 65.47 million in July 2006 ("Country Profile: Thailand," 2005).

In the past, the Thai economy expanded very rapidly during the 1980s and early to mid 1990s with average annual Gross Domestic Product (GDP) growth between 1990 and 1996 of 8.5 %. Thailand's transformation from an agriculturally dominant structure to an industrially dominant one become statistically apparent in 1981, when for the first time the value added from manufacturing surpassed that of agriculture. In 1985, the value of manufactured export started to exceed that of agriculture and from that point on, manufacturing exports have been accelerating. The economy was already slowing down when the Asian currency crisis struck in the late summer of 1997. During 2001–2004 the economy grew at a moderate rate, but the

rate of growth was slower than in the booming 1980s and the first half of the 1990s. A long-term shift from agriculture to manufacturing and services continues.

Manufacturing has led Thailand's economic growth. Manufacturing output grew at 10 percent annually during the 1980s and early 1990s, much faster than the economy as a whole. As a result, the manufacturing share of Gross Domestic Product (GDP) rose from 22 percent in 1980 to 35 percent in 2006. While all industries grew, expansion was most rapid among manufacturers. This is supported by the finding of the 2005 survey, conducted by the United Nations' Commission for Trade and Development (UNCTAD) that cites Thailand as the 3rd most attractive foreign direct investment or FDI location in Asia and the 9th most attractive location in the world. Thus, the need to continuously improve manufacturing competitiveness still exists.

2.3 History of Thai Ceramics Industry

Ceramics products, traditionally called pottery, have been produced in many regions of the land known as Thailand today since Neolithic period. All pottery produced in the early periods were of earthenware type, very fragile, unglazed, reddish brown or black in color and decorated by burnishing, cord impression or brushwork with colored clay slip. High fire glazed pottery evolved in Thailand around 600 AD., notably during Sukhothai and early Ayutthaya period (13th – 16th century AD.) The wares produced during this period were very high quality with beautiful blue-green celadon glaze, known the world over as Sangalok wares. The production of ancient Thai ceramics died down during the end of the 16th century, possibly due to the war between the Ayutthaya kingdom and Burma, and never recovered until the modern time (Thammapreechakorn, Lertrit, & Pinsri, 1996).

2.4 Modern Thai Ceramics Industry

Modern Thai ceramics industry began after the end of the Second World War by a group of Chinese investors, traders and artisans who immigrated to Thailand to fill the demand of the Thai consumers because China increased exporting the pottery due to the political problems. Early ceramics factories employed carried over traditional Chinese production technology. Kaolin and ball clay, the essential raw materials, were found and mined in Lampang province during 1955-1956. This prompted the establishment of many new ceramics factories to take advantage of the newly found resources (“History of Lampang Ceramics Industry,” 2002). Thai ceramics industry began to adopt modern production technologies such as mechanical forming machines and modern gas fired kilns to improve production efficiency around 1960’s, with financial support from the Board of Investment (BOI) of Thailand.

The classification of “ceramics” is divided into 2 categories: The first category is known as a new ceramics that includes ceramics products for technical and industrial applications. The second category is known as a traditional ceramics that include ceramics products for normal uses in everyday life. Traditional ceramics can be further divided into sub-categories as follow: sanitary ware; wall and floor tiles; dinnerware/tableware; ornamental ware; and electrical insulators.

Ceramics industry in Thailand mostly concentrates on traditional ceramics (“Thai Small and Medium Enterprises Focus,” 2003). Sanitary ware, wall and floor tiles are produced in large, modern factories with high capital investment and utilize high level of technology and expensive machinery. Many manufacturers of sanitary ware, wall and floor tiles are either foreign-owned or joint ventures. Most of these factories are located in Bangkok and Saraburi province. Dinnerware can be produced in large, medium or small factories. Porcelain and bone china dinnerware production

requires high level of technology and capital investment; therefore they are produced in large factories located in Saraburi province. Stoneware dinnerware, on the other hand, can be produced in medium and small factories because production does not necessitate modern technology in order to produce good quality products. Most stoneware dinnerware factories are located in Lampang and Chiang Mai provinces. Ornamental ware is produced in small factories, mostly family owned. Almost all of ornamental ceramics products produced in Thailand are from Lampang and Chiang Mai provinces. There are some factories producing ornamental ware in Samutsakorn, Pratumthani, Ratchaburi and Nakornratchasima province also (“Thai Small and Medium Enterprises Focus,” 2003). Locations of ceramics industries in Thailand are shown in figure 2.1.

The plans for developing Thai ceramics industry have been included in the National Economic and Social Development Plan since 1965. Furthermore, the knowledge of technologies and the science of ceramics aided by the Service Science Department, under the Ministry of Science, Technology and Energy, have helped fostering the steady improvement and growth of the industry. It is now one of the most promising industries in Thailand, especially tableware manufacturing and production. Large scale production of tableware are now located in Bangkok and Saraburi provinces while small and medium production are mostly located in Lampang and Chiang Mai provinces in the northern region of Thailand (“Thai Small and Medium Enterprises Focus,” 2003).

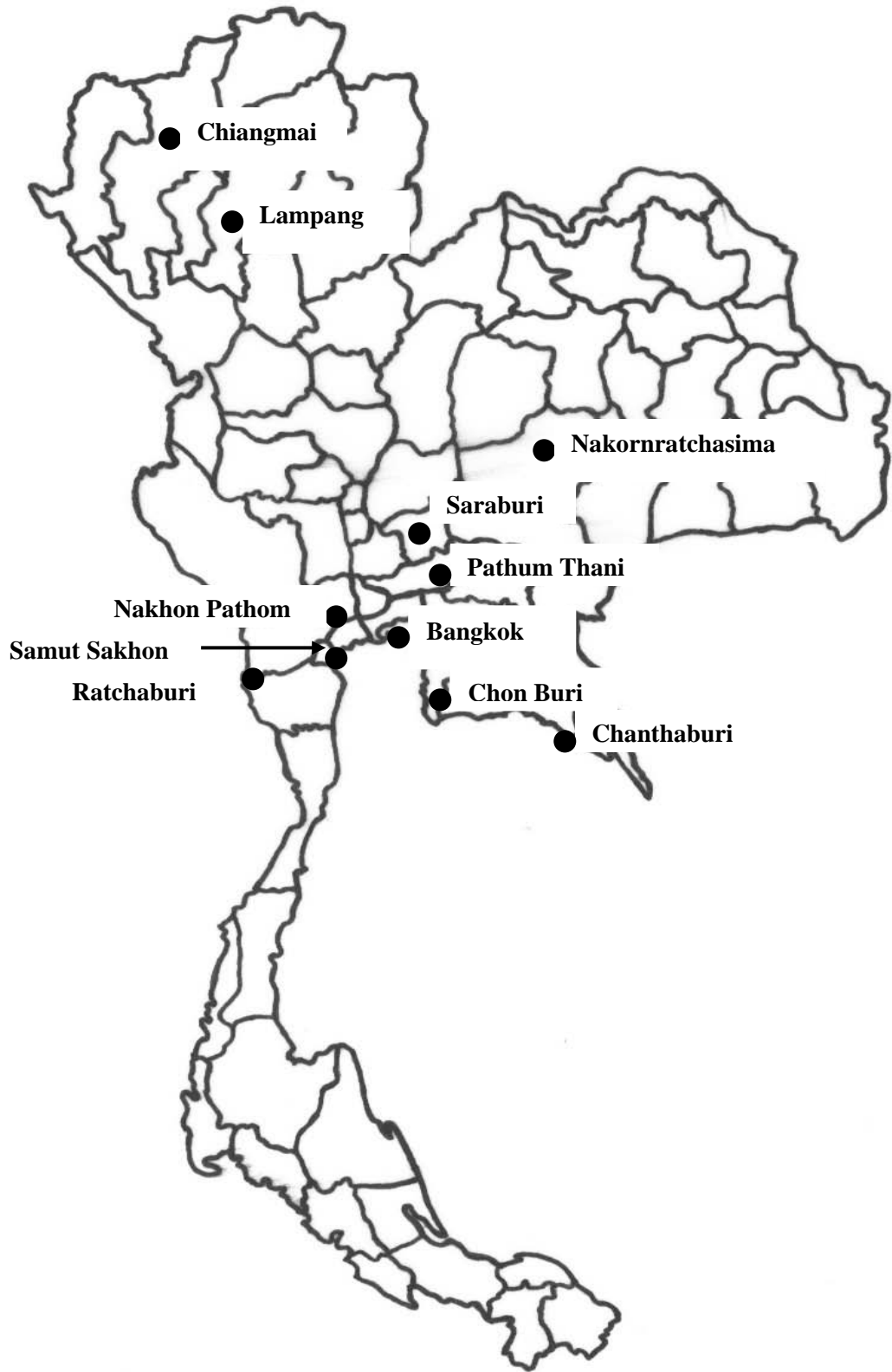


Figure 2.1 Locations of Ceramics Industry in Thailand

2.5 Ceramics Production Process

According to Export-Import Bank of Thailand (2004) and Teeprasan (1999), ceramics production process can be divided into four steps as follows:

- 1. Material preparation:** Ceramics products are inorganic substance composed largely of clay minerals; kaolin, ball clay and fire clay and rock minerals; quartz or silica sand, feldspar and many others. These raw materials must be weighed and mixed exactly according to formula or recipes specifically designed and ground to a proper fineness.
- 2. Forming:** Forming gives ceramics products their shapes. Different ceramics products employ different forming methods. Slip casting uses porous plaster moulds to absorb excess water from clay slip and turns it into plastic clay adhere to the inside surface of the mould and duplicate the shape and every detail of the mould. Plastic forming uses plastic property of clay bodies to aid the forming of ceramics products. Dry pressing or dust pressing uses a heavy hydraulic press for packing clay body in dry granule state into a metal mould to form a very dense product in high volume. Turning is the only method of forming products with very thick cross section requiring very high strength successfully.
- 3. Drying:** All ceramics products must go through drying step to drive off excess moisture contained for prevention of explosion from heat in the next step, firing.
- 4. Firing:** Firing gives ceramics products its' strength and durability. The process of firing is accomplished in a ceramics kiln subjecting the products being fired to high temperature. Different types of ceramics require