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Multi-level factors affecting firm competitiveness in ASEAN region of small and medium enterprises of Thailand

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Abstract

This research examined the external and internal factors influencing the competitiveness of SMEs in Thailand operating in the ASEAN context. A quantitative approach was applied using a survey method with a questionnaire as a tool to collect data from a sample of 527 Thai SMEs from June 2016 to March 2017. The findings indicated a relatively medium-to-high level of competitive capacities on the part of Thai SMEs in general. SMEs in the service and manufacturing sectors, as well as firms with international experience, were rated at a high level compared to others. In addition, the analysis of the variables using a structural equation model demonstrated that firm performance had a positive relationship to the level of business competitiveness ($r = .43$). The research results also indicated the potential competitive capacity development of Thai SMEs, with evidence from relevant variables regarding firm performance, which directly affected the company's competitiveness. Organizational strategy, firm readiness for internationalization, and organizational characteristics were the significant factors that were seen to enhance the competitive capacity of SMEs in Thailand. Hence, entrepreneurs should improve these indices in order to better carry out their business in the region.

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Introduction

Small and medium enterprises (SMEs) are considered a key factor in an economic system in a great number of countries around the world (Chiao, Yang, & Yu, 2006) and are also a mechanism that rejuvenates the economy and eliminates poverty as they create incomes and employment. ASEAN is ranked as the ninth-largest economic region by size with approximate Gross Domestic Product (GDP) of USD 2.18 trillion. SMEs also play an important role in ASEAN because they account for more than 96 percent of all enterprises in the region. Furthermore, they create between 52 and 97 percent of employment, contribute between 23 and 58 percent to the GDP, and 10 to 30 percent in

total exports (ERIA, 2014). In Thailand, there were approximately 2.77 million SMEs in 2015 according to the Office of SMEs Promotion (OSMEP) (2017). Significantly, they created over 10.8 million jobs or 80.4 percent of the country's total employment, secured 41.1 percent of the country's GDP as well as 28.4 percent of total export value (OSMEP, 2017). Therefore, this punctuates the significant contribution of SMEs to the Thai economy.

Globalization, the free trade agreement (FTA), as well as the establishment of the ASEAN Economic Community (AEC) in 2015 have stimulated the internal relationship among ASEAN nations, which has resulted in the creation of commercial advantages, including investment and the free movement of production factors and labor. On the other hand, the SMEs are exposed to even more aggressive competitors and the overflow of products in the market (Ferrell, Fraedrich, & Ferrell, 2011). As a consequence, SMEs

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must be ready for the aggressive, competitive market since competitors are not limited to the domestic level but have expanded internationally.

Recent studies indicated that most of Thai SMEs have low readiness to internationalize and are still not equipped with sufficient knowledge to handle the highly competitive business environment that collaboration in the region will bring (Siriphatrasophon & Saiyasophon, 2013; Siriphatrasophon, 2015). Therefore, this study examined multi-factors influencing the competitiveness of SMEs in order to create an overall picture for SME development plans. Indeed, the study focused on the development of SME competitiveness and competency indicators in the AEC market and aimed to discover other supporting factors that could make a business successful. The findings from this research can be used as a tool to develop organizational knowledge and administration, especially regarding SMEs in the ASEAN region.

Literature Review

Definition and Importance of Firm Competitiveness

Feurer and Chaharbaghi (1994) defined competitiveness in the following statement: 'Competitiveness is explained as the ability of firms, regions, and nations to generate relatively higher income and levels of sustainable employment for the benefit of shareholders at the time that they are exposed to international competition'. Competitiveness is crucial for organizations operating in today's dynamic markets. Therefore, it is essential that firms must have appropriate business strategies to compete in local and international markets (Jadesadalug & Usshawanitchakit, 2008).

Guan, Hansen, and Mowen (2006) stated that companies must consistently improve their operational effectiveness in order to be competitive among rivals. Based on the explanation by Guan et al. (2006), competitive advantage consists of the following factors: (i) cost leadership, which aims to offer customers better value at lower costs compared to competitors; (ii) delivered customer value advantage, meaning the ability to offer customer benefits or customer realization to a greater degree than is sacrificed by customers; (iii) time management quality, meaning the ability to deliver or complete the work assigned within or faster than the timeline given; and (iv) innovation advantage, which is a result of advanced technologies and product innovation that require firms to adapt themselves to survive.

Factors Building Firm Competitiveness in International Business

A number of researchers have demonstrated the external and internal factors needed to build international business competitiveness. This study, therefore, has reviewed some of the literature as explained below.

Organizational Characteristics

Previous studies have defined organizational characteristics in terms of four factors: (i) entrepreneurial orientations – the ability to engage in product market innovation, undertake somewhat risky ventures, and being

the first to come up with proactive innovations, beating competitors to the punch (Miller, 1983); (ii) global mindset – the way in which organizations or business owners realize and are open-minded to diversity and different business contexts; that is, they can generate profits from this diversity (Gupta & Govindarajan, 2002); (iii) imitative capability – the ability to imitate the existing innovation of rivals in order to become competitive in the market (Olavarrieta & Friedmann, 1999); and (iv) strategic flexibility – the ability of an organization to effectively adapt in a fast-changing environment, and to the uncertainty or unpredictability in the new competitive landscape, which helps firms develop and/or maintain their competitive advantage (Kogut & Kulatilaka, 2001).

Organizational Strategies

Organizational strategy is seen as a tool that a company uses to become successful (Miller & Dess, 1996). According to Thompson, Peteraf, Gamble, and Strickland (2016), organizational strategies can be categorized into three levels: (i) corporate strategy; (ii) business strategy; and (iii) the strategic business unit. These three levels of business strategy are directly connected and therefore harmonization and consistency in implementing them is a key to success. Frese (2009) places priority on the business strategy as a key to success, meaning that the strategy is a plan or action that leads to business success and can be adapted to different situations and circumstances. In addition, a number of SMEs studied in many countries have shown that corporate strategy has a direct connection with the positive relationship and overall success of the company (Rue & Ibrahim, 1998).

Organizational Readiness for Internationalization

According to Cavusgil, Knight, and Riesenberger (2014), dimensions in an organization that are recommended to be evaluated for the readiness to internationalize include: (i) competitive capabilities in the domestic market – the capability to carry out a business efficiently in the local market can build advantages over foreign competitors; (ii) motivation for going international – this comprises the factors stimulating a company to need to internationalize; (iii) commitment of owners – entrepreneurs must provide evidence of their commitment to truly internationalize; (iv) product standard for foreign markets – refers to products that have been certified for their standards according to international principles; (v) skills, knowledge, and resources of the firm – entrepreneurs have knowledge and understanding in transacting businesses with foreign countries; and (vi) international experience and training – entrepreneurs have experience and/or have been sufficiently trained in in-depth international business management. It is recommended that in an analysis of the readiness to internationalize, entrepreneurs should scrutinize their own organizational elements, including resources and motivation, as a necessary capacity that will lead to successful internationalization.

Firm Performance

Miller and Friesen (1982) defined firm performance as a procedure that is directly relevant to business decision-

making, leading to a competitive advantage for the company. Studies of the impact of internationalization activities on SMEs performance have led to a variety of findings and results due to the different research methods and tools used. In a general context, “growth” is a common indicator used to evaluate the achievement of small enterprises because it reflects directly the level of achievement through the overall performance of the firm (Wang, 2008). Firm performance usually has a multidimensional nature in general and therefore a variety of indicators is required in order to conduct a study on the topic (Lumpkin & Dess, 1996).

Relationship Between Firm Performance and Competitiveness

Ambastha and Momaya (2004) gathered relevant literature on the above relationship and discovered that firm-level competitiveness has a direct relationship with organization performance, especially in the current business context. O’Farrell, Hitchens, and Moffat (1992) conducted a study to find a relationship between a company’s competitiveness and performance with a direct focus on price, quality, design, marketing, flexibility, and management. Therefore, some academics have concluded that firm-level competitiveness is a measure of a company’s performance (Rodríguez-Pose & Hardy, 2017).

The present review of the literature relating to a company’s competitiveness demonstrates that there are internal organizational factors that support, maintain, and conserve the company’s competitiveness. Furthermore, internal factors are both substantial and abstract: firms’ strategies, structures, competencies and capabilities to innovate, the ability to market, supporting marketing and distribution systems, technology, productivity, human resources infrastructures, operations management, supply-chain management, quality systems, etc. (Ambastha & Momaya, 2004). Previous studies have proved that these internal factors help to increase a firm’s competitive capabilities and performance (Tracey, Vonderembse, & Lim, 1999). The level of capabilities leading to increased firm performance and firm competitiveness is seen as a company’s outcome and as an indicator of achievement.

Methods

This study applied exploratory research in a cross-sectional, descriptive study using a self-administered questionnaire and electronic-based survey that was conducted from June 2016 to March 2017. The targeted population of the study was Thai SMEs that were registered in the database of the Ministry of Commerce, the Department of Industrial Promotion, the Department of International Trade Promotion, and Thailand’s SME Institutions.

Sample and Data Collection

This research used a survey to collect the primary data from a sample of SMEs in Thailand. Respondents in the survey were owners or general managers since they are knowledgeable about their firms’ characteristics, management style, and performance. The research sample unit was

selected using non-probability sampling. Data collection was then implemented geographically (the central region including Bangkok Metropolitan, the northern region, the southern region, and the northeastern region). The questionnaires were developed based on information from the literature review and validated by data collection validation tools before being disseminated to the database of SME networks. The filled questionnaires were collected, checked, and verified prior to the data analysis stage. The total number of completed questionnaires collected was 527.

Instrument Development and Measures

The questionnaire was divided into four parts. The first part consisted of general information on the respondents and their type of business operation, while the second part consisted of a series of questions on SME competitiveness in the ASEAN market in four dimensions: (i) cost leadership; (ii) delivered customer value advantage; (iii) time management quality; and (iv) innovation advantage (Guan et al., 2006). The third part involved the factors enhancing business competitiveness: (i) organizational characteristics; (ii) organizational strategies (Department of Industrial Promotion, 2012); (iii) firm readiness to internationalize (Cavusgil et al., 2014); and (vi) firm performance. The main focus of the research was the study of non-financial measures as Thailand’s SME context still encounters great limitations concerning financial records that do not reflect the firm’s actual financial performance. Parts 2 and 3 of the questionnaire involved Likert-scale survey questions with 5-level rating scores from strongly disagree (=1) to strong agree (=5). The “do not know” type of answer was not scored nor was it counted in the data analysis. The final part of the questionnaire was an open-ended question allowing the respondent to share his or her opinions and to raise suggestions regarding the research topic.

Validity and Reliability

The questionnaire developed was assessed for validity and reliability according to the following.

- 1) *Content Validity* – The content validity process was undertaken beginning with translating the original English version into the Thai language as well as the completion of back-translation by language specialists. The draft questionnaire was again validated by the research advisor and subject matter experts in order to adjust and finalize the questionnaire.
- 2) *Reliability* – A pilot test was implemented with 30 Thai SMEs and data collected from the test were used to analyze the questionnaire’s reliability, especially the information in parts 2 and 3 (Likert-scale survey questions). Cronbach’s alpha coefficient indicated that the questions on competitiveness and antecedent constructs were between .68 and .91, indicating the reliability of the questionnaire (Hair, Anersaon, Tatham, & Black, 1998).

Data Analysis

Both descriptive and inferential statistics were applied for the data analyses. Descriptive statistics were used to analyze and describe the sample of the study while inferential statistics were used to test the research hypothesis. The structural equation modeling (SEM) was applied to test the research hypotheses and to confirm the relationship between the level of firm competitiveness and all of the antecedent variables measured in this study. For the purpose of statistical testing, all tests were conducted at a .05 level of significance.

Results and Discussion

Results of the Study

The demographic information on the SME research sample obtained from the questionnaire and the level of competitive capacity are shown in Table 1. According to Table 1, with a statistically-significant difference level of .05, the “Company limited” form of business tended to have a higher level of competitiveness compared to others, while SMEs in the service and manufacturing sectors tended to have a higher level of competitiveness than the trading business, both in the retail or wholesale sectors. Entrepreneurs with experience in international business tend to have higher competitive capacity compared to those with

Table 1
Descriptive statistics of the SME sample

	Percentage	Level of firm competitiveness (Mean, SD)
Business registration form		
Company limited	59.2%	3.70* (.59)
Partnership	16.5%	3.50 (.65)
Others	24.3%	3.53 (.68)
Business sector		
Production	32.3%	3.67* (.62)
Service	35.7%	3.72* (.60)
Retail	21.8%	3.41 (.69)
Wholesale	10.2%	3.62 (.48)
Time of operations		
Less than 5 years	24.1%	3.53 (.61)
6–10 years	25.1%	3.62 (.56)
10–20 years	22.8%	3.68 (.67)
More than 20 years	27.9%	3.76 (.64)
International business experience		
Never	42.2%	3.51 (.66)
Less than 5 years	21.9%	3.58 (.56)
6–10 years	17.1%	3.74* (.57)
10–20 years	9.5%	3.80* (.53)
More than 20 years	9.3%	3.87* (.63)
Revenue from international business		
Less than 5%	29.7%	3.50 (.67)
5%–10%	30.3%	3.62 (.55)
11%–50%	23.1%	3.81* (.53)
More than 50%	16.8%	3.96* (.59)
Scope of business		
Local market	46.9%	3.53 (.65)
ASEAN market	33.3%	3.72* (.57)
Global market	19.8%	3.80* (.60)

* Statistically significant at the $p < .05$ level (2-tailed)

Note: Based on two-tail tests, observed correlations whose absolute values exceed .149 are significant at $p < .05$; absolute values that exceed .195 are significant at $p < .01$

less or no international experience. For instance, SMEs who had been engaged for six to ten years in international business (mean = 3.74) had a higher firm competitiveness level than those who had never had international experience (mean = 3.51). The higher competitive capacity also was seen to be linked directly to income generated from international markets. Finally, enterprises aiming at regional (ASEAN) or global targets literally had higher competitive capacity than enterprises focusing only on the domestic target.

In order to explore the causal relationships among the variables, a structural equation model was formed as a measurement model of the study and the proposed hypothesis was then analyzed. Confirmatory factor analysis (CFA) was conducted in order to estimate single-factor measurement models for each of the study's constructs. The overall fit measures obtained from the structural equation analysis of the model were chi-square (χ^2) = 864.198, $df = 307$, $\chi^2/df = 2.815$, CFI = .949, GFI = .921, and RMSEA = .049. The factor loading of the observable variable equaled ($>.50$), with a high t -value (>1.96), and all indices met satisfactory standards. Therefore, the model for competitive capacity assessment was validated and appropriate. The results of the model analysis are shown in Figure 1.

The SEM results clearly demonstrate a positive and moderate relationship toward the level of competitiveness of Thai SMEs ($r = .43$) with statistical significance at the level of .05. Additionally, the causal factors that influenced firm performance were: internal organizational strategy (IOS) ($r = .47$); firm readiness for internationalization (FRI) ($r = .20$); and organizational characteristics (OrC) ($r = .09$). Figure 1 also presents parameter estimates for the model between: (i) organizational strategy and organizational characteristics (OrC) – entrepreneurial orientation (EO), global mindset (GM), imitative capacity (IC), and strategic flexibility (SF); (ii) internal organizational strategy (IOS) and its components in terms of main strategy, marketing strategy, operation strategy, HR strategy, and finance strategy; and (iii) firm readiness for internationalization (FRI) and capability in domestic market (CDM), motivation for going global (MI), owner commitment (OC), skill and resources of the firm (SKR), international experience and training (IET), and product standard for foreign markets (PFM). The standardized path coefficient between all measured factors was significant ($p < .05$).

Discussion

The positive relationship between firm performance and the competitiveness of Thai SMEs demonstrates the consistency and similarity of the two variables in previous researches (Barney, Wright, & Ketchen, 2001; O'Farrell et al., 1992; Rodríguez-Pose & Hardy, 2017), in which a high level of competitiveness was seen as greatly beneficial for the intensely-competitive market resulting from the AEC's free trade policy. This will create business competitiveness in the country and assist SMEs in growing in the ASEAN context as well.

The study of the causal factors influencing SME firm performance indicated that the “internal organizational

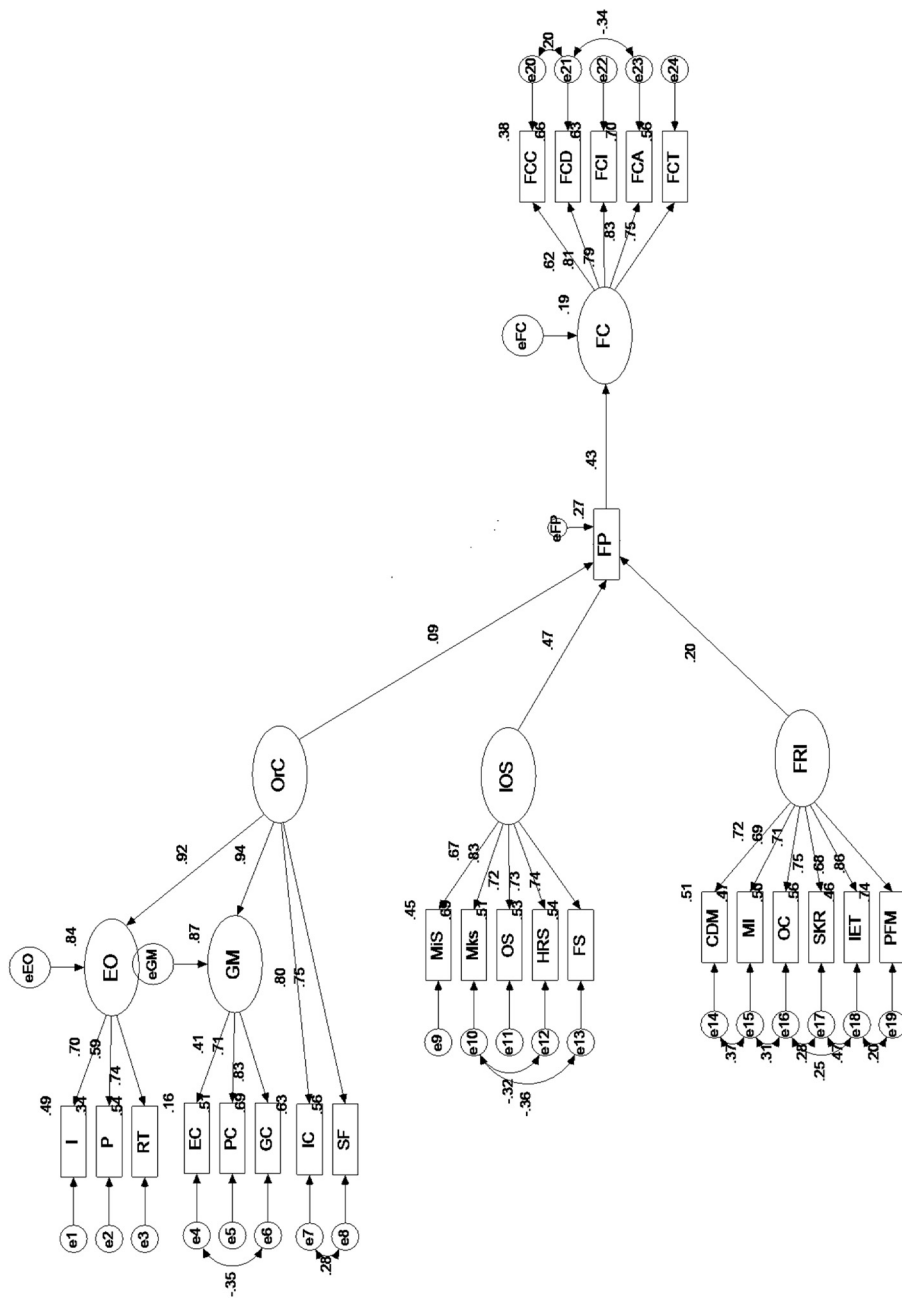


Figure 1 Path diagram of firm competitiveness in internationalization of Thai small and medium enterprises. Chi-square (χ^2) = 864.198, df = 307, X^2/df = 2.815, CFI = .949, GFI = .921, and RMSEA = .049

strategy” was the most influential factor, demonstrating the importance of strategies for a company's operation, especially in the areas of marketing, finance, strategic human resources, strategic operations, and overall strategy. The research conducted by [Abid, Saurabh, and Deepak \(2016\)](#) discovered that the factor of an increasing level of competitive capabilities and performance also leads to better firm performance in general.

The firm's readiness for internationalization was the second factor influencing SME performance in Thailand, which explains how a firm's readiness reflects increased competitive capabilities. Previous studies revealed that the SMEs in Thailand still had a lower level of internationalization ([Siriphatrasophon, 2015](#)). Entrepreneurs therefore should expedite the factors enhancing internationalization readiness, such as improving their skill and knowledge and the resources of the firm, or obtaining more international experience and training in terms of the ASEAN market. The greater the readiness of SMEs to internationalize, the greater will be their capacity for competitiveness in the AEC ([Siriphatrasophon, 2015](#)).

Even though organizational characteristics were little affected by firm performance, this was another factor that should be considered. The “global mindset” and “entrepreneurial orientation” variables both demonstrated a significant positive effect on firm performance and hence were seen to enhance firm competitiveness. This implies that the greater the improvement in the above characteristics, the better SMEs can achieve competitiveness. SME owners should be proactive, innovative, and have appropriate risk-management skill. These are linked to the findings of previous studies conducted by [Miller \(1983\)](#), [Covin and Slevin \(1991\)](#), and [Lumpkin and Dess \(1996\)](#), which indicated that proactive management and risk management are key elements of good entrepreneurs.

Conclusion and Recommendation

The empirical research data showed a moderate level of Thai SME competitiveness, despite all of the benefits of the AEC in widening business opportunity. As the results suggest that firms that engage more in international activities will have greater competitiveness, Thai SMEs who have not engaged in international business (42 percent in this study) need to adopt the specific strategic approaches/factors identified in this research and they need to accept the challenges and adapt themselves to fit the present fast-changing world.

The results also indicated a positive relationship between firm performance and the company's competitive capacities, and pointed out some of the factors influencing firm performance and that can eventually increase their competitive advantage in the ASEAN and international or global markets. The findings from this study hence imply that the development of Thai SMEs, especially in terms of organizational strategy, is crucial as it creates business competitiveness in the ASEAN market. This also leads to the preparation and readiness of firms for international market penetration and the escalation of the company's readiness for an intense business environment. SMEs should consistently validate their readiness in various

contexts, such as organization readiness and product standard, in order to verify the company's strengths and weaknesses, as well as to analyze the opportunities and limitations of entering the AEC. In addition, Thai SMEs should increase their preferred entrepreneurial characteristics, their internationalization mindset, imitating strategies, and be strategically flexible. SMEs should also implement proactive approaches, such as effectively analyzing markets and rivals, managing risks, being patient, implementing innovation, and seeking capital funds, as well as being able to access ASEAN business networks. In conclusion, in order to be competitive and to survive in the region, SMEs in Thailand should analyze carefully the surrounding factors as well as consider the causal factors that escalate the firm's performance and competitive capacities where the SMEs can best monetize the benefits of AEC.

Conflict of Interest

There is no conflict of interest.

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