


The Impact of Dynamic Capabilities on the Performance of Thai Small and Medium Enterprises

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ABSTRACT

Traditional research and literature reveal that organizations may acquire a competitive advantage and improve performance by enhancing their capabilities. However, none of them strongly emphasizes dynamic capabilities, and small and medium-sized firms (SMEs), particularly in South East Asia, have not been thoroughly examined in this area. Consequently, this study will investigate the impact of dynamic capabilities (innovative capability, absorptive capability, and adaptable capability) on the performance of small and medium-sized enterprises (SMEs). The responses of 322 SMEs in Thailand were analyzed quantitatively using multiple regressions. The findings indicated that all of them significantly impact the performance of SMEs. Nevertheless, SMEs should prioritize innovative capability by investing and paying more attention to innovation and creativity, followed by firms' adaptation and absorption capabilities.

KEYWORDS

Absorptive Capability, Adaptive Capability, Dynamic Capabilities, Innovative Capability, Small and Medium Enterprise (SMEs)

INTRODUCTION

It is widely known that Thailand's economy is highly dependent on exports of products and services. For almost the past two decades, industrial products have accounted for over 70% of overall export revenues. Since then, local support industries have helped rebuild the country's industrial sector. Small and medium-sized businesses (or SMEs) are essential to supporting industries. Thai SMEs have developed in response to government development policies and the evolution of the global economy (Sumipol, 2018). Currently, it is commonly acknowledged that small and medium-sized enterprises (SMEs) are crucial to the nation's economy. According to Kamunge, Njeru, and Tirimba (2014), SMEs are gaining importance in terms of employment, wealth creation, and innovation development. They are very important to national economies all over the world because they create jobs and income, contribute to innovation and the spread of information, meet new or niche social needs, and help bring people together (OECD, 2017).

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In addition, they are recognized as the most effective economic growth engines. Moreover, SMEs create the largest profit margins for the nation when compared to larger firms, which spend a significant amount of their earnings on imported machinery, technologies, and supplies. In addition, SMEs contribute to the growth of wealth and prosperity in rural regions of the nation. According to a recent research undertaken by the Office of Small and Medium-Sized Enterprises Promotion (OSMEP) of the Ministry of Industry, Thailand has 2,9 million SMEs, representing 99 percent of the country's total number of businesses. This resulted in the creation of 9.7 million jobs and additional revenue of 3,400,000,000 baht. They contributed 37.2% to the nation's gross domestic product and earned 1.59 quadrillion baht in exports. OSMEP also claimed that in 2019, micro enterprises and small and medium-sized businesses (MSMEs) created 5,963,156 million baht in GDP, or 35.3% of the national GDP. It climbed by 34.6 percent at a rate of 3.0 percent, a decrease from the previous year's rate of 5.5 percent. Micro enterprises (Micro) contributed 496,187 million baht (2.9%) to GDP, while small enterprises (SE) contributed 2,575,443 million baht (15.3%), and medium enterprises (ME) contributed 2,891,526 million baht (17.1%). Their growth rates were 8.6 percent, 0.7%, and 3.9 percent, respectively (The Office of SMEs Promotion, 2021).

There is a lot of competition among SME owners and entrepreneurs in Thailand because of the country's fast-paced business environment. For example, external elements like socio-culture, technology, the economy, politics, and the law have an inevitable impact on the success of SMEs, yet internal factors such as organizational infrastructure and strategy have an undeniably tremendous impact. According to Aas and Breunig (2017) and Yoo and Kim (2015), businesses must be able to effectively manage change in increasingly volatile and complex service eco-systems in order to prosper in the globalized and hyper-speed business climate of the present day (Crossan & Apaydin, 2010; Francis and Bessant, 2005). Nevertheless, according to Arinaitwe (2002), SMEs are frequently confronted with several difficulties that hinder their long-term survival and growth. Small company development research reveals that the failure rate in underdeveloped countries is substantially greater than in industrialized nations. In addition, Kamunge, Njeru, and Tirimba (2014) affirm that SMEs are increasingly encountering competition not only from direct competitors but also from major enterprises operating in specialty areas that were formerly thought to be exclusive to small businesses. According to Amyx (2005), one of the most significant barriers is a negative perception of small and medium-sized businesses. Prospective clients believe that small enterprises lack the capacity to provide high-quality services and are incapable of simultaneously completing many vital tasks. Frequently, larger companies are selected and awarded contracts solely on the basis of their brand recognition (Bowen, Morara and Mureithi, 2009). Inadequate planning, inadequate money, and inefficient management have been mentioned as the leading causes of small business failure (Longenecker, 2006).

Consequently, developing a competitive advantage is essential for the success of SMEs. Numerous classic research focusing on strategic management demonstrate that organizations can obtain both competitive advantage and performance improvement by enhancing their skills (Rothaermel, 2018; Wheelen and Hunger, 2018; Mongkol, 2021). However, relatively few of them highlight dynamic capabilities, and they have not been widely examined in SME contexts, particularly in Southeast Asia. In addition, the relationship between dynamic capacities and small and medium-sized enterprises has received limited attention in the literature. Consequently, the purpose of this study is to highlight the significance of dynamic capabilities in terms of the competitive advantage of SMEs and to study the impact of dynamic capabilities on the performance of SMEs in Thailand. To achieve the study goals, the author organized the paper as follows. The study begins by discussing fundamental concepts and theories concerning the performance and dynamic capacities of SMEs. The second section addresses the research technique, including the research framework and variable definitions. Thirdly, it summarizes and explains the statistical analysis's key conclusions. In conclusion, the most important findings and ideas for future research are given.

LITERATURE REVIEW

Small and Medium Enterprises (SMEs) in Thailand

Different countries define SME differently. In Thailand, the definition of small and medium enterprises is contented by the Ministry of Industry (The Office of SMEs Promotion, 2021). To illustrate the point, Thai SMEs classifications are provided in the table 1.

However, based on the features of Thai SMEs, Carson (1990) proved that they have unique qualities that distinguish them from large enterprises. In addition, Intrapairot and Srivihok (2003) demonstrate that Thai SMEs are characterized by a large number of distinct traits. Initially, Thai SME's are able to commence operations with minimal capital. Second, Thai SMEs are adaptable and able to modify their product lines and production processes, allowing them to respond well to customer demand. Thirdly, they utilize expertise, primarily manual, in their manufacturing. Fourthly, their products are exceptional and of excellent quality. Lastly, they are involved in their communities and use things and people that are available there.

Small and Medium Enterprises (SMEs) Performance

Due to the significance of small and medium-sized enterprises (SMEs) in the new economy, several studies have been undertaken on SME performance and key success determinants. SMEs' performance can be measured quantitatively in terms of efficiency, financial results, level of production, and customer base (Anggadwita & Mustafid, 2014), market share, profitability, productivity, and the dynamics of revenues, costs, and liquidity (Gupta & Batra, 2016; Zimon, 2018), and qualitatively in terms of goal achievement, leadership style, and employee behavior (Anggadwita & Mustafid, 2014). Gopang, Nebhwani, Khatri, and Marri (2017) identify fourteen performance indicators for SMEs: reputation, productivity, employee satisfaction, profits, sales, on-time order delivery, sufficient working capital, operational effectiveness, product quality, target achievement, client base, ease of supervision, and cost reduction.

According to the increasing complexity of companies and the markets in which they compete, Kennerley and Neely (2002) argue that historical financial data alone is insufficient to adequately gauge the performance of SMEs in the new economy (Kennerley & Neely, 2002). Moreover, this is due to the fact that financial reports are poor predictors of shareholder value. Cumby and Conrod (2001) claim that non-financial elements such as customer loyalty, internal processes, employee satisfaction, and organizational innovation are the primary drivers of long-term shareholder value. As a result, rather than focusing solely on financial variables, the effectiveness of a business may typically be evaluated using a range of criteria, such as market share and staff growth. Moreover, numerous scholars (Ankrah, Mensah, 2015; Thompson, Peteraf, Gamble, and Strickland, 2019) emphasize that while return on investment (ROI) is an efficient method for assessing a company's financial performance, the ability of SMEs to grow and achieve their strategic objectives is crucial from a strategic standpoint.

Table 1. Classification of Thai small and medium-sized enterprise

Sector	Medium-sized Enterprises	Small-sized Enterprises
Manufacturing	51-200 person/< BHT 200 million	< 50 person/< BHT 50 million
Service	51-200 person/< BHT 200 million	< 50 person/< BHT 50 million
Wholesale	51-200 person/< BHT 200 million	< 50 person/< BHT 50 million
Retail	51-200 person/< BHT 200 million	< 50 person/< BHT 50 million

Capability And Dynamic Capabilities

Organizational capabilities are critical for achieving a sustainable competitive advantage that results in increased performance (Mongkol, 2021). As an example, organizational capabilities are described as the combined talents, knowledge, and alignment of a company's personnel. While competences are primarily individual-based, capabilities are organization-wide. Organizational talents are vital intangible assets that cannot be duplicated. These assets are more important than any others when it comes to executing the strategy (Hawkins, 2016). They are considered the primary intangible assets of a corporation. They encompass the aggregate skills, abilities, and expertise of an organization. Moreover, Smallwood and Ulrich (2004) affirm that organizational capacities are the means by which people and resources are united to do work. They shape the organization's identity and character by defining its strengths and, ultimately, its essence. They are less susceptible to imitation than capital market access, product strategy, and technology.

However, strategic literature distinguishes between capabilities and dynamic capabilities, defining the latter as "the firm's capacity to integrate, build, and reconfigure internal and external skills in response to dynamically changing circumstances" (Teece, Pisano, and Shuen, 1997). Dynamic capabilities are the organizational and strategic competitiveness that enable managers to transform their resource base (acquire and dispose of resources, integrate them, and recombine them) in order to produce new value-creating strategies. (Grant, 1996; Pisano, 1994). However, dynamic capabilities are separate from operational capabilities, which pertain to the actual operations of an organization. In contrast, dynamic capabilities refer to an organization's capacity to generate, expand, or alter its resource base on purpose (Helfat and Peteraf 2007). Teece, Pisano, and Shuen (1997) define dynamic adaptability as an organization's innate capacity to optimize and consciously modify its resource base. It focuses on the company's capacity to develop, integrate, and reconfigure internal and external competences in response to a turbulent and dynamic business environment. Most firms want to enhance their dynamic capabilities because they allow them to acquire and maintain a competitive edge, while also carving out a unique identity in the industry and offering a formidable challenge to their industry rivals. In addition, the concept of dynamic capabilities emphasizes an organization's internal strengths, such as its workforce and capital investments, rather than external forces, such as government policies and market trends, in order to maintain the dynamic nature of the market and gain a competitive edge.

Nevertheless, Eisenhardt and Martin (2000) argue that dynamic capabilities are frequently characterized in imprecise words such as 'routines to learn routines,' which have been attacked for being tautological, endlessly recursive, and nonfunctional (Mosakowski and McKelvey, 1997; Priem and Butler, 2000; Williamson, 1999). Yet, dynamical capabilities are in fact recognizable particular routines that have frequently been the subject of considerable empirical inquiry in their own right outside of RBV. Some dynamic capabilities include resource integration. Product creation procedures in which managers mix their diverse abilities and functional backgrounds to create revenue-generating products and services are an example of a dynamic capacity (Clark and Fujimoto, 1991; Dougherty, 1992; Helfat and Raubitschek, 2000). Other dynamic skills emphasize the reconfiguration of resources inside organizations. Managers employ transfer processes, such as replication and brokering (e.g., Hansen, 1999; Hargadon and Sut-ton, 1997; Szulanski, 1996), to replicate, transfer, and recombine resources, particularly knowledge-based ones, inside the organization.

However, this paper mainly focuses on Wang and Ahmed (2007) who describe that dynamic capabilities consist of three components: inventive capability, absorptive capability, and adaptive capability. Therefore, the focus of this research article is on these three components, which are incorporated into the research framework.

Innovative Capability

An innovation capability is described as a company's ability to recognize new ideas and translate them into new or improved products, services, or processes that are advantageous to the company. It refers

to the capacity of a company to seek fresh concepts, designs, technologies, and creative processes (Lumpkin and Dess, 1996). According to Lawson and Samson (2001), innovation capabilities are referred to as higher-order capabilities, or the capacity to form and manage various capabilities. Companies with these qualities are able to successfully combine their critical capabilities and resources in order to foster innovation (Othman and Sohaib, 2016; Sudolska and Lapinska, 2020). In addition, highly inventive organizations have demonstrable increases in market share, product success, returns on investment, and long-term returns compared to less innovative firms (Allocca and Kessler, 2006). It has been shown (Donkor, Donkor, Kankam-Kwarteng, and Aidoo, 2018) that inventive capability moderates the link between strategic goals and financial performance.

Absorptive Capability

Currently, absorptive capacity is largely regarded as a dynamic capability, and it is rooted in macroeconomics, which defines it as the potential of an economy to utilize its capital resources effectively. Cohen and Levinthal (1990) are credited with coining the absorptive idea, which is defined as the capacity of a firm to perceive the value of new information, assimilate it, and utilize it commercially. Despite the fact that Cohen and Levinthal placed an emphasis on research and development spending to boost an organization's absorptive capacity, Zahra and George (2002) highlighted that a number of other areas might also be examined for this purpose. Their ideas reformulate and broaden the prior definition of absorptive capability, describing it as a combination of two separate absorptive capacities: potential absorptive capacity and realized absorptive capacity. Their new definition of absorptive capacity is as follows: a collection of organizational routines and processes through which organizations acquire, integrate, transform, and use knowledge in order to develop a dynamic organizational capability. Absorptive capacity is the capacity of a business to absorb external knowledge from its environment, or the capacity of a business to acquire, assimilate, transform, and exploit external knowledge (Jimenez-Barrionuevo, Molina, and Garcia-Morales, 2019; Zahra and George, 2002), and it is one of the primary determinants of corporate capacity in businesses, as it can significantly increase the capacity for exploring new opportunities (Zahra et al., 2009). However, some researchers have found positive correlations between absorptive capacity and organizational performance, both directly and indirectly (Wales, Parida, and Patel, 2013), whereas other researchers assert that absorptive capacity has no significant impact on organizational performance, arguing that simple acquisition and assimilation of external knowledge without effective transformation and commercialization via specific innovation outputs cannot result in performance improvement. (Da Costa, Camargo, Toaldo, and Didonet, 2018).

Adaptive Capability

Adaptive capability measures a company's ability to detect and capitalize on emerging market opportunities, as well as its capacity to align its resources and routines with shifting external market conditions (Alvarez & Merino, 2003). It is intrinsically tied to the strategic plan of an organization, which includes identifying and nurturing important capabilities, resources, and other organizational processes in order to respond to changing business requirements (Teece, Pisano, and Shuen) (1997). Paliokaite (2012) argued that adaptability confers a competitive advantage, especially in dynamic contexts. The definition of adaptive capability incorporates three dimensions: horizon scanning, change management, and resilience. Horizon scanning is the continual activity of acquiring information about consumers, suppliers, rivals, society, and technology and applying it to make informed decisions (Ali, Sun and Ali, 2017). Second, change management is characterized by revisions to objectives, strategies, structures, and governance systems in response to horizon-scanning information (Rathgeber and Kotter, 2006). The degree of adaptive capability is defined by changes in market/product expectations (McKee, Varadarajan, and Pride, 1989) and the firm's capacity to meet those expectations with its current resources and capabilities (McKee, Varadarajan, and Pride, 1989). (Ali, Sun and Ali, 2017). Thirdly, resilience refers to a company's ability to resist a variety of disturbances (Sheffi and Rice,

2005; Ponomarove and Holcomb, 2009). It could be defined as adaptability, responsiveness, and the ability to modify corporate operations and strategies in response to disruption. In addition, Wang and Ahmed (2007) assert that adaptive capability is a reaction, with the reaction concentrating on balancing exploration and exploitation techniques through resource modification, application, and renewal. According to Eshima and Anderson (2017), the transition of adaptive capability relates to a company's potential to respond to changing market and product assumptions with its existing resources. The primary aspect of adaptive capability involves the formulation of strategies, which serve as the means through which managers can enhance performance (Wang & Ahmed, 2007). Businesses who are able to adapt to the development process will be able to achieve their goals (Clarke, O'Connor, Leavy, and Yilmaz) (2015).

RESEARCH METHODOLOGY

The research methods include a review of various national and international literatures, and a questionnaire survey was also performed. Figure 1 illustrates the conceptual research framework. According to secondary research, the framework includes three elements of dynamic capabilities that have an impact on the performance of SMEs.

The study hypothesizes the following:

Hypothesis One: Innovative capability has a significant impact on SMEs' performance.

Hypothesis Two: Absorptive capability has a significant impact on SMEs' performance.

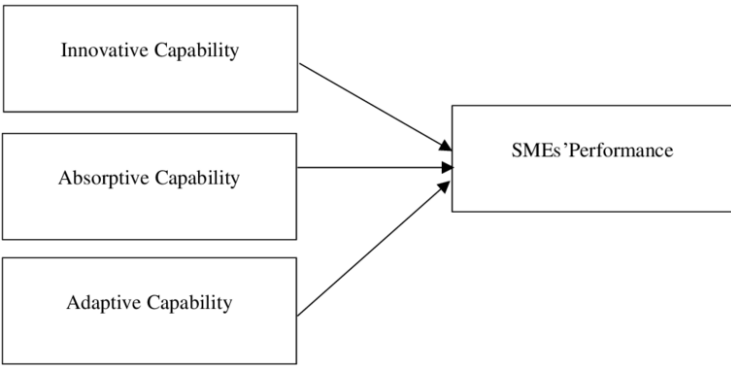
Hypothesis Three: Adaptive capability has a significant impact on SMEs' performance.

According to variables, independent variables were identified as follows.

The study developed the research model based on Wang and Ahmed's definition (2007), who contended that dynamic capabilities consist of three elements, namely innovative capability, absorptive capability and adaptive capability:

1. **Innovative capability:** A firm's ability to identify new ideas and creative processes and transform them into new/improved products, services or processes that benefit the firm.
2. **Absorptive capability:** A firm's ability to recognize the value of new information as well as the ability to absorb external knowledge from the business environment and assimilate it and apply it to commercial ends.

Figure 1. Conceptual framework



3. **Adaptive capability:** A firm's ability to identify and capitalize on emerging market opportunities and the ability to align its resources and routines to the changing external market.

In addition, dependent variables were also identified as follows.

SMEs' performance is measured by the capability of the business to grow in a dynamic environment (Ankrah, Mensah, 2015; Thompson, Peteraf, Gamble, and Strickland, 2019).

The study population consisted of 344,118 Thai SMEs (The Office of SMEs Promotion, 2021). According to the Krejcie and Morgan table (1970), a proportional stratified sampling method was used to select 322 companies in four different industries, including service, commerce, production and agriculture (as seen in Table 2).

A survey questionnaire was developed to collect primary data for this study. It consisted of three parts, which were 1) the characteristics of SMEs 2) three elements of dynamic capabilities and 3) performance of SMEs. In relation to the second and the third parts, 24 questions were collected to measure all study variables. All constructs were measured with a multiple-item 5-point Likert scale (1=strongly disagree; 5 = strongly agree). Cronbach alpha was used to measure the internal consistency and reliability of each construct. This study's reliability is acceptable because, according to Sekaran and Bougie (2016), cronbach alphas greater than 0.80 are considered good, as shown in table 3. Moreover, questionnaires were also handed out to 5 specialists in the area of management to confirm the content validity by identifying the Index of Item Objective Congruence (IOC). Only questions with the index of higher than 0.50 were chosen.

RESULTS AND DISCUSSION

According to the hypothesis testing, the results indicated that there is at least one independent variable that impacted SMEs' performance at 0.05 significance level (Table 4).

Multiple Regression analysis was used to test three hypotheses suggested in this paper (H1, H2, and H3). The results indicated that all independent variables (innovative capability, absorptive

Table 2. Classification of respondents

Business Sector	Population	Sample size
Service Sector	160,377	150
Commercial Sector	127,038	119
Manufacturing Sector	54,691	51
Agricultural Sector	2,012	2
Total	344,118	322

Table 3. Cronbach's reliability tests

Variables	Alpha	No. of items
Innovative Capability	0.845	10
Absorptive Capability	0.859	10
Adaptive Capability	0.8884	10
SMEs Performance	0.803	10

Table 4. Analysis of Variance (ANOVA) of variables that impacted SMEs' performance

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	p-value
1	Regression	113.434	3	28.358	306.361	0.000
	Residual	36.563	318	.093		
	Total	149.997	321			

capability, adaptive capability) have a significant impact on SMEs' performance at 0.05 significance level (Table 5). In addition, the regression model is showed as follows:

$$Y = 1.058 + 0.480 x_1 + 0.392 x_2 + 0.425 x_3$$

CONCLUSION

Because the concept of dynamic capabilities has received considerable attention in strategic management research, but little research has been devoted to studying dynamic capabilities in SMEs, particularly in Southeast Asia, this paper has shed some light on the impact of dynamic capabilities on SMEs' performance. The importance of the paper stems from the fact that it brings new empirical research into the Thai SMEs' dynamic capabilities and issues related to performance, utilizing statistical analyses that have rarely been performed. The research findings support H1 (innovative capability has a significant impact on SMEs' performance). This is in line with Weismeier-Sammer (2014), who found that highly innovative firms have definitely increased market share, high product success, greater returns on investment and long-term returns, unlike less innovative firms. This view is also applicable to Thai SMEs, which are characterized by a high level of competition. In relation to H2, absorptive capability has a significant impact on the dependent variable, and this aligns with the literature of Zahra and George (2002) and Wales, Parida, and Patel (2013), who have discovered positive correlations between absorptive capacity and organizational performance, both direct and indirect. Finally, H3 (adaptive capability has a significant impact on SMEs' performance) is also supported. Since the current business situation is seen as a VUCA (volatile, uncertain, complex, ambiguous) landscape, This is in line with Kaehler, Busatto, Becker, Hansen and Santos (2013), who define adaptive capability as an organization's strategic ability to maintain competitive advantage by modifying, reconfiguring or interconnecting resources, capabilities and competences, and seeking to increase the number of options or available strategic reactions in order to adapt quickly to environmental

Table 5. Multiple regression analysis: the impact of dynamic capabilities on SMEs' performance

Factor	Unstandardized (b)	SE	Standardized (β)	t	p-value
Constant	1.058	0.244	0.253	4.334	0.000
Innovative Capability (X ₁)	0.480	0.025	0.435	5.010	0.000
Absorptive Capability (X ₂)	0.392	0.026	0.381	4.413	0.000
Adaptive Capability (X ₃)	0.425	0.012	0.423	4.598	0.000
R = 0.859	Adjusted R ² = 0.758				
R ² = 0.738	SE = 0.070				

Significance level = 0.05

changes. It also reflects the ability of a firm to align its resources and routines to the changing external market (Alvarez and Merino, 2003), and this view is aligned with the Thai context.

In conclusion, it is essential that the implications of the results be described. Dynamic capabilities are essential. Enhancing innovative capability, absorptive capability, and adaptive capability would enable SMEs to gain a sustainable competitive advantage and increase their performance. However, the results show that the beta (b) of innovative capability is the highest ($b = 0.480$), while the betas of adaptive and absorptive capability are 0.425 and 0.392, respectively. Therefore, SMEs should prioritize innovative capability by investing and paying more attention to innovation and creativity, followed by the adaptation and absorption abilities of firms. To illustrate the point, in order to create an innovation or a new initiative, SMEs could apply various approaches to innovation, such as design thinking or blue ocean strategy. In the meantime, following trends and conducting foresight could help SMEs to adapt to the changing environment, while knowledge sharing from successful entrepreneurs together with good knowledge management in the organization will allow SMEs to improve their absorptive capability. In summary, dynamic capabilities are considered a significant factor that allows SMEs to gain a competitive advantage, and they would enable SMEs to sustain superior performance over time.

Study Limitations and Future Studies

Although this paper has offered some contributions to SMEs literature, it also has limitations since Thailand represents only one of the South East Asian countries. So, the researcher recommends more comprehensive studies on dynamic capability elements related to SMEs performance to be conducted in other South East Asian countries.

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