CRITICAL SUCCESS FACTORS OF THAI SMES IN THE NEW PRODUCT AND SERVICE DEVELOPMENT SECTOR

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Abstract:

SMEs plays a significant role of national economic development as it creates jobs and helps release the poverty issue. This research aims at identifying the critical success factors of SMEs in the sector of the New Product and Service Development (NPSD) as well as proposing a guideline for promoting such SMEs for sustainable development. Qualitative and quantitative research approaches are employed. In-depth interviews with NPSD entrepreneurs were conducted, using 8 case studies with 4 experts in the field. The research found that the critical success factors consisted of 4 factors: resources and capital, entrepreneur characteristics, ability to develop product quality, and marketability. However, supports provided to experienced and new entrepreneurs seem to be both identical and diverse at the same time. The experienced entrepreneurs need support related to product development and marketability for staying competitive whereas the new entrepreneurs need supports for all aspects: capital, business knowledge, marketability, as well as product development.

Keywords: Thai SMEs, NPSD, success factors,

1. INTRODUCTION

SMEs becomes a significant mechanism driving the country's economy. Grass-root innovative products have been developed by SMEs to respond to local market needs, blending local wisdom with modern technology. However, SMEs encounter with some certain limitations such as a lack of knowledge, a lack of skillful staff, limited capital and machine as well as systematic process, and importantly, the product quality. With the limitations in these areas could affect the ability to compete with the major players in the field.

Thailand is a developing country partly relying on SMEs as it creates job, stimulating GDP and lessening poverty. Thai SMEs in various sectors especially in innovative and technology industry has been supported by the government through coordinating offices which help SMEs in the aspects of finance, marketing, physical area, human resource development, rules & regulations, as well as technology and information system (Economic Research and Training Center, Thammasat University, 2008)

New Product and Service Development (NPSD) is one mechanism amongst others that creates competitive advantage to firms. However, it is so challenging for medium and small firms because it requires knowledge, technology and a lot of investments. Even so, there are some SMEs realizing the significance of innovation and such an opportunity and capable to operate their business based on product R&D that practically work (New Product Development: NPD). They also adjust the patterns of services to respond to their target markets (New Service Development: NSD).

It is then interesting to explore the factors that influences the success of Thai SMEs pursuing NPSD in their operations so that appropriate approaches and mechanisms to support the growth of Thai SMEs in this NPSD sector can be drawn and truly support the sustainability of such Thai SMEs and Thai economy at last

2. LITERATURE REVIEW AND RELATED RESEARCH

In knowledge based economy, SMEs play significant role in introducing new products and services to the global market (Ensari and Karabay, 2014). SMEs has been recognized its role as a core of national economy as it creates jobs and innovation. (Amini, 2004, Peters & Waterman, 1982). It is especially true for SMEs that are capable of doing research and development to respond to the economic growth, strong competition, and rapid changes of advanced technology (Bruque & Mayano, 2007).

However, SMEs encounter with strong competition with large and global firms and also more challenges both at national and international levels. With its size of SMEs, they are capable of quick decision making and adjustment compared to large firms whereas the large firms take advantages from economy of scale, advanced technology, manpower and variety of knowledge that can respond well to the circumstances (Paul & Gupta, 2014; Wolff & Pett, 2000). Accordingly, SMEs need to build up their competitive advantage by creating their own innovation utilizing their limited resources compared with what the large firms have (Keskin, 2006)

Effective management for New Product Development (NPD) can also create a competitive advantage (Cooper and Kleinschmidt, 2007). The process of new product development becomes the process responding to customers that prefer variety and tend to change to other brands for the new and/or different features (Henard and Szymanski, 2001). Even though SMEs may put less effort on NPD compared with the large firms but SMEs has at least tried to develop their new product for their customers more and more. The success of SMEs is still hard to predict.

Previous researches identified success factors of large organizations mainly based on financial data which may be insufficient as it moved up and down from time to time. It became sensitive and weak for prediction (Brigham, 1999, McGuire et al., 1988). To cope with this weakness, non-financial factors were included to predict the performance of firms. Kemayel (2015) proposed factors influencing the success of SMEs in Lebanon, including internal factors: characteristic of SMEs; entrepreneur's characteristic; and its operations as well as external factors which include relationship with stakeholders; customers, suppliers, competitors, staff, financial institutions, etc.

Success of SMEs depends on several factors which are diverse from one context to another context. Ghosh et al. (2001) indicated that leaders and effective management team were key factors to the SMEs success. Musteen et al. (2008) found that the success of SMEs in developing countries and emerging countries relied much on strategy especially international marketing strategy. Benzing et al. (2009) pointed out that

experienced entrepreneur is the key to success for SMEs. Also, there are other scholars who proposed some other different factors such as quality of product, responsiveness to the markets (William, James and Susan, 2005), ability to develop and technical advantage, customer focus, utilization of information technology (IT) to support innovation, business strategy (Knight, 2000; Ghosh et al. 2001, McMahon, 2001; Suh and Kim, 2014), and resource and financial readiness (Chittithaworn et al, 2011; Ensari and Karabay, 2014)

Collaboration between SMEs and customers, suppliers, and other organizations can be in a variety of formats, i.e. technical knowledge providers, financial supporters, researchers and developers, etc. (Hoffmann and Shclosser, 2001; Numprasertchai and Numprasertchai, 2014; Klewitz and Hansan, 2014). Charoenrat and Harive (2014) pointed out that foreign investments driven by the government policy as well as export were the key factors to efficiency of Thai manufacturing SMEs. However, Zeng (2009) suggested that collaboration between Chinese SMEs and government agency had no significant impact to their innovation

It is commonly acceptable that the growth of information technology (IT) and internet technology creates opportunity for SMEs. It eases SMEs' operations in particular, idea generation, product innovation, communication cost saving, product and service dissemination, etc. Internet technology overcomes some business barriers, leading an enterprise to seize more opportunity for its own benefits. In addition, website becomes an important communication tool that helps SMEs reaching their target groups and making it easy to modify messages for effective communication (Mbatha, 2013). With internet technology, SMEs also can develop their business model utilizing internet and online activities (Levy and Powell, 2003). However, SMEs, especially in Thailand still lacks of competency to do online trade or e-Commerce to respond to customers' needs. It then becomes challenging for Thai SMEs to enhance its competence by utilizing e-Commerce to create its own competitive advantage.

Based on the previous research and analysis mentioned above, it is found that factors that have impacts to success of SMEs consist of entrepreneur's characteristic, business strategy, product and service, resources and capital, stakeholder relationship, marketing, IT and communication. These factors would be filtered by the experts in the field. The research would analyze all types of supports provided to Thai SMEs and how they are matched with the needs of SMEs and whether or not affect SMEs' success.

3. METHODOLOGY

This research takes an approach of qualitative research, utilizing on-site survey as well as case studies of SMEs in the sector of NPSD in order to obtain the insight information. Based on the literature review, this research takes steps as follows.

- Previous scholarly researches on SMEs in the sector of NPSD were reviewed to comprehend the current situation in terms of influencing factors as well as related process to the conduct of SMEs.
- 2. Eight cases of SMEs in NPSD sectors were selected for in-depth interviews
- 3. Secondary data related to SMEs promotion provided by organizations that support SMEs were analyzed and categorizes to obtain current availability of SMEs supports.
- 4. Focus group among experienced entrepreneurs and SMEs supporters were conducted at the last step to get their feedback on the research results and lead to the development of a guideline to effectively promote SMEs in the sector of NPSD.

4. RESULT AND DISCUSSION

Based on the in-depth interviews with representatives of organizations supporting SMEs, both government and private ones, and SME entrepreneurs who were experienced and non-experienced (new) ones, the critical factors influencing success of Thai SMEs in the sector of NPSD and the supporting approaches available to SMEs were summarized as shown in Table 1.

Table 1: Findings from in-depth interviews

Source of information	Number of	Issues of interview		
	units as	Critical success	Supporting	
	informants	factors	approaches available	
SME supporting organizations	4			
-Finance and marketing support	2	✓	✓ ✓ ✓	
-Knowledge and technical support	1	✓		
-SME Coordinating Center	1	✓		
SME Entrepreneurs	8			
-Experienced & successful entrepreneurs	3	✓	✓	
-Former SME entrepreneurs	2	✓	✓	
-New entrepreneurs	3		√	

According to the summary shown in Table 1, it can be elaborated for each group of informants as follows

4.1 SME supporting organizations

4.1.1 Marketing supporting organizations

Two interviews were conducted. One was done with the executive of a private academic institution who was in charge of SME supporting projects, international marketing in particular. Another one was with former executive of a private company which promoted innovation competitions and provided venture capital to new entrepreneurs that won the competition. Here are the key findings from the interviews.

Informant: The executive of a private academic institution

- To be a successful entrepreneur, it requires creative thinking process and making things different from others. Be dare to change even though what to be changed used to be a success of the enterprise.
- It requires different approaches to support each individual SME depending on the context and conditions that each SME encounters.
- The appropriate support to Thai SMEs at present is marketing assistance, especially international market expansion. It starts from oversea technical visits and moves to participation in international merchandise expos. This helps Thai SME entrepreneurs learn about customers' needs and international markets directly from worldwide entrepreneurs so that they can develop products or service that responds well to international markets.
- To support Thai SMEs to be sustainable, it requires the injection of systematic management, utilizing data for decision making and planning. The Thai entrepreneurs are to be convinced that change is an opportunity. Product or service development needs to be done consistently to make it fit to the market.

Informant: Former executive of a private company

- For private firms to assist SMEs, they focus on what they would gain as consequences of such assistance, such as a positive image to their firms, or some certain extensions to their current business, etc.
- To conduct an emerging SME supporting project, yearly budget is set with a target of the whole project, not of individual project. Normally, to be worth for firms, the target of 10 percent of all projects being practically implemented and utilized is set.
- To support Thai SMEs in the long run, it depends on the trends of products or services.

4.2 Knowledge and technical supporting organizations

The interview was conducted with the executives of the organization which is an academic institution funded by the government agency, providing knowledge, advices, and technical support related to business conduct to Thai SMEs in NPSD sector. The executives of this organization were experienced in SMEs for more than 30 years. The findings from the interview are as follows.

- The emerging SMEs entrepreneurs focused mainly on products, overlooking marketing and management plan.
- The major problems that the emerging SMEs entrepreneurs encounter included production, financial, and marketing problems.

Production problems: This problem usually occurs when an SME needs to expand its production which cannot be done by existing simple tools or process. This type of problem can be solved by consulting with an academic or research organization.

Financial problems: Due to limited financial resources of the emerging Thai SMEs, business cannot expand even though opportunities exist. To overcome such a burden, an entrepreneur has to be able to develop a sound business plan to propose for a loan from financial institutions

Marketing problems: New entrepreneurs are lack of knowledge and experience in marketing. They need marketing support to help them reach the right target or to train them to utilize new technology to create new markets.

- Most entrepreneurs of emerging Thai SMEs are somewhat well educated with positive attitude towards being an entrepreneur. They expect a leap frog of business growth, taking high degree of risks. This leads them to be careless when making decision.
- Most entrepreneurs of emerging Thai SMEs are capable of fast learning and utilizing information technology, leading to an initiation of new marketing approaches for their products.

4.3 SME Coordinating Centers

These units are responsible for coordinating SMEs with other working units that aim at strengthening Thai SMEs. The interview was conducted with the management of association. The key findings are as follows.

- Most of the Thai SMEs are still unofficially registered. It is then difficult to reach all SMEs to provide support that helps strengthening them.
- Working units related to SMEs promotion have unclear roles and structures. Role redundancy still exists.
- There is a lack of effective data management. This causes inefficient support to SMEs.
 Some SMEs are provided surplus supports by several parties whereas some which in need of assistance have none.
- Thai SMEs lack of capacity in many areas such as cash flow management, equipment or machines for efficient production, new marketing knowledge, etc. This weakens the competitiveness of Thai SMEs when compared especially to Chinese entrepreneurs.
- The government has no attractive policy to push the local market to support Thai SME products or services.

5. SME ENTREPRENEURS

Two categories of entrepreneurs, including the one with experience in the business at least 3 years and the new emerging one which were in business less than 3 years, were investigated to find out the factors that influenced the success of business as perceived by the entrepreneurs themselves. There were 8 entrepreneurs altogether that were interviewed. The results are as follows.

5.1 The SMEs with experience in business at least 3 years

 Successful SMEs: Based on the in-depth interviews with 3 entrepreneurs from 3 types of businesses: innovative printing (SPT), smart home appliances and equipment (SSD), and computer management system development (SAP), the findings of influencing factors towards the success of SMEs were summarized in Table 2

Table 2 Key success factors for SMEs as perceived by entrepreneurs

Key success factors	SPT	SSD	SAP
Taking risk with continuous learning		✓	✓
Knowledgeable in business and markets		✓	✓
Sound strategy			
 Product differentiation strategy 	✓	✓	
- Niche market strategy		✓	✓
Competitive quality products, not price focus		✓	
Product responsiveness with potential to be extended		\	✓
Quick problem solving		✓	✓
Government policy supporting market access and		✓	✓
decrease of expenditures			
Collaboration with research units for product development		√	√

• Unsuccessful SMEs: The in-depth interviews were conducted with 2 former entrepreneurs. One did the business on room management application software (FHA), of which the products were nationally and internationally awarded and was invited by venture capitalist to participate the emerging business project. Another one was a firm developing applications for hand-held mobile devices (FMA) with revenues around more than USD300,000 per year. With high growth in revenues at that time, FMA extended its business having a large corporation be its business partner. Based on the interviews, several issues were found as follows.

Due to the highly dynamic environment of technology, it caused a difficulty to entrepreneurs to develop the product at the pace of such a quick change in new technology, leading to the obsolete products.

Entrepreneurs struggled with the high rise in demand, causing them to change their operations. It needed a huge investment. However, diverse opinions among partners on such a huge investment caused them to break up and some of them left the firm.

The venture capitalist, as a business partner tied by a contract, had limited financial support due to the fact that it had several projects on hand. This caused the SMEs receive insufficient support and was unable to acquire support from other sources as it was against the condition stated on the contract. SMEs lost opportunity and failed to reach their targets.

The contract with the venture capitalist as a business partner impeded the growth of business in the future as SMEs were to use brand or logo of their partner instead of its own brand.

Binding contract with business partner took time for SMEs to make a decision and lacked of autonomy.

5.2 The emerging SMEs with experience in business less than 3 years

The interviews were conducted with 3 entrepreneurs in different businesses: healthy food (NHA), herbal product (NHB), and software business. Support that were in need of entrepreneurs were found as follows. Financial support: it could be in any forms such as financial funds, tax cut, office rental fee exemption or discount, free or discount on equipment service fee, R&D and lab test service, etc.

Knowledge: the new entrepreneurs were eager to acquire knowledge especially on two areas: marketing and management as well as business law, regulations, and procedures related and technical knowledge the helps develop their products

Trust building: the emerging entrepreneurs would like the government to support them in building trust in the market. Certifying products or entrepreneurs by the government should help them be more reliable to customers.

Financial support: the new entrepreneurs would appreciate the continuous financial support as well as fair benefit sharing.

6. CONCLUSION

According to the analysis of several interviews aforementioned, it was found that the success factors perceived by experienced and new entrepreneurs were partially the same and partially different. The key success factors for Thai entrepreneurs in NPSD sector consisted of entrepreneur qualification, staff, business strategy and management, product and service types, capital and resources and market capability.

The new or emerging entrepreneurs required more support especially on financial support, knowledge on business and related rules and regulations, market promotion, and product development to assure their business would overcome any difficulties and break through since the beginning stage.

The experienced entrepreneurs, on the other hand, required more support on market expansion and product development in order to make their products or service be competitive. They emphasized relationship and collaboration with business alliances.

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