ABSTRACT

In this day and age, it is easy to see that small and medium enterprises (SMEs) play an essential role in the growth of the Thai economy. The rapid change in the world economy and its social repercussions has also influenced the aforementioned SMEs. In the case of Thailand, SMEs have faced many problems that affect business performance. An essential issue for Thai SMEs is the growing competition not only from inside the region but also from abroad. Consequently, SMEs must adapt and improve themselves in order to survive. A key challenge of modern organization is to develop a knowledge-based organization. As Drucker (1999) has proposed, the present competition is to shift from focusing on manual worker productivity or labor-intensive to a more knowledge-intensive-based form of work. The theories of organizational learning and innovation are widely used in modern organizations in order to accomplish their goals and build up their organizations. The purpose of this study is to develop a framework for organizational learning and innovation in the case of Thai SMEs from various standpoints including internal factors and external turbulences. The qualitative method was employed in a semi-structured interview technique used as the data collecting tool with the literature review also performed along the way. The results from the interviews were identified by conjunction with the literature. Seven interviewees from electronics, and automotive component companies were selected. As a result, the internal antecedents included leadership, culture, motivation, and information technology. The external antecedents were market turbulence and technological turbulence.

Keywords: Organizational learning, innovation, SME, Thailand

INTRODUCTION

Nowadays, one could say that small and medium enterprises have become an essential part in the growth of the Thai economy. According to the report of the Office of Small and Medium Enterprises Promotion 2010, the amount earned by Small and Medium Enterprises (SMEs) in Thailand was around 2.9 million or 99.8 percent of all private enterprises in the country. Moreover, they also helped generate the Thai GDP by as much as 37.8 percent of the national income. The hiring rate among SMEs was around 9.7 million workers or 78.2 percent of all enterprises. Therefore, it is fair to say that SMEs constitute the most important mechanism driving forward the Thai economy. Consequently, increasing the potentiality of SMEs is an important issue in Thailand. Both public and private sectors in Thailand recognize the importance of SMEs in improving the economy of Thailand, then
many organizations had been established with help from both sectors for the purpose of supporting and enhancing the performance of SMEs, such as the Office of Small and Medium Enterprises Promotion (OSMEP), Institute of Small and Medium Enterprises Development (ISMED), SME bank of Thailand, the Thailand Research Fund (TRF), and many commercial banks.

At the present time, the rapid change in the world economy has also influenced the SMEs. In the case of Thai SMEs, one challenge for them is the growing competition from both inside and outside the region. Moreover, free trade agreement with other countries such as USA, Australia and China will also affect the Thai economy and SMEs as well. SMEs must then adapt and improve themselves in order to survive. In recent years, SMEs faced many problems that affect business performance such as the uncertainty of the Thai political situation, natural disaster, high competition, high cost of labor, and lack in required knowledge. The ISMED 2008 categorized the current problems of Thai SMEs into eight issues, namely: marketing problem, labor problem, lack of capital, technology limitations, lack of modern management knowledge, insufficient support from public and private sectors, restrictions on access to the service of the public sector management, and restrictions on access to information.

To improve the SMEs’ performance, one challenge of modern organization is to develop their knowledge-based organization. As Drucker (1999) mentioned, the present competition is to shift from focusing on manual worker productivity or labor-intensive to a more knowledge-intensive nature of work. To retain the useful knowledge within organization as long as possible, the theory of organizational learning, which is widely used in modern organization, was a focus of this study. Moreover, to survive in competition, innovative ability is also required in every organization. Hence, this study is focused on organizational innovation as well.

In addition, this study aims to develop a conceptual framework for internal and external antecedents towards organizational learning and innovation of SMEs in Thailand. Such a conceptual framework could provide a better understanding of the role of relevant factors and their influence. Furthermore, the qualitative method was also employed in this study. The semi-structured interview technique was used as the collecting tool. This paper is organized into four sections. The first section describes the nature and context of SMEs in Thailand from the literature review. The second section emphasizes on the methodology and sample of this study. The third section identified the internal and external antecedents of organizational learning and innovation, and its consequence. Moreover, the conceptual framework is constructed in this section. The final section is identified the limitation and further research of this study.

**SME IN THAI CONTEXT**

Each country defines SME differently. In the case of Thailand, the Institute of Small and Medium Enterprise Development described SME as follows: “SME stands for small and medium enterprise that operates the business in production, trading, and service business sector.” According to the Small and Medium Enterprises Promotion Act of 2000, the type
and characteristics of SMEs can be categorized by the enterprise’s fixed asset and number of employees as shown in Table 1.

Table 1: The type and characteristics of SMEs.

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of employees</th>
<th>Fixed asset (million Baht)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production sector</td>
<td>&lt; 50</td>
<td>51-200</td>
</tr>
<tr>
<td>Service sector</td>
<td>&lt; 25</td>
<td>51-200</td>
</tr>
<tr>
<td>Trading sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale</td>
<td>&lt; 25</td>
<td>26-50</td>
</tr>
<tr>
<td>Retail</td>
<td>&lt; 15</td>
<td>16-30</td>
</tr>
</tbody>
</table>

First, the production sector includes the agricultural processing, manufacturing, and mining industries. Second, the trading sector includes the wholesale and retail businesses. Third, the service sector includes the service business such as hotel, restaurant, and spa businesses.

Some benefits of SMEs to the Thai economy (Ministry of Industrial, Thailand, 1999) are described as follows:

- To create jobs in every regions of Thailand: the SMEs were established in almost every region of Thailand in order to create jobs for the people in their regions. In other words, it is the distribution of income to the people in the rural area as well.
- To generate the high value-added of products: the SMEs can bring in benefits from exporting their products and also creating foreign exchange earnings. Moreover, they can also produce goods as import substitution which can prevent a lot of foreign goods being imported.
- To support and link large, medium, and small enterprises with each other in the form of primary production of raw materials or goods by manufacturing employment of subcontracting.
- To be a source of experience available to entrepreneurs, especially those who are in the start-up point of new businesses and investors can expand their business from small to ultimate growth.
- To link between the industry and other relevance such as trading, logistics, agricultural, and construction sectors.

METHODOLOGY

Theoretical framework typically originates from the data that could create new ideas or improve existing theories (Holloway, 1997). In this study, the qualitative method was employed in order to create the theoretical framework. Qualitative research usually focuses on human perception, behavior, and experiences with the purpose of improving theories or experiments (Stake, 2010). It has been applied and used in many research works in both the social and science fields. A semi-structured interview technique was used as the data collection tool. Moreover, a literature review was performed along with the whole data
collection and analysis processes, with the purpose of clarifying and comparing the evolving results.

For the sample of this study, five Thai SMEs companies were chosen based on our criteria. First, the selected companies are in the production sector and are located in the Bangkok metropolitan and perimeter areas, where there is high concentration of SMEs, and the premium business-infrastructures are provided in this area rather than the rural areas. Second, the medium size companies selected for the analysis each has the number of workers between 51 and 200 as well as the size categorization of ISMED. Then, there were in total seven interviewees who participated: three were two engineers and one technician from automotive and components companies; and four were two engineers, one technician, and one manager, who were willing to be interviewed for this study. Each interview was approximately 20-30 minutes. The questions were open-ended in semi-structured interviews. After a comprehensive literature review and semi-structured interview with Thai SMEs, a conceptual framework of organizational learning and innovation was developed as shown in Figure 1.

**CONCEPTUAL FRAMEWORK**

**Organizational learning in SME**

Even though the SME is a small or medium size business, the continuous performance improvement must be considered in order to keep pace with the rapidly changing economic conditions and global competition. Nowadays, the shifting from a labor-based economy to a knowledge-based economy, such that knowledge, which is an intangible asset, becomes an important weapon of organizations for competition. As such, management and sustaining of knowledge is a critical issue for organizations. One challenge for management of organizational knowledge is the organizational learning theory. It can be described as “a process that gathers information from both the external and the internal environments of organizations. This information is assimilated by organization members through collective struggle behavior which produces shared visions that can be used to make changes to lead to an organization’s success” (Chen, 2006). Many researchers focused on the research work of organizational learning in large companies rather than in SME companies including the research work of SMEs in Thailand.

**Organizational Innovation**

Nowadays, it is undeniable that innovation is an important driver in the improvement of performance, whether small or large organizations including SME. This requires an innovation process to improve and develop their organizations such as the development of product or process innovation. In the case of SME, their characteristics differ from large companies, for example, producing a variety of products in order to fulfill customers’ order, modern products or services. Moreover, not only can the needs of customers be changed all the time along with new technology, but also the external turbulence and competition lead SME to improve themselves such as the tools, machines, management system, and skilled and trained workers. In other words, innovation improvement is a critical issue of SME.
Antecedents of organization learning and innovation

After a comprehensive literature review and semi-structured interview, the four internal antecedents and two external antecedents were selected and described in this section. Internal factors consist of the following four: leadership, information technology, culture, and motivation as shown in Figure 1.

**Internal Factors**
- Leadership
- Culture
- Motivation
- Information technology

**External Factors**
- Market turbulence
- Technological turbulence

Figure 1: The conceptual model.

**Leadership**

Many decades ago, much has been researched on the theory of leadership with the purpose of developing the organization. The leader is also called manager in much of the literature. The roles of the leader include planning, hiring, motivating, and rewarding employees. However, the role of leadership does not only involve managing the organization but also encouraging, facilitating, and sustaining the innovation and learning (Yukl, 2009). Moreover, the needs of employees should be considered in order to have them integrated with the organizational system. The style of leadership, especially transformational leadership, could directly and positively influence organizational learning and innovation, all of which could be improved by processes such as training and mentoring (Jung et al., 2003; Vera and Crossan, 2004).

In this research, the researcher observed that the nature of Thai SME is such that the manager is the owner and thus contributes the tasks on a daily basis to all departments such as planning, controlling, R&D, hiring, motivating, organizing. Moreover, these SME managers have to face and solve problems on a day-to-day basis by themselves. One interviewee argued that:

“Our manager plays an important role in our company and he has to make the decision in almost all activities in the company such as hiring the staffs, providing our training course, and investing in new technology. ... He is the central link and drives the relationship among staffs in our company.”
Additionally, Senge (1990) described that this new perspective of leadership could lead the organization to become a learning organization. On other words, poor leadership will instill a low capability for a learning culture in the organization. Furthermore, organizational learning can be enhanced by motivation such as pay incentive for creating new ideas for innovation, or building a climate and culture that lead to learning (Achua and Lussier, 2010). The engagement between staffs and manager will lead to SME development and continuous growth.

**Culture**

As Drucker (1975) mentioned, the management system is concerned with people, culture, and performance. One challenge of organizational development is organizational culture. Culture is traditionally referred to as intangible, a set of values, beliefs, and symbols that make the community an organization. Additionally, each organization has its own culture. Schein (1992), who is an expert in this field, defined organizational culture as “a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way you perceive, think, and feel in relation to those problems” (p. 12). Moreover, Dwivedi (1995) mentioned that organizational culture also has influence on the attitude and behavior of employees that will lead to organizational improvement. In comparison, the strong organizational culture will lead to improving innovation, supporting teamwork, and increasing efficiency, quality, and productivity, while a weak organization culture could block the creating of new ideas, processes, and systems (Morgan, 1989).

In this study, the management system of Thai SMEs was the clan culture which was flexible and focused on the staff. One interviewee from an automotive component company mentioned that:

> “Our company manages just as the relationship system. It has the munificence, and gives the opportunity for everyone to share ideas and make comment that is of benefit to our company.”

Increasing the robustness of organizational culture will lead to a learning organization (Chang and Lee, 2007). Moreover, the organization culture could be changed to organizational commitment by managing the relationship between leader and employee (Singh, 2007). Then, strong leadership will lead towards changing the organizational culture for the better.

**Motivation**

Motivation is an important role of the organization’s manager: “Motivation is the set of forces that leads people to behave in particular ways” (p. 83). The theories of motivation were established by many theorist and researchers, for example, Maslow’s hierarchy of needs theory included the physiological, security, belonging, esteem, and self-actualization
needs. Moreover, Herzberg’s dual-structure theory consists of two essential factors, motivation factors such as achievement, recognition, and hygiene factors (e.g. pay and job security), and working conditions. Nowadays, there has been a tangible shift from the scientific management area which focused on the worker motivation by money to the human resource area with the focus on worker motivation and the contributions to the organization (Griffin, 2010).

In this study, the interviewees of Thai SMEs agreed that motivation was an important factor in driving the worker to pursue organizational learning and innovation. Some interviewees believed that if a comparison is made between the motivation source of large organizations and SMEs, most large organization provide better motivation than SMEs such as the pay incentives, rewards, and promotions at work. However, the primary remuneration and welfare such as social security are also provided in all SMEs.

“Our company has programs that give rewards to the idea that makes the most benefit such as part design improvement. ...The training programs are provided for some staffs, not for all staffs in our company. However, I think they should provide training for all staffs as someone who is willing to learn is better than training according to the plan.”

Moreover, one of the interviewees recommended that the work environment and relationship between workers, colleagues and leader in the workplace were also important factors which could lead to motivate the worker’s commitment to the organization. Moreover, sometime the innovation of SME could result from worker motivation such as giving rewards to new ideas.

**Information Technology**

Nowadays, information technology plays an important role in daily life and business. It has a lot of benefits to the organization such as enhancing the competitiveness and organizational performance (Potter and Millar, 1985; Croteau and Bergeron, 2001). The role of information technology in an organization includes controlling and storing data, learning and development. Moreover, the use of information technology to increase communication among members in an organization, as well as memorizing and storing information could also enhance organizational learning (Robey et al., 2000). Moreover, the high information technology capability of the organization will lead to a variety of profit- and cost-based performance measures (Bharadwaj, 2000).

In this study, from the interviews, all agreed that information technology is very important for their business because it can create many benefits and value added to their business such as transferring market data, communication with vendors and customers. Hence, they endeavor to apply and use information technology to develop their performance such as learning new knowledge from external sources, using electronic commerce or social networks to communicate with their customers and vendors.

“IT is needed for all part of our business. Communications via IT are very important activities both in terms of communication with customers and
Moreover, the SME preferred to use the service from the computer agency in performing their business rather than employing a computer technician because the wage for the agency is lower than hiring a full-time computer worker. The amount of IT investment is based on the type of business and the decision making of the leadership while firm size is not an issue (Love and Irani, 2004).

External Factors

After the global economic crisis, every country faced its devastating impacts regardless of whether developed and developing countries. Thailand is one country that was directly affected in many sectors such as export, manufacturing, and service sector. These directly impacted the people, public, and their business, especially whether it could reduce the number of employment, production, and delay or reduce investment in Thailand, etc. One important factor characteristic of this situation is turbulence. Turbulence is defined as the change, uncertainty, instability in the external environment (Smith, 2005) and has both direct and indirect effects on organizational performance. Two types of turbulences were considered in this study, namely, market turbulence and technological turbulence.

Market Turbulence

Market turbulence (also called market dynamism or demand uncertainty) is defined as “the rate of change in the composition of customers and their preferences” (Hanvanich et al., 2006). Market turbulence can be categorized into five types such as customer, channel, competitor, macro-environment, and value proposition turbulence (Smith, 2005).

In this study, after the in-depth interview, the interviewees agreed that market turbulence was one factor that was difficult to control. One interviewee from the electronics company mentioned that:

“Our model has changed quickly due to customer needs…. Learning from external sources or benchmark with others….creating an innovation in our organization in order to increase the value-added to our products and make us different from the competitor. This will bring satisfaction to our customers and gives us the competitive advantage.”

Organizational learning could be increased by forcing market turbulence (Hanvanich et al., 2006). And since customer preferences are unstable and change quickly, the innovation must be quickly changed in order to satisfy them.

Technology turbulence

Technological turbulence is defined as “the amount and unpredictability of change in production, process, or service technologies” (Srivastava and Frankwick, 2011). This is the factor that could determine the life cycle of existing products. For example, the products
with fast technological advances or high technological turbulence will have a short life cycle, while the low technological turbulence of products will perform in the opposite direction. Moreover, sometimes the product life cycle can grow and the new technology could occur in those cycles.

In this study, after the in-depth interviews, most of interviewees agreed that technological turbulence has an influence on their performance, especially among electronic companies, who seem to have been greatly impacted at least according to one interviewee from an electronic company:

“Technological turbulence comes around us all the time due to electronic products which have changed over time. Everything in our company also changed accordingly such as the machine, process, and knowledge about new technology. Then, we have to prepare ourselves in order to deal with it such as preparation of learning and training our staffs on the new technology. This way is quite better than hiring a new expert that requires a high investment. Moreover, this is the way to improve our staff ability as well.”

Even though many companies or businesses agree with the above, however, only one interviewee from the automotive part company seems not to agree:

“We did not get any effect from technological turbulence because we produced unique products of which we’re the sole producer in Thailand. Moreover, our products do not need a lot of change because it is the foundational part of automobile.”

The requirement of technological development is an essential competitive strategy. Porter, (1985, p. 171) defined technological development as “raise or lower scale economies, make interrelationships possible where they were not before, create the opportunity for advantages in timing, and influence nearly any of the other drivers of cost or uniqueness”. In other words, the products with low cost or are differentiated will lead the organization to be more competitive and could also create organizational innovation. Moreover, technological leadership will be required in order manage the costs of such learning activities and innovative technology (Porter, 1985).

**Consequence of organizational learning and innovation**

In this study, organizational performance was identified as the consequence of organizational learning and innovation. In order to know the current competency level of an organization, the measurement of the overall organizational performance should be recognized (Kaplan and Norton, 1996). The measurement of organizational performance is typically categorized into two types which are non-financial and financial measurement. A Tool for measuring non-financial performance is for example the balance scorecard, while the tools for measuring financial performance are the APC model and the MFPMM technique which were developed by the American Productivity and Quality Center. (Rao, 2006; Phusavat and Photaranon, 2006). The key performance indicators which are widely used in performance measurement include quality, cost, delivery, flexibility, creativity,
marketing, production, finance, innovation, and public relation (Kaplan and Norton, 1996; Cooper and Kleinschmidt, 1987; and Zhang et al., 2004).

CONCLUSION

The conceptual framework is illustrated in this study, is still in the first step and requires the further empirical investigation. As this study, the qualitative method was employed for construct the conceptual model, then further research, the quantitative method would be employed with the purpose of investigating the answer and reflecting the data. Moreover, the framework identified in this paper can be used as a guideline for organizational development to enhancing their learning and innovation ability. To sum, the conceptual framework identified the internal antecedents of organizational learning and innovation which included leadership, motivation, culture, and information technology. All of them were the internal factor of organization that could be focused on because they had been influenced on organizational learning and innovation. Moreover, the external antecedents included two factors which were market turbulence and technological turbulence. Both of them were the important factor of SME because they were the uncertainty factors and had the high risk.

LIMITATIONS AND FURTHER RESEARCH

The limitations of this study have to do with the sample which was selected from the SMEs in Thailand and all of them were in the industrial sector. First, the comparison across different sectors could be demonstrated. Then, these could provide a better understanding of the different industries with their different competencies. Second, the comparison across different countries could be considered. These could provide a better understanding of the different factors that influence organizational learning and innovation, such as the comparison between SMEs in Asian and European countries. Third, the comparison across cultures could be included. This could provide a better understanding of the different socio-cultural factors that influence organizational learning and innovation, such as the comparison between Japanese-Thai SMEs entrepreneurs and original-Thai SMEs entrepreneurs. However, the purpose of this study, which is to create a conceptual framework, will not be answered unless the hypothesis is constructed and tested in further research (Patton, 1989).

REFERENCES


