

Relationship Between Innovative Organization and the Performance of Small and Medium Enterprises

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ABSTRACT

Abstract—The aims of this research were to study the relationship between organizational culture, organizational creativity, organizational innovation and the performance of small and medium enterprises in Thailand. This research employed both the quantitative and qualitative research methodologies. The research sample for the quantitative study consisted of 300 entrepreneurs who were the small and medium enterprises in Thailand and were employed by stratified random sampling. A questionnaire was designed and used to collect data and a structural equation model analysis was applied for the data analysis. In the qualitative study, data were collected via in-depth interviews from the experts and stakeholders in SMEs and content analysis was used to analyze with a synthesis of interview results. The findings revealed that the causal relationship model of innovative organizational performance of SMEs in Thailand was consistent with empirical data and had the ability to predict the good acceptable. The influencing of the factors affecting performance of SMEs showed that the organizational culture had positive direct effect on organizational creativity and organizational innovation, while organizational culture had indirect effect on SMEs performance through organizational creativity and organizational innovation. Moreover, organizational creativity had positive direct effect on organizational innovation and performance of SMEs, and organizational innovation had a positive direct effect on SMEs performance.

Keywords—Innovative Organization, Performance, Small and Medium Enterprises

INTRODUCTION

Presently, business operation in each country is facing a rapidly changing environment, such as economic, social and political factors including domestic and international hyper competition. It's a truism that today's successful companies must adapt and embrace rapid change. Small and medium-sized enterprises (SMEs) plays an important role in the economic development of a country. Their role in terms of production and employment generation is critical because they constitute the largest number of establishments and contribute significantly to the added value of the economy of each country. Currently, SMEs operate under highly competitive environment both domestically and internationally. Thai SMEs entrepreneurs need to develop their business capabilities in order to survive sustainably. Therefore, the researcher has studied literatures to see if there are any factors that can provide the organization's sustainability in the development of potentiality and competitiveness of SMEs.

In the change environment, innovation is recognized as key building block of competitive and dynamic economies, especially in small and medium-sized enterprises (SMEs) that need to push innovation to gain a competitive advantage. Nowadays, it is well accepted that innovation is not only important for business development but also for improving the competitiveness of the country. The innovation in each business varies depend on situation and context. Some businesses will be suitable for product innovation while some businesses may be suitable for process innovation or service innovation in order to create business excellence. These depend on many factors such as ready supplies of finance, personnel and timing. Then, each business should find the right innovation to become the leader in the industry. In the past, it was gradual innovation in the traditional market. Nowadays, innovation in the new market is a leap forward innovation or technological breakthroughs. As a result, new products or modified processes are always available to meet the needs of consumers. Today, local and global organizations try to find the way in creative innovation that best fit their organization which often depend on the context and situation of the organization (Gumusluoglu & Ilsev, 2009; Oke et al., 2007)

In addition to being an innovative leader in this era, the indispensable key is to strengthen the corporate culture of innovation. By creating an atmosphere for the personnel in the organization dare to think outside the

box, try to do new things and learn to accept mistakes that may arise in making a change that is beneficial to the organization. In addition, workplace atmosphere is conducive to creativity. Employees are free to use their creativity, creating team work or recruiting personnel with leadership, courage, and creativity. The organization becomes an innovative organization only when it has a culture of innovation (Weinzimmer et al., 2011)

Recently, factors affecting the performance of the organization have been studied most in large enterprises. Then, the researcher wants to study whether those factors affect the performance of SMEs in Thailand or not. In addition, the researcher has also studied the owner or the successors of the business from the successful and sustainable SMEs, to be a model for other SMEs to be adopted to benefit the business to grow sustainable. The two main objectives of this study were to examine the relationship model of factors influencing the performance of innovative enterprises of SMEs and to study the influence of factors influencing the performance of innovative enterprises of SMEs.

LITERATURE REVIEWS

Innovation is developing among every type of businesses in terms of innovation leverage, promoting innovative culture, and the creation of innovative systems and innovative organizations to strengthen the competitive advantage of the country. (National Innovation Agency Thailand, 2006). There are major dimensions of innovation can be concluded from the related literatures (Rogers, 1995; Schilling, 2008) as follows:

1. Newness means something new or different is being introduced. This may be a product, service, or process which is a new one or developed.

2. Economic benefit is to provide economic benefits or create success in the commerce aspect, that is, innovation must be able to add value through the development of new things. The benefits will be directly measurable both in terms of monetary value or nonmonetary value.

3. Usage of knowledge and creativity idea means that what is considered to be an innovation must be based on the use of knowledge and creativity as the basis for new development, not imitation or copycat.

Classification of innovation can be divided into several categories according to the scope, and the purpose of adoption. Common classification according to the target of innovation which widely used in research and innovation management is product innovation and process innovation (Roger, 1995; Schilling, 2008). Description of the classification of each type of innovation is as follows:

1. Product innovation. Product innovation is the development and presentation of new products, whether technology aspect or how to use it including improving existing products for better quality and efficiency. Product innovation is the output of an organization or business. It may be in the form of goods or services and the two key variables of product innovation that are technology opportunity refers to body knowledge of science and technology, equipment, and processes that will enable to product develop product, and market demand refers to the needs of the user who has demand for that new product and ready to buy or use. As a result, innovation owners receive economic benefit or social benefit.

2. Process innovation. The process innovation is as the application of new ideas, methods or processes that results in the significant higher efficient and effective production processes and the overall work processes, such as use of computers in the design of new manufacturing processes, etc. It's a change in the organization whether there are tools, production process, distribution or management of organization. The goal is to lead to product innovation and distribute that product to consumers or users. Although product innovation is more visible but process innovation is very important as well in order to make the organization gains a competitive advantage in business (Schilling, 2008). Most process innovations focus on quality control, productivity improvement and continuous operations.

Considering the definition in the dimension of the organization, creativity is a process of novelty or ideas that are useful and appropriate to be used to solve problems and increase the effectiveness of individual creativity. It is a key factor in creating innovation for the success of an organization (Amabile et al., 1996; Pungnirund, 2017) Creativity is a wide variety of positive thinking and perspectives endlessly such as invent new things. There are advanced skills and brain processes, including fluently thinking, flexible thinking, and thoughtful thinking. Creative people can find new ideas based on existing information and link them together.

From the study of related concepts, all innovations begin with creativity, successful implementation of new programs or launching new products and services depend on the person or the team which has creative thinking.

Social environments can influence both the level and frequency of creative behaviors like finding other new things. In this view, creativity of individuals and teams is the starting point for new innovation. Research work has found that psychological mechanisms have the effect on setting hypotheses of creative behavior. These mechanisms are the result of the true motivation of creativity, i.e. people are most creative when they are intrinsically motivated. Interest, happiness, satisfaction, and the challenge of working are important factors. Yet, this intrinsic motive can be reduced by external motives or environmental factors as well (Amabile, 1999).

A study of the relationship of factors affecting the performance of an innovative organization in small and medium-sized enterprises in Thailand has found that factors influencing organizational performance are organizational creativity and organizational innovation. However, it has been found by academics that organizational culture with transformation leadership is correlated with organizational creativity and organizational innovation (Oke et al., 2007; Kmiecik et al., 2012). The study also found that organizational creativity is correlated with organizational innovation (Alves et al. 2007; Weinzimmer et al., 2011; Zhang & Bartol, 2010). So, it is possible that transformational leadership may not directly affect the performance of the organization. However, it may indirectly affect the performance of the organization through the mediator variable, organizational creativity and organizational innovation. Since leader plays an important role in decision making and encourages creativity and innovation within the organization. Also, creativity in the organization may indirectly affect the performance of the organization through a mediator variable and organizational innovation (Weinzimmer et al., 2011). Hence, the creative thinking of employees in the organization contributes to organizational innovation resulting to better performance of the organization.

METHODS

This research is a quantitative research. The research population is SMEs of the creative technology and innovation industries, agro-industry and agricultural processing, retail and wholesale business, and service and tourism, total 47,214 organizations from Bangkok metropolitan area. The numbers of sample are 300 samples selected by stratified random sampling method.

By studying the theory and concept of relevant texts and documents, researchers have developed a questionnaire and conducted content validity test through the use of the index of item objective congruence. For reliability testing, conducted with 30 non-sample SMEs, the reliability value was .906. Research tools used to collect quantitative data was a questionnaire consisted of 5 rating scale questions about the performance of the organization, transformational leadership, organizational creativity, and organizational innovation, respectively. The researcher modified 16 questions of transformational leadership consisted of 4 components of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. For organizational creativity, the researcher has developed 12 questions consisted of 3 components of creativity in the organization: expertise, creative thinking skill and motivation. For organizational innovation, the researcher has developed 10 questions consisted of 2 components: product innovation and process innovation. For performance of the organization, the researcher has developed questions with two components of the performance of the organization are growth and profitability. Statistics used for data analysis were percentage, mean, standard deviation, Structural Equation Model (SEM), correlation testing and analysis of direct and indirect influences of model.

RESULTS

Results of the personal data of the sample showed that most of the entrepreneurs or the successors were men (59.4%), aged between 31-40 years (36.8%). Most of them graduated with Bachelor's degree (75.4%) and had roles or responsibilities as the owners and managers too (49.8%). Most of them were registered as corporation (86.4%). Most of them were in service sector (35.6%) had fixed assets of 1-30 million baht (48.2%), and the number of employees was 1-15, (41.3%).

The level value of transformational leadership, organizational creativity, organizational innovation by descriptive analysis, it was found that the owner or heir of the company or senior management had a high level of transformational leadership behavior, with the highest average value of observed variable was intelligence motivation. Business owner or top management thought that the levels of total latent variables of organizational

creativity were at a moderate level and organizational creativity in each observed variable had mean value at moderate to high level which the highest mean value of observed variable was the motivation. Business owner or top management had the opinion that the level of overall organizational innovation latent variable was at a high level. For organizational innovation, each observed variable had a mean value at a high level, with the highest mean was process innovation.

In testing the fitness of Structural Equation Model of the correlation of the factors affecting the performance of SMEs, it showed that the modified structural equation model of the correlation of the factors were in accordance with the empirical data. Based on the Chi-square value of 41.17, the degree of freedom (df) was 29 and the p-value was 0.066, at the acceptable level of 0.05. The relative Chi-square (χ^2/df) was 1.419 and the acceptable criteria was less than 2.00. Then, root mean square error of approximation (RMSEA) value was 0.037, which was lower than the criterion of 0.05 mean good fit and comparative fit index (CFI) value was 1.00, which was higher than the acceptance criterion above 0.90. Goodness of fit index (GFI) was 0.98, which was higher than the acceptable criteria of 0.90. Adjusted goodness of fit index (AGFI) was 0.94 which was higher than the criterion used to determine the model at 0.90. The standardized root means square residual (SRMR) measured at 0.055 was lower than 0.10 indicated that data fitness was acceptable. For Non-normed fit index (NNFI), the value was 0.99 which was higher than 0.90, where the value closed to 1 indicated that good fitness of data. Comparative fit index (CFI) was 1.00, which was higher than 0.90 mean that relatively high good fitness of data.

Table 1
Standard Scores of Direct Effect (DE), Indirect Effect (IE), and Total Effect (TE), of Causal Variables of Organizational Performance

Effective latent variable/ Causal latent variable	R ²	Effect	Transformation Leadership	Organizational Creativity	Organizational Innovation
Organizational Creativity	.55	DE	0.34*		
		IE	-		
		TE	0.34*		
Organizational Innovation	.36	DE	0.28*	0.46*	
		IE	0.39**	-	
		TE	0.67**	0.46*	
Organizational Performance	.25	DE	-	0.32*	0.38*
		IE	0.58**	0.17	-
		TE	0.58**	0.49**	0.38*

From Table 1, the results of the study on the influence size of the latent variables as the causal factor of the organizational performance found that the exogenous causal variables directly affected the endogenous variables significantly at the 0.01 level. Then, transformational leadership had a positive influence on organizational creativity with coefficient value equaled 0.34. Transformational leadership had a positive influence on organizational innovation with coefficient value of 0.28 and had a positive indirect influence on the performance of the organization with coefficient value of 0.58. Internal causal variables that directly influenced the internal variables were statistically significant at 0.01 level which organizational creativity positively influenced organizational innovation with coefficient value equaled to 0.46. In addition, organizational innovation had a positive influence on the performance of the organization with coefficient value equaled to 0.38. Also, organizational creativity has a positive influence on the performance of the organization with coefficient value equaled to 0.32. The external and internal causal variables had indirectly influence on the internal variables statistically significant at 0.01 level that was transformational leadership had indirectly influence on organizational innovation through creative organizational creativity with coefficient value equaled to 0.39. Transformational leadership had indirectly influence on the performance of the organization through organizational creativity and organizational innovation with coefficient value equaled to 0.58.

While organizational creativity indirectly affected the performance of the organization through the organizational innovation variables without statistical significance with coefficient value equaled to 0.10. In addition,

the results of the data analysis showed that transformational leadership could explain organizational variance of organizational creativity by 55 percent while transformational leadership and organizational creativity could explain the variance of organizational innovation by 36 percent and transformational leadership, organizational creativity and organizational innovation could explain the variance of organizational performance by 25 percent.

CONCLUSION AND FUTURE WORK

Conclusion and discussion

Based on the findings of the causal relationship of transformational leadership, organizational creativity, and organizational innovation with the performance of SMEs have found that empirical analysis supports all hypothesis, namely, transformational leadership has a direct positive influence on the performance of SMEs. Because the leaders motivate, persuade, inspire, and encourage the followers in the organization to agree and dedicate their effort and spirit towards the vision, strategy, and needed goals. Leader is one of the most important factors to success or failure of the organization. Transformational leadership has indirect positive influence on the performance of SMEs through organizational creativity, and organizational innovation This may be because the leaders motivate and encourage followers to strive for using creative thinking in building new innovation by setting hypothesis, problem-solving framework and doing problem-solving solution, where leaders are the ones who promote and support their followers to find new ways and approaches (Matzler et al., 2008).

Transformational leadership has indirect positive influence on the performance of SMEs through organizational innovation. This may be due to leaders will inspire their followers by having a shared vision and supporting followers to think about new ways and create an atmosphere of innovation. The study showed that organization creativity has a direct positive influence on organizational innovation, may be due to employee creativity, organizational innovation, the effectiveness and existence of the organization. Creative thinking in the organization has a direct positive influence on the performance of SMEs may be due to leadership creativity that is most important to business success (Weinzimmer et al., 2011). Then, creative thinking in the organization has a direct positive influence on organizational innovation and has an indirect positive influence on the performance of the organization through organizational innovation may be due to organizational creativity that is essential to the organization's ability to innovate and survive. In current competitive environment, creative thinking, innovation and new product development have a significant relationship (Alves et al., 2007).

Organizational creativity has indirect influence on the performance of SMEs through organizational innovation because creativity is an important factor in innovation contributing to organizational success and is critical to the survival of many organizations in highly competitive globalization era. These factors cause the organizations develop innovation continuously and use resources effectively especially creativity of human resource. In addition, the research is also found that organizational innovation has a direct positive influence on the performance of SMEs. It may be that most researchers consider innovation plays a continuing major role in influencing the success and survival of every organization (Kmieciak et al., 2012; Weinzimmer et al., 2011; Zhang & Bartol, 2010; Pungnirund, 2017; Suwunniponth, 2020).

Recommendations and future work

The research found that transformational leadership, organizational creativity, and organizational innovation affect the performance of SMEs. Therefore, SMEs should put great importance to promoting and developing leadership at all levels; first line supervisor, middle level and top executive to have leadership skills. They must convey the art of leadership to the staff in order to achieve more effective and productive operations. In addition, the owner or heir of a business or senior management should be provided with knowledge and ideas about creativity and organizational innovation in order to increase product development and doing value-added for products and services. Also, the government should stimulate and promote research and development for SMEs, so that they can compete in the highly competitive market.

In addition, organizations should give high priority on the variety of businesses or products and services, constantly innovative developments, including promoting continuous employee development and training. Some organizations focus on having partners or business partners, and importantly, for many organizations, modern technology is used to do management for greater efficiency and effectiveness. SMEs must be committed and have good knowledge of both domestic and international business and marketing. Unique product design, package design include attractive pricing strategies are the key factors for many successful enterprises to be sustainable.

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