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The Mediating Effect of Risk Management Linking Management Processes and Performance of Small and Medium Enterprises in Rayong

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ABSTRACT

This research studied on the relationship of management process that influenced on the efficiency in risk management and the performance of SME in Rayong province. Together, it studied on the mediation effects of risk management from the management process until the performance. Research tool was the questionnaire survey among the SMEs entrepreneurs in Rayong. In Rayong, it was found that SMEs entrepreneurs had the highly level of management process with the good efficiency in Risk management; where overall in high level. In addition, it had the high level of Balance Scorecard performance. As well, in the study on the management process that influenced on SMEs performance in Rayong, it was begun with Confirmatory Factor Analysis (CFA) and found that all seven aspects in the management strategic were the good indicators for the management strategy. The indicator to measure the efficiency of risk management from four aspects was the good one and the four aspects from the Balance Score Card can also well indicate the SMEs process. Moreover, it conformed to the empirical data and correlation testing via Structure Equation Modeling in which found that SMEs businesses in Rayong had well management process that covered all the seven aspects with the efficient risk management. Both led to the well Balance Scorecard performance including the well management process that would lead the business to have good risk management efficiency. The risk management efficiency was the partial mediation from the management process to the performance result.

Keywords: Risk Management, Management Processes, Performance.

1. INTRODUCTION

Small and Medium Enterprises (SMEs) is the key mechanism to link the economic activities between businesses. It has the main role as the sources of employments and incomes for people at all areas in the

country. However in the past, SMEs has still faced with the development problems. Not less businesses lack of ability to compete and generate enough profits thus, they have to shut down themselves. The performance result of SMEs is the recent crisis since it lacks of strength and efficiency in the management. Another problem of Thai SMEs is the lack of entrepreneur spirit and awareness of the key role of SMEs in national development. This leads to no value added into the products or self-potential development. Therefore, Thai SMEs shall learn and develop themselves with the systematic and efficient administration (The Office of SMEs Promotion, 2017.)

The principle of management is to set for the direction of unit, group or to process on any functions with the efficient and effective use of all resources. Efficient resource use covered to the wisely use of resources with cost-effective while the Effective use of resource means the Right decision made with the success operation according to the plan. These are the main role of the management to bring the organization to the goal and achieve the mutual targets of the organization. The management functions to gather and manage the use of existing resources in the organization effectively and efficiently by using the best practices of management as the essential mechanism and key coordinator in processing to drive and direct the resource management factors to be able to efficiently process and reach to the required goals. Understanding the management process and higher skills practicing would enhance more efficiency in management. In business management, the factor that causes the company to fail to achieve its objectives is risk. Risk is an important factor that makes the operation of the organization is not systematic or serious errors can damage the organization. In order to reduce errors and get rid of the hurdles of the business, the company controls the risk, but how effective the control of the risk depends on many factors. Therefore, knowing the factors that affect the efficiency of risk management will help operators to manage the risk properly and more effectively.

Enterprise risk management has been brought to apply in strategic and all organization activities planning to help the management to define, estimate and manage on unexpected risk and to support on organization value forming and preserving (Meulbroek, 2002). Enterprise risk management will support the risk management potential and strategy in the same direction, connect risks with growth and returns, support the responsive decision to risk and reduce the panic and loss in the operation. In addition be able to define and manage risks between entrepreneurial places, to integrally respond to complex risks, be able to gain opportunity and proper investment. Every organization has to face with uncertainty and challenges, for the organization management, it is generally to set for the existing level of uncertainty to add values. Risk management of organization in general then is to form the framework for the management to manage on uncertainty, risk and opportunity to promote the ability to create more values to the organization and stakeholders. Risk management would reasonably affirm that general organization will be able to achieve the objectives of the organization. The organization that process in the environment where all the factors such as globalization, technology, rules and re-organization, changes in market and competition that cause uncertainty in which usually reflects or being formed via the strategic choices. Thus, uncertainty could be either chances or risks with the possibility to reduce or increase the organizational values (CAS, 2003; COSO, 2004; Beasley et. al., 2008; Pagach and Warr, 2011; Hoyt and Liebenberg, 2011).

Rayong is a province that the country's key industrial sectors, with good economic conditions and high per capita incomes. The Office of SMEs Promotion has shown the number of SMEs in Rayong in 2011 to 2015 were 31,126, 32,422, 32,889, 33,538 and 34,143, respectively. In contrast, SMEs have had to

shut down increased every year. In 2012-2015 SMEs were shut down totaling 16,936, 17,435, 18,968 and 22,733, respectively.

As stated above, it is the main problem toward SMEs management that leads to the less efficient of SMEs performance, if the situation remains like this. The researcher needs to study on the management process and risk management that results on Small and Medium Enterprises (SMEs) performance in Rayong to become the information that is the success guidance of SMEs business processing in Rayong.

2. REVIEWS LITERATURE AND CONCEPTUAL FRAMEWORK

1. Management Process

The theorists in the group of the principles of administrative education; Luther Gulick and Lyndal Urwick (1937) have suggested the principle of “POSDCoRB” management consisting of the followings.

1. Planning refers to setting work roles and responsibility to prompt before operation in order to efficiently achieve the target goal.
2. Organizing refers to organization structuring related to functions, segregation of duties, assigning of authority and responsibility, organizing the chain of command, setting the main unit and consulting unit, etc.
3. Staffing refers to organization human resource management consisting of labor planning, ordering, appointment, orientation, training, assessment, promoting, lower the position, job rotation and job termination.
4. Directing refers to the art to manage the followers to operate according to the plan or assigned duties such as leadership, relationship, motivation and decision, etc.
5. Coordinating refers to the function to coordinate with any sub-units in the organization to work accordingly in the same direction.
6. Reporting refers to the report of progress, problem, obstacle as well as any news of the organization to all party to know for the benefit to follow up and solve those problems derived from working.
7. Budgeting refers to functions related to budgeting, accounting, payment and financial and accounting audit for the organization. Normally, the budget is a kind of plan that reflects on projects or activities that the organization will operate within the period as set.

From the management process of Luther Gulick, it is found that the business will become success if it has well management on planning in order to obtain the target goals. Organizing shall assign with clear authority and place people in the proper position moreover, continue develop them until they finish with the position. Besides, the management shall use their leadership to motivate people to sacrifice their knowledge and ability for the organization achievement and coordinate all parts to work for the mutual goals. Thus, the management shall listen to the performance report and conduct budget arranging as the measure and plan for auditing and control.

H1: Management process: planning, organizing, staffing, directing, coordinating reporting and budgeting effect on firm performance.

2. Risk Management

Enterprise risk management - ERM is the management framework to efficiently cope with the uncertain situation and to increase the potential to form the opportunity and value for the organization. For the uncertainty in general organization, it is that the organization cannot meet the mission as planned.

Shared value is then the key goal set and accepted from the management and all members in the organization. Philosophy and values are raised in all staff to hold and practice, management decision would form, keep or give values to any activities from the determined of daily operation of the organization. The decision shall aware on risks and chances and it requires the management to consider on the information technology related to internal and external environment. Thus, Stock Exchange of Thailand (2014) has separated risk into four types as follows.

1. Strategic Risk is the risk related to strategic planning, operation and to bring the place to practice properly. Besides, strategic risk also includes changes in internal and external factors in which influence on strategic planning or to operate to achieve the main objectives, goals and operation guidelines of the organization.
2. Operational Risk is risk related to operation in each procedure or internal organization activities including risk related to information technology management and any knowledge information for the achievement. Risk in operation could affect the efficient in work procedure and to meet the organization objectives overall.
3. Financial Risk is the risk related to financial management. It could be risk from the internal factor such as affluent management, credit, financial investment, or from the external factor such as changes in interest rates, exchange rate, or risk from the failure to compliance of the contractor in which affects on the remaining and organization damage.
4. Compliance Risk is risk related to rule and regulation compliance according to the governance units such as Securities and Exchange Commission, etc. Moreover, risk related to any laws related to the business running in the group of stock exchange market and when these kinds of risk take place, it could affect to the organization reputation and image overall.

3. Balance Scorecard

Balanced Scorecard is a modern management tool used for performance management. Organizations with management aimed at achievement of tasks commonly used to control and evaluate the operations to achieve goals that are important to the success of the organization. Balanced Scorecard Initiated by Robert S. Kaplan and David P. Norton in 1992. They have the notion that not only financial success cause the organization to be successful and sustainable. The organization to achieve sustainability will be achieved in four key areas as the follow; Financial Perspective, Customer Perspective, Internal Business Process and Learning and Growth Therefore, this study firm performance measurement using Balance Scorecard.

According to the literature review, the advantage of process management, enterprise risk management. Thus, the following three hypotheses are studied.

H2: Management process effect on enterprise risk management.

H3: Enterprise risk management effect on firm performance.

H4: Management process effect on firm performance through enterprise risk management.

Conceptual Framework

The conceptual framework (Figure 1) shows the factors and expected effect of the study. The effect of management process and risk management are expected to be positive.

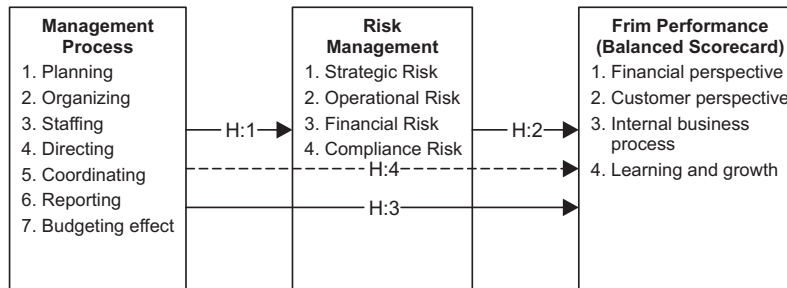


Figure 1: Conceptual Framework

3. RESEARCH METHODOLOGY

This research was the Quantitative Research that the populations in this study were the 34,143 SME entrepreneurs in Rayong province in 2014. The group of sample used in this research was calculated for the sample size according to the table by Taro Yamane (Silpcharu, 2008) at the confidence level of 95% and deviation $\pm 5\%$. Thus, there were 396 samples to study. Research tool was the Questionnaire created with the required goals and conceptual framework. The research questionnaire conducting was studied to set for the research framework and literature review was done on books, documents, articles and relevant researches including the interview with people with strong experiences on SMEs society; thus, to be the guideline to form the items in questionnaire.

The researcher analyzed to find the quality of the instrument by seeking for the validity value of the questionnaire either on the suitable content or the Item Objective Congruence: IOC by bringing them to consider by three professionals to get the score of validity, covered, and conformance of the content or objectives. Two of them were the specialist professors on administration and another was an accounting specialist professor and the result was 1.00. Then the draft of questionnaire was brought to Try-Out for 30 sets; the confidence value from Cronbach's Alpha was equal to 0.976 in which higher than 0.80; it meant that the questionnaire was suited and reliable.

The study employed a structural equation modelling (SEM) approach. SEM was selected as an approach because of its superior flexibility and capabilities, particularly for modelling indirect relationships (Byrne, 2016). Confirmatory factor analysis (CFA) and path analysis were used as the main analytical tools. CFA was used to extract and examine the measurement model and identify the latent variables, while path analysis was used to examine the strength and direction of relationships within the model (Byrne, 2016; Kline, 2011). The hypothesized relationships in the theoretical framework were state as the following equations.

$$\text{Risk management} = \alpha_1 + \beta_1(\text{management}) + \epsilon_1 \tag{1}$$

$$\text{BSC} = \alpha_2 + \beta_2(\text{management}) + \beta_3(\text{risk}) + \epsilon_2 \tag{2}$$

The Result

The results of general data analysis concerning the management process according to the principles of Luther Gulick and Lyndal Urwick found that SMEs in Rayong have seven processes: Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting. The average value is between 3.77 – 4.02 and standard deviation is between 0.880 – 0.985, which is considered by SMEs to have a high level of management. SMEs in Rayong have the efficiency of accounting risk management, consisting of 4 areas: Strategic Risk, Financial Risk, Operational Risk and Compliance Risk. The average value was between 0.83 and 0.95, and the average standard deviation ranged from 0.77-0.82. The SME business had a high level of risk management.

The results of firm performance by using Balanced Scorecard of Kaplan and Norton found that SMEs in Rayong have a balanced scorecard performance, which consists of four areas: Financial Perspective, Customer Perspective, Internal Business Process and Learning and Growth. The average is between 3.88 to 3.93 and the average standard deviation ranged from 0.900 to 0.970, which is considered the SMEs are operating in a balanced level.

The structural model (Figure 2) shows the relationships identified in the path analysis and their relative weights. Goodness of fit indicators (Table 1) show that the measures selected are consistent with a good fit, including chi-square 17.625 ($p = 0.128$), CMIN/DF (1.469), GFI (0.991), AGFI (0.959), NFI (0.984), CFI (0.995), RMSEA (0.035) and PCLOSE (0.740). Thus, this model was generally consistent with rules of thumb regarding model fit.

Table 1
Goodness of fit statistics

| <i>Model</i> | <i>Model Fit Criteria</i> | <i>Result</i> |
|-------------------------|---------------------------|---------------|
| Chi-square | – | 17.625 |
| Degrees of freedom (DF) | – | 12 |
| <i>p</i> -value | > .05 | .128 |
| CMIN/DF | < 3 | 1.469 |
| GFI | > .90 | .991 |
| AGFI | > .90 | .959 |
| NFI | > .90 | .984 |
| CFI | > .90 | .995 |
| RMSEA | < .08 | .035 |
| PCLOSE | > .05 | .740 |

Structural Model

The Regression Weights (Table 2) is used to assess the significance of the proposed relationship paths in the model, assessed at $p < 0.05$. Of the proposed factors in process management and risk management were significant. Standardized regression weights average (Table 2) showed that almost high ($\beta = 0.869 – 0.932$).

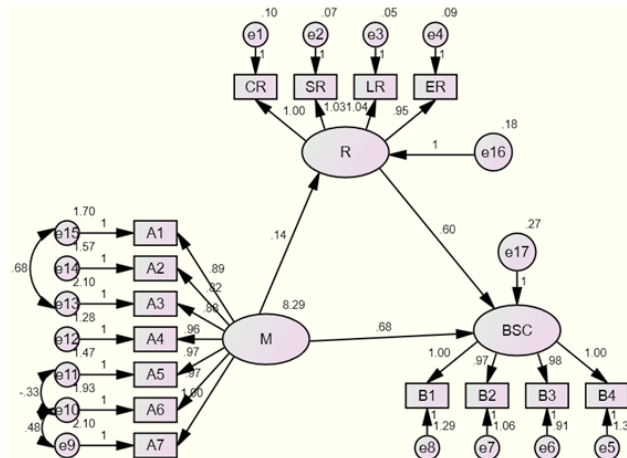


Figure 2: Structural model

Table 2
Regression Weights

| | | | Estimate | S.E. | C.R. | P | Standardize |
|--------------------------------|------|-----------------|----------|------|--------|-----|-------------|
| Risk management (R) | <--- | Management | .136 | .010 | 13.659 | *** | .684 |
| BSC | <--- | Risk management | .605 | .118 | 5.121 | *** | .153 |
| BSC | <--- | Management | .679 | .034 | 20.134 | *** | .862 |
| Strategic Risk (SR) | <--- | Risk management | 1.000 | | | | .877 |
| Financial Risk (LR) | <--- | Risk management | 1.029 | .041 | 25.319 | *** | .917 |
| Operational Risk (ER) | <--- | Risk management | 1.035 | .040 | 26.202 | *** | .932 |
| Compliance Risk (CR) | <--- | Risk management | .953 | .041 | 23.077 | *** | .879 |
| Learning and Growth (B4) | <--- | BSC | 1.000 | | | | .888 |
| Internal Business Process (B3) | <--- | BSC | .978 | .037 | 26.769 | *** | .918 |
| Customer Perspective (B2) | <--- | BSC | .973 | .038 | 25.874 | *** | .906 |
| Financial perspective (B1) | <--- | BSC | 1.001 | .040 | 25.077 | *** | .894 |
| Budgeting (A7) | <--- | Management | 1.000 | | | | .893 |
| Reporting (A6) | <--- | Management | .966 | .033 | 29.246 | *** | .894 |
| Coordinating (A5) | <--- | Management | .967 | .036 | 27.138 | *** | .917 |
| Directing (A4) | <--- | Management | .958 | .034 | 27.830 | *** | .925 |
| Staffing (A3) | <--- | Management | .885 | .037 | 23.831 | *** | .869 |
| Organizing (A2) | <--- | Management | .821 | .033 | 24.788 | *** | .884 |
| Planning (A1) | <--- | Management | .891 | .035 | 25.304 | *** | .892 |

*** $p < 0.001$.

Hypothesis Outcomes

Hypothesis 1 showed that management process: planning, organizing, staffing, directing, coordinating reporting and budgeting did have a significant effect on firm performance. Hypothesis 2 showed that management process did have a significant enterprise risk management. Hypothesis 3 showed that enterprise

risk management did have a significant effect on firm performance. Thus, Hypothesis 1, Hypothesis 2 and Hypothesis 3 are accepted. Finally, risk management was a partial mediating variable between the significant management process variables and firm performance. Thus, Hypothesis 4 was accepted

4. CONCLUSION AND DISCUSSION

The research found that SMEs in Rayong had good management strategies at a high level, resulting in a balanced and well-balanced performance. It is in line with the research by Thikhanporn Tavidej, Supot Saeng-ngean & Nattapol Chumworathayee (2011) claimed that the principles of international management are applied to manage reasonably, with good immunity and morality as decision-making. The organization is growing in a balanced way, both economically, socially and environmentally, with the change and pace of globalization. Moreover, supports the study found management process that would affect the effectiveness of risk management. Hackman and Wageman (1995) support the contention that the effectiveness of management should be to meet customer requirements.

The results showed that the effectiveness of risk management had effected on firm performance. It support previous researches (Florio, C., and Leoni, G. 2017; Pagach and Warr, 2011; Hoyt and Liebenberg, 2011). It also found that the efficiency of risk management was partially mediation from the management process to the performance. That support the concept suggested that the business had a good management would be more effective in managing risk. That the literature is so fragmented implies that there is a need for better theoretical development and potentially more empirical attention to the internal decision process that underlies the role of risk management in firm performance.

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