




# The Management of the Competitiveness Enhancement of Small and Medium Enterprises in the Economic Zone of Northeastern Thailand

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**Abstract.** This research aims to test the impact of an appropriate cost management strategy on operational efficiency and test the impact of operating efficiency on the competitiveness of small and medium enterprises in the lower northeastern border trade area. The research methodology was used a quantitative research methodology by studying with entrepreneurs, managers or account managers of SMEs in the lower northeastern border trade area comprising Sisaket, Ubon, and Surin provinces. The instruments were questionnaires, and 210 respondents were analyzed using multiple regression analysis statistics to test the research hypothesis. The study found that an appropriate cost management strategy has a positive impact on operational efficiency, especially in focus, proactive targeting, and appropriate planning and forecasting. Moreover, found that operational efficiency had a positive impact on the Company's competitive advantage. Suggestions for further research: This conceptual framework should be tested with other sample groups to confirm research responses.

**Keywords:** Cost management strategic · Competitive advantage · Firm operational performance · Proactive goal orientation · Resource allocate appropriateness

## 1 Introduction

Entering the ASEAN Economic Community (AEC) in 2015, it is binding for its members to liberalize trade such as goods, services, investment in capital, and free movement of skilled labor. Therefore, the entrepreneurs and small and medium enterprises (SMEs) must be prepared to adapt to the changes that are going to happen effectively; both proactive and reactive, especially entrepreneurs must have knowledge in areas such as investment, labor, marketing, and business negotiations. They are setting product standards, rules, and regulations, etc. Therefore, entrepreneurs are trying to find new strategies. That will be a tool for management, planning, control, and support for the business to be successful in the long run. In particular, a cost-effective, cost-effective management strategy will enable an entity to appropriately allocate resources, be able to set product prices at reasonable prices, in line with the quality of products and services.

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For example, Wal-Mart is a strategic leader, low-cost leader leadership), etc. Typically, the company's products and services that run this low-cost strategy look no different from their competitors. It can be a general consumer product. Such as coil steel sheet. The power cord used in the house or taking a flashlight, etc. The merchandise sold at Wal-Mart is general merchandise, and the use of this low-cost strategy has increased the company's overall profit [1]. Therefore, cost management is essential for management to consider, as cost management efficiency signals an increase in net profits, which must be well planned for the organization to cooperate. The business can operate effectively while simultaneously reducing costs, popular cost, reduction strategies cost such as: 1) reduction of logistics costs, and reduced transportation costs; 2) cost reduction using the four aspects of the balanced scorecard (BSC).

However, cost reduction does not always give an enterprise a competitive advantage; therefore, entrepreneurs need to know and understand cost management suitable for their operating style. Due to the size of that business is a cost management strategy that is a tool of excellence, helping managers plan, control, and operate more efficiently. Especially small and medium-sized enterprises, which often encounter problems with appropriate cost management, as most businesses are managed as a single owner or family management with a single point of administration. As in the analysis, the classification between costs and expenses may not be appropriate, making small and medium-sized enterprises face burdens of high product costs; although trying to reduce costs, they are still found the cost of the product is still high as before. Therefore, the businesses that can survive must come with appropriate cost management [2].

The appropriate cost management strategy refers to how to properly allocate the resources of the business such as analyze data collection, accounting data collection, a summary report of the data, and the application of accounting information to systematically improve the business process under the concept of netting emphasizes difference and value-added to the business. It consisting of 5 dimensions, including: 1) Proactive Goal Orientation; 2) Resource Allocate Appropriateness; 3) Application of Cost Method Adoption Techniques; 4) Proper Planning and Forecasting; 5) Continuous Managerial Process Improvement which provides the business with superior performance than its competitors. Therefore, if the entrepreneurs of small and medium enterprises have appropriate cost management strategies in line with the size and nature of the operations of the business, the cost management strategy is a vital tool to lead companies to success and gain a long-term competitive advantage, especially for small and medium-sized enterprises. Moreover, SMEs now are highly valued businesses, continuously generating income for Thailand, since the 2015–2020 export-import value and growth rate of SMEs found that the export value was over 966,961.59 or hundreds each 28 of the total value of exports (Thailand Customs Department, 2011). Furthermore, ASEAN countries where Thai SMEs exported the top 5 values in December 2011, the highest country was Cambodia, accounting for 23% (Cambodia), No. 2 Indonesia. Accounted for 19% (Indonesia) No. 3, Malaysia accounted for 19% (Malaysia) No. 4, Viet Nam, 11% (Vietnam) and No. 5 Myanmar, 8% (Myanmar) and other 20% other countries [3].

Therefore, to prepare and enhance the competitiveness of SMEs, it is time for entrepreneurs to focus on the strategy for managing the operating costs to make their businesses successful. To achieve a competitive advantage and survive in the long run,

entrepreneurs need to apply their knowledge to work systematically according to the business's operational structure. In particular, an emphasis on appropriate cost management strategies is the key to enabling an enterprise to perform and achieve its goals. As a result, the researcher is interested in studying the management of the competitiveness enhancement of small and medium enterprises in the economic zone of northeastern Thailand.

## 2 Methodology

### 2.1 Population and Sample

For this study population, the researcher assigned 13,157 small and medium enterprises in Sisaket, Surin, and UbonRatchathani provinces to be the population used in the quantitative research. For the sample, the researcher determined 375 small and medium enterprises in Sisaket, Surin, and UbonRatchathani provinces by calculating according to the formula of Crazy and Morgan (Krejcie & Morgan, 1970) at the significance level 0.5, and the researcher used a stratified sampling method for each area to achieve the data distribution [4] (Table 1).

**Table 1.** Number of SMEs with locations and registered in provinces with trade links.

Neighbor Country	Province	Number of SMEs	Sample
(1) Cambodia	Sisaket	4.698	135
	Surin	4.601	131
(2) Laos	UbonRatchathani	3.858	109
<b>Total Numbers</b>		<b>13.157</b>	<b>375</b>

Source: Office of Small and Medium Enterprises Promotion, as of October 8, 2020

### 2.2 Data Collection

It is a process and procedure for creating tools. The researcher reviews the literature related to cost management strategies to increase the competitiveness of small and medium enterprises in Sisaket, Surin, and UbonRatchathani provinces. The theoretical findings were relevant, and the results from the collection of qualitative data from the actual practice were developed as a tool for collecting quantitative data by the researcher developed into questionnaires. In this regard, before the existing data collection, the researcher presented the draft tool to 2 experts: 1) Assistant Professor PraditWongsuwan and 2) Dr. SakchaiChanruang for approval and quality inspection. Content-oriented devices after being guided, the questionnaire was updated to be more complete.

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When a complete questionnaire was obtained, the researcher sent the questionnaire to SME entrepreneurs. Accounting Manager of 375 small and medium enterprises in the lower northeastern region by mailing methods and using questionnaires to collect data from the sample group, with a research assistant assisting in the data collection. There were 210 responses, accounting for 56%, which is more than 20%, so it can be analyzed further.

### 2.3 Data Analysis

1. Descriptive Statistics is mean, standard deviation, percent.
2. Data analysis was used by researcher using Multiple Regression Analysis by SPSS for Windows to analyze equation data. Multiple Regression Analysis OLS is as follows:

$$FOP = \beta_0 + \beta_1CMS + \beta_2SIE + \epsilon_1 \quad (1)$$

$$FOP = \beta_0 + \beta_3PGO + \beta_4RAA + \beta_5CMA + \beta_6APF + \beta_7MPI + \beta_8SIE + \epsilon_2 \quad (2)$$

$$CAD = \beta_0 + \beta_9FOP + \beta_{10}SIE + \epsilon_3 \quad (3)$$

By requiring:

- CMS = Cost Management Strategic Appropriateness;
- PGO = Proactive Goal Orientation;
- RAA = Resource Allocate Appropriateness;
- CMA = Application of Cost method Adoption;
- APF = Appropriate planning and forecasting Appropriateness Planning and Forecasting;
- MPI = Continuous Managerial Process Improvement;
- FOP = Firm Operational Performance;
- CAD = Competitive Advantage;
- FIS = Firm Sized.

### 3 Result

The researcher analyzed the data using multiple regression analysis according to Eqs. 1–3 shown in the research method. To test the hypothesis 1 and 2, presented in the following order (Table 2).

**Table 2.** Multiple regression analysis results.

Independent Variables	Dependent Variables (Firm Operational Performance)
Proactive Goal Orientation	0.300** (0.078)
Resource Allocate Appropriateness	0.069 (0.079)
Cost method Adoption	0.237** (0.090)
Appropriateness Planning and Forecasting	0.119 (0.084)
Continuous Process Improvement	0.111 (0.063)
Firm Sized	0.027 (0.117)

R = .705, R<sup>2</sup> = 498, SEE = .721, F = 32.516, Sig of F = .000

\*\* p < .01, \* p < .05 a Beta coefficient with standard errors in parenthesis (...) = Standard Error

The results of the multiple regression analysis among cost management strategies affect the operating efficiency of the organization. According to the research objective, through Eq. 1  $FOP = \beta_0 + \beta_1CMS + \beta_2SIE + \epsilon_1$ , it was found that the proactive targeting cost management strategy had a statistically significant positive correlation to the operational efficiency of the organization ( $b_3 = 0.300$ ,  $p < 0.01$ ) and cost method adoption ( $b_5 = 0.237$ ,  $p < 0.01$ ) and for resource allocate appropriateness ( $b_4 = -0.069$ ,  $p < 0.01$ ), appropriateness planning and forecasting ( $b_6 = -0.119$ ,  $p < 0.01$ ), continuous process improvement ( $b_7 = -0.111$ ,  $p < 0.01$ ) and firm size is not significant to the firm operational performance ( $b_8 = -0.027$ ,  $p < 0.01$ ) (Table 3).

Show the results of multiple regression analysis to test the relationship between strategy, cost management, and operational efficiency for objective 2 through equation one shown in the research methodology. The results of multiple regression analysis found that strategy cost management strategic appropriateness has a positive correlation to operating efficiency ( $b_1 = 0.675$ ,  $p < 0.01$ ) and therefore supports hypothesis 1 (Table 4).

The relationship between firm operational performance and competitive advantage for objective 2 through Eq. 3. The analysis results showed that the firm operational performance and the firm Sized of the business have a positive relationship with competitive advantage ( $b_9 = 0.695$ ,  $p < 0.01$ ;  $b_{10} = 0.114$ ,  $p < 0.05$ ), thus supporting hypothesis 2.

**Table 3.** Multiple regression analysis results.

Independent Variables	Dependent Variables (Firm Operational Performance)
Cost Management Strategic Appropriateness	0.675*** (0.054)
Firm Sized	0.039 (0.116)

R = .678, R<sup>2</sup> = .467, SEE = .731, F = 90.316, Sig of F = .000

\*\* p < .01, \* p < .05 a Beta coefficients with standard errors in parenthesis (...) = Standard Error

**Table 4.** Multiple regression analysis results.

Independent Variables	Dependent Variables (Competitive Advantage)
Firm Operational Performance	0.695** (0.049)
Firm Sized	0.114* (0.107)

R = .730, R<sup>2</sup> = .528, SEE = .687, F = 116.101, Sig of F = .000

\*\* p < .01, \* p < .05 a Beta coefficient with standard errors in parenthesis (...) = Standard Error

#### 4 Discussion

Testing the impact of cost management strategies on the operational efficiency of small and medium-sized enterprises in the lower northeast border trade area found that the cost management strategic appropriateness was positively related to operational efficiency. Since cost is the value of the resources that an organization has to lose to get goods and services back, therefore, the value of that resource must be measured in monetary units where the costs incurred may be utilized at present or in the future. Therefore, cost management is the key for the executives to be used for management efficiency. This is in line with the [5], that found the logistics activity cost management is related to the performance of SMEs because strategic cost management has to reduce wasted costs by trying to find the cause of problems or defects by using data analysis techniques to compare standard costs with actual costs incurred (Actual Cost) to find a way to bridge the gap between activities both to be as small as possible. In line with [6], who explained that the use of administrative accounting information for planning sets guidelines for implementing activities and the use of future activity resources for budget decision-making. Because the accounting data of the organization can analyze and compare the cost and the return (Benefit) that will be received from the activities. This includes comparing the organization's performance with similar context, which will help businesses make decisions more efficiently and effectively along with the use of industrial engineering or IE techniques to analyze work processes in various parts, where information about

workers' working time must be collected to determine the standard time, which results in continuous improvement of operational efficiency, etc.

The results of the relationship between operating efficiency and competitive advantage revealed that the operating efficiency of the organization and its size had a significant positive correlation with its competitive advantage. This means measuring financial performance, such as value-added economic metrics, such as those at profit numbers. The measure of return on investment is linked to effective allocation of resources, for example, the ability to reduce costs that reflect an entity's management achievements. This is in line with the [7] that found that companies using various performance appraisal methods, especially those using quantitative and qualitative performance assessment systems, were more efficient than other businesses. This is consistent with the study of [8] explained that the use of financial reports of SMEs in the measurement of business financial liquidity, measuring the profitability of a business, measuring a business's debt servicing ability, and practical utilization for management has a positive impact on the ability to access capital of SMEs. And found that the business operational efficiency such customer satisfaction, quality of products and services, good image of the enterprise. This affects the business's success in the long run, often found that customers will return to use the business products and services again. Moreover, customer satisfaction is a tool for public relations and word-of-mouth communication, resulting in more market share.

Therefore, the organization's operational efficiency is the result of the operation of the organization that can achieve its goals well. It can be measured both quantitatively and qualitatively, such as the results from the organization's operations until it can reduce costs and increase efficiency in running at the same time. It will result in the business's success that reflects the difference being recognized by customers in the quality of products and services, reflecting a competitive advantage as well.

Applying research results to practice, the results of the study show that cost management is associated with the operational efficiency of an organization, mainly focusing on setting clear and proactive goals that can help an enterprise to be successful, including the application of the costing is an essential tool of management in planning, control various factors of the business, which can be used as a guideline for the operation of the business to be appropriate. Therefore, the business can allocate resources efficiently and keep up with the changes, especially in the ASEAN community. Moreover, the business must have readiness in both internal management and external competition.

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