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THE POWER OF STRATEGIC MANAGEMENT ACCOUNTING FOR ENHANCING PERFORMANCE EFFICIENCY OF THE FOOD INDUSTRY

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Abstract

This research aims to study the power of strategic management accounting for enhancing performance efficiency of the food industry in the Thailand's three southern border provinces. The study included a population group of 151 restaurant businesses. Data was collected through a questionnaire and semi- structured interviews, and analyzed using descriptive analysis, structural equation modeling, and content analysis. The research result reveals that the food industry holds a moderate level of opinion regarding the effectiveness of strategic management accounting on the industry's performance. In terms of the performance process, both the effectiveness and efficiency of the food industry, encompassing non- financial and financial aspects, reached a high level. Performance was assessed based on factors such as cost, the freshness of materials, timely and regular customer response, analysis of rivals' strengths in various aspects, and emphasis on service. Furthermore, the Casual Model developed to measure the impact of strategic management accounting on the food industry's performance effectiveness aligns with empirical data and confirms the hypotheses for all items.

Keywords: Strategic Management Accounting, Operational Efficiency, Food Industry

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Introduction

The current global economic situation is likely to slow down significantly due to the outbreak of the coronavirus disease. The number of people infected has reached 55.4 million worldwide, resulting in 1.3 million deaths (World Health Organization, 2020). This has led government agencies in each country to implement various preventive measures, one of which is country-wide lockdowns, causing enormous damage to the economic system. In Thailand, the gross domestic product has been affected by up to 5 percent (World Bank, 2020), and the business sector has seen the closure of as many as 3,876 companies in the first four months of 2020, affecting the labor sector with up to 14.5 million workers (Efinancethai, 2020). This industry has been slow to recover, as most of the products are exported to hotels and food services, which have experienced a significant slowdown in investment. Regarding employment, it has shrunk compared to the same period last year, with some businesses adjusting their employment practices to align with economic activities. This includes measures such as reducing labor wages, cutting working hours, and requesting cooperation from employees to take unpaid leaves, along with the right to receive compensation from social security in case of temporary business closure. It is expected that currently, there are 400,000 people in the three border provinces who have lost their jobs due to unemployment Therefore, executives should place importance on organizational management in such situations, which necessitates tools for effective management. One such tool is strategic management accounting information, which the Institute of Certified Management Accountants has determined to be a form of accounting that emphasizes information related to organizational factors or non- financial information generated within the organization.

For this reason, this research project is of paramount importance and should be undertaken urgently. It aims to initiate a new avenue of research focused on identifying strategic accounting and management practices that can propel organizations toward the highest levels of operational efficiency, exerting the most significant impact on both financial and non-financial performance. This type of research has not been explored yet, as there is currently no interest among researchers in the country in examining these variables in conjunction with the food industry in this region. Upon discovering these findings, it will establish a fresh body of knowledge for the target group to utilize, instilling confidence in decision- making for management. The enhanced economic vitality in the area will lead to the sustained stability of children and the overall stability of the country's economy.

Literature Review

Simmonds (1981) coined the term 'strategic management accounting,' which encapsulates the preparation and analysis of management accounting data about the business and its competitors. This information is used in the development and scrutiny of business strategies. From a financial perspective, Bromwich (1990) defined strategic management accounting as the acquisition and analysis of financial information concerning the organization's product market and competitors' costs. Moreover, Roslender & Hart (2002) asserted that strategic management accounting is integrated with marketing strategy, while Cadez & Guilding (2008) found that when operating under situational theory, strategic management accounting influences the judgment of executives, yielding positive outcomes aligned with the organization's goals. This corresponds with studies that highlight the significance of management accounting in achieving operational success, as it is considered an efficient and administrative duty of executives, thereby influencing the realization of organizational goals (Limchaicharoen, 2017). The successful implementation and development of integrated performance in this study have been centered on strategic management accounting, comprising of 1) costing, 2) customer focus, and 3) competitor analysis, under the framework of Cinquini & Tenucci (2010) and incorporating the concepts presented by Cadez & Guilding (2008).

Financial and non-financial infer indicators provide information about the outcomes of completed activities. Indicators are complemented by three types of performance evaluations falling under the categories of customer satisfaction, internal processes, and learning abilities. The Balanced Scorecard (BSC) framework aids executives in assessing their business performance from four perspectives: How do customers perceive us? (Customer Perspective) Where do we need to enhance? (Internal View) If we can improve and create value (Innovation and Learning Perspectives), how do our shareholders or co-investors view us? (Financial Perspective) (Kotane & Kuzmina-Merlino, 2012).

The business operations of an organization are expressed in terms of currency to maximize shareholders' equity. In essence, financial activities entail managing resources, including their collection, distribution, and utilization in business processes. The quality of financial activities serves as a reflection of their effectiveness. Presently, studies on financial performance and the quality of financial activities (Phama & Phan, 2020) have shed light on the determinants of an organization's financial performance. The concept of financial performance is multifaceted. Chen & Wong (2004) evaluated the financial health of Asian insurance companies by considering profits. They employed return on assets (ROA) as a measure of financial performance, demonstrating its efficacy in assessing asset efficiency in income generation. Commonly utilized accounting metrics encompass ROA (Clarkson et al., 2008), return on equity (ROE) (Bowman & Haire, 1975), and return on sales (ROS) aligning with the study's aim to measure financial performance in terms of profitability and growth according to the concept of Santos & Brito (2012). Thus, methods for assessing ROA and ROE serve as valuable tools for evaluating financial performance.

Jusoh (2008) found that organizations facing high levels of perceived environmental uncertainty adopt customer learning and growth metrics, which are considered high-level non-financial performance indicators. This is in line with Schulz et al. (2010) findings regarding organizations perceiving high levels of environmental uncertainty, where executives increasingly incorporate both financial and non-financial performance measurement systems. Furthermore, Gosselin (2011) discovered that organizations confronting high levels of environmental uncertainty tend to rely on performance indicators. This comprehensive information empowers executives to make informed decisions and administer various aspects of their operations effectively, offering a holistic view of the organization's success. The use of both financial and non-financial performance indicators enables more efficient decision-making and administration in response to the uncertain external organization environment. A study by Cinquini & Tenucci (2010) highlighted the use of comparative analysis, where companies seek to benchmark against the best practices of competitors. This connects the management system throughout the organization, fostering the most efficient operation (Olve et al., 1999).

Research Methodology

This study employed mixed-methods research. The population consisted of food industry executives registered as limited companies in the following provinces of Thailand: Yala (18 establishments), Pattani (42 establishments), and Narathiwat (91 establishments), totaling 151 establishments (ThaiMallPlaza, 2020). The research team focused on registered juristic food businesses. The study involved 10 observational variables, following the principle outlined by Hair et al. (2010), Suggesting that structural equation statistical analysis should involve a sample size of approximately 10-20 times the number of observed variables. However, to mitigate potential non-response from the sample group, this research aimed to study the entire population using a simple random sampling method. Additionally, a brainstorming meeting or open forum was held with the executive community of the food industry to gather in-depth and comprehensive insights into organizational management operations. This was done using tools

such as questionnaires and semi-structured interviews. The qualitative research component targeted executive representatives of the food industry, with 8 individuals participating. The data was analyzed using descriptive statistics and inferential statistics using structural equation analysis techniques. After the tests and data had been analyzed, the research team organized a forum to discuss the research findings with the target groups and relevant agencies.

Research Results

Level of Opinion on the Implementation Level Accounting on Enhancing Performance Efficiency of the Food Industry

Table 1 Comments on strategic management accounting on the operational efficiency of the food industry

Strategic Management Accounting	$\bar{x}$	S.D.	Level of Opinion
Costs	3.51	0.94	High
Customers	3.70	0.88	High
Competitors	3.10	1.05	Moderate
Total	**3.44**	**0.96**	**Moderate**

Table 1 shows that the overall level of opinion on strategic management accounting on the operational efficiency of the food industry was at a moderate level, with a mean of 3.44. When considering each aspect, it revealed that the side with the highest level of opinion was customer accounting, with a mean of 3.70, followed by costs (3.51) and competitor accounting (3.10), respectively.

Level of Feedback on the Operational Process on Enhancing Performance Efficiency of the Food Industry

Table 2 Feedback on the operational process on the operational efficiency of the food industry

Operational Process	$\bar{x}$	S.D.	Level of Opinion
1) Businesses use past operating results such as profits, revenues, and expenses to compare with current operating results on a monthly, quarterly, or yearly basis to evaluate and improve their business operation.	3.74	0.82	High
2) Businesses compare work processes or working methods between their own business and other businesses to enhance their organizational efficiency.	3.64	0.87	High
3) Businesses compare food products between their businesses and other businesses to plan their competitive strategies	3.42	0.93	Moderate
4) Business measures their operating results using financial data as a basis, such as profit, sales, etc.	3.79	0.80	High
5) Businesses assess customer performance, such as customer satisfaction with products and handling complaints from customers, etc.	3.97	0.88	High
6) Businesses evaluate the performance of internal management processes, such as process quality, planned production, and coordination of various departments, etc.	3.81	0.80	High
7) Businesses measure learning performance and growth, such as employee training, new product design, etc.	3.84	0.92	High
Total	**3.74**	**0.86**	**High**

Table 2 found that the operational process on the operational efficiency of the food industry overall was at a high level, with a mean of 3.74. When considering each item, the mean satisfaction scores, sorted in descending order are as follows: the businesses assess customer performance, such as customer satisfaction with the product and handling complaints from customers had a mean of 3.97, followed by the businesses measure learning performance and growth, such as employee training, new product design had a mean of 3.84, businesses evaluate the performance of internal management processes, such as process quality, planned production, and coordination of various departments had a mean of 3.81. Business measures their operating results using financial data as a basis, such as profit, sales had a mean of 3.79. Businesses use past operating results such as profits, revenues, and expenses to compare with current operating results on a monthly, quarterly, or yearly basis to evaluate and improve their business operation had a mean of 3.74. The business has a comparison. Work processes or methods of operating between one's own business and other businesses to improve the organization, the average value is 3.64 and businesses compare work processes or working methods between their own business and other businesses to enhance their organizational efficiency had a mean of 3.42, respectively.

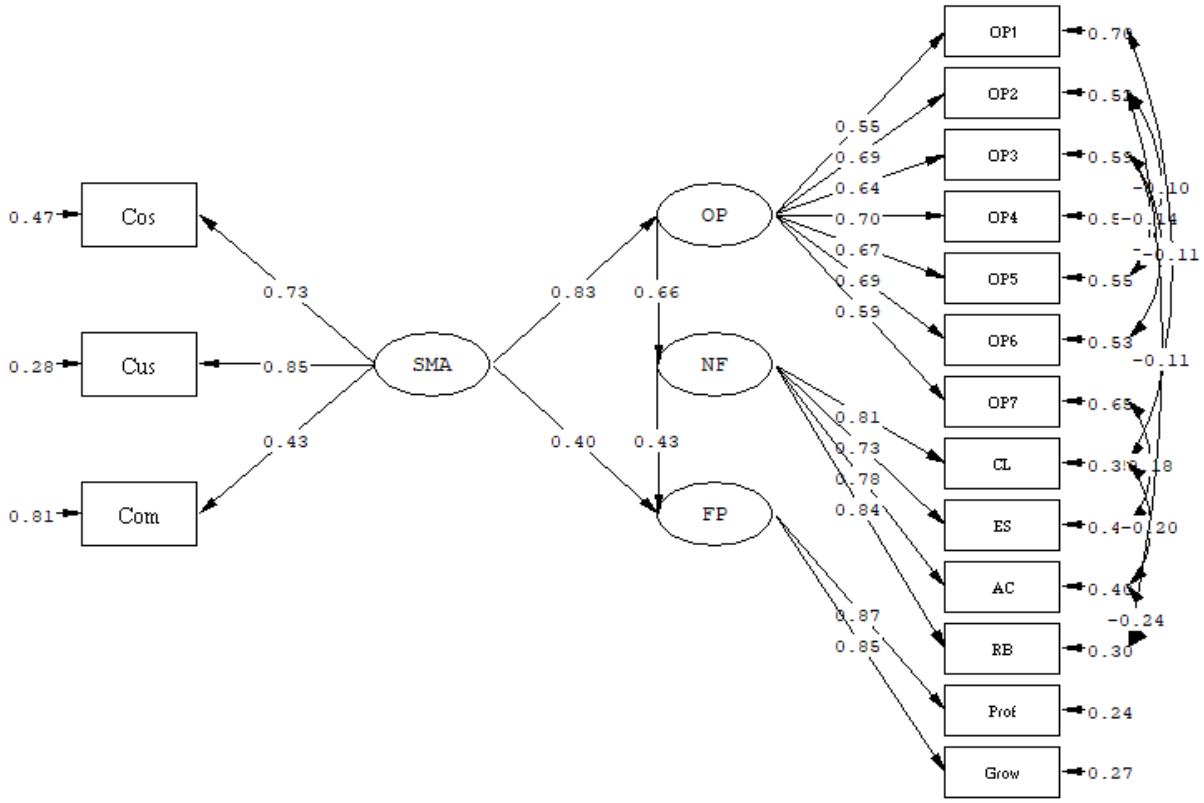
Level of Opinions Regarding Operational Efficiency towards Enhancing Performance Efficiency of the Food Industry

Table 3 Opinions regarding operational efficiency towards the operational efficiency of the food industry.

Performance	$\bar{x}$	**S.D.**	**Level of Opinion**
Non-Financial Performance	**3.92**	**0.83**	High
Customer Loyalty	4.26	0.68	High
Employee Satisfaction	3.95	0.81	High
Access to Capital	3.41	1.01	Moderate
Business Reputation	4.06	0.81	High
Financial Performance	**3.55**	**0.89**	High
Profitability	3.58	0.86	High
Growth	3.53	0.93	High
Total	**3.74**	**0.86**	**High**

Table 3 Discover the overall level of opinions regarding operational efficiency affecting the operating efficiency of the food industry both non- financial performance and financial performance was at a high level, with a mean of 3.74. Non-financial performance had a mean of 3.92. When considering each item, it revealed that the highest level of agreement was customer loyalty, with a mean of 4.26, followed by business reputation (4.06), employee satisfaction (3.95), and access to capital (3.41), respectively. Financial performance had a mean of 3.55. When considering each aspect, it was revealed that the highest level of agreement was profitability, with a mean of 3.58, followed by growth, with a mean of 3.53, respectively.

Causal Relationships of the Power of Strategic Management Accounting for Enhancing Performance Efficiency of the Food Industry



Chi-Square = 115.02, df = 86, p-value = 0.02, RMSEA = 0.05

Figure 1 Parameters of the causal relationship model of the might of strategic management accounting for the operational efficiency of the food industry (after model adjustment)

Table 4 The Index Values used to check the Consistency of the Causal Relationship Model of the power of Strategic Management Accounting for Enhancing Performance Efficiency of the Food Industry (after model adjustment)

Index	**evaluation**	**Index Values**	**Interpretation**
x^2 Statistic	Significant p-values even with good fit	115.02 (p = 0.02)	Passed
x^2/df	< 3	1.34	Passed
SRMR	> 0.95	0.07	Passed
RMSEA	> 0.08	0.05	Passed
CFI	< 0.08	0.99	Passed
GFI	> 0.90	0.91	Passed

Table 4, the index values used to check the consistency of the model found that the Chi-Square statistic of the model was equal to 115.02 (p-value = 0.02). The Normed Chi-Square index (x^2/df) was equal to 1.34. The Standardized Root Mean Square (SRMR) was 0.07, the Root Mean Square Error of Approximation (RMSEA) was 0.05, the Comparative Fit Index (CFI) was equal to 0.99, and the Goodness of Fit Index (GFI) was equal to 0.91, all of which passed the consistency assessment criteria. Overall results found that the causal relationship model of the might of strategic management accounting for food industry operational efficiency is consistent with empirical data. The next step involves considering the direct effect, indirect effect, and predictive coefficients of the model.

Table 5 Direct Effect (DE), Indirect Effect (IE), Total Effect (TE), and predictive coefficient (R^2) of the causal relationship model of the might of strategic management accounting for Enhancing Performance Efficiency of the food industry

DV	**OP**			**NF**			**FP**		
IV	**DE**	**IE**	**TE**	**DE**	**IE**	**TE**	**DE**	**IE**	**TE**
NF	-	-	-	-	-	-	0.43** (0.11)	-	0.43** (0.11)
OP	-	-	-	0.66** (0.19)	-	0.66** (0.19)	-	0.29** (0.13)	0.29** (0.13)
SMA	0.83** (0.11)	-	0.83** (0.11)	-	0.55** (0.10)	0.55** (0.10)	0.40** (0.13)	0.24** (0.07)	0.64** (0.12)
R^2	0.69			0.44			0.54		

** means statistical significance at level .01, the values shown in ( ) are the Standard Error.

In Table 5, the analysis of financial performance (FP) revealed that the factor exerting the greatest overall effect on financial performance was strategic management accounting (SMA), followed by non-financial performance (NF) and operational processes (OP), with effect sizes of 0.64, 0.43, and 0.29, respectively. All three factors demonstrated a statistically significant positive influence at the 0.01 level. Additionally, it was found that both NF and SMA had a direct effect on FP with effect sizes of 0.43 and 0.40, respectively. Operational processes (OP) and SMA also exhibited a positive effect on FP with effect sizes of 0.29 and 0.24, respectively. When considered together, NF, OP, and SMA collectively accounted for 54 percent of the variance in FP.

When considering NF, it revealed that the factors that the most influence NF include OP, followed by SMA, with effect sizes equal to 0.66 and 0.55, respectively, both of which have a positive influence statistically significant at the .01 level. In addition, it found that OP had a direct effect on NF, with a positive effect size equal to 0.66, and SMA had an indirect effect on NF with a positive effect size equal to 0.55. OP and SMA collectively accounted for 44 percent of the variance in FP.

Conclusion and Discussion

The findings indicate that the food industry holds a high opinion regarding the strategic accounting for operational efficiency, albeit at a moderate level. This aligns with the study conducted by Schulz et al. (2010) observed that organizations facing higher levels of environmental uncertainty tend to implement systems for measuring both financial and non-financial performance. This is consistent with the study of Cinquini & Tenucci (2010), which found that in using benchmarking techniques, companies are searching for competitor best practices to guide improvement, performance, and strategic positioning. Schulz et al. (2010) found that organizations with higher perceptions of environmental uncertainty make executives use a system to measure financial and non-financial performance. Furthermore, Gosselin (2011) found that in organizations dealing with high environmental uncertainty, executives tend to rely on a balanced set of performance indicators. The content analysis results revealed a strong operational focus on factors such as cost management, ingredient freshness, and the ability to consistently and promptly address customer needs. Additionally, a thorough examination of competitors' costs across various sectors and a keen emphasis on service were noted. This operational approach ultimately leads to enhanced efficiency, increased profitability, and sales growth. These findings align with the research consistent with studies indicating that the application of management accounting plays a pivotal role in operational success. This is attributed to its perceived significance in enhancing efficiency and fulfilling

administrative responsibilities, both of which have a direct bearing on an organization's overall goal achievement. (Limchaicharoen, 2017).

The results of testing the causal relationship model, which explores the impact of strategic management accounting on the operational efficiency of the food industry, align with empirical data. Each hypothesis was confirmed, indicating that food industry operations in the three southern border provinces effectively utilize SMA information to plan and enhance competitiveness in both non-financial and financial performance. This is consistent with the research results of Thapayom (2019) which found that the use of SMA techniques in operations significantly correlates with competitive ability and sustainable performance in organizations. Similarly, Abdelraheem et al. (2017) established that strategic cost management aids in cost reduction and supports competitive advantage. They emphasize that strategic costing, a modern accounting approach, provides crucial cost information for management decision-making and contributes to the development of long-term competitive strategies. This underscores that the adoption of strategic management accounting serves as a pivotal factor in organizational management. When accurate and reliable information is employed, it leads to increased profits and positively influences the perception of operational efficiency and organizational management. Executives must choose strategies that align with accounting practices to effectively manage operations and drive organizational performance (Nixon & Burns, 2012). Furthermore, findings by Cinquini & Tenucci (2010) also highlight the significance of benchmarking techniques in guiding companies towards best practices for improved efficiency and strategic positioning. Ahmad & Zabri's study (2016) indicates that the use of non-financial efficiency metrics correlates with internal efficiency, product development, growth, corporate social responsibility, and overall financial performance of the organization. Similarly, Kotane & Kuzmina-Merlino (2012) found that both financial and non-financial management indicators can enhance organizational efficiency.

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