

Influential factors on the implementation of strategic management accounting: A case study of logistics enterprises in Ho Chi Minh City

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KEYWORDS

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ABSTRACT

This study employs both qualitative and quantitative methods by gathering data from 220 survey samples to identify and evaluate the influencing factors on the application of Strategic Management Accounting (SMA) in logistics companies in Ho Chi Minh City (HCMC) amidst Vietnam's transition to a market economy. Through the research, the authors clarify the influencing factors on the application of SMA, namely competition, managerial decentralization, and performance, as well as their respective impacts. Additionally, the study emphasizes the necessity of SMA tools in the context of fierce competition, especially within the logistics industry. Moreover, it proposes several recommendations aimed at enhancing the operational quality of logistics companies in HCMC through the implementation of SMA tailored to this business sector.

1. Introduction

In 2003, the Vietnamese Accounting Law was enacted, recognizing the accounting system comprising Financial accounting (FA) and Management accounting (MA). FA is understood as a system managed by state agencies and must comply with accounting regulations and standards set by the government. In contrast, the application of MA, especially SMA tools, in Vietnamese enterprises largely occurs spontaneously and

voluntarily, depending on the managerial information needs. This practice began when Vietnam transitioned to a market economy, where business competition intensified. Notably, in the logistics industry, given its operational intricacies and financial information requirements, there is a demand for suitable tools to provide regular and timely financial information for management. The question arises as to whether the adoption of modern management tools and practices helps logistics enterprises enhance their competitive capabilities

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and operational efficiency. This research aims to introduce different perspectives on SMA tools in logistics enterprises in HCMC, assessing the impact of various factors on SMA tool adoption. The goal is to provide a basis for managers and policy-makers to promote the development of MA and SMA in local logistics enterprises.

2. Theoretical framework, hypotheses and research model

Simmonds first introduced SMA in 1981, defining it as the use and analysis of accounting information of the company and its competitors to develop and monitor business strategies (Simmonds, 1981). Since then, there has been an increasing number of related studies on SMA being implemented (Bromwich & Bhimani, 1994). Despite numerous studies on SMA, there is no widely accepted formal definition, especially in Vietnam and within the logistics field.

Definitions of SMA vary widely, ranging from multi-stage accounting processes to tools supporting marketing decisions and market development (Dixon, 1993; Foster & Gupta, 1994; Roslender, 1995). In Langfield-Smith's study (2008), SMA is defined as an integrated process between strategic management and cost management, aiming to provide a comprehensive view for managers, helping them understand competition and resource optimization better. Conversely, Cadez and Guilding (2008) propose that SMA not only encompasses the collection and analysis of financial information but also integrates non-financial information to support strategic decisions. This information often relates to competitors, market structure, customers, and emerging technology and market trends. This illustrates the strategic nature of management accounting, going beyond its traditional role of cost control and monitoring (Bhimani & Langfield-Smith, 2007).

In Vietnam, logistics companies are gradually adopting SMA to compete and dominate the market. This field is becoming increasingly important and contributes significantly to the country's development. Despite differences in perspectives, concepts of SMA typically focus on three main factors: orientation towards the company's external environment, long-term orientation support, and the use of financial and non-financial information

in decision-making (Cadez, 2006). The rapid development of technology and the business environment is rendering traditional accounting inadequate (Kaplan, 1992), particularly in HCMC, where competition is intensifying. Researching the factors influencing SMA becomes crucial to promote the development of this method in logistics companies in HCMC, helping them enhance competitive capabilities and operational efficiency in the market economy.

2.1. *The relationship between Competition and SMA*

Competitive factors serve as important indicators of a company's ability to deal with competitors, manage resources, human capital, and product quality, as well as other factors such as services, distribution channels, and pricing. Studies have demonstrated a close relationship between the application of management accounting (MA) and a company's competitive capability (Anh, 2012; Ulrich, 2011). SMA is particularly crucial in shaping and executing business strategies by providing financial information, cost management, evaluating strategic effectiveness, decision support, monitoring and adjusting plans, as well as forecasting and planning for the future (Lan, 2019).

The development of infrastructure and economic renewal policies in Vietnam also contributes to enhancing the competitiveness of companies. Applying SMA is not only a choice but also a crucial requirement for companies to survive and thrive in an increasingly fierce business environment (Nguyen, 2022). In other words, competition drives the application and optimization of SMA, thereby creating a positive feedback loop between improving performance and the competitiveness of enterprises (Tran, 2023). This is not only important for the success of individual companies but also for the overall economic development of HCMC and Vietnam. In a competitive business environment, companies, especially in the logistics sector in HCMC, are increasingly focusing on product diversification, improving quality, and expanding distribution channels to enhance competitiveness and better serve customers. The application of SMA helps companies reorganize their information systems, leverage diverse information sources to

understand and quickly respond to customer needs, thereby enhancing their competitive advantage. Therefore, the following hypothesis is formulated:

Hypothesis 1: The level of Competition impacts the adoption of quality MA in logistics enterprises in HCMC

2.2. The relationship between Hierarchical management and SMA

Hierarchical management is a management approach where decision-making authority is decentralized to lower levels, allowing them more autonomy in planning and controlling activities. This process not only enhances accountability but also improves organizational efficiency. Hierarchical management has a close relationship with SMA, a crucial factor that provides detailed financial information, supports goal-setting, strategic planning, budget management, and evaluates strategic performance.

In the modern business environment, in logistics enterprises, hierarchical management combined with the application of SMA helps managers easily align with common goals and focus. SMA provides financial and quantitative information for managers to have a clearer view of the financial and strategic situation of the company, enabling them to make informed decisions and timely adjustments. It also requires close coordination and communication between management levels and the accounting department to ensure the smooth and effective implementation of strategies.

However, managerial decentralization also brings some challenges, such as difficulties in unifying common goals. To overcome these challenges, effective management tools need to be applied, with SMA playing an indispensable role in providing necessary information and maximizing resource utilization. This helps management levels measure and evaluate the company's operational effectiveness, thereby promoting common goals and improving overall management (Anh, 2012). Hence, hypothesis 2 is formulated.

Hypothesis 2: The level of Hierarchical management in a business impacts the adoption of quality MA in logistics enterprises in HCMC

2.3. The relationship between SMA and Business performance

SMA is a crucial tool that directly influences the operational outcomes of a business, not only through data collection and analysis but also by aiding in shaping and promoting development strategies. In the strategy-building phase, SMA helps assess current financial status, analyze costs, and project operations, establishing a solid foundation for strategic decision-making. During strategy implementation, SMA monitors and evaluates financial performance, provides regular reports, and suggests adjustments when needed, aiming to optimize operations and achieve set objectives. Additionally, SMA plays a vital role in financial resource management, tracking and controlling budgets, costs, and profits, ensuring efficient resource allocation. The success of a business relies not only on financial aspects but also on non-financial aspects, with studies indicating that the application of SMA significantly improves operational efficiency (Davila & Foster, 2005; Hoque & James, 2000).

SMA serves as a measure for the operational outcomes of a business, helping compare the final results with the resources utilized. Investing in SMA, especially in logistics enterprises, is recommended as a way to accurately assess and improve operational efficiency. The relationship between SMA and business performance demonstrates a close connection between financial management, performance evaluation, and strategic shaping, all contributing to the sustainable development and long-term success of the enterprise.

Hypothesis 3: The extent of applying SMA in logistics enterprises affects the Operational outcomes of the business.

3. Research method

3.1. Data

This research utilized statistical figures encapsulating data collected through interviews based on well-structured and pre-planned questionnaires. The research method has advantages and a level of utility that helps the interviewees easily understand and accurately respond to the central focus of the questions. The interviewees were primarily individuals with accounting responsibilities in businesses of various scales. The statistical figures were gathered

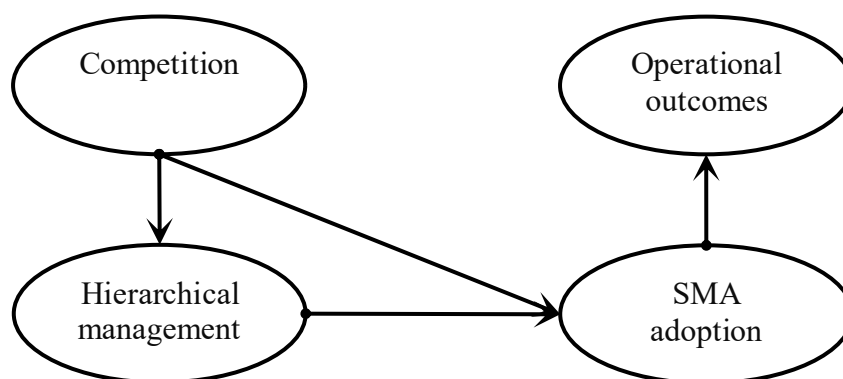


Figure 1. Research model

through meticulous surveys conducted in logistics enterprises in HCMC. A random sampling method was applied, with a total of 220 samples collected and included in the analysis.

3.2. Analysis method

The statistical analysis described was conducted to examine the characteristics, as well as the relationships and correlations among different research variables. Using the collected data, the method of applying structural equation modeling (SEM) with the software AMOS will be implemented to determine the structure reflecting how the influencing factors relate to the use of SMA tools.

As the variables (factors) in the model were constructed based on previous studies, the validation process was carried out through the following steps:

- Confirmatory factor analysis (CFA) was conducted to assess the reliability of the scale, item simplicity, and convergence of each factor;
- Structural equation modeling was used to test the hypotheses. The study utilized commonly used indices such as Chi-square/df, CFI, TLI, RMSEA, and PCLOSE.

A model is considered acceptable when Chi-square/df is less than or equal to 2, GFI, CFI, TLI are greater than 0.9; RMSEA is less than 0.08, and PCLOSE is greater than 0.05 (Hair, Black, Babin, Anderson, & Tatham, 2010).

4. Research findings and discussion

4.1. Reflective model analysis

The CFA results show that the Chi-square/df ratio is less than 2, and GFI, CFI, TLI are all greater than 0.9; RMSEA is less than 0.08, and PCLOSE is greater than 0.05. Therefore, the measured factors are suitable for the collected data. To assess the convergence, reliability, and discriminant validity of the factors, the study uses factor loadings, Cronbach's Alpha coefficient, Composite reliability, and Average variance extracted.

The data from Table 1 indicate that all factor loadings are greater than 0.5; Cronbach's Alpha is greater than 0.7; Composite reliability is greater than 0.6, and Average variance extracted is greater than 0.5; all these indices exceed the minimum threshold to ensure convergence, reliability, and discriminant validity of the factors as proposed by Hair (2010). Therefore, the factors in the study ensure unidimensionality, reliability, and discriminant validity.

The process of conducting structural equation analysis, which reveals the correlational relationships among multiple factors, was used as the basis for identifying multicollinearity cases (if any). This also implies the foundation for determining the structure of factors influencing the application of SMA or the impact of using SMA on the operational outcomes of many businesses. The relationships between these factors are presented in Table 2.

Table 1. Convergent validity, reliability and discriminant validity of factors

Factor	Variable	Factor loading	Cronbach's Alpha	Composite reliability	Average variance extracted
Competition	CT1	0.730	0.890	0.888	0.534
	CT3	0.841			
	CT4	0.885			
	CT5	0.937			
	CT6	0.848			
	CT7	0.752			
Hierarchical management	PC1	0.750	0.892	0.897	0.654
	PC3	0.993			
	PC4	0.932			
	PC5	0.951			
SMA	SMA1	0.795	0.854	0.882	0.527
	SMA2	0.795			
	SMA3	0.931			
	SMA4	0.926			
	SMA5	0.831			
	SMA6	0.651			
Operational outcomes	TQ1	0.750	0.726	0.750	0.605
	TQ2	0.991	0.890		

Table 2. Correlational relationships among research variables

Factor	Competition (1)	Hierarchical management (2)	SMA (3)	Operational outcomes (4)
Competition (1)	0.59			
Hierarchical management (2)	0.12**	0.74		
SMA (3)	0.33**	0.31**	0.58	
Operational outcomes (4)	0.20*	0.19**	0.32**	0.54

Notes: * Statistical significance at $P < 0.05$

** Statistical significance at $P < 0.01$

Through detailed statistical figures in Table 2, it can be observed that there is a significant and precise correlational relationship among all the researched factors (with $P < 0.05$ or $P < 0.01$)

Chi-square = 157.234; df = 128; Chi-square/df = 1.231; GFI = .925; TLI = .973,

CFI = .979; RMSEA = .032, PCLOSE = .959

4.2. Structural equation modeling analysis

Based on the constructed hypotheses, combined

with the correlational relationships among the influencing factors on the application of SMA identified in Table 2, a structural model has been developed. The results of the analysis using AMOS software are presented in Figure 2.

To assess the model's appropriateness, this study relies on widely accepted criteria (Hair et al., 2010) as mentioned above. Through the criteria used to evaluate the model's appropriateness, it is found that the model is entirely suitable for the collected data.

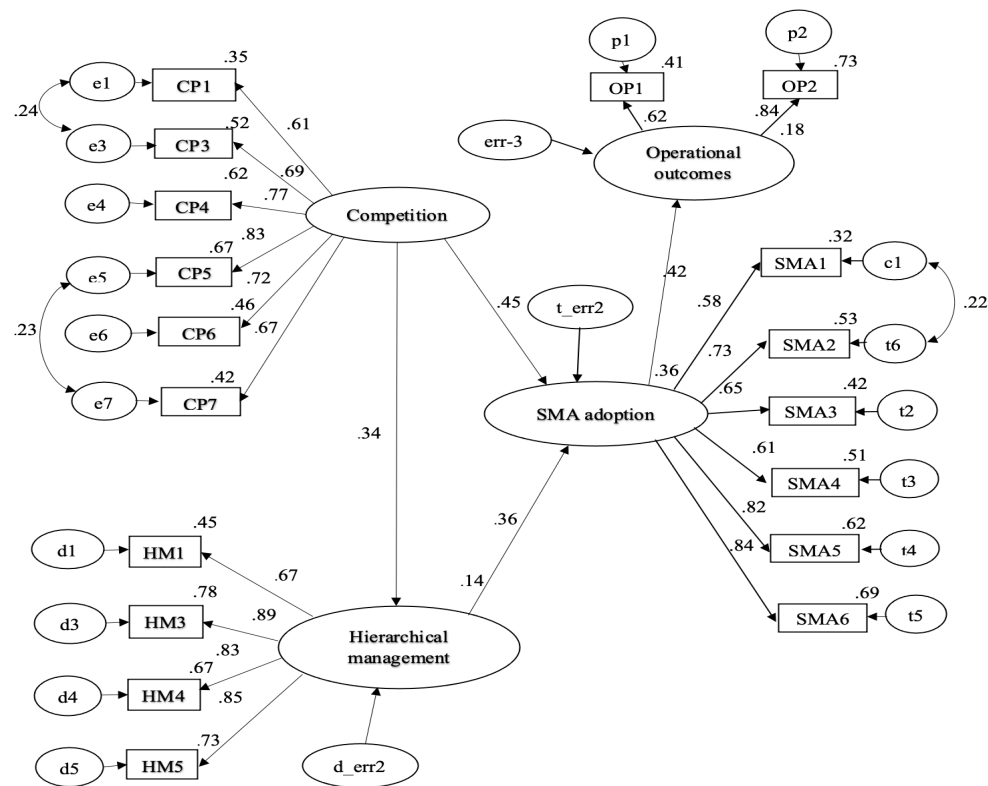


Figure 2. Model of Factors influencing the application of SMA and Operational outcomes

The analysis results indicate that the competition and management hierarchy factors positively impact the use of SMA, and these relationships are statistically significant at the 1% significance level. This demonstrates the acceptance of hypotheses 1 and 2.

The analysis also reveals that the application of SMA is positively correlated with the operational performance of the enterprise, and this correlation is statistically significant at the 1% significance level. Therefore, hypothesis 3 is also accepted. This result aligns with previous research by Abernethy & Bouwens (2005); Chenhall (2003).

5. Recommendations

Several recommendations are proposed regarding the factors influencing the application of SMA in the context of the study of logistics companies in HCMC:

Firstly, for logistics companies in HCMC, SMA is still a relatively new and underutilized tool.

Therefore, management should enhance awareness and skills in applying SMA. Additionally, at the employee level, there is a need for organizing training programs to enhance SMA capabilities. Providing opportunities for employees to participate in specialized courses, workshops, and knowledge-sharing events will help them stay informed about trends and new methods. This, in turn, will strengthen their analytical abilities and decision-making skills related to strategic financial decisions, creating conditions for leveraging SMA tools effectively in decision-making processes to gain a competitive edge in the market.

Secondly, a significant constraint that could affect the business efficiency of logistics companies is the shortage of skilled manpower. Therefore, there is a need to enhance training and skill development for employees through the implementation of specialized training programs on SMA. Specifically, a survey should be conducted to identify the skills and knowledge gaps among employees and managers. Subsequently, training

programs should be developed based on the identified skills, combining both theory and practice to ensure high interaction and immediate application in the workplace. During the training implementation, diverse training methods such as workshops, seminars, e-learning, and mentoring should be utilized. Furthermore, continuous learning and development should be encouraged through participation in seminars, workshops, and learning opportunities from industry experts. Additionally, providing opportunities for employees to participate in real projects where they can apply the knowledge and skills they have learned to solve specific problems is crucial. Moreover, logistics enterprises in HCMC can collaborate and exchange academic knowledge with universities and academies in the area to seek and attract skilled manpower with knowledge and experience in this field to implement and apply SMA most effectively.

Finally, enterprises in the logistics sector need to improve their management information systems primarily by identifying the strengths and weaknesses of the current system through internal assessment and user feedback. This enables them to determine improvement requirements, leading to the development and upgrading of information systems through new investments or upgrades to ERP/SAP systems or specialized accounting software. Integration, automation, and optimization of data collection and processing should be prioritized to ensure data accuracy and reliability by controlling and managing data quality. Additionally, advanced analysis methods should be applied to evaluate and resolve issues, thereby enhancing analytical and forecasting capabilities to provide accurate and timely information for business decisions. Furthermore, attention should be directed towards sustainable development strategy by identifying and pursuing long-term goals through integrating SMA into the company's comprehensive strategic planning and implementation process. Moreover, enterprises must regularly review and update their business strategies based on business analysis and forecasting to ensure alignment with the highly competitive and complex business environment of the industry.

6. Conclusion

Since the period when Vietnam began to integrate into the global market economy, the logistics industry, with a focus on research in HCMC, has witnessed positive changes and actively embraced advanced management methods from around the world. Among them, SMA has received special attention and gradually become an indispensable part of planning and implementing business strategies, especially for companies in the logistics sector.

The research has indicated that in the context of increasing competition, competitive factors and the level of management decentralization significantly influence the extent and manner in which SMA is applied. Specifically, as the level of competition rises, companies in HCMC tend to intensively apply SMA tools to their management and strategic activities. Simultaneously, enhancing management decentralization not only makes organizations more flexible and agile but also promotes the widespread use of SMA, leading to positive results in both financial and non-financial aspects.

Through objective feedback and evaluations from practical experience, it is evident that organizations effectively applying SMA achieve impressive results. This further emphasizes the necessity and value of SMA in business practice. Therefore, leaders of logistics companies need to quickly recognize and invest heavily in the development and decentralization of management, creating the most favorable conditions for the widespread and in-depth application of SMA. This aims to improve business efficiency and optimize profits.

From a broader perspective, there should be special attention from management agencies and policies through the construction and enforcement of policies that encourage and support businesses in adopting SMA. This not only helps companies reap benefits and enhance the use of this tool but also contributes to the overall development of the MA field, specifically SMA in Vietnam, and especially in HCMC. It provides motivation for innovation, improvement and sustainable development in the future.

In this study, due to time and space constraints, with a sample size of 220, it may not fully represent all logistics companies in HCMC. Additionally, not only companies in the logistics sector have the need and ability to apply SMA, so the authors also recognize the importance of expanding the survey sample to other types of businesses in the area as well

as expanding the scope of the survey and research further (in the Southeast, Central Highlands, or Northern regions...), which would be a feasible and more contributory research direction in the future.

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