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APPLICATION OF STRATEGIC MANAGEMENT ACCOUNTING TO COMPANIES LISTED ON HO CHI MINH STOCK EXCHANGE

Tran Van Tung*, Ngo Ngọc Nguyen Thao, Tran Phương Hai

HUTECH University

tv.tung@hutech.edu.vn

Abstract

This research aims to identify and measure the degree of impact of factors on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange (HOSE). This research utilized quantitative and qualitative research methods with the Exploratory Factor Analysis model (EFA). Results showed that there were 5 factors that positively affected the application of strategic management accounting in these companies, ranging from most effective to least effective: Organizational size, Market competition, Business strategy, Participation of accountants in the strategic decision making process and IT level. Based on the results, this research suggests several implications on policies to improve the application of strategic management accounting on these companies.

Key words: *Strategic management accounting, Listed companies, HCMC Stock Exchange*

1. Introduction

Due to weak connections with the organization's strategy, strategic management accounting has been critised for its overconcentration on internal operation and lack of assistance for managers in the strategic decision making process and maintaining competitive advantages. Under pressure from criticisms, several scholars such as Simmonds (1981), Bromwich (1990), Bromwich & Bhimani (1994), Johnson & Kaplan (1987) have conducted many researches highlighting the importance of strategic management accounting in creating competitive advantages for organizations; these researches also pointed out that in modern business environment, strategic management accounting must focus on the organization's external environment, mainly market and customers. According to Đoàn Ngọc Phi Anh (2012), over 220 managers stated that the more intensive the internal competition and the more decentralized management are, the higher the usage of strategic management accounting. Additionally, applying strategic management accounting will improve the organization's performance in both financial and non-financial aspects. Currently, annual reports from listed companies in Vietnam still collect and use information generated by strategic management accounting such as information about the company's investors, suppliers, customers, competitors, product life cycle, value chain, etc. on a fairly simple level. Therefore, it can be stated that "Managers in Vietnam still collect and use strategic information, but the information they used hasn't been processed and analyzed professionally by the tools provided by strategic management accounting". As of 30/7/2022, there are currently 402 listed stocks, 3 closed-end fund certificates, 4 ETF certificates, 74 covered warrants and 43 listed bonds on HOSE. Apparently, HOSE mainly attracts large enterprises, which is clearly showed by the fact that large enterprises account for 79% of the total market capitalization of HCMC's stock market and 74% of the total market capitalization of Vietnam's stock market despite only making up 7.8% of the total listed companies. Therefore, the author chose to research "Factors affecting the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange" in order to improve the application of strategic management accounting for such companies.

2. Foundation Theories

2.1 Literature review

Many domestic and foreign studies have confirmed that in order to make strategic decisions and monitor the implementation of the strategy, applying strategic management accounting is essential. There are many authors focusing on strategic management accounting, such as:

Ansari, Bell & Okano (2007) conducted a study on Japanese suppliers to evaluate the effectiveness of using target costing. The result showed that target costing can reduce manufacturing costs. Moreover, the above results don't only show in Japanese companies as the authors have found evidences of target costing reducing both production cost and labor time in American and Europe manufacturers. In conclusion, "In their research, Ansari, Bell & Okano (2007) stated that successes in Japanese companies are often paired with the application of strategic management accounting, especially target costing."

Langfield-Smith (2008) stated in his research that several strategic management accounting tools have made their ways into the "Language of business" because both the accountants and managers have to participate in the processes and control expenses to manage information. The author pointed out several strategic management accounting tools including target costing, strategic cost analysis, competitors' cost analysis, activity-based costing, management operations, attributable costs, and strategic performance measurement systems. Among them, balanced scorecard and activity-based costing are more widely recognized than the rest.

Fowzia (2011) analyzed studies about the implementation of strategic management accounting and made important findings such as: (1) Strategic management accounting is not based on strategy, (2) Several strategic management accounting tools have a positive impact on improving financial performance and (3) the overall and individual usage of strategic management accounting tools varies from country to country. The authors studying strategic management accounting stated that they were very satisfied with using strategic management accounting tools and their high applicability.

Đoàn Ngọc Phi Anh (2012) conducted a study on factors affecting the application of strategic management accounting in Vietnamese organizations. Results from the research have confirmed that "competition and management style have the same impact on the application of strategic management accounting in Vietnamese enterprises. Specifically: For the competition factor, the results from empirical researches show that businesses will utilize more strategic management accounting tools when businesses operate in the environment with harsh competition. For the management style factor: the author believes that the influence of the management style factor is proportional to the implementation of strategic management accounting. Thus, if the organization has a suitable structure and a fair workload distribution, the responsibility of each individual will increase, especially for the management accounting department. So it is necessary to apply more strategic management accounting tools to achieve organizational targets and goals.

Đoàn Ngọc Quế and Trịnh Hiệp Thiện (2014) have studied the implementation of strategic management accounting in the modern business environment. The main content of the research is to study the formation and development process of strategic management accounting theory 34 years after its creation, showing the necessity of strategic management accounting theory in the modern business environment and considering the possibility of applying strategic management accounting theory to enterprises in Vietnam from the perspective of management accounting lecturers. In the topic, the author has analyzed the impact of changes in the modern business environment on management accounting, thereby proving that constructing strategic management accounting theories is necessary and suitable for the changes in the business environment

Đỗ Thị Thanh Hương and Lê Trọng Bình (2016) have conducted a research on the concept and development of strategic management accounting. According to the research results, the concept of strategic management accounting still does not meet the requirements. Many studies also want to produce more results in order to fill the gap between the definition and future development of management accounting strategy concepts. The inconsistency in strategic management accounting concepts also negatively affects the establishment of strategic management accounting systems in enterprises. Additionally, the technology factor also needs to be considered when applying strategic management accounting in organizations.

Nguyễn Thị Thanh Loan (2016) conducted a study on the connection between strategic management accounting and management control systems in enterprises in Vietnam. The study once again confirms that strategic management accounting is a part of management accounting as organizations can use it to support the creation, selection, implementation and evaluation of organizational strategies, to allocate resources efficiently and to collect financial and non-financial information from both the internal and external environments of the organizations. The topic focuses on clarifying the benefits of applying strategic management accounting and the importance of strategic management accounting in the management control system of the organization. For strategic management accounting to be effective, strategic management accountants must recognize the challenges and skill required for the management control system to be suitable and effective. Additionally, the results also reflect the current situation of applying strategic management accounting in organizations in Vietnam based on several published studies, provide a conclusion and specific recommendations to enhance awareness about the role of strategic management accounting for managers and accountants, thereby contributing to the application of strategic management accounting for organizations.

Samuel Nduati Kariuki et al (2016) studied the application of strategic management accounting in manufacturers in Kenya. With contingency theory as the basis, they identified three variables related to the application of strategic management accounting: competition intensity, advanced manufacturing technology, and company life cycle. The results suggest that the intensity of competition in the industry and the use of advanced manufacturing technology have an impact on the implementation of strategic management accounting in manufacturers in Kenya

2.2 An overview of strategic management accounting

2.2.1 Definition and characteristics of strategic management accounting

Strategic management accounting is considered as a conjunctional approach between strategic management and accounting, which is understood as accounting that focuses on managing business strategies for enterprises. Strategic management accounting was first mentioned by Simmonds (1981), since then many studies related to strategic management accounting have been conducted (Bromwich, 1990; Ward, 1992; Shank, 1993; Roslender and Hart, 2003; Langfield-Smith, 2008; Ma & Tayles, 2009). However, there is still no official concept of strategic management accounting that is widely accepted.

According to Cadez & Guilding (2008), strategic management accounting is used for collecting, processing, analyzing and providing information for planners to strategize, make decisions and monitor the process, with the goal of contributing to the necessary strategic management. In contrast to traditional management accounting activities applied internally in organizations, strategic management accounting activities are applied more externally and are more future-oriented. They are multidimensional and take both financial and non-financial measurements into consideration, therefore strategic management accounting activities can filter out strategic information such as customers, competitors, markets and the external environment in general, which allows organizations to create and gain competitive advantages, improving the efficiency of the organization

According to Langfield-Smith (2008), strategic management accounting has 3 characteristics: Firstly, strategic management accounting focuses on information collected externally, mainly competitors from the same industry. This fact suggests that when applying strategic management accounting, it is necessary to pay attention to the size and characteristics of the organizations. Secondly, strategic management accounting uses both financial information (revenue, manufacturing costs, profits, rate of return, etc.) and non-financial information (product quality, market share, customer satisfaction, employee loyalty, etc.) and thirdly, strategic management accounting is designed for long-term cycles in organizations.

2.2.2 Functionality and mission of strategic management accounting

According to Simmonds (1981), strategic management accounting is a fairly completed strategic management tool for organizations. The primary task for strategic management accounting is to collect data from marketing, manufacturing, and other functions including accounting and finance on organizational levels to determine the company's strategic business unit. For example, this information will be about targeted customer groups, technologies adopted by the units, competitors, pricing policies. Collecting external information helps an enterprise to plan for changes beyond its control such as new competitors entering the market or threats from alternative goods and services competing for the enterprise's market share. Additionally, information from strategic management accounting also helps enterprises develop and implement strategies with the lowest cost in their business activities as well as helping managers forecast the growth of the economy so their enterprises can acquire more market share. Enterprises can also create a distinctive competitive advantage compared to competitors in the same industry. Strategic management accounting can also help enterprises select certain fields to improve profits on and reduce wasteful activities.

2.2.3 Some basic strategic management accounting contents

Cinquini & Tenucci (2010) listed the content of strategic management accounting in 5 groups with 19 tools as follows: strategic cost management; customer relationship management; supplier relationship management; competitiveness management; strategic decision making, controlling, and performance evaluation.

Firstly, strategic cost management includes:

Activity-based costing/Activity-based management (ABC/ABM): According to Hasen & Mawen (2012b), activity-based costing is a model of assembling costs for resources by activities and allocating costs for such activities to each department based on the activities usage of that department. The main goal of ABC is to help managers allocate indirect costs more accurately. Activity-Based Management (ABM) is a systematic approach that focuses on improving activities with the goal of improving profitability through enhancing customer value.

Life-cycle costing (LCC): According to Wilson (1995), life-cycle costing is the total cost of a product type for each stage of its life cycle, starting from the design stage, introduction stage to the growth stage, the maturity stage and finally the decline stage. Wilson (1995) notes that, instead of estimating yearly costs, time should be spent calculating costs occurring in each stage of the product life-cycle. The goal when determining life-cycle costing is to help managers implement appropriate business strategies for each stage of the product life-cycle.

Quality costing (COQ): According to Guilding et. al. (2000), another strategic guiding approach to cost management is quality cost analysis. Whether it's just perception or reality, product or service quality can be a competitive advantage for an organization. Quality costs include costs to ensure that products and services meets customer needs. Such costs are classified into three groups: prevention costs, appraisal costs and damage costs. Managers can track these costs to ensure an optimal level of quality costs. The purpose of identifying and classifying quality costs is to help managers predict, measure and analyze costs to ensure long-term effectiveness. Quality cost is also a measure for managers' efforts in the quality management process.

Target costing: Target costing is determined by the target selling price of the product/service minus the target profit of that product/service. The target selling price is understood as the selling price determined by the market, or the price that customers are willing to pay to buy a new product that is unavailable on the market. The target profit is set based on the strategic plan of the enterprise. Target costing is about designing products that satisfy cost goals right from the research and development stage, rather than trying to reduce costs in production stages

Value chain costing: Built from the value chain analysis model of Porter (1985), Shank & Govindarajan (1991) proposed accounting using the value chain model. Value chain cost accounting is "determining costs by each activity in the value chain from the manufacturing stage to the distributing stage, not by factory and manufacturing process like the traditional accounting method, to help enterprises focus on improving activities to create additional value for the customers and increase profits for the enterprises.

Kaizen costing: Kaizen is a theory of continuous improvements, in which small incremental changes are implemented in a long-term process to achieve goals effectively. Kaizen costing is the systematic cost reduction goal that the management department sets for each manufacturing stage and empowers employees to find continuous improvement solutions to achieve the target goals. Then, management accountants will compare the difference between the target Kaizen costing with the actual level of cost reduction achieved to find solutions in case the Kaizen cost target is not achieved

Environmental cost: Environmental cost management is the process of identifying, measuring and allocating environmental costs for the management process, make financial decisions and provide environmental information for all related parties. Environmental costs are divided into two groups. External environmental costs are costs for damage caused by the organization to the environment for which current or future governmental regulations have not required the organization to be legally responsible, or have financial obligations for the damage yet. Internal environmental costs are costs that an organization is obliged to spend in order to prevent, plan, implement, control and fix damage caused to the environment to protect the environment from being negatively impacted by the organization's business activities.

Secondly, customer management: Customer profitability analysis is used to strategically segment and target customers, markets, and distribution channels. This method compares the revenue earned from a customer or customer group with all the costs involved to achieve such revenue.

Thirdly, supplier management includes:

Supply chain management: Supply chain management is about tracking the flow of products/services from the original suppliers to the end-users. The goal of supply chain management is to build strong relationships with customers, suppliers, cost managers, and evaluate performance related to customers and suppliers, speeding up the time needed to market new products

Supplier performance management: Supplier performance management is about managing relationships with suppliers, analyzing costs related to each supplier to develop and strengthen the relationship with suppliers, limiting the costs related to the suppliers, reducing inventory costs and improving efficiency in the manufacturing cycle.

Just-in-time Inventory Management: the JIT system was created based on the proposal from the Japanese company Toyota in the 1990s. With JIT, raw materials are received in time to go into the manufacturing process, products are then manufactured in time to be put on sale and finally finished products are transported to customers in time. Although it is difficult for companies to achieve such perfect timing in the real world, by applying JIT, companies can reduce inventory to assets ratio, reduce costs that do not create value added and increase the efficiency of capital management.

Fourthly, competitiveness management includes:

Competitors' cost analysis: According to Ward (1992), competitors' cost analysis focuses mainly on analyzing competitors' cost structure to consider the sensibleness of the own organization's cost structure. There are many different sources of information that can be collected from competitors. The authors highlighted methods for analyzing competitor costs, such as analyzing competitors' facilities, the size of the economy, government relations, and manufacturing technologies. Furthermore, Ward (1992) also identified indirect sources of competitor information such as comparing customers and suppliers the organization and competitors have in common as well as employees who formerly worked for competitors.

Competitive positioning analysis: According to Simmonds (1986), analyzing competitive positioning provides businesses a more comprehensive approach to assess competitors. This strategic management accounting tool focuses on regularly analyzing competitors' revenue trends, market share, quantity and unit price, ROA and annual reports. Based on such information, a company can assess its position in relation to other competitors to create and manage its strategies.

Competitor performance analysis: Moon & Bates (1993) argue that information from public financial statements such as annual reports, which include trends in sales and profits, movements in assets and liabilities, are important in the competitor analysis process. Detailed strategic information will be analyzed using information obtained from competitors' public financial statements. The analysis will help managers compare the results of their enterprise with competitors in the same industry or with enterprises in other countries more easily.

Fifthly, strategic decision making, controlling, and performance evaluation include:

Pricing Strategy: Based on the competitive advantages that the product has, whether it be an advantage of a low-cost production stage, an advantage of product characteristics, or the stage of the product life-cycle, managers can create different pricing strategies. Managers need to identify factors affecting the pricing of the product such as market positioning, costs, customer value, competitors' behaviors, legal, political or ethical factors, etc. to create appropriate pricing strategies.

Brand valuation: Brand valuation is a tool to calculate the economic value of a brand which would enable managers to create strategies and estimate the importance of the proposed strategies. In other words, brand valuation is a process of synthesizing and measuring the present and future economic value of a brand.

Benchmarking: Benchmarking is the process of analyzing, comparing and applying better practical experience to achieve higher competitiveness. Based on the targets being compared, benchmarking can be divided into many types. But in overall, the goal of Benchmarking is to help the organization analyze its competitive position and strengths compared to its competitors. This technique involves identifying the best solutions and comparing the organization's performance with an ideal benchmark to improve the organizations (Cadez & Guilding, 2008; Cinquini & Tenucci, 2010).

Measuring intellectual capital: In the knowledge economy, organizational intellectual capital is one of the main sources of competitive advantages for organizations. According to Edivinsson and Malone (1997), intellectual capital consists of three elements: human capital, relationship capital and structural capital. The goal of intellectual capital accounting is to measure and report organizational intellectual capital to help managers monitor and manage intellectual capital in organizations.

Balanced scorecard: According to Cinquini & Tenucci (2010), results must be considered from both financial and non-financial aspects to establish an integrated performance measurement system. The Balanced Scorecard system is a comprehensive performance measurement system that translates the organization's vision and strategy into specific goals, measures and action plans in four aspects: financial, customers, internal business processes, and learn and grow. The combination of these four aspects, shown through a strategic map, will be an important foundation for implementing the BSC model. The measurements used in BSC include both financial and non-financial measurements. The main goal of BSC is to create a performance measurement system for competitive management.

3. Methodologies And Research Models

3.1 Methodologies

3.1.1 Research design

Qualitative Research: Qualitative research is a type of exploratory research. Qualitative research projects are carried out with a small group of research subjects, where samplings are selected by the theoretical sampling method. (Nguyen Dinh Tho, 2013). The theoretical sampling process is carried out through discussions with experts to collect the necessary data

Quantitative research: Using Cronbach's alpha to test the consistency and correlation of question in the survey; Exploratory factor analysis (EFA) was utilized to test influential factors and identify factors that are considered appropriate; simultaneously, multivariable linear regression analysis was also employed to identify factors and the level of impact each factor have on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange. Through a review of research documents and expert consultation, combined with group discussion method, the authors were able to identify 5 factors with 20 observed variables that have an impact on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange.

3.1.2 Data analysis method

Primary data: The author collected primary data by interviewing experts. After collecting opinions, comparing them with relevant research results and discussing with experts, an agreement was reached to add, adjust, and keep observed variables for the measurement and primary data of the research model.

Secondary data: The author collected data through the method of sending questionnaires to individuals who were able to participate directly in the management accounting process of companies listed on Ho Chi Minh stock exchange. The questionnaire included the adjusted observed variables that were more appropriate and realistic, and could help measure the impact of the factors on the application of strategic management accounting in listed companies in the Ho Chi Minh Stock Exchange. The questionnaire uses a 5 point Likert scale: 1 - Strongly disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly agree

3.1.3. Data collection

According to Bollen's (1989), the minimum sample size is 5 observations for a question to be estimated. Accordingly, this study has 20 questions, so the minimum sample size is 20x5 = 100. To achieve the minimum of 100 observations, the author sent 500 questionnaires from June 2023 to July 2023 for managers of companies listed on Ho Chi Minh stock exchange, including representatives for the board of directors, chief accountant, general accountant. The results obtained 462 votes, of which 17 were rejected due to invalidity (mainly due to lack of information). Therefore, the number of observations included in the analysis was 445 votes, meeting the minimum sample size requirement for the research

3.1.4. Data processing and analysis

The data obtained from the questionnaire will be imported into SPSS 26.0 and Excel 2010 for processing, then it will be checked, encrypted and cleaned, and then analyzed through various steps: Scale reliability test by calculating using Cronbach's Alpha; exploratory factor analysis (EFA): to identify the appropriate factors in preparation for the next analysis; multiple regression analysis: to determine the degree of impact of each factor on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange.

3.2. Research model: Based on foundation theories including contingency theory, agency theory and information processing theory, at the same time inheriting research results of previous studies, discussing with experts and interviewing them for their opinions on factors impacting the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange, the author got the following results:

Independent variables: Organization size variable has 3 measurements, Market competition variable has 6 measurements, the Business strategy variable has 3 measurements, the Participation of accountants in strategic decision making variable has 4 measurements and the IT level variable has 4 measurements.

Dependent variables: the application of strategic management accounting in listed companies in the HCMC Stock Exchange includes 3 measurements.

The measurements of the research variables are measured using a 5-point Likert scale with: 1- Strongly disagree; 2- Disagree; 3- Neutral; 4- Agree; 5- Strongly agree.

To identify the importance and influence that factors have on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange, the following hypotheses are constructed:

H1: The Organization size factor has a positive (+) impact on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange.

Hypothesis H2: The Market competition factor has a positive (+) impact on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange.

Hypothesis H3: The Business strategy factor has a positive (+) impact on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange.

Hypothesis H4: The Participation of accountants in strategic decision making factor has a positive (+) impact on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange.

Hypothesis H5: The IT level factor has a positive (+) impact on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange.

4. RESEARCH RESULTS

4.1 Reliability of the measurements analysis:

The results in Table 1 show that all measurements have a Cronbach alpha greater than 0.6. the corrected item-total correlation of all observed variables are greater than 0.3. Cronbach alpha if item deleted are all lower than the Cronbach alpha of measurements. Therefore, all 23 observed variables of 5 independent variables measurements and 3 observed variables of 1 dependent variable measurement are reliable.

Table 1. Results from cronbach alpha analysis

Thang đo thành phần - Variables	Number of original observed variables	Cronbach alpha	Corrected item-total correlation	Cronbach alpha if item deleted	Number of observed variables remaining
Organization size	3	0.806	≥ 0.674	≤ 0.738	3
Market Competition	6	0.850	≥ 0.698	≤ 0.833	6
Business strategy	3	0.735	≥ 0.553	≤ 0.634	3
The participation of accountants in strategic decision making	4	0.825	≥ 0.633	≤ 0.774	4
IT level	4	0.883	≥ 0.671	≤ 0.830	4
The application of strategic management account in listed companies in the HCMC Stock Exchange	3	0.812	≥ 0.799	≤ 0.856	3

4.2 Exploratory factor analysis (EFA) results:

The results after conducting EFA on independent variables showed that 5 factors were extracted as expected, all 20 observed variables have Factor Loading larger than the permitted standard (Factor Loading > 0.5). Bartlett's test also showed that there was a correlation between the variables in the population (significance level = 0.000 < 0.05) with KMO = 0.874 (0.5 < KMO < 1). The cumulative variance was 76.496, which means it could account for 76.496% of the variability of the data.

The results after conducting EFA on dependent variables showed that all 3 observed variables had Factor Loading larger than the permitted standard (Factor loading > 0.5). Bartlett’s test also showed that there was a correlation between the variables in the population (significance level = 0.000 < 0.05) with KMO = 0.753 (0.5 < KMO < 1). The cumulative variance extracted was 85.164, which means it could explain 85.164% of the variability of the data.

Table 2. Explatory factor analysis (EFA) results

Factor	KMO	Significance level	Cumulative variance	Factor Loading
1. Independent variables	**0.874**	**0.000**	**76.496%**	
Organization size				0.806 – 0.850
Market competition				0.811 – 0.901
Business strategies				0.676 – 0.818
The participation of accountants in strategic decision making				0.739 – 0.826
IT level				0.781 – 0.854
2. Dependent variables	**0.753**	**0.000**	**85.164%**	
The application of strategic management account in companies listed on Ho Chi Minh stock exchange				0.810 – 0.834

4.3 Regression analysis results and hypothesis testing

Table 4. Model suitability analysis

Model	R	R^2	Adjusted R^2	Std. error of estimation	Changes in Statistics				Coefficient
					R^2 after adjustment	F after adjustment	Degree of Freedom 1	Degree of Freedom 2	Durbin-Watson
	0.901[a]	0.811	0.809	0.31295	0.811	340.822	5	396	1.510

The above table shows that the correlation coefficient value is 0.901 > 0.5. Therefore, this is a suitable model to evaluate the relationship between dependent and independent variables.

Additionally, the adjusted R^2 was 0.809. This means that the linear regression model fits with 80.9% of the data, explaining 80.9% of all variables of the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange, the remaining 10.1% is from other factors' errors. The Durbin Watson test = 1.510, in the range of $1 < D < 3$ so there was no autocorrelation of residuals.

Results from Table 4 suggested that all 4 independent variables had a positive impact on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange with a 95% statistical significance level. The standardized regression coefficient of variables from high to low were as follows: Market competition (CTTT) (standardized beta coefficient = 0.284), followed by Organization size (QMCT) (standardized beta coefficient = 0.258), Business strategy (CLKD) (standardized beta coefficient = 0.244), Participation of accountants in strategic decision making (KTTG) (standardized beta coefficient = 0.243) and finally IT level (CNTT) (standardized beta coefficient = 0.192). Now the standardized regression equation for this model can be written as follows:

Standardized regression equation:

Strategic management accounting = 0.284*CTTT + 0.258*QMCT + 0.244*CLKD + 0.243*KTTG + 0.192*CNTT

Table 5. Regression coefficient of the research model

Model		Unstandardized coefficient		Standardized coefficient	Student's t-distribution	Statistical significance	Multicollinearity test	
		B	Standard error	Beta			Tolerance	VIF
1	(Constant)	-1.576	0.134		-11.719	0.000		
	QMCT	0.302	0.031	0.258	9.724	0.000	0.678	1.475
	CTTT	0.396	0.037	0.284	10.740	0.000	0.679	1.472
	CLKD	0.274	0.030	0.244	9.166	0.000	0.671	1.490
	KTTG	0.253	0.029	0.243	8.628	0.000	0.601	1.663
	CNTT	0.207	0.029	0.192	7.036	0.000	0.637	1.571

When determining tstat and $t\alpha/2$ of the variables in the table to measure the reliability, all independent variables satisfied the requirements and the Sig values all showed a high reliability of < 5%. Additionally, all VIF coefficients of Beta coefficients were less than 10, showing that there were no multicollinearity phenomenon happening.

5. Conclusion and recommendations

5.1 Conclusion

Based on analysis of the research model, the authors were able to confirm the 5 factors positively affecting the implementation of strategic management accounting in companies listed on Ho Chi Minh stock exchange. Meanwhile, Sig. < 0.05 suggested that all variables were statistically significant and all hypotheses were approved and confirmed.

Table 5. Listing the impact of factors

Independent variable	Variables	Standardized regression coefficient	Sig value
QMCT	Organization size	0.258	0.00<0.05
CTTT	Market Competition	0.284	0.00<0.05
CLKD	Business strategiy	0.244	0.00<0.05
KTTG	Participation of accountants in strategic decision making	0.243	0.00<0.05
CNTT	IT level	0.192	0.00<0.05

5.2 Recommendations

Based on the results, all 5 factors have positive impact on the application of strategic management accounting in companies listed on Ho Chi Minh stock exchange and the level of impact of these factors can improve the application of strategic management accounting for companies in the future, the authors offer several management recommendations as follows:

Firstly, enterprises have to create business strategies to satisfy the needs of improving market competitiveness for the enterprise. Results show that market competition, in terms of raw materials, human resources, sales and distribution, product quality, product diversity, price, production line, etc. has a promoting effect and encourages more businesses to apply strategic management accounting. Moreover, managers of enterprises are more aware of the importance of improving competitiveness in order to create suitable business strategies in each stage of the enterprise's development and at the same time, serve as a basis for businesses to create partnership in different regions and areas to improve their competitiveness in the ever-changing global business environment.

Secondly, companies need to pay attention to expanding their size because the larger company size is, the more successful the application of strategic management accounting will be. As the scale and size of the business increase, it is easier for enterprises to access resources and requirements needed to apply newer and more detailed management and cost calculation tools to support the enterprise's growth. Additionally, the increase in scale can be done through cooperating, merging, consolidating and business cooperation to become large domestic and international enterprises.

Thirdly, enterprises need to further focus and improve the participation of accountants in strategic decision making. Managers should acknowledge the importance of the role accountants play in the enterprise, provide compensation policies for those who have been, and will be working for the enterprise and have assistance policies to encourage accountants to participate in training courses delivered by associations to update and use modern strategic management accounting tools to better suit their enterprises' operating models. Moreover, accountants must constantly update and improve their knowledge because the possibility for the application of strategic management accounting increases when the staffs are qualified and have a good understanding of management accounting, in general, and strategic management accounting, in particular. Additionally, accountants must provide their managers with feedbacks so the application of strategic management accounting is in accordance with their enterprises' business practices and the characteristics of their industry

Finally, businesses need to pay more attention to the application of technologies in production and business activities as well as the IT management system of the organization. For production technologies, it is necessary for companies to constantly invest in innovation, acquire new technology to increase productivity. Apparently, modern production lines require large financial investments. Therefore, the role of strategic management accountant is to make forecasts of capital investment, acquire and utilize all accessible source of capital to ensure the technology used by the organization is always up-to-date. For the IT management system, managers must promote the use of IT in the organization's accounting and management system to provide information for the decision making process. Enterprises must invest in effective information systems capable of collecting, analyzing, storing and providing managers with information so they can make appropriate and timely decisions. Depending on the financial capabilities of the organization, the design of their accounting software may vary: it can be separated between the accounting software and the strategic management accounting system or integrated between the traditional financial accounting system and the strategic management accounting system.

References

Ansari, S., Bell, J., & Okano, H.(2007). *Target Costing: Uncharted Research Territory. In C. S. Chapman, A. G. Hopwood & M. D. Shields (Eds.).* Handbook of Management Accounting Research : Elsevier Ltd.507-530

Bollen, K.A. (1989) Structural Equations with Latent Variables. John Wiley and Sons, Inc., New York.

Bromwich, M. (1990). The case for strategic management accounting: the role of accounting information for strategy in competitive markets. *Accounting, Organisation and Society*, *15*(1/2), 27-46.

Bromwich, M. & Bhimani, A. (1994). *Management accounting pathways to progress*. Chartered Institute of Management Accountants, London.

Cadez, S. & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, Organisations and Society*, 836-873.

Cinquini, L. & Tennuci, A. (2010). Strategic management accounting and business strategy: a loose coupling? *Journal of Accounting and Organisational change*, 228-259.

Đoàn Ngọc Phi Anh (2012). Các nhân tố ảnh hưởng đến việc vận dụng kế toán quản trị chiến lược tại Việt Nam. *Tạp chí Phát triển kinh tế,* số 264, Tháng 10 năm 2012

Đỗ Thị Thanh Hương và Lê Trọng Bình (2016). Lấp đầy khoảng trống trong khái niệm và sự phát triển của kế toán quản trị chiến lược, *Tạp chí tài chính,* số 05/2016, 33-38

Edivinsson, L., & Malone, M.S. (1997). *Intellectual Capital: The Proven Way to Establish Your Company's Real Value by Measuring Its Hidden Value*. Piatkus, London

Fowzia, R. (2011). Strategic management accounting techniques: Realtionship with business strategy and strategic effectiveness of manufacturing organizations in Bangladesh, *World Journal of Management, 3 (2),* 54-69.

Guilding, C., Cravens, K. S. & Tayles, M. (2000). An international comparison of strategic management accounting practices. *Management Accounting Research*, *11* (1), 113–135.

Johnson, T. H., & Kaplan, R. S. (1987). *Relevance lost: The rise and fall of management accounting*. Boston: Harvard Business School Press.

Langfield-Smith, K. (2008). Strategic management accounting: how far have we come in 25 years? *Accounting, Auditing and Accountability Journal*, 21, 204-228.

Ma, Y, & Tayles, M (2009). On the emergence of strategic management accounting: An institutional perspective. *Journal Accounting and Business Research, 39(*5*)*, 473-495.

Moon, P., & Bates, K. (1993). Core analysis in strategic performance appraisal. *Management Accounting Research*, 4, 139-152.

Nguyễn Thị Thanh Loan (2016). Kế toán quản trị chiến lược với hệ thống kiểm soát quản lý tại các doanh nghiệp ở Việt Nam. *Tạp chí khoa học công nghệ,* số 34. 2016

Porter, M. (1985). *Competitive advantage: creating and sustaining superior performance*. Free Press, New York.

Samuel Nduati Kariuki & Charles Guandaru Kamau (2016). Organizational contingencies influencing the adoption of strategic management accounting practices among manufacturing firms in Kenya. *International Journal of Advanced Research in Management and Social Sciences, 5(*4*),* 167-182

Shank, J., K. & V. Govindarajan, V. (1991). *Strategic cost management and the value chain. The Handbook of Cost Management Accounting, B. Brinker, ed*., New York: Warren, Gorham and Lamont.

Shank, J. K., & Govindarajan, V. (1993). *Strategic cost management*. New York: The Free Press.

Simmonds, K. (1981). *Strategic management accountin. Management Accounting*, CIMA (April), pp.26-29.

Simmonds, K. (1986). The accounting assessment of competitive position. *European Journal of Marketing*, 20, 16-32.

Roslender, R. & Hart, S. (2003). In search of strategic management accounting: theoretical and field study perspectives. *Management Accounting Research*, 16, 255-279.

Ward, K. (1992). *Strategic management accounting*. Oxford: Butterworth-Heinemann.

Wilson (1995), An Integrated Model of Buyer-Seller Relationships, An Integrated Model of Buyer-Seller Relationships, Journal of the Academy of Marketing Science, First Published September 1, 1995 Research Article, https://doi.org/10.1177/009207039502300414

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HO CHI MINH CITY UNIVERSITY OF ECONOMICS AND FINANCE

141 - 145 Dien Bien Phu, Ward 15, Binh Thanh District, HCM City

Website: uef.edu.vn - Hotline: (028) 5422 6666 * (028) 5422 5555