

**MINISTRY OF INDUSTRY AND TRADE  
HANOI UNIVERSITY OF INDUSTRY**



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**STRATEGIC MANAGEMENT ACCOUNTING IN VIETNAMESE  
CONSTRUCTION ENTERPRISES**

Major: Accounting

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**SUMMARY OF DESERTATION IN ACCOUNTING**

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# INTRODUCTION

## 1.1 Rationale for the study

In the context of globalization, digital transformation, and sustainable development (ESG) requirements, the business environment has become increasingly dynamic and highly competitive, requiring managers to make strategic decisions based on multidimensional, timely, and reliable information systems. The critiques of Johnson and Kaplan (1987) and Kaplan (1996) regarding traditional management accounting, which emphasize that existing accounting systems are no longer adequate to support decision making and control in a rapidly changing business environment, have marked a significant turning point in both the thinking and practice of management accounting. In response to this perspective, the Chartered institute of management accountants (CIMA) asserted that “management accounting needs evolution rather than revolution in both thinking and methods.” This viewpoint has led to substantial adjustments in management accounting, thereby laying the foundation for the emergence and development of strategic management accounting (SMA), which adopts a new approach emphasizing the role of accounting information in the formulation, implementation, and control of business strategy.

The construction industry possesses distinctive economic and technical characteristics, creating fundamental differences compared to manufacturing and service industries. Messner (2016) emphasized that industry context is a key determinant in the design of management accounting systems. Specific characteristics of construction activities such as large project scale, long investment cycles, high contractual risks, substantial capital requirements, and complex organizational structures make cost management, cash flow forecasting, and investment efficiency control particularly challenging. Moreover, significant fluctuations in the real estate market, volatility in material prices, and the impacts of the COVID-19 pandemic in recent years have further increased pressure on operational efficiency and competitiveness among construction enterprises. In this context, the application of SMA is essential for construction firms to

position their strategies, optimize resource allocation, and enhance competitive capabilities.

Empirical evidence from Vietnam indicates that the adoption of SMA in construction enterprises remains limited, with a primary focus on project cost management for short-term efficiency and risk control. While these practices support cost control and competitiveness, they fall short in enabling comprehensive strategic analysis and long-term decision-making. Advanced techniques such as benchmarking and the Balanced Scorecard (BSC) are still underutilized. Moreover, the role of accountants in strategic decisions is constrained by limited non-financial expertise, a technically oriented organizational culture, and the lack of integrated data systems incorporating non-financial information.

Existing studies, both domestically and internationally, on SMA have primarily focused on sectors such as manufacturing, tourism, hospitality, and healthcare. Meanwhile, the construction industry which accounts for a significant proportion of GDP, utilizes substantial social resources, and has strong spillover effects on the economy has not received adequate research attention. The lack of in depth studies within the specific context of construction enterprises listed on the stock market has created a gap in both theoretical and practical understandings of SMA in Vietnam.

Based on the above considerations, the author selects the research topic entitled “Strategic management accounting in Vietnamese construction enterprises” for this doctoral dissertation. This study not only contributes to clarifying the theoretical and practical foundations of SMA within the specific context of the construction industry but also identifies the factors influencing the adoption of SMA and evaluates its impact on firm performance. The findings are expected to provide useful scientific evidence for business managers, policymakers, and other stakeholders in enhancing competitiveness and improving managerial efficiency of Vietnamese construction enterprises in the context of international integration and sustainable development.

## 1.2 Research objectives

In order to achieve the overall objective of this dissertation, the study is directed toward the following specific objectives:

- ✓ To systematize and clarify the theoretical foundations of strategic management accounting (SMA), thereby providing a basis for analyzing the current practices and proposing relevant recommendations.
- ✓ To examine and analyze the current state of SMA implementation in Vietnamese construction enterprises, with the aim of evaluating the extent to which SMA techniques are applied in practice and highlighting the necessity of adopting SMA in these firms.
- ✓ To identify the factors influencing the adoption of SMA in construction enterprises, and to test the research hypotheses in order to clarify the relationships between these factors and the level of SMA adoption.
- ✓ To propose policy implications to promote the adoption of SMA in Vietnamese construction enterprises, thereby contributing to enhanced operational performance and strengthened strategic competitiveness.

## 1.3 Research questions

To address the aforementioned specific research objectives, this study is conducted to answer the following research questions:

*Question 1: What constitutes the theoretical framework of strategic management accounting in enterprises?*

*Question 2: What is the current state of SMA implementation, and what factors influence the adoption of SMA in Vietnamese construction enterprises?*

*Question 3: How does the adoption of SMA influence the operational performance of construction enterprises in Vietnam?*

*Question 4: What recommendations should be proposed to promote the adoption of SMA in Vietnamese construction enterprises?*

## 1.4 Research subject and scope

- **Research subject:** This dissertation examines strategic management accounting

(SMA) in Vietnamese construction enterprises.

**- Research scope:**

- **Spatial scope:** The study focuses on Vietnamese construction enterprises listed on three stock exchanges, namely HNX, HOSE, and UPCOM, in order to ensure both feasibility (in terms of infrastructure and human resources) and relevance (in terms of information requirements) for investigating the application of SMA.
- **Temporal scope:** The study has been conducted from July 2023 to the present. In particular, expert interviews were carried out from August 2024 to December 2024 and in September 2025, while the survey was conducted from March 2025 to July 2025.

### **1.5 Structure of the thesis**

The dissertation is structured into three chapters as follows:

Chapter 1: Theoretical foundations of strategic management accounting in enterprises.

Chapter 2: Current practices of strategic management accounting in Vietnamese construction enterprises.

Chapter 3: Recommendations to enhance the adoption of strategic management accounting in Vietnamese construction enterprises.

## **1.6 Contributions of the thesis**

### *Theoretical contributions*

- The dissertation enriches and further refines the concept of strategic management accounting (SMA).
- It systematizes strategic management accounting techniques (SMATs), clarifying the content, functions, and roles of each technique such as attribute based costing, value chain costing, quality costing, benchmarking, and the balanced scorecard (BSC)—in supporting strategic decision making.
- It develops a research model identifying the factors influencing the adoption of SMA in Vietnamese construction enterprises, thereby contributing to the theoretical development of SMA research.

### *Practical contributions*

- The dissertation evaluates the current state of SMA implementation in Vietnamese construction enterprises, enabling managers to better understand the extent of application, as well as the strengths and limitations of SMA practices in these firms.
- It identifies the key factors affecting the adoption of SMA in construction enterprises, thereby providing a basis for firms to improve their management accounting systems in support of business strategy.
- It proposes practical solutions to enhance the application of SMA in Vietnamese construction enterprises, contributing to the improvement of longterm operational performance.

## **CHAPTER 2**

### **CURRENT PRACTICES OF STRATEGIC MANAGEMENT ACCOUNTING IN VIETNAMESE CONSTRUCTION ENTERPRISES.**

#### **2.1. Characteristics of the construction industry affecting the adoption of strategic management accounting in vietnamese construction enterprises**

The construction industry possesses distinctive characteristics that differentiate it from traditional manufacturing and service sectors, thereby requiring specific management information systems. These characteristics create both pressures and driving forces for the adoption of strategic management accounting (SMA) in order to enhance cost management efficiency, decision making, and the competitiveness of Vietnamese construction enterprises.

Key features of the construction industry including project based operations, high levels of risk, intense competition, complex supply chains, and increasing demands for transparency generate a strong need for SMA techniques. These characteristics make SMA an essential management tool, enabling firms to control strategic costs, improve bidding success rates, enhance project performance, manage risks and quality, and strengthen long-term competitive advantage.

#### **2.2. Research methods used to examine the current state of strategic management accounting in vietnamese construction enterprise**

##### **2.2.1 Qualitative method**

To assess the current state of SMA adoption in Vietnamese construction enterprises, this dissertation employs a mixed methods approach, combining qualitative and quantitative methods to provide a comprehensive understanding of SMA practices in reality. Based on the literature review, the study defines the scope of SMA by focusing on strategic management accounting techniques (SMATs). For the qualitative approach, the theoretical review identified 16 SMATs. Subsequently, the author conducted in depth interviews with a group of experts (Group A), comprising five selected scholars who have published research in management accounting, SMA, or finance in the context of construction enterprises. The purpose of these interviews was to evaluate the suitability

of SMATs for application in Vietnamese construction enterprises. The findings from Group A interviews identified a set of SMATs considered appropriate for implementation in Vietnamese construction enterprises.

## **2.2.2. Quantitative method**

### ***2.2.2.1 Research hypotheses and research model***

#### **\* Research hypotheses**

Based on the literature review and underlying theoretical frameworks, the author proposes several factors influencing the adoption of strategic management accounting (SMA) in listed construction enterprises in Vietnam. The research model is developed based on prior studies and further refined to reflect the specific characteristics of listed construction firms in Vietnam. Subsequently, expert consultation was conducted, and the model was adjusted to ensure its suitability to the practical conditions of these enterprises. The research hypotheses are formulated as follows:

*H1: Market orientation has a positive effect on the adoption of SMA in construction enterprises.*

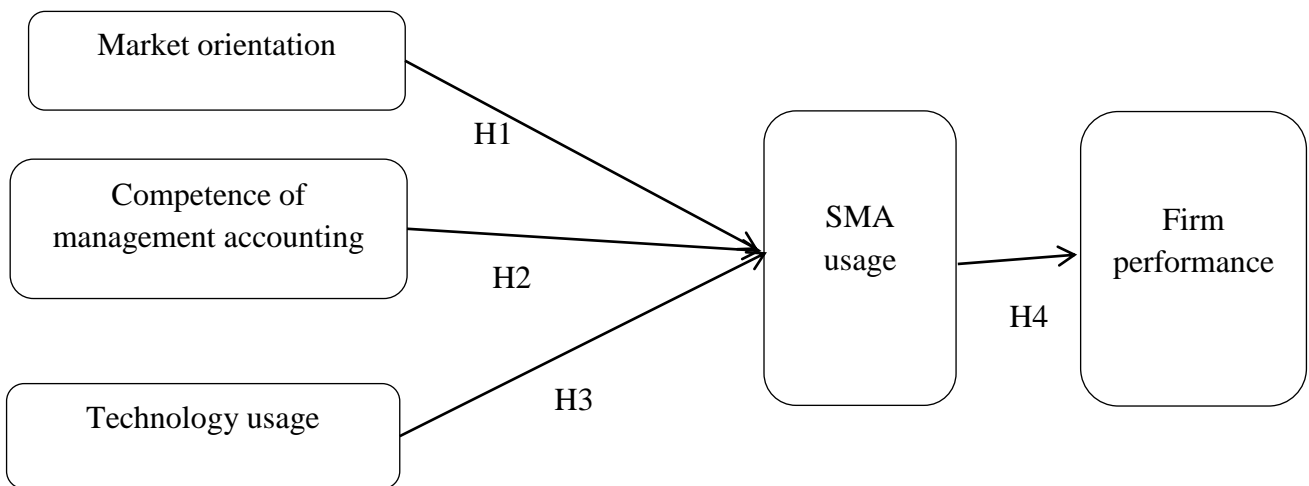
*H2: The professional competence of management accounting has a positive effect on the adoption of SMA in construction enterprises.*

*H3: The use of technology has a positive effect on the adoption of SMA in construction enterprises.*

*H4: The adoption of SMA has a positive effect on the performance of construction enterprises in Vietnam.*

#### **\* Research model**

Based on the theoretical foundations and prior studies, the research model is proposed to examine the factors influencing the adoption of SMA, with appropriate adjustments to the context of Vietnamese construction enterprises. In this model, the independent variables represent the factors affecting SMA adoption in construction enterprises, while the dependent variable is firm performance, with SMA adoption serving as a mediating variable. These relationships are reflected through hypotheses H1, H2, H3, and H4, and are illustrated in the following research model.



**Figure 2.1. Research model**

*Source: Compiled by the author*

### **Research procedure**

To test the proposed theoretical framework, the author conducted a series of analytical steps, including descriptive statistics of the research sample and reliability testing of the measurement scales used in the study. Specifically, the quantitative research procedure was implemented as follows:

For data analysis, SPSS 25 was used for data coding and cleaning. In addition, the author performed descriptive statistical analysis, reliability testing of the measurement scales, and exploratory factor analysis (EFA). Subsequently, validated measurement scales were imported into AMOS 24 to conduct Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) in order to test the research hypotheses.

The specific analytical steps are as follows:

- + Descriptive statistics
- + Reliability analysis of measurement scales
- + Exploratory Factor Analysis (EFA)
- + Confirmatory Factor Analysis (CFA)
- + Structural Equation Modeling (SEM) to test the research hypotheses by examining the relationships among the constructs.

### ***2.2.2.2 Development of measurement scales for factors influencing strategic management accounting***

The research model is developed based on a comprehensive review of SMA studies, particularly the work of Cadez and Guilding (2008), in which SMA is influenced by factors grounded in contingency theory. Building upon and adapting this framework to the context of the Vietnamese construction industry, the proposed model examines the effects of three key factors—market orientation, the professional competence of management accounting staff, and the use of technology—on the adoption of strategic management accounting. This approach ensures the robustness and reliability of the SMA measurement scale, as it captures both the extent to which SMA techniques are applied within enterprises and the involvement of accounting personnel, which is a necessary condition for the effective implementation of these techniques.

### ***2.2.2.3 Descriptive statistics of the research sample***

The purpose of this study is to examine the impact of various factors on the adoption of SMA and its subsequent effect on business performance in Vietnamese construction enterprises. Accordingly, the survey questionnaires were distributed to managers and accountants working in construction enterprises listed on the stock market.

A total of 650 questionnaires were distributed, of which 379 were returned. The questionnaire included screening questions to ensure that respondents were appropriate for the research objectives. After removing invalid responses and flat data, 350 valid observations remained, which constitute the final sample size of the study.

## **2.3 Current use of strategic management accounting techniques in Vietnamese construction enterprises**

To evaluate the current use of SMA techniques in Vietnamese construction enterprises, this dissertation adopts a mixed methods approach, combining qualitative and quantitative methods to provide a comprehensive assessment of the level of adoption in practice.

### **(1) Qualitative research findings**

The results of in depth interviews, conducted until data saturation was achieved, with five academic experts and eleven senior managers from listed construction

enterprises indicate that several SMA techniques are particularly essential in the construction industry context. These include target costing, project life cycle costing, competitor analysis and benchmarking, quality costing, value chain costing, and the Balanced Scorecard (BSC).

## **(2) Quantitative research findings**

Based on 350 valid responses collected from construction enterprises listed on the Vietnamese stock market, the data were processed using SPSS and analyzed through descriptive statistics to determine the extent of application of each SMA technique. The statistical indicators employed include mean, standard deviation, variance, and frequency of use.

Overall, the quantitative findings are consistent with the expert evaluations obtained from the qualitative study. The results indicate that the adoption of SMA in construction enterprises remains at an early stage, primarily focusing on techniques directly related to project cost management, while more comprehensive strategic analysis techniques are still applied to a limited extent. Techniques that support project competitiveness, cost control, and risk mitigation such as target costing (TC), quality costing (QC), and LCC are more widely adopted. In contrast, long-term strategic techniques requiring multidimensional data and advanced management systems such as benchmarking and the BSC remain underutilized. The adoption of SMA is found to depend significantly on accounting capabilities, the use of technology, and the firm's market orientation.

## **2.4 The role of strategic management accounting in enhancing the performance of vietnamese construction enterprises**

The results of the quantitative analysis highlight the significant role of strategic management accounting in improving firm performance. These findings underscore the need to further investigate the factors influencing the adoption of SMA in Vietnamese construction enterprises. Accordingly, it is essential to propose practical solutions that align with the operational realities of construction firms, thereby supporting the achievement of their strategic objectives.

## **2.5 Analysis of factors influencing the adoption of strategic management accounting in vietnamese construction enterprises**

### ***2.5.1 Reliability testing of measurement scales***

Cronbach's Alpha coefficient was first employed to eliminate inappropriate variables. The results of the reliability analysis indicate that the overall Cronbach's Alpha values for all scales are greater than 0.6. In addition, no observed variable has a Cronbach's Alpha value (if deleted) higher than the overall Cronbach's Alpha, and the item-total correlation coefficients of all observed variables exceed the threshold of 0.3. These results confirm that all measurement scales used in the study satisfy reliability requirements and are suitable for inclusion in the exploratory factor analysis (EFA).

### ***2.5.2 Exploratory factor analysis (EFA)***

The EFA results show that five factors were extracted from the initial 28 observed variables. All five factors have Eigenvalues greater than 1, and the total variance explained by the extracted factors is 67.831% (greater than 50%). This indicates that the extracted factors account for 67.831% of the variation in the data, confirming that the dataset is appropriate for factor analysis.

### ***2.5.3 Confirmatory factor analysis (CFA)***

#### **Unidimensionality of the measurement scales**

Most model fit indices reach acceptable levels. Although the Goodness-of-Fit Index (GFI) is 0.897, slightly below the recommended threshold of 0.9, it is still considered acceptable due to the small deviation (0.003), as suggested by Hair, Risher et al. (2019). Overall, the indices used to assess unidimensionality meet the required criteria. Therefore, the constructs used in the study demonstrate unidimensionality, and the research model is consistent with the empirical data. In addition to testing unidimensionality, the study also evaluates convergent validity, discriminant validity, and reliability to ensure robustness and minimize potential measurement errors, thereby contributing to both theoretical and practical implications.

### **Convergent validity**

The measurement scales are considered to achieve convergent validity when standardized factor loadings exceed 0.5 and the associated p-values are less than 0.05, indicating that the observed variables are statistically significant.

### **Unidimensionality (Internal consistency of constructs)**

The correlation coefficients among the constructs are all less than 1, indicating that the constructs are distinct from one another. Therefore, the measurement scales satisfy the requirement of unidimensionality, and no multicollinearity issue is detected among the constructs. The research model is thus appropriate for the observed data.

### **Discriminant validity**

The p-values of the tests are all less than 0.05, indicating that the constructs used in this study achieve discriminant validity.

### **Reliability and average variance extracted (AVE)**

The table below presents detailed results of the reliability and variance extracted for the measurement scales:

**Table 2.1: Summary of statistical indicators**

	<b>CR</b>	<b>AVE</b>	<b>MSV</b>	<b>HQ</b>	<b>SMAU</b>	<b>NL</b>	<b>CN</b>	<b>DH</b>
<b>HQ</b>	0.949	0.725	0.399	<b>0.852</b>				
<b>SMAU</b>	0.894	0.560	0.228	0.477	<b>0.748</b>			
<b>NL</b>	0.908	0.625	0.056	0.236	0.173	<b>0.791</b>		
<b>CN</b>	0.895	0.684	0.143	0.378	0.328	0.128	<b>0.827</b>	
<b>DH</b>	0.880	0.647	0.399	0.632	0.421	0.163	0.309	<b>0.804</b>

*(Source: Survey data analysis)*

The study employs Composite Reliability (CR) and Average Variance Extracted (AVE) to assess the reliability and validity of the measurement scales used. The results presented in the table above indicate that all CR values exceed 0.7 and all AVE values are greater than 0.5, confirming that the measurement scales achieve satisfactory composite reliability and convergent validity. Furthermore, the Maximum Shared Variance (MSV) is lower than the AVE for all constructs, indicating adequate discriminant validity. Therefore, all measurement scales used in the model meet the required reliability and validity criteria and are retained for subsequent analyses.

### 2.5.4 Structural equation modeling (SEM)

Structural Equation Modeling (SEM) is a widely used method for testing theoretical models. The model fit results of the SEM analysis are presented below:

**Table 2.2: Model fit indices**

Indicator	Threshold	Result	Evaluation
CMIN/df	$\leq 3$	2.102	Tốt
GFI	$\geq 0.9$	0.879	Đạt
CFI	$\geq 0.9$	0.958	Tốt
TLI	$\geq 0.9$	0.952	Tốt
RMSEA	$\leq 0.6$	0.056	Tốt
PCLOSE	$\geq 0.01$	0.042	Tốt

(Source: Survey data analysis)

Therefore, the model employed in this study is well fitted to the empirical data, and the following hypotheses are accepted:

**Table 2.3: Summary of research results**

Hypothesis	Test Result
H1: Market orientation has a positive effect on the adoption of SMA in construction enterprises.	Accepted
H2: The professional competence of management accounting has a positive effect on the adoption of SMA in construction enterprises.	Accepted
H3: The use of technology has a positive effect on the adoption of SMA in construction enterprises.	Accepted
H4: The adoption of SMA has a positive effect on the performance of construction enterprises in Vietnam.	Accepted

(Source: Survey data analysis)

## 2.6 Evaluation of the current practices of strategic management accounting in vietnamese construction enterprises

### 2.6.1 Evaluation of the content of strategic management accounting in vietnamese construction enterprises

The findings indicate that seven SMA techniques are appropriately applied in the context of Vietnamese construction enterprises, including target costing, project life-cycle costing, quality costing, attribute-based costing, value chain costing, benchmarking, and integrated performance measurement systems (Balanced Scorecard – BSC). Among

these techniques, attribute-based costing exhibits the highest level of adoption, followed by quality costing and value chain costing, which also demonstrate relatively high levels of application. The remaining four techniques life cycle costing, target costing, benchmarking, and the BSC are applied at comparatively lower levels.

### ***2.6.2 Evaluation of the role of SMA adoption in influencing firm performance in vietnamese construction enterprises***

A review of previous studies on strategic management accounting, together with the findings of this dissertation, confirms the significant role of SMA adoption in enhancing the performance of construction enterprises in Vietnam. Building on prior research, this study employs a combination of qualitative and quantitative methods to examine the impact of key factors including market orientation, the professional competence of management accounting staff, and the use of technology on the adoption of SMA in Vietnamese construction enterprises.

### ***2.6.3 Evaluation of factors influencing the adoption of strategic management accounting in vietnamese construction enterprises***

The research findings indicate that market orientation, the professional competence of management accounting staff, and the use of technology are key factors influencing the adoption of SMA in Vietnamese construction enterprises. The effects of these factors are interpreted as follows:

#### **\* Market orientation**

The results show that market orientation has a strong influence on the adoption of SMA in Vietnamese construction enterprises.

#### **\* Professional competence of management accounting staff**

The findings indicate that the professional competence of management accounting staff has a positive but relatively weak effect on SMA adoption. This suggests that while professional competence is a necessary condition, it is not sufficient to drive the effective implementation of SMA in practice.

#### **\* Use of technology**

The results demonstrate that the use of technology has a positive and significant effect on SMA adoption, reflecting the current management practices of Vietnamese construction enterprises in the context of ongoing digital transformation.

**CHAPTER 3**  
**RECOMMENDATIONS TO ENHANCE THE ADOPTION OF STRATEGIC**  
**MANAGEMENT ACCOUNTING IN VIETNAMESE CONSTRUCTION**  
**ENTERPRISES**

**3.1 Prospects for the development of the construction industry in Vietnam**

In recent years, the construction industry in Vietnam has shown a clear recovery trend and opened up numerous opportunities for medium- and long-term development, thereby creating a favorable foundation for improving strategic management accounting (SMA) systems in listed construction enterprises. According to a report by the General Statistics Office under the Ministry of Finance (2025), the value added of the construction sector increased by 7.87% compared to the previous year, contributing 0.57 percentage points to the overall growth of the economy. At the same time, the national GDP in 2024 grew by 7.09% compared to 2023. Within the economic structure, the industry and construction sector—with construction as a key component—has made a significant contribution to overall growth, clearly reflecting its role in macroeconomic development.

**3.2 Requirements for improving strategic management accounting in vietnamese construction enterprises**

Based on the literature review and theoretical foundations, as well as the specific characteristics of the construction industry, the current level of SMA adoption, and the information needs of managers in construction enterprises, the author identifies several requirements for improving SMA in Vietnamese construction firms as follows:

*First*, SMA techniques should be refined to align with the operational characteristics of construction enterprises in Vietnam.

*Second*, the improvement of SMA must ensure both effectiveness and cost efficiency.

*Third*, SMA systems should meet the information needs required to support planning, cost control, and managerial decision making in Vietnamese construction enterprises.

### **3.3 Recommendations to enhance the adoption of strategic management accounting in vietnamese construction enterprises**

The research findings indicate that Vietnamese construction enterprises need to implement specific solutions to improve SMA practices in order to enhance business performance. Based on these considerations, the dissertation proposes the following recommendations:

#### **(1) Improving the system of SMA techniques in Vietnamese construction enterprises**

##### **\* *Expanding the application of comprehensive strategic tools***

First, develop the BSC as an integrated performance measurement tool in construction enterprises.

Second, develop life cycle costing techniques for projects/construction works to improve the quality of information supporting strategic planning, control, and decision-making processes.

Third, apply benchmarking in construction enterprises to identify capability gaps, support strategic positioning, and enhance competitiveness.

##### **\* *Integrating multidimensional data***

One of the current limitations is that management data remains fragmented, primarily focusing on cost or project progress, while lacking non-financial information such as construction quality, customer satisfaction, and occupational safety. To address this issue, enterprises should:

- + Develop centralized databases.
- + Establish multidimensional reporting systems.
- + Update data in real time by utilizing technologies such as IoT, construction management software, or ERP systems to automatically collect data, reduce errors, shorten processing time, and provide timely feedback to management.

The integration of multidimensional data will facilitate the implementation of modern SMA tools, thereby enhancing forecasting capabilities, risk analysis, and comprehensive strategic decision-making.

#### **(2) Enhancing the role and competencies of accountants in strategic decision-making in vietnamese construction enterprises**

##### **\* *Developing non-financial competencies for accountants***

- + Develop specialized training programs to enhance accountants' understanding of non-financial aspects relevant to construction operations.

+ Provide training in strategic analysis skills, enabling accountants to master modern SMA tools such as the BSC, LCC and benchmarking, as well as to analyze non-financial data and formulate strategic recommendations.

+ Foster soft skills, including communication, presentation, consulting, and negotiation skills, to enable accountants to actively participate in decision-making meetings with technical departments, project management teams, and senior management.

**\* Strengthening cross-functional collaboration**

A major barrier in construction enterprises is the dominance of a technically oriented culture, where decisions are often driven by engineering departments, limiting accountants' involvement in strategic decisions. To address this issue, construction enterprises should:

+ Promote cross-functional collaboration by establishing regular meetings among accounting, project management, technical departments, and senior management to exchange strategic information.

+ Develop integrated decision making processes in which accountants participate in feasibility assessments, cost forecasting, project risk analysis, and the selection of optimal alternatives.

+ Encourage a culture of mutual learning, where technical departments recognize the value of accounting information, thereby fostering a data-driven decision-making environment.

**\* Involving accountants directly in strategic planning**

Strong commitment from top management is required to empower accountants to actively participate in the strategic decision making process within enterprises.

**\* Developing periodic strategic reporting systems**

+ Establish financial forecasting and strategic cost reporting systems.

+ Provide regular reports to top management to support timely and informed decision-making.

+ Integrate reporting technologies by utilizing business intelligence (BI) tools, ERP systems, and project management software to automate data collection, analysis, and reporting processes, thereby reducing errors and improving responsiveness.

**(3) Enhancing the use of digital technologies to improve the level and effectiveness of strategic management accounting adoption in listed construction enterprises in vietnam**

In the context of the fourth industrial revolution, digital transformation has become an inevitable trend in the economy. Strengthening the application of digital technologies is therefore considered a key solution to enhance both the extent and effectiveness of strategic management accounting (SMA) implementation in listed construction enterprises in Vietnam.

First, enterprises should invest in and develop integrated management information systems, particularly enterprise resource planning (ERP) systems, construction project management software, management accounting systems, and centralized databases. Second, firms should adopt advanced data analytics tools and digital technologies such as BI, AI, robotic process automation (RPA), big data analytics, and blockchain to enhance the quality of strategic analysis. Third, enterprises need to standardize and digitalize the entire SMA process, including data collection, information processing, planning, analysis, and strategic reporting. Fourth, alongside technological investments, enterprises should improve the digital capabilities and strategic analytical skills of management accounting staff through specialized training in data analytics, information systems management, financial modeling, and the application of digital technologies in strategic management. Finally, enterprises should develop a digital transformation roadmap aligned with their long-term development strategy, in which SMA is positioned as a key informational pillar supporting management and decision making processes.

#### **(4) Recommendations for top management of construction enterprises to enhance the adoption of strategic management accounting**

- + Top management should strengthen the strategic role of the accounting function in corporate governance. It is essential to shift the perception of accounting from a mere recording and financial reporting function to a strategic partner in strategy formulation and implementation.
- + Promote market orientation and align SMA adoption with long-term strategic development goals.
- + Invest in enhancing the professional competence of management accounting staff.
- + Accelerate digital transformation to support SMA implementation.
- + Establish performance evaluation mechanisms based on SMA frameworks.
- + Foster a data driven management culture and enhance transparency in information disclosure.

### **(5) Recommendations for accounting staff in enterprises**

- + Proactively transform their role from “record keeping accountants” to “strategic partners.” Accountants should recognize the shift in their professional role toward providing advisory support and contributing to strategic decision making.
- + Enhance professional competencies in SMA and construction project management. Accounting staff should actively update their knowledge of modern SMA techniques such as target costing, project life cycle costing, value chain analysis, benchmarking, Balanced Scorecard, and scenario analysis.
- + Strengthen data analytics skills and the application of digital technologies.
- + Actively participate in strategic planning and decision-making processes. Early and in depth involvement in strategic decisions will improve the effective use of accounting information and elevate the role of the accounting function.
- + Enhance cross-functional collaboration. Close coordination with other departments enables accountants to access comprehensive information on project progress, quality, costs, and risks, thereby improving the quality of SMA analysis.
- + Develop a long-term cost and value management mindset. Instead of focusing solely on controlling incurred costs, accountants should adopt a “cost design” approach from the strategic planning stage, particularly during budgeting, bidding, and project selection processes.

### **3.4. Conditions for implementing the proposed solutions**

#### **Condition 1:** Enhancing market orientation and responsiveness to competitive signals

Enterprises should establish systematic mechanisms for market information collection, regularly updating data on material prices, bidding competition intensity, public–private investment trends, and customer demand across different construction segments. The management accounting function should play a central role in processing and transforming this information into strategic reports that support decision-making.

#### **Condition 2:** Promoting the development of strategic management accounting capabilities with strong commitment from top management

Enterprises need to foster the development of management accounting capabilities from a strategic perspective, with strong commitment from senior management in assigning responsibilities and empowering management accountants to participate in various stages of strategic development.

Firms should encourage accountants to be involved in project evaluation, financial feasibility assessment, and risk identification. In addition, enterprises should provide advanced professional training in budgeting, sensitivity analysis, and project cost simulation. Priority should be given to recruiting and developing personnel with advanced professional certifications such as CPA, CFO, and CMA. The higher the competence of accounting staff, the more significant their contribution to strategic decision-making, thereby improving overall firm performance.

**Condition 3:** Strengthening commitment to technology adoption and digital transformation in project cost management

Enterprises should integrate systems such as ERP, Building Information Modeling (BIM), Project Management Information Systems (PMIS), cost management software (e.g., CostX, GXD), and data analytics tools to ensure that accountants have access to real-time data for cash flow forecasting, cost estimation, and strategic decision-making.

Digital transformation provides a foundation for reducing cost inefficiencies, enabling real-time monitoring of project progress and quality, and optimizing project performance and profitability.

**Condition 4:** Enhancing the use of SMA as a tool for competitive advantage

Enterprises should prioritize the implementation of competitor analysis and benchmarking, project value chain analysis, the Balanced Scorecard (BSC), and life-cycle financial forecasting. SMA enables firms to base decisions on forward-looking data rather than historical reports, thereby enhancing bidding competitiveness and optimizing long-term performance.

## SCIENTIFIC PUBLICATION

- [1] Le Thi Ngoc Mai (2024). The impact of asset management indicators on the business performance of listed enterprises in Vietnam. *Journal of Science and Technology, Hanoi University of Industry*, Vol. 60, No. 2, 2024.
- [2] Le Thi Ngoc Mai, Nguyen Thi Hong Nga, Nguyen Minh Thanh (2025). A review of strategic management accounting through bibliometric analysis using VOSviewer. *Journal of Financial and Accounting Research*. Vol 294, Page 46-50, No.2, 8/2025.
- [3] Le Thi Ngoc Mai, Nguyen Thi Hong Nga, Nguyen Minh Thanh (2025). The role of green accounting in sustainable development strategies in Vietnamese construction enterprises. *Journal of Economics and Forecasting*. Available at: <https://kinhtevadubao.vn/vai-tro-cua-ke-toan-xanh-voi-chien-luoc-phat-trien-ben-vung-tai-cac-doanh-nghiep-xay-dung-viet-nam-32371.html>
- [4] Le Thi Ngoc Mai, Nguyen Thi Hong Nga, Nguyen Minh Thanh (2025). A study on the impact of asset management indicators on the business performance of listed construction enterprises in Vietnam. *Vietnam Economic & Financial Online*. Available at: <https://nghiencuu.tapchikinhtetaichinh.vn/nghien-cuu-anh-huong-cua-cac-chi-tieu-quan-tri-tai-san-den-hieu-quakinh-doanh-cua-cac-doanh-nghiep-xay-dung-niem-yet-tai-viet-nam-32556.html>