“The relationship between transformational leadership style, innovation capability, management accounting information systems, and performance in Vietnam’s manufacturing firms”

AUTHORS	Thu Hien Nguyen Dao Tung Nguyen Tuan Anh Nguyen

ARTICLE INFO	Thu Hien Nguyen, Dao Tung Nguyen and Tuan Anh Nguyen (2025). The relationship between transformational leadership style, innovation capability, management accounting information systems, and performance in Vietnam’s manufacturing firms. *Problems and Perspectives in Management*, *23*(4), 513-532. doi:10.21511/ppm.23(4).2025.36
DOI	http://dx.doi.org/10.21511/ppm.23(4).2025.36
RELEASED ON	Thursday, 11 December 2025
RECEIVED ON	Tuesday, 22 July 2025
ACCEPTED ON	Wednesday, 19 November 2025

LICENSE	This work is licensed under a Creative Commons Attribution 4.0 International License

JOURNAL	"Problems and Perspectives in Management"
ISSN PRINT	1727-7051
ISSN ONLINE	1810-5467
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”

NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES
64	2	8

© The author(s) 2025. This publication is an open access article.

BUSINESS PERSPECTIVES

LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine

www.businessperspectives.org

Thu Hien Nguyen (Vietnam), **Dao Tung Nguyen** (Vietnam), **Tuan Anh Nguyen** (Vietnam)

THE RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP STYLE, INNOVATION CAPABILITY, MANAGEMENT ACCOUNTING INFORMATION SYSTEMS, AND PERFORMANCE IN VIETNAM'S MANUFACTURING FIRMS

Type of the article: Research Article

Received on: 22nd of July, 2025
Accepted on: 19th of November, 2025
Published on: 11th of December, 2025

© Thu Hien Nguyen, Dao Tung Nguyen, Tuan Anh Nguyen, 2025

Thu Hien Nguyen, Ph.D., Associate Professor, Department of Management Accounting, Faculty of Accounting, Academy of Finance, Vietnam. (Corresponding author)

Dao Tung Nguyen, Ph.D., Associate Professor, President of the Academy of Finance, Vietnam.

Tuan Anh Nguyen, Ph.D., Main Lecturer, Head of the Management Accounting Department, Faculty of Accounting, Academy of Finance, Vietnam.

Abstract

This study examines the interrelationships among transformational leadership style, innovation capability, management accounting information systems (MAIS) utilization, and firm performance within Vietnam's manufacturing sector. Survey data were collected from 378 managers at medium and large-sized manufacturing firms, and analyzed by partial least squares structural equation modeling (PLS-SEM) to test the proposed hypotheses. The findings demonstrate that the transformational leadership style has significant positive effects on innovation capability, MAIS utilization, and firm performance. Furthermore, innovation capability positively impacts both MAIS utilization and firm performance, while MAIS utilization directly enhances performance outcomes. Beyond these direct effects, the study also explores multiple mediating mechanisms: transformational leadership style indirectly helps improve firm performance via innovation capability and MAIS utilization, and it fosters MAIS utilization via the mediating influence of innovation capability. Similarly, innovation capability contributes to enhancing firm performance via the effective use of MAIS. These results underscore the strategic roles of leadership, innovation, and accounting information systems in driving and improving firm performance and offer valuable insights for managers aiming to sustain competitive advantage in manufacturing industries.

Keywords transformational leadership style, innovation capability, management accounting information systems (MAIS), performance, manufacturing firm, Vietnam

JEL Classification M14, M41, L25, L69

INTRODUCTION

Globalization and rapid technological advancements have fundamentally reshaped the dynamics of competition, so beyond ensuring operational efficiency, firms are required to develop the capacity for agile adaptation to the volatility and evolving conditions of the contemporary business environment. This requires companies not only to innovate continuously but also to effectively utilize their resources and capabilities to create value, such as changing management methods, innovating operating mechanisms and business models, and applying modern management tools (Jimenéz-Jimenéz et al., 2018; Hadid & Al-Sayed, 2021). In this case, leaders are considered the key factor in changing and determining the organization's success or failure. However, an organization's successful change requires active human resource participation and employees' trust in the leaders (Geller, 2003). Successful leaders know how to select a suitable leadership

This is an Open Access article, distributed under the terms of the Creative Commons Attribution 4.0 International license, which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

Conflict of interest statement:
Author(s) reported no conflict of interest

style to enhance employee performance (Bass, 1985), thereby improving organizational performance. Moreover, no single leadership style is suitable for all situations, so organizations must choose leadership styles that align with their culture, goals, and characteristics to enhance leadership effectiveness. Visionary leaders will be the premise for the development of leadership models in contemporary contexts (Harsanto & Roelfsema, 2015), such as transformational, servant, and transactional leadership, etc., of which transformational leadership has been a leadership model that significantly contributes to completing individual and organizational goals (Gyensare et al., 2017). This leadership style influences employees' attitudes and behaviors, as well as organizational characteristics (García-Morales et al., 2008). Therefore, to cope with the increasing volatility of contemporary business environments, managers need to change their thinking and transition from traditional leadership models toward vision-oriented leadership. Recognizing the important role of transformational leadership in firms' sustainable development, numerous scholars have examined the impact of transformational leadership on various dimensions in firm operations, such as management control systems, culture, innovation, organizational performance, etc. Moreover, the mechanisms of how transformational leadership influences performance through mediating factors such as organizational culture and innovation (Jung et al., 2008; García-Morales et al., 2012), management control system (Abernethy et al., 2010; Nguyen et al., 2017), management accounting systems (Le et al., 2020; Juliana et al., 2021), organizational learning (Gomes et al., 2021), and knowledge sharing (Shahzad et al., 2022), are widely explored.

Recent empirical evidence underscores the pivotal role of transformational leadership in promoting firms' sustainable development. Nevertheless, in developing-country contexts such as Vietnam, managerial awareness of the benefits of a transformational leadership style remains limited in many companies. Therefore, companies often place insufficient emphasis on nurturing a culture of innovation, creating a democratic workplace, promoting collaboration and creative thinking, and investing in skills training for human resources. These shortcomings hinder the effective use of modern management tools. In addition, many companies still struggle to access investment capital for equipment upgrades and technological innovation, and face limitations in human resources and staff skills when implementing modern management systems. These limitations have negatively affected the performance and competitive advantage of Vietnamese enterprises in the international market. Therefore, the study of the relationship between transformational leadership style, innovation capability, management accounting information systems (MAIS), and performance will supplement the existing literature's shortcomings, thereby offering deeper insights into the multidimensional relationships among these factors within manufacturing firms in developing countries. Furthermore, the research results provide empirical evidence to support leaders in developing innovative strategies, implementing advanced management tools, and adjusting leadership styles to suit the firm's specific characteristics, thereby enhancing performance and competitive advantage in the context of global economic integration.

1. LITERATURE REVIEW AND HYPOTHESES

Based on the resource-based view and contingency theory, the relationship between transformational leadership, innovation capability, management accounting information systems (MAIS), and organizational performance can be interpreted as a mutually reinforcing mechanism that facilitates the creation and sustenance of sustainable competitive advantage. Resource-based view theory argues that internal resources such as transformational leadership, innovation capability, and MAIS are valuable, rare, inimitable, and non-substitutable, thereby playing a fundamental role in creating superior organizational performance (Barney, 1991; Peteraf, 1993). In particular, transformational leadership serves as an intangible resource that fosters a learning culture, encourages creativity, and guides the organization's innovative vision (Shahzad et al., 2022). By stimulating novel ideas and innovation capabilities, leaders help translate creative potential into practical outcomes, while orienting the effective utilization of MAIS to enhance organizational performance. From the perspective of contingency theory, the effectiveness

http://dx.doi.org/10.21511/ppm.23(4).2025.36

of internal resources depends on adaptability and suitability to the organization's specific context (Otley, 1980; Chenhall, 2003). Therefore, MAIS delivers value only when it is flexibly designed to support the leader's innovation strategy; it serves as a connecting link between resources, capabilities, and performance (Le et al., 2020; Tran, 2022; Kubota & Okuda, 2023).

Transformational leadership can foster both individual and organizational innovation through stimulating intrinsic motivation, enhancing work commitment, and promoting creative thinking among team members (Avolio et al., 2004; Zhu et al., 2009). Leaders who adopt this style consistently promote and encourage subordinates to proactively change and support creative thinking, thereby devising new solutions to address the organization's challenges (Zhu et al., 2009; Khalili, 2016). This approach fosters enthusiasm and creativity, enhancing employees' innovative capacity and benefiting the organization (Birasnav et al., 2013). Furthermore, when leaders demonstrate positive behavior and support their subordinates' ideas, it promotes employee creativity and generates innovation within the organization (Nani & Safitri, 2021). Such innovation-oriented leadership encourages the development of novel ideas, products, and projects (Le et al., 2020), thereby enhancing the organization's overall innovation capability.

In another aspect, transformational leadership promotes shared interests and facilitates members' efforts toward the organization's common goals (Fauzi, 2023). By embedding a sense of responsibility and commitment, this leadership style cultivates a consistent organizational culture grounded in core values that serve as the foundation for all activities (Bass & Avolio, 1994). A positive organizational culture will facilitate the successful implementation and use of accounting information systems (Qatawneh, 2023). When leaders view accounting information as a crucial tool for planning and controlling, they will encourage subordinates to use management accounting information more extensively in their tasks, thereby promoting the organization's adoption of modern management accounting techniques (Abernethy et al., 2010; Kubota & Okuda, 2023). Consequently, transformational leadership is well-suited for organizations aiming to strengthen the application of management accounting practices (Juliana et al., 2021). Additionally, this cultural environment fosters trust and open communication, encourages knowledge sharing, and equips employees with the necessary tools to make informed decisions (Qatawneh, 2023), thereby contributing to enhanced organizational performance.

Beyond inspiration, transformational leadership encourages subordinates to maximize their potential to realize a shared vision and put greater effort into each assigned task for the organization's benefit (Hilton et al., 2023) by fostering autonomy and alleviating performance-related pressure on their subordinates, which enhances work efficiency and boosts intrinsic motivation and psychological empowerment among employees (Arif & Akram, 2018). This will increase job satisfaction and encourage employees to exhibit positive behaviors that lead to higher performance (Nguyen et al., 2017).

Innovation capability refers to an organization's ability to adopt novel ideas, processes, products, or services (Robb et al., 2022). Innovation-oriented organizations are willing to take risks to explore new opportunities and experiment with creative ideas (Martínez-Costa et al., 2019). Such organizations often enhance their risk management activities based on the information from the management accounting systems (Soin & Collier, 2013). MAIS provides timely, forward-looking information to help managers respond to risks (Liem et al., 2020). They also support activities such as forecasting, analyzing, and transforming risks into actionable initiatives that drive process improvement within the organization, contribute to product and service innovation, and develop competitively positioned offerings in the marketplace (Pasch, 2019; Saleh & Al-Nimer, 2022), as well as the reduction of uncertainty in decision-making. Consequently, firms with high innovation capability are more likely to integrate MAIS into their operations (Tran, 2022).

In addition, innovation is a critical factor in development strategies and a driver of organizational performance (Rosenbusch et al., 2011). Organizations with high innovation rates are more likely to enhance profitability, expand market share, and successfully enter new markets; through improved product and service quality, they can effectively reach diverse customers and maintain sus-

tainable growth momentum (Alrowwad et al., 2020). Innovation is considered a core element determinant of organizational success (Nani & Safitri, 2021), as it enables organizations to optimize resources, create new value for customers, maintain their current market share, and penetrate new markets (Miftah, 2020). Innovation-oriented organizations often maximize available skills and resources to develop new activities (Jones, 2013). This focus on innovation fosters the development of novel ideas, processes, products, and services (Hult et al., 2004), thereby enhancing organizational performance.

Management accounting systems are considered complex administrative systems designed to provide crucial information that supports managers in their decision-making and control processes (Collier, 2015). This system delivers insights regarding products, strategies, financial positions, competitors, and market changes, thereby enabling managers to identify and address problems effectively (Bui et al., 2023). As a result, management accounting systems become powerful tools that help managers make accurate, timely, and effective decisions in response to fluctuations in the business environment (Quang Hung et al., 2023). Moreover, when managers use information systems characterized by broad scope, aggregation, integration, and timeliness, it will enhance planning capabilities, thereby helping organizations easily achieve their goals and improving managerial performance (Kesumawati et al., 2019; Ghasemi et al., 2019).

Empirical studies emphasize that innovation capability affects all aspects of an organization, including transformational leadership, management accounting systems, and performance. It is considered a key resource that enhances organizational performance (Rosenbusch et al., 2011) by fostering the generation of unique ideas, products, services, and processes that help organizations differentiate themselves in the marketplace and deliver greater value to customers compared to competitors (Nasution & Mavondo, 2008). Organizations with strong innovation capabilities are often better at leveraging management accounting systems in their operations (Liem et al., 2020; Tran, 2022), as these systems provide accurate, timely information to evaluate the effectiveness of innovation activities. Meanwhile, the transformational leadership style has been recognized as a key driver of innovation and a stimulant of organizations' innovation (Yoshida et al., 2014). Transformational leaders foster employees' commitment to change by linking individual values with the organizational shared vision. This linking enhances readiness to adopt management accounting systems as part of the innovation process (Tran, 2022), while encouraging employees to utilize management accounting information more extensively for effective decision-making (Abernethy et al., 2010; Qatawneh, 2023), hence contributing to improved organizational performance. Consequently, under the leadership of managers who adopt a transformational style, employees demonstrate a keen interest in innovation (Rawashdeh et al., 2021), and they are motivated to enhance their work performance (Nguyen et al., 2017).

The design of a fit management accounting system will depend on each organization's specific characteristics or context (Otley, 1980). This fit represents the interaction among contingency factors, management accounting facets, and organizational outcomes (Saleh & Al-Nimer, 2022). In uncertain markets, managers face pressure to innovate and utilize resources more effectively to secure organizational competitiveness. This necessitates adopting management control systems and accounting tools tailored to a specific operating environment to improve performance (Kesumawati et al., 2019; Ghasemi et al., 2019). The information provided by this system will become knowledge for managers, supporting them in making breakthrough decisions (Quang Hung et al., 2023), thus offering a unique competitive advantage (Collier, 2015).

Furthermore, innovation capability is positively related to the management accounting system, so this system should be closely linked to and aligned with the innovation strategy and organizational culture to enhance performance (Al-Baghdadi et al., 2021). The effective design and use of this accounting system can translate leaders' innovative visions into actionable operational outcomes, strengthening firm performance. In another aspect, organizations that pursue product innovation and differentiation strategies through successful innovators can leverage MAIS to uncover competitive products, adapt to technological advancements and competitive pressures, and make informed decisions (Pasch, 2019).

Previous research has explored the interconnections among transformational leadership, innovation ca-

http://dx.doi.org/10.21511/ppm.23(4).2025.36

pability, management accounting systems, and performance. However, empirical findings remain inconsistent due to differences in research objectives, methodological approaches, and research contexts. Notably, empirical evidence from developing economies is limited and has not clarified the mechanisms by which transformational leadership influences organizational performance through the mediating roles of innovation capability and the utilization of MAIS. Consequently, there is a pressing need for additional empirical research to advance understanding of the nature of these linkages in developing countries such as Vietnam.

The primary aim of this study is to analyze the relationships among TLS, innovation capability, MAIS use, and performance in Vietnam's manufacturing firms. Grounded in theoretical and previous studies, the hypotheses and a research model (Figure 1) are built to clarify the above relationship, which are presented as follows:

H1: *Transformational leadership style positively impacts firms' innovation capability.*

H2: *Transformational leadership style positively impacts the utilization of MAIS within firms.*

H3: *Transformational leadership style positively impacts firm performance.*

H4: *Innovation capability positively affects the utilization of MAIS in firms.*

H5: *Innovation capability positively impacts firm performance.*

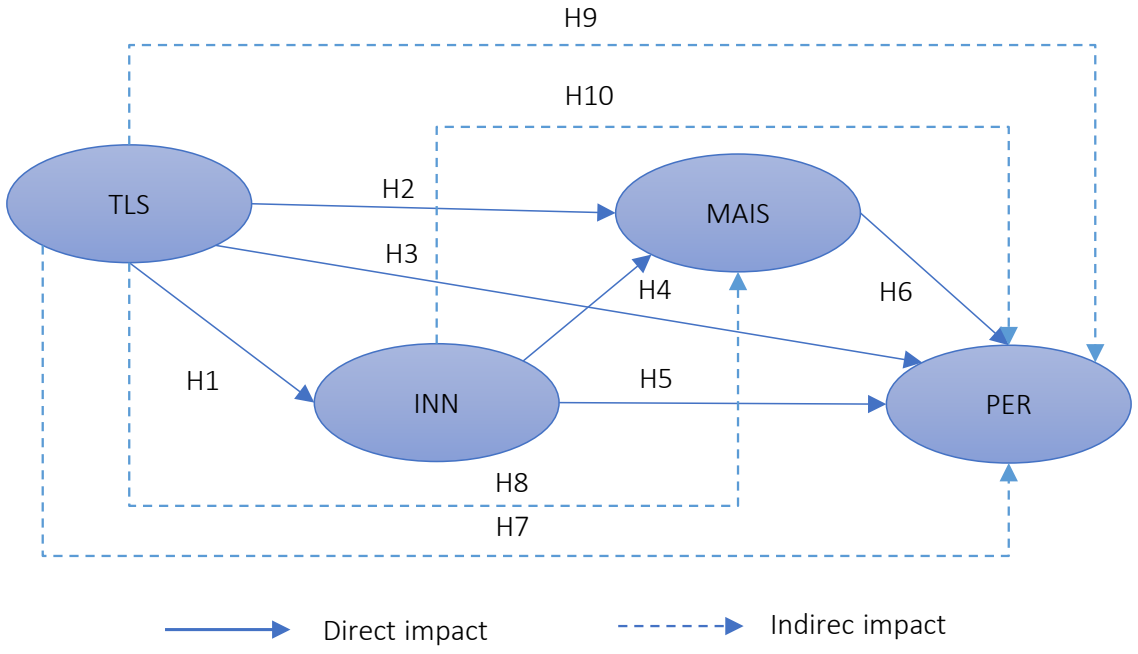
H6: *Use of MAIS positively impacts firm performance.*

H7: *Transformational leadership style indirectly influences firm performance through innovation capability.*

H8: *Transformational leadership style indirectly influences the utilization of MAIS through innovation capability.*

H9: *Transformational leadership style indirectly influences firm performance through the utilization of MAIS.*

H10: *Innovation capability indirectly influences firm performance through the utilization of MAIS.*



Note: Definition of variables: TLS = Transformational leadership style; INN = Innovation capability; MAIS = Management accounting information systems; PER = Firm performance.

Figure 1. Proposed research model

2. METHODS

2.1. Research sample

The study selected the sample by surveying managers at medium and large-sized firms in Vietnam's manufacturing and processing sectors (Table 1). This decision was based on the following reasons. First, managers play a crucial role in changing the organization, orienting innovation strategies, and building modern management control systems suitable to the characteristics of the firm's operations. Second, medium and large-sized enterprises often have clear organizational structures, professional management processes, and highly specialized managers. This is a favorable condition for effectively implementing transformational leadership models, modern management accounting systems, and systematic innovation programs. With a multi-layered management structure, these enterprises need to adopt a transformational leadership style to spread vision, foster motivation, and encourage innovation across multiple levels of the organization. Moreover, the scale and complexity of production activities require the systematic use of MAIS for planning, strategic decision-making, and performance control. In particular, a human resources team of highly qualified individuals working in many fields and actively participating in the innovation process helps to evaluate the impact of transformational leadership and innovation capacity more objectively and comprehensively. Third, manufacturing firms in Vietnam are seeking solutions to enhance internal capacity, innovate management methods, and improve production technology to meet technical standards, quality, product prices, product diversity, and customer needs, thereby adapting to market fluctuations in the global economic integration. Fourth, the research sample focuses on a specific sector (manufacturing and processing sector), which better reflects the intrinsic characteristics and limits the potential for confounding variables arising from a multi-sector sampling frame, thereby increasing the study's internal validity more than multi-sector research (Ittner et al., 2003). The manufacturing and processing sector is one of the key industrial areas, characterized by high labor and technology intensity, and it represents Vietnam's industrialization capacity. Enterprises in this sector often face pressures from global competition, market fluctuations, and technology innovation requirements, so the role of leaders becomes crucial in promoting innovation, organizational learning, process improvement, and exploiting management accounting information as a strategic tool to improve business performance and competitiveness.

The determination of the research sample size depends on the chosen regression analysis method, the required reliability level, and the number of variables in the research model. There are differing opinions on the ideal sample size (Kline, 2016); however, when analyzing structural equation modeling (SEM), the minimum sample size is 300 (Hair et al., 2021). The sample size of this study (n = 378) met the minimum required level.

2.2. Measurement scales

The measurement scales are built based on previous studies and adjusted to suit the actual conditions of manufacturing enterprises in Vietnam. This adaptation to the study's specific context ensures that the scales are not only reliable but also relevant to the fields of management and manufacturing. The scales were selected, screened, and adjusted in comparison to the original scale through consultation and a survey of experts with in-depth knowledge of the research field. The transformational leadership style (TLS) scale consists of six items (García-Morales et al., 2012; Nguyen et al., 2017; Juliana et al., 2021; Shahzad et al., 2022; Tran, 2022). The innovation capability scale consists of five items, adapted from Hult et al. (2004), Le et al. (2020), Saeidi et al. (2021), and Saleh and Al-Nimer (2022). For management accounting information systems (MAIS), the scale consists of four main components: broad scope (SCO), aggregation (AGG), integration (INT), and timeliness (TIM). Accordingly, except for aggregation management accounting information measured by three items, each remaining component is measured by four items and developed from the previous studies (e.g., Agbejule, 2005; Le et al., 2020; Tran, 2022; Quang Hung et al., 2023). Finally, the indicators for assessing firm performance (PER) include two main components – financial and non-financial performance – each measured using five items adapted from scales in previous studies (e.g., Nguyen, 2018; Le et al., 2020). The measurement scales are described in Appendix A.

http://dx.doi.org/10.21511/ppm.23(4).2025.36

2.3. Data collection method

This study collected data through a questionnaire survey (see Appendix A) sent via email or direct interviews with managers at 455 medium and large-sized manufacturing firms across various provinces and cities in Vietnam. To facilitate respondents' clear expression of their opinions and minimize potential confusion (Marton-Williams, 1986), we used a 5-point Likert scale for all survey statements (ranging from 1 = "totally disagree" to 5 = "totally agree"). The survey lasted over 4 months, from December 2024 to March 2025, and 415 questionnaires were collected, yielding a response rate of 91.20%. However, 37 questionnaires (8.92%) were discarded due to invalid responses: respondents left the question blank, provided the same answer uniformly, or were not firm managers. Ultimately, 378 valid questionnaires (91.08%) were used for analysis. The demographic characteristics are shown in Table 1.

2.4. Data analysis method

To estimate the relationships in the linear structural model and test the research hypotheses, we used the partial least squares structural equation modeling (PLS-SEM) approach for the following reasons. First, PLS-SEM accommodates studies with small sample sizes and is capable of analyzing complex models with multiple observed, latent, and mediating variables, particularly structural model testing. This method also provides accurate parameter estimates and robustly supports a detailed assessment of the individual indicator associated with each construct (Hair et al., 2021). Second, PLS-SEM easily handles formative and reflective models, constructs measured by single or multiple indicators. Finally, this method is especially suitable for exploratory studies or when the theoretical framework is not fully developed (Hair et al., 2019).

Table 1. Description of research sample characteristics

Characteristics	Demographics	Frequency	Percentage (%)
Firm size	Medium (100–200 staff)	258	68.25%
	Large (> 200 staff)	120	31.75%
Sector	Textile, leather, and footwear	89	23.55%
	Electronics industry	45	11.90%
	Plastics, packaging	68	17.99%
	Machinery, equipment, mechanics	59	15.61%
	Pharmaceutical production	38	10.05%
	Wood processing, furniture	42	11.11%
	Agriculture, forestry, and fisheries	37	9.79%
Firm's age	< 31 years	61	16.14%
	31–40 years	132	34.92%
	41–50 years	95	25.13%
	51–60 years	59	15.61%
	> 60 years	31	8.20%
Position	Chairperson of the board of directors/members	46	12.17%
	General directors/directors	97	25.66%
	Deputy general directors/Deputy directors	129	34.13%
	Chief accountant	106	28.04%
Work experience	< 5 years	8	2.12%
	5–10 years	74	19.58%
	11–20 years	159	42.06%
	> 20 years	137	36.24%
Education	College	21	5.55%
	Bachelor	215	56.88%
	Master	110	29.10%
	Ph.D.	32	8.47%
Gender	Male	273	72.22%
	Female	105	27.78%

Note: *n* = 378.

Given that all constructs in this study are measured using a reflective measurement model, the data analysis and estimation procedures are conducted with SMARTPLS 3.0. The evaluation process comprises two stages: the assessment of the measurement model and the structural model (Henseler & Chin, 2010). The measurement model is examined through indicator reliability, internal consistency reliability, composite reliability, convergent validity, and discriminant validity. Subsequently, the structural model is assessed by analyzing path coefficients, explanatory power, predictive relevance, and effect size.

3. RESULTS

3.1. Measurement model assessment

The measurement properties of all constructs were evaluated using key statistical indicators from the measurement model, including outer loadings, internal consistency reliability, convergent validity, and discriminant validity (Hair et al., 2019, 2021). As shown in Table 2, all outer loadings are above 0.7, evidencing robust indicator reliability (Hair et al., 2019, 2021). Furthermore, Cronbach's Alpha (CA), rho_A, and composite reliability (CR) were

Table 2. Reliability and convergent validity

Variable	Measured	Outer loadings	CA	rho_A	CR	AVE
Transformational leadership style (TLS)	TLS1	0.820	0.872	0.876	0.904	0.610
	TLS2	0.712				
	TLS3	0.787				
	TLS4	0.783				
	TLS5	0.803				
	TLS6	0.779				
Innovation capability (INN)	INN1	0.752	0.813	0.818	0.869	0.571
	INN2	0.729				
	INN3	0.736				
	INN4	0.785				
	INN5	0.774				
Broad scope (SCO)	SCO1	0.808	0.835	0.838	0.889	0.668
	SCO2	0.796				
	SCO3	0.839				
	SCO4	0.826				
Timeless (TIM)	TIM1	0.799	0.842	0.850	0.893	0.667
	TIM2	0.838				
	TIM3	0.838				
	TIM4	0.816				
Aggregation (AGG)	AGG1	0.863	0.860	0.861	0.915	0.782
	AGG2	0.886				
	AGG3	0.903				
Integration (INT)	INT1	0.831	0.827	0.829	0.885	0.659
	INT2	0.800				
	INT3	0.829				
	INT4	0.786				
Financial performance (PER_F)	PER_F1	0.817	0.868	0.870	0.905	0.655
	PER_F2	0.767				
	PER_F3	0.804				
	PER_F4	0.820				
	PER_F5	0.837				
Non-financial performance (PER_nF)	PER_nF1	0.848	0.884	0.885	0.915	0.683
	PER_nF2	0.852				
	PER_nF3	0.816				
	PER_nF4	0.788				
	PER_nF5	0.827				

http://dx.doi.org/10.21511/ppm.23(4).2025.36

Table 3. Discriminant validity

Variable	TLS	INN	SCO	TIM	AGG	INT	PER_F	PER_nF
TLS	0.781							
INN	0.646 *0.755*	0.756						
SCO	0.610 *0.715*	0.540 *0.645*	0.817					
TIM	0.567 *0.655*	0.566 *0.673*	0.593 *0.700*	0.823				
AGG	0.601 *0.693*	0.572 *0.680*	0.612 *0.717*	0.560 *0.644*	0.884			
INT	0.575 *0.678*	0.583 *0.705*	0.565 *0.675*	0.587 *0.693*	0.640 *0.757*	0.812		
PER_F	0.570 *0.651*	0.612 *0.724*	0.452 *0.528*	0.459 *0.531*	0.509 *0.587*	0.512 *0.605*	0.810	
PER_Nf	0.572 *0.649*	0.639 *0.749*	0.520 *0.603*	0.484 *0.552*	0.601 *0.689*	0.549 *0.642*	0.740 *0.842*	0.827

Note: TLS = Transformational leadership style; INN = Innovation capability; SCO = Broad scope; TIM = Timeless; AGG = Aggregation; INT = Integration; PER_F = Financial performance; PER_nF = Non-financial performance.

all above 0.7, indicating that the scales formed reliable constructs (Henseler & Chin, 2010; Hair et al., 2017, 2019, 2021). All constructs also achieved AVEs above the 0.50 cut-off, thus satisfying the criterion for convergent validity (Hair et al., 2017, 2019, 2021).

We used the criteria proposed by Fornell and Larcker (1981) and Henseler et al. (2015) to assess the discriminant validity of the constructs, as the Fornell–Larcker criterion, Heterotrait-Monotrait ratio (HTMT). The result presented in Table 3, the square roots of the AVE values (bolded on the diagonal) for each variable lie above the diagonal, exceed the corresponding correlation coefficients with other latent variables (below the diagonal), satisfying the Fornell–Larcker discriminant validity criterion. Besides, all HTMT values (italicized) were below the threshold of 0.90; thus, the discriminant validity between the latent constructs is consistent with the proposal of Henseler et al. (2015).

In addition, the research model incorporates two second-order constructs, MAIS and PER; consequently, the analysis also investigates the relationships between the first-order and second-order constructs. As presented in Table 4, all measurement indicators with these second-order constructs met the standards for convergent validity. Specifically, all outer loadings exceeded 0.7, demonstrating high indicator individual reliability for the observed variables; the values of CA, rho_A, and CR were all greater than 0.70, confirming high internal consistency reliability; and all AVE values were above 0.50. This result confirms that the convergent reliability of the measurement model is guaranteed.

The results in Table 5 further demonstrate that the second-order constructs also fulfilled the discriminant validity requirements. The square roots of the AVE for each construct (bolded on the diagonal) were larger than the corresponding inter-construct correlation coefficients (below the diagonal).

Table 4. Reliability and convergent validity (second-order variables)

Variable	Measured	Outer loadings	CA	rho_A	CR	AVE
Management accounting information systems (MAIS)	SCO	0.828	0.853	0.855	0.901	0.694
	TIM	0.816				
	AGG	0.849				
	INT	0.840				
Firm performance (PER)	PER_F	0.929	0.851	0.853	0.930	0.870
	PER_nF	0.937				

Note: INN = Innovation capability; SCO = Broad-scope; TIM = Timeless; AGG = Aggregation; INT = Integration; PER_F = Financial performance; PER_nF = Non-financial performance.

Table 5. Discriminant validity (second-order variables)

Variable	TLS	INN	MAIS	PER
TLS	0.781			
INN	0.646 *0.755*	0.756		
MAIS	0.706 *0.817*	0.678 *0.807*	0.833	
PER	0.612 *0.707*	0.671 *0.801*	0.660 *0.772*	0.933

Note: TLS = Transformational leadership style; INN = Innovation capability; MAIS = Management accounting information systems; PER = Performance.

At the same time, all HTMT ratios (italicized) remained below the 0.90 threshold. This provides consistent support for the discriminant validity of the second-order variables.

3.2. Structural model assessment

3.2.1. *Explanatory power (R^2) and predictive relevance (Q^2)*

The explanatory power (R^2) and predictive relevance (Q^2) of the research model were assessed in accordance with the criteria proposed by Hair et al. (2019). Accordingly, the model has a high explanatory power when $R^2 \geq 0.75$, a moderate level when $0.50 \leq R^2 < 0.75$, and a low level when $0.25 \leq R^2 < 0.50$. Similarly, the model has high predictive significance when $Q^2 > 0.5$, moderate when $0.25 \leq Q^2 \leq 0.50$, and low when $0 < Q^2 < 0.25$. The results in Table 6 show that the variables PER, MAIS, and INN all have R^2 values exceeding 0.25, indicating that the model›s explanatory ability is primarily moderate, thereby reinforcing its robustness. Additionally, all Q^2 values for PER, MAIS, and INN are positive, confirming the significance of the model's predictive relevance and affirming practical applicability.

Table 6. Explanatory power and predictive relevance

Variable	R^2	R^2 Adjusted	Q^2
INN	0.417	0.416	0.231
MAIS	0.583	0.581	0.400
PER	0.541	0.538	0.465

Note: INN = Innovation capability; MAIS = management accounting information systems; PER = Performance.

3.2.2. *The effect size f^2*

The effect size coefficient (f^2) reflects the degree to which each exogenous construct contributes to the explained variance (R^2) of its corresponding endogenous construct. The thresholds for evaluating effect size follow four categories: negligible when $f^2 < 0.02$, small when $0.02 \leq f^2 < 0.15$, medium when $0.15 \leq f^2 < 0.35$, and large when $f^2 \geq 0.35$ (Hair et al., 2021). The results in Table 7 indicate that the impact of TLS on PER is small ($f^2 = 0.029$), while its effect on MAIS is medium ($f^2 = 0.295$), and its impact on INN is large ($f^2 = 0.716$). Moreover, INN has a small impact on PER ($f^2 = 0.137$) and a medium effect on MAIS ($f^2 = 0.204$). Similarly, MAIS demonstrates a small impact on PER ($f^2 = 0.079$). Altogether, these results confirm that all exogenous constructs have meaningful contributions to the explained variance of their respective endogenous constructs, thereby establishing the robustness of the structural model.

Table 7. The effect size f^2

Independent variable	Dependent variable		
	INN	MAIS	PER
TLS	0.716	0.295	0.029
INN		0.204	0.137
MAIS			0.079

Note: INN = Innovation capability; MAIS = management accounting information systems; PER = Performance.

3.2.3. *Hypotheses testing*

The structural model was assessed using path analysis to test the research hypotheses. To ensure robustness of the statistical estimates, the bootstrapping technique with 5,000 resample iterations was applied to evaluate the statistical significance of the structural paths. This method enables the estimation of the standard errors, *t*-statistics, and *p*-values of the path coefficients (Hair et al., 2021).

Figure 2 and Table 8 present the structural model results, revealing that all proposed relationships are statistically significant at the 1% level.

http://dx.doi.org/10.21511/ppm.23(4).2025.36

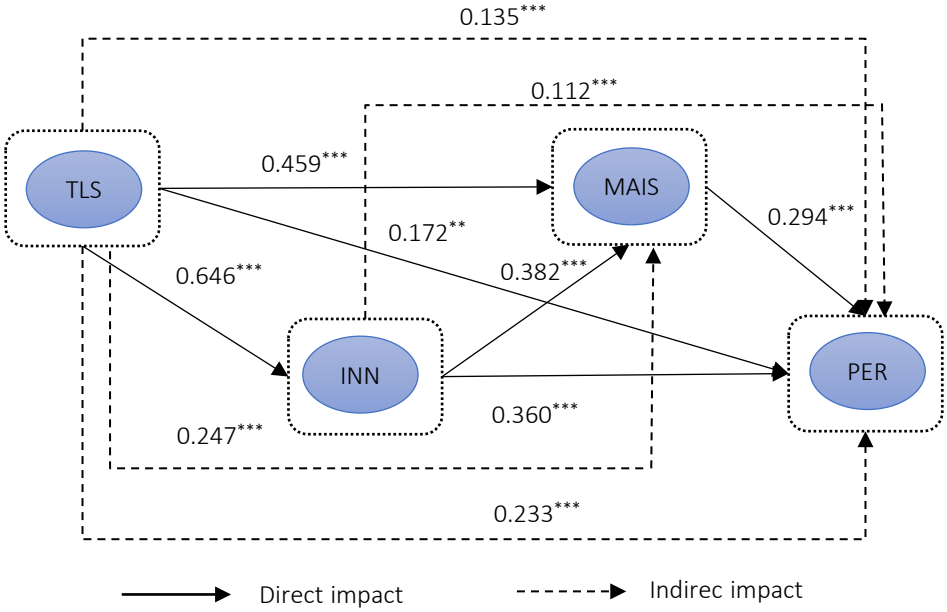
Table 8. Hypothesis testing

Hypothesis	Relationship	B	T-statistics	p-value	Decision
Direct impact					
H1	TLS → INN	0.646	20.850	0.000	Accept
H2	TLS → MAIS	0.459	10.397	0.000	Accept
H3	TLS → PER	0.172	3.396	0.001	Accept
H4	INN → MAIS	0.382	8.458	0.000	Accept
H5	INN → PER	0.360	7.058	0.000	Accept
H6	MAIS → PER	0.294	4.975	0.000	Accept
Indirect impact					
H7	TLS → INN → PER	0.233	6.346	0.000	Accept
H8	TLS → INN → MAIS	0.247	7.544	0.000	Accept
H9	TLS → MAIS → PER	0.135	4.422	0.000	Accept
H10	INN → MAIS → PER	0.112	4.054	0.000	Accept

Note: TLS = Transformational leadership style; INN = Innovation capability; MAIS = Management accounting information systems; PER = Performance.

The findings confirm that the transformational leadership style has a positive relationship with innovation capability (β = 0.646, p = 0.000), the use of MAIS (β = 0.459, p = 0.000), and firm performance (β = 0.172, p = 0.001), thereby providing support for hypotheses H1, H2, and H3. Similarly, innovation capability demonstrates a significant positive relationship on both the use of MAIS (β = 0.382, p = 0.000) and firm performance (β = 0.360, p = 0.000), thus supporting hypotheses H4 and H5. The results further show that the utilization of MAIS significantly positively relates to firm performance (β = 0.294, p = 0.000), thus accepting hypothesis H6.

In addition, the path analysis results support the mediating role between the concepts proposed in the research model. Accordingly, innovation capability mediates the effects of transformational leadership style on both firm performance (β = 0.233, p = 0.000) and the use of MAIS (β = 0.247, p = 0.000), thus lending support to hypotheses H7 and H8. Likewise, the use of MAIS mediates the positive relationships between transformational leadership style and firm performance (β = 0.135, p = 0.000), as well as between innovation capability and firm performance (β = 0.112, p = 0.000), providing support for hypotheses H9 and H10.



Note: $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$. TLS = Transformational leadership style; INN = Innovation capability; MAIS = Management accounting information systems; PER = Performance.

Figure 2. Path coefficients of the structural model

4. DISCUSSION

The findings of this study confirm that the transformational leadership style positively influences three key critical areas: innovation capability, the utilization of MAIS, and the performance of Vietnam's manufacturing firms. These findings imply the essential role of transformational leaders in fostering firms' adaptability and competitiveness within increasingly dynamic market conditions. Accordingly, to enhance performance and sustain competitive advantage, managers in Vietnamese manufacturing firms should adopt a transformational leadership style that inspires, promotes innovation, empowers employees, and fosters creative problem-solving. Additionally, these companies need to prioritize investments in modern management systems, along with training and development of leadership skills grounded in the four core competencies of the transformational leadership model. Human resource development policies should particularly emphasize the development of strategic thinking, inspirational skills, and knowledge of modern management systems. The results contribute significantly to the existing literature in management and organizational behavior, particularly by extending the theoretical framework proposed by Abernethy et al. (2010) on the interrelationships among management control mechanisms, leadership style, and organizational performance outcomes. Furthermore, the results not only corroborate and strengthen prior empirical findings (e.g., Nguyen et al., 2017; Juliana et al., 2021; Tran, 2022) but also provide a new perspective on the important role of transformational leadership in fostering innovation, facilitating the effective utilization of MAIS, and ultimately improving performance among manufacturing enterprises in developing economies.

Additionally, the research results suggest that innovation capability positively impacts both the utilization of MAIS and the performance of Vietnamese manufacturing firms. This finding implies that Vietnamese manufacturing firms with a tendency to innovate will have a greater need to use MAIS in their operations. Simultaneously, these enterprises will enhance process restructuring, optimize resources, increase product value, maintain market share, and penetrate new markets, thereby promoting firm performance. Moreover, the study findings confirm that MAIS positively affects the performance of Vietnamese manufacturing firms. This result indicates that the effective use of MAIS enhances the accuracy of market forecasting, shortens decision-making processes, and provides comprehensive data on products, financials, competitors, and market fluctuations, thereby supporting management control through in-depth performance analysis. This allows firms to identify weaknesses early and adjust their strategies accordingly, thereby improving firm performance. This finding underscores the pressing need for manufacturing enterprises in Vietnam to prioritize implementing modern management systems, including management accounting systems, to enhance operational performance. In brief, to improve performance and enhance their competitive advantage, manufacturing enterprises in Vietnam need to focus on investing in and developing innovative capabilities, combined with the practical application of management accounting systems. This is especially important as manufacturing enterprises in Vietnam are shifting from a processing model to deeper participation in the global value chain. The above findings contribute to the theoretical foundation by validating and extending previous evidence on the positive influence of innovation capability on both the use of MAIS and firm performance (e.g., Pasch, 2019; Nani & Safitri, 2021; Saleh & Al-Nimer, 2022; Tran, 2022). Simultaneously, the results reinforce prior evidence of a positive relationship between MAIS use and firm performance (e.g., Ghasemi et al., 2019; Le et al., 2020; Quang Hung et al., 2023).

The research results reveal that the transformational leadership style positively affects firm performance via the mediating roles of innovation capability and the use of MAIS within Vietnamese manufacturing firms. In line with this, the findings also indicate that the transformational leadership style enhances the use of MAIS indirectly through innovation capability. Furthermore, innovation capability is found to positively influence firm performance via the use of MAIS. Collectively, findings emphasize that manufacturing firms in Vietnam led by transformational leaders will promote employee creativity, establish a collaborative environment, and foster a culture of innovation and continuous improvement. Therefore, these firms are better equipped to adapt

http://dx.doi.org/10.21511/ppm.23(4).2025.36

flexibly to market fluctuations, develop new products, and enhance labor productivity, thereby contributing to improved financial and non-financial performance. In other words, to improve overall performance, managers in Vietnamese manufacturing firms should adopt a transformational leadership mindset, foster a culture of innovation, and optimize the use of MAIS effectively in their decision-making processes. Furthermore, Vietnamese manufacturing firms with higher innovation capability tend to accept greater levels of risk, which encourages them to use advanced MAIS to manage uncertainties and support timely planning, control, and decision-making, thereby enhancing performance outcomes.

The above findings imply that manufacturing enterprises in Vietnam need to synchronize their transformational leadership strategy with investments in modern management accounting systems and the development of a flexible, innovation-oriented organizational culture to maximize operational performance. Such integration is likely to generate a positive cycle, in which transformational leadership stimulates innovation, innovation increases the demand for precise management accounting information, and this accounting information supports optimal decision-making, ultimately enhancing overall enterprise performance. These findings are consistent with previous research emphasizing the mediating role of innovation capability and MAIS utilization in the relationship between transformational leadership and organizational performance (e.g., García-Morales et al., 2012; Nguyen et al., 2017; Rawashdeh et al., 2021; Ali & Oudat, 2021).

CONCLUSION

This study aims to examine the relationships among transformational leadership style, innovation capability, the use of management accounting information systems, and firm performance. The PLS-SEM method was employed to analyze survey data collected from 378 managers at medium and large-scale manufacturing enterprises in Vietnam. The empirical results indicate that transformational leadership style promotes innovation capability, increases the use of management accounting information systems (MAIS), and improves overall firm performance. Simultaneously, innovation capability positively impacts both the use of MAIS and performance, while the use of MAIS directly enhances firm performance. Additionally, the transformational leadership style indirectly promotes firm performance via the mediating effects of innovation capability and MAIS usage; and it also indirectly positively influences the use of MAIS via the mediating effect of innovation capability, while innovation capability promotes firm performance by increasing the use of MAIS.

The study's findings provide several important managerial implications for Vietnamese manufacturing enterprises. Firstly, firms should prioritize investments in modern management systems and leadership training focused on the four core competencies of transformational leadership. Strengthening these competencies fosters strategic thinking, inspirational skills, and the effective use of modern management systems. Secondly, firms should prioritize investing in improving their innovation capacity and expanding the adoption of management accounting systems in operations to achieve sustainable competitiveness and superior firm outcomes. Thirdly, firms should invest in and adopt an integrated strategic approach that develops transformational leadership capabilities, nurtures an innovation-oriented culture, and advances the implementation of modern MAIS, thereby improving performance and creating competitive advantage in a volatile business environment. Implementing an integrated strategic plan creates a positive cycle: transformational leadership drives innovation, which increases the demand for accurate management accounting information; this information supports optimal decision-making, ultimately leading to improved firm performance.

Despite yielding important insights, the study is not without limitations that warrant attention in future research. The relatively small sample size (n = 378), limited to managers within Vietnamese manufacturing firms, thus restricts the representativeness and generalizability of the results. Therefore, future stud-

ies should increase sample size and expand to more business sectors. Additionally, omitting potential control variables, such as firm age, business type, and industry characteristics, could have introduced bias into the findings; incorporating these variables in future models is necessary. Furthermore, the exclusive focus on transformational leadership also overlooks the influence of other leadership styles, such as servant, transactional, and democratic leadership, etc., thus further research is needed to explore these forms of leadership. Lastly, the reliance on self-reported questionnaires may introduce subjective bias; integrating survey data with secondary information sources will enhance accuracy and validity.

AUTHOR CONTRIBUTIONS

Conceptualization: Thu Hien Nguyen, Dao Tung Nguyen.
Data curation: Thu Hien Nguyen, Dao Tung Nguyen, Tuan Anh Nguyen.
Formal analysis: Thu Hien Nguyen, Tuan Anh Nguyen.
Funding acquisition: Tuan Anh Nguyen.
Investigation: Dao Tung Nguyen, Tuan Anh Nguyen.
Methodology: Thu Hien Nguyen, Dao Tung Nguyen.
Project administration: Thu Hien Nguyen, Dao Tung Nguyen, Tuan Anh Nguyen.
Resources: Dao Tung Nguyen, Tuan Anh Nguyen.
Software: Thu Hien Nguyen, Dao Tung Nguyen.
Supervision: Dao Tung Nguyen, Tuan Anh Nguyen.
Validation: Thu Hien Nguyen, Tuan Anh Nguyen.
Visualization: Thu Hien Nguyen, Dao Tung Nguyen.
Writing – original draft: Thu Hien Nguyen, Dao Tung Nguyen.
Writing – review & editing: Thu Hien Nguyen, Dao Tung Nguyen.

REFERENCES

1. Abernethy, M. A., Bouwens, J., & van Lent, L. (2010). Leadership and control system design. *Management Accounting Research, 21*(1), 2-16. https://doi.org/10.1016/j.mar.2009.10.002
2. Agbejule, A. (2005). The relationship between management accounting systems and perceived environmental uncertainty on managerial performance: A research note. *Accounting and Business Research, 35*(4), 295-305. https://doi.org/10.1080/00014788.2005.9729996
3. Al-Baghdadi, E. N., Alrub, A. A., & Rjoub, H. (2021). Sustainable business model and corporate performance: The mediating role of sustainable orientation and management accounting control in the United Arab Emirates. *Sustainability, 13*(16), Article 8947. https://doi.org/10.3390/su13168947
4. Ali, B. J. A., & Oudat, M. S. (2021). Accounting information system and financial sustainability of commercial and Islamic banks: A review of the literature. *Journal of Management Information and Decision Sciences, 24*(5), 1-17. https://doi.org/10.2139/ssrn.5147108
5. Alrowwad, A. A., Abualoush, S. H., & Masa'deh, R. E. (2020). Innovation and intellectual capital as intermediary variables among transformational leadership, transactional leadership, and organizational performance. *Journal of Management Development, 39*(2), 196-222. https://doi.org/10.1108/JMD-02-2019-0062
6. Arif, S., & Akram, A. (2018). Transformational leadership and organizational performance: The mediating role of organizational innovation. *SEISENSE Journal of Management, 1*(3), 59-75. https://doi.org/10.33215/sjom.v1i3.28
7. Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior, 25*(8), 951-968. https://doi.org/10.1002/job.283
8. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99-120. https://doi.org/10.1177/014920639101700108
9. Bass, B. M. (1985). *Leadership and performance beyond expectations.* New York: Free Press.
10. Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage Publications. Retrieved from https://books.google.com.pe/books?id=_z3_BOVYK-IC&printsec=frontcover&hl=es&source=gbs_vpt_read#v=onepage&q&f=false
11. Birasnav, M., Albufalasa, M., & Bader, Y. (2013). The role of transformational leadership and knowledge management processes

http://dx.doi.org/10.21511/ppm.23(4).2025.36

on predicting product and process innovation: An empirical study developed in Kingdom of Bahrain. *Tékhne, 11*(2), 64-75. https://doi.org/10.1016/j.tekhne.2013.08.001

12. Bui, H. Q., Hoai, T. T., Tran, H. A., & Nguyen, N. P. (2023). Performance implications of the interaction between the accountants' participation in strategic decision-making and accounting capacity. *Journal of Asian Business and Economic Studies, 30*(1), 67-81. https://doi.org/10.1108/JABES-04-2022-0087

13. Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society, 28*(2-3), 127-168. https://doi.org/10.1016/S0361-3682(01)00027-7

14. Collier, P. M. (2015). *Accounting for managers: Interpreting accounting information for decision making*. John Wiley & Sons. Retrieved from https://www.ibs-b.hu/documents/270/accounting_for_managers.pdf

15. Fauzi, M. A. (2023). Research vs. non-research universities: Knowledge sharing and research engagement among academicians. *Asia Pacific Education Review, 24*(1), 25-39. https://doi.org/10.1007/s12564-021-09719-4

16. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50. https://doi.org/10.1177/002224378101800104

17. García-Morales, V. J., Jiménez-Barrionuevo, M. M., & Gutiérrez-Gutiérrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of Business Research, 65*(7), 1040-1050. https://doi.org/10.1016/j.jbusres.2011.03.005

18. García-Morales, V. J., Lloréns-Montes, F. J., & Verdú-Jover, A. J. (2008). The effects of transformational leadership on organizational performance through knowledge and innovation. *British Journal of Management, 19*(4), 299-319. https://doi.org/10.1111/j.1467-8551.2007.00547.x

19. Geller, E. S. (2003). Leadership to overcome resistance to change: It takes more than consequence control. *Journal of Organizational Behavior Management, 22*(3), 29-49. https://doi.org/10.1300/J075v22n03_04

20. Ghasemi, R., Habibi, H. R., Ghasemlo, M., & Karami, M. (2019). The effectiveness of management accounting systems: Evidence from financial organizations in Iran. *Journal of Accounting in Emerging Economies, 9*(2), 182-207. https://doi.org/10.1108/JAEE-02-2017-0013

21. Gomes, G., Seman, L. O., & De Montreuil Carmona, L. J. (2021). Service innovation through transformational leadership, work-life balance, and organisational learning capability. *Technology Analysis & Strategic Management, 33*(4), 365-378. https://doi.org/10.1080/09537325.2020.1814953

22. Gyensare, M. A., Kumedzro, L. E., Sanda, A., & Boso, N. (2017). Linking transformational leadership to turnover intention in the public sector: The influences of engagement, affective commitment and psychological climate. *African Journal of Economic and Management Studies, 8*(3), 314-337. https://doi.org/10.1108/AJEMS-07-2016-0099

23. Hadid, W., & Al-Sayed, M. (2021). Management accountants and strategic management accounting: The role of organizational culture and information systems. *Management Accounting Research, 50,* Article 100725. https://doi.org/10.1016/j.mar.2020.100725

24. Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: A comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science, 45*(5), 616-632. https://doi.org/10.1007/s11747-017-0517-x

25. Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook* (197 p.). Springer Nature.

26. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31*(1), 2-24. https://doi.org/10.1108/EBR-11-2018-0203

27. Harsanto, B., & Roelfsema, H. (2015). Asian leadership styles, entrepreneurial firm orientation and business performance. *International Journal of Entrepreneurship and Small Business, 26*(4), 490-499. https://doi.org/10.1504/IJESB.2015.072759

28. Henseler, J., & Chin, W. W. (2010). A comparison of approaches for the analysis of interaction effects between latent variables using partial least squares path modeling. *Structural Equation Modeling, 17*(1), 82-109. https://doi.org/10.1080/10705510903439003

29. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43,* 115-135. https://doi.org/10.1007/s11747-014-0403-8

30. Hilton, S. K., Madilo, W., Awaah, F., & Arkorful, H. (2023). Dimensions of transformational leadership and organizational performance: The mediating effect of job satisfaction. *Management Research Review, 46*(1), 1-19. https://doi.org/10.1108/MRR-02-2021-0152

31. Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management, 33*(5), 429-438. https://doi.org/10.1016/j.indmarman.2003.08.015

32. Ittner, C. D., Larcker, D. F., & Randall, T. (2003). Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society, 28*(7-8), 715-741. https://doi.org/10.1016/S0361-3682(03)00033-3

33. Jimenéz-Jimenéz, D., Martínez-Costa, M., & Ahmed-Dine Rabeh, H. (2018). Fostering new product success through learning competences. *Technology Analysis & Strategic Management, 30*(1), 58-70. https://doi.org/10.1080/09537325.2017.1286010

34. Jones, G. R. (2013). *Organizational theory, design, and change* (7th ed). Pearson. Retrieved from https://kaizen-ju.com/storage/images/files/file_17534721143ewAB.pdf

35. Juliana, C., Gani, L., & Jermias, J. (2021). Performance implications of misalignment among business strategy, leadership style, organizational culture and management accounting systems. *International Journal of Ethics and Systems, 37*(4), 509-525. https://doi.org/10.1108/IJOES-02-2021-0033

36. Jung, D. D., Wu, A., & Chow, C. W. (2008). Towards understanding the direct and indirect effects of CEOs' transformational leadership on firm innovation. *The Leadership Quarterly, 19*(5), 582-594. https://doi.org/10.1016/j.leaqua.2008.07.007

37. Kesumawati, N. K. A., Putri, I. M. A. D., & Dwirandra, A. A. N. B. (2019). The role of business strategies, environmental uncertainty and decentralization as moderating the effect of management accounting systems on managerial performance. *International Research Journal of Management, IT and Social Sciences, 6*(3), 37-45. https://doi.org/10.21744/irjmis.v6n3.627

38. Khalili, A. (2016). Linking transformational leadership, creativity, innovation, and innovation-supportive climate. *Management Decision, 54*(9), 2277-2293. https://doi.org/10.1108/MD-03-2016-0196

39. Kline, R. B. (2016). *Principles and practice of structural equation modeling*. New York: The Guilford Press.

40. Kubota, T., & Okuda, S. Y. (2023). Relationship between top managers' interest in accounting information and accounting practices in startups. *International Journal of Accounting Information Systems, 51,* Article 100640. https://doi.org/10.1016/j.accinf.2023.100640

41. Le, H. M., Nguyen, T. T., Hoang, T. C., & Ntim, C.G. (rev. ed.). (2020). Organizational culture, management accounting information, innovation capability and firm performance. *Cogent Business & Management, 7*(1), Article 1857594. https://doi.org/10.1080/23311975.2020.1857594

42. Liem, V. T., Hien, N. N., & Ntim, C.G. (rev. ed.). (2020). Exploring the impact of dynamic environment and CEO's psychology characteristics on using management accounting system. *Cogent Business & Management, 7*(1), Article 1712768. https://doi.org/10.1080/23311975.2020.1712768

43. Martínez-Costa, M., Jiménez-Jiménez, D., & Dine Rabeh, H. A. (2019). The effect of organisational learning on interorganisational collaborations in innovation: An empirical study in SMEs. *Knowledge Management Research & Practice, 17*(2), 137-150. https://doi.org/10.1080/14778238.2018.1538601

44. Marton-Williams, J. (1986). *Questionnaire design in consumer market research handbook* (R. Worcester & J. Downham, Eds.). McGraw-Hill Book Company.

45. Miftah, D. (2020). Does innovation affect company performance? Exploring the mediation effects of management accounting information systems. *International Research Journal of Business Studies (IRJBS), 13*(2), 189-200. Retrieved from https://repository.uin-suska.ac.id/70155/1/2054-3062-1-PB.pdf

46. Nani, D. A., & Safitri, V. A. D. (2021). Exploring the relationship between formal management control systems, organisational performance and innovation: The role of leadership characteristics. *Asian Journal of Business and Accounting, 14*(1), 207-224. https://doi.org/10.22452/ajba.vol14no1.8

47. Nasution, H. N., & Mavondo, F. T. (2008). Organisational capabilities: antecedents and implications for customer value. *European Journal of Marketing, 42*(3/4), 477-501. https://doi.org/10.1108/03090560810853020

48. Nguyen, N. P. (2018). Performance implication of market orientation and use of management accounting systems: The moderating role of accountants' participation in strategic decision making. *Journal of Asian Business and Economic Studies, 25*(1), 33-49. https://doi.org/10.1108/JABES-04-2018-0005

49. Nguyen, T. T., Mia, L., Winata, L., & Chong, V. K. (2017). Effect of transformational-leadership style and management control system on managerial performance. *Journal of Business Research*, *70*, 202-213. https://doi.org/10.1016/j.jbusres.2016.08.018

50. Otley, D. T. (1980). The contingency theory of management accounting: Achievement and prognosis. *Accounting, Organizations and Society, 5*(4), 413-428. https://doi.org/10.1016/0361-3682(80)90040-9

51. Pasch, T. (2019). Strategy and innovation: the mediating role of management accountants and management accounting systems' use. *Journal of Management Control, 30*(2), 213-246. https://doi.org/10.1007/s00187-019-00283-y

52. Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal, 14*(3), 179-191. https://doi.org/10.1002/smj.4250140303

53. Qatawneh, A. M. (2023). The role of organizational culture in supporting better accounting information systems outcomes. *Cogent Economics & Finance, 11*(1), Article 2164669. https://doi.org/10.1080/23322039.2022.2164669

54. Quang Hung, B., Thanh Hoai, T., Anh Hoa, T., & Phong Nguyen, N. (2023). Performance implication of management accounting systems in market-oriented firms: Empirical evidence from Vietnam. *Cogent Business & Management, 10*(3), Article 2251630. https://doi.org/10.1080/23311975.2023.2251630

55. Rawashdeh, A. M., Almasarweh, M. S., Alhyasat, E. B., & Al-Rawashdeh, F. (2021). Examining the effect of transformational leader-

http://dx.doi.org/10.21511/ppm.23(4).2025.36

ship to organizational performance through quality innovation: A developing country perspective. *International Journal for Quality Research, 15*(1), 353-368. https://doi.org/10.24874/IJQR15.01-20

56. Robb, A., Rohrschneider, M., Booth, A., Carter, P., Walker, R., & Andrews, G. (2022). Enhancing organisational innovation capability – A practice-oriented insight for pharmaceutical companies. *Technovation, 115,* Article 102461. https://doi.org/10.1016/j.technovation.2022.102461

57. Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing, 26*(4), 441-457. https://doi.org/10.1016/j.jbusvent.2009.12.002

58. Saeidi, P., Robles, L. A. A., Saeidi, S. P., & Zamora, M. I. V. (2021). How does organizational leadership contribute to the firm performance through social responsibility strategies? *Heliyon, 7*(7). https://doi.org/10.1016/j.heliyon.2021.e07672

59. Saleh, Q. Y., & Al-Nimer, M. B. (2022). The mediating role of the management accounting information system in the relationship between innovation strategy and financial performance in the Jordanian industrial companies. *Cogent Business & Management, 9*(1), Article 2135206. https://doi.org/10.1080/23311975.2022.2135206

60. Shahzad, M. A., Iqbal, T., Jan, N., & Zahid, M. (2022). The role of transformational leadership on firm performance: Mediating effect of corporate sustainability and moderating effect of knowledge-sharing. *Frontiers in Psychology, 13,* Article 883224. https://doi.org/10.3389/fpsyg.2022.883224

61. Soin, K., & Collier, P. (2013). Risk and risk management in management accounting and control. *Management Accounting Research, 24*(2), 82-87. https://doi.org/10.1016/j.mar.2013.04.003

62. Tran, Y. T. (2022). Study on the relationship between transformation leadership, organizational innovation and management accounting systems in Vietnamese firms. *Science & Technology Development Journal: Economics-Law & Management, 6*(4), 3747-3761. https://doi.org/10.32508/stdjelm.v6i4.1120

63. Yoshida, D. T., Sendjaya, S., Hirst, G., & Cooper, B. (2014). Does servant leadership foster creativity and innovation? A multi-level mediation study of identification and prototypicality. *Journal of Business Research, 67*(7), 1395-1404. https://doi.org/10.1016/j.jbusres.2013.08.013

64. Zhu, W., Avolio, B. J., & Walumbwa, F. O. (2009). Moderating role of follower characteristics with transformational leadership and follower work engagement. *Group & Organization Management, 34*(5), 590-619. https://doi.org/10.1177/1059601108331242

APPENDIX A

A. PREFACE

Dear Sir/Madam.

We are collecting data to conduct research on the topic: "The relationship between transformational leadership style, innovation capability, management accounting information systems, and performance in Vietnam's manufacturing firms", aiming to examine the relationship between these factors in manufacturing enterprises. The information you provide plays a vital role in our research; therefore, we look forward to receiving your help. We commit that all data collected from the survey will only serve research purposes, and your personal information will be kept strictly confidential.

B. SURVEY QUESTIONNAIRE

B.1. Transformational leadership style (TLS)

Please indicate the extent to which each of the following leadership behaviors reflects your transformational leadership style by marking an (X) in the circle corresponding to a score from 1 to 5 in the right column.

Code	Statements	Level of agreement				
		Totally Disagree	Disagree	Neutral	Agree	Totally Agree
		[1]	[2]	[3]	[4]	[5]
TLS1	I demonstrate confidence, decisiveness, and put the company's interests above personal interests.					
TLS2	I focus on core values, strong beliefs in the company's direction, and mission.					
TLS3	I regularly help subordinates understand what is most important for fulfilling the company's mission.					
TLS4	I communicate clearly and frequently emphasize the company's mission, goals, and reason for existence to all employees.					
TLS5	I always show respect, listen to opinions, and acknowledge contributions of subordinates.					
TLS6	I regularly and enthusiastically discuss and share the tasks to be completed with subordinates.					

B.2. Innovation capability (INN)

Please indicate the extent to which each statement reflects the innovation capability of your company by marking (X) in the circle corresponding to a score from 1 to 5 in the right column.

Code	Statements	Level of agreement				
		Totally Disagree	Disagree	Neutral	Agree	Totally Agree
		[1]	[2]	[3]	[4]	[5]
INN1	Our company regularly tests and implements new ideas.					
INN2	Our company consistently takes a proactive approach in seeking innovative methods and practices.					
INN3	Our company is innovative in the way we operate.					
INN4	Our company is often a front-runner in presenting new products and services to the market.					
INN5	Our company's new product introductions have increased significantly over the past 5 years.					

http://dx.doi.org/10.21511/ppm.23(4).2025.36

B.3. Use of management accounting information systems (MAIS)

Please indicate the extent of the use of management accounting information systems in your company by marking (X) in the circle corresponding to a score from 1 to 5 in the right column.

B.3.1. Broad-scope of management accounting information (SCO)

Code	Statements	Level of agreement				
		Totally Disagree	Disagree	Neutral	Agree	Totally Agree
		[1]	[2]	[3]	[4]	[5]
SCO1	Information related to possible future events (if you feel that the company mainly uses historical information, please select a low score on the scale)					
SCO2	Non-financial information related to products and markets (if you feel the company only uses financial information, please select a low score on the scale).					
SCO3	Non-economic information encompasses consumer trends, employee attitudes, business relationships, perspectives of regulatory bodies and consumer associations, as well as potential threats posed by competitors.					
SCO4	Information about macro factors outside your company, such as the economic situation, population changes, developments in science and technology, etc.					

B.3.2. Timeless management accounting information (TIM)

Code	Statements	Level of agreement				
		Totally Disagree	Disagree	Neutral	Agree	Totally Agree
		[1]	[2]	[3]	[4]	[5]
TIM1	Necessary information for decision-making will be provided immediately upon request.					
TIM2	The information system will automatically send you the data immediately after it is recorded and processed.					
TIM3	When an event occurs, the appropriate information will be processed and provided to you quickly and without any delay.					
TIM4	Reports are sent to you periodically, regularly, and in an organized manner, such as daily or weekly reports.					

B.3.3. Aggregation management accounting information (AGG)

Code	Statements	Level of agreement				
		Totally Disagree	Disagree	Neutral	Agree	Totally Agree
		[1]	[2]	[3]	[4]	[5]
AGG1	Information is presented in forms that help you analyze the management tasks that must be performed.					
AGG2	Information reflects the impact of events on your company in each specific period, such as market trends and a comparison of operating indicators by month, quarter, year, etc.					
AGG3	Information is systematically structured to support decision-making models, including discounted cash flow analysis, inventory management, incremental cost-benefit assessment, etc.					

B.3.4. Integrated management accounting information (INT)

Code	Statements	Level of agreement				
		Totally Disagree	Disagree	Neutral	Agree	Totally Agree
		[1]	[2]	[3]	[4]	[5]
INT1	Information about costs and prices of products or services from different departments within the company.					
INT2	Each activity in all departments within the company has specific goals to achieve.					
INT3	Information regarding how your decisions influence the performance outcomes of other departments within the organization.					
INT4	Information about the influence of the decisions you make on the department under your management, and the influence of decisions made by other senior managers on your area of responsibility.					

B.4. Performance (PER)

Please indicate the extent to which the following statements reflect the improvement in your company's performance over the past five years by marking (X) in the circle corresponding to a score from 1 to 5 in the right column.

B.4.1. Financial performance (PER_F)

Code	Statements	Level of agreement				
		Totally Disagree	Disagree	Neutral	Agree	Totally Agree
		[1]	[2]	[3]	[4]	[5]
PER_F1	Return on investment (ROI)					
PER_F2	Return on sales (ROS)					
PER_F3	Revenue growth rate					
PER_F4	Return on assets (ROA)					
PER_F5	Company-wide profitability					

B.4.2. Non-financial performance (PER_nF)

Code	Statements	Level of agreement				
		Totally Disagree	Disagree	Neutral	Agree	Totally Agree
		[1]	[2]	[3]	[4]	[5]
PER_nF1	Market share					
PER_nF2	Customer satisfaction					
PER_nF3	Employee satisfaction					
PER_nF4	Developing new products/Services					
PER_nF5	Attracting new customers					

http://dx.doi.org/10.21511/ppm.23(4).2025.36