VIETNAM NATIONAL UNIVERSITY HO CHI MINH CITY
INTERNATIONAL UNIVERSITY

LE THU HANG

SUMMARY OF DOCTORAL DISSERTATION

FOSTERING ORGANIZATIONAL EFFECTIVENESS THROUGH STRATEGIC ORIENTATIONS, LEARNING CAPABILITY AND INNOVATION

DOCTOR OF PHILOSOPHY
in BUSINESS ADMINISTRATION
ID: 9340101

HO CHI MINH CITY, YEAR 2025

PUBLICATIONS

(Related to this research field)

1. Le, T. H., & Ngoc-Khuong, M. (2024). Fostering SME's organizational effectiveness through strategic orientations, learning capability, and innovation. *Journal of Small Business Management*, 1–30. https://doi.org/10.1080/00472778.2024.2312390 ***(SSCI, Scopus Q1).***

2. Nguyen, P. N., Mai, K. N., & **Le, T. (Corresponding author)** (2023). Strategic perspectives, creativity, and financial performance in Vietnamese SMEs. *Heliyon, 9*(9), e20354. https://doi.org/10.1016/j.heliyon.2023.e20354 ***(SCIE - Scopus Q1)***; *(This paper is funded by VNU-HCMU; under grant number B2023-28-03)*

3. Thu-Hang Le, Khuong Mai Ngoc, Phuong Ngoc-Duy Nguyen (2024). Driving SME Growth and Learning Effectiveness: The Role of Analyzer Orientation, Learning Capability, and Innovation. *Journal of Infrastructure, Policy and Development. 8*(8): 6908. https://doi.org/10.24294/jipd.v8i8.6908 ***(Scopus Q2)***; *(This paper is funded by VNU-HCMU; under grant number B2023-28-03)*

4. Thu-Hang Le, Ngoc-Khuong Mai (2025). The influence of prospector and defender strategies on dynamic capabilities, innovation, and financial effectiveness in Vietnamese service SMEs. *Entrepreneurial Business and Economics Review*, *13*(1), 187-205. https://doi.org/10.15678/EBER.2025.130111 ***(ESCI, Scopus Q1).***

5. Dinh Su, T., Phan Tan, L., **Le, T. H.**, & Nhat Hanh Le, A. (2024). Strategic management under the context of environmental uncertainty. In *Emerging and evolving business and management issues in Vietnam: Research and practice* (pp. 1-42). World Scientific. https://doi.org/10.1142/9789811286100_0001

Table of contents

CHAPTER 1
INTRODUCTION

Small and medium-sized enterprises (SMEs) have become increasingly central to Vietnam's economic development. As noted by the General Statistics Office (2023), SMEs are vital to economic growth, employment generation, poverty alleviation, and income improvement, contributing nearly 40% to the nation's GDP and employing almost half of the workforce. In recent years, the SME sector has also emerged as a key driver of innovation and a conduit for applying scientific and technological advances in practice.

Under Vietnamese law (Article 4 of the SME Support Law; Decree No. 80/2021/ND-CP), SMEs are classified by size and sector, with trade and service SMEs defined by employee numbers, capital, and revenue thresholds. This sub-sector is particularly dynamic, encompassing wholesale and retail, finance, banking, insurance, transportation, and accommodation services. The service sector has gained increasing prominence, spurred by digitalization and globalization. From contributing 19% of GDP in 1991, the sector's share rose to 35.3% by 2019 and recorded an impressive growth rate of 9.99% in 2022—outpacing both industrial and agricultural sectors ((*Taking Stock, March 2023: Harnessing the Potential of the Services Sector or Growth*, 2023).

However, significant performance gaps remain. Vietnam's service sector underperforms compared to regional peers due to challenges such as the predominance of micro-sized firms, low technology adoption, and weak inter-sectoral linkages (Cirera et al., 2021; Ho et al., 2023) . Service SMEs average only 1.5 employees, far below the productivity levels seen in manufacturing and in high-income countries (World Bank, 2023). With limited participation in high-productivity sectors like ICT and finance, these SMEs often face constraints stemming from fragmented operations and inefficient management practices.

In response to these challenges, enhancing organizational effectiveness—encompassing financial management, customer orientation, internal processes, and learning and development—has become imperative (Ha et al., 2022; Subramanian & Suresh, 2022) . Traditional financial performance measures are now seen as insufficient, with scholars advocating for multidimensional, stakeholder-based approaches to performance evaluation (Manville et al., 2019; Yoshikuni & Albertin,

2018) . Organizational effectiveness provides a more holistic view of an enterprise's success, especially for SMEs seeking long-term sustainability.

Crucially, innovation and learning capability have emerged as central enablers of competitiveness for SMEs, especially under the pressures of a knowledge-driven global economy (Le & Ikram, 2022; Thomä & Zimmermann, 2020) . Innovation enhances both firm-level performance and national economic growth, while learning capability equips SMEs with the agility needed to respond to rapidly changing environments (Effendi et al., 2021; Zahoor et al., 2022). Compared to large firms, SMEs rely more on internal culture and informal networks for innovation, making their strategic behavior distinct (Müller et al., 2021).

Among strategic frameworks, the Miles and Snow typology remains one of the most widely validated models for examining firm strategy in uncertain environments. It classifies firms into prospectors, defenders, analyzers, and reactors—each with distinct orientations toward market exploration and innovation (Dalwai & Salehi, 2021; Handoyo et al., 2023). While the model was originally designed for large firms, it has proven applicable to small business contexts (Blackmore & Nesbitt, 2013). Notably, recent literature calls for deeper exploration of the adaptive cycle—a key but under-researched component of the typology that integrates innovation and learning into strategic decision-making (J. Anwar et al., 2021; Núñez-Ríos et al., 2022).

Despite the relevance of this theoretical lens, significant knowledge gaps persist regarding how SMEs, particularly those in emerging economies like Vietnam, formulate and execute strategic orientations under resource constraints and environmental uncertainty (Sayal & Banerjee, 2022) . SMEs in developed countries benefit from advanced infrastructure and supportive policy ecosystems, whereas their counterparts in developing economies often contend with institutional and financial barriers that hinder innovation and competitiveness (Alqahtani et al., 2024).

Additionally, the strategic management behaviors of SMEs differ fundamentally from those of large firms in terms of structure, decision-making, and resource access (Quansah et al., 2022) . Yet, empirical studies investigating these behaviors, especially in service and trade SMEs in Vietnam. remain limited (Ibidunni et al., 2020).

Gathering all identified research gaps under a unified research framework that clearly illustrates their interconnection. This framework will position organizational effectiveness, grounded in both financial and non-financial measures, as the key

outcome variable, with Miles and Snow's strategic orientations as the primary antecedents. Innovation and learning capability will be conceptualized as dual mediators, aligned with the adaptive cycle. The framework will be informed by stakeholder theory, contingency theory, and the knowledge-based view to contextualize the relationships within the distinct characteristics of trade and service SMEs in Vietnam.

This study outlines several specific objectives, including:

1. To assess the adaptability of research constructs including Miles and Snow strategic orientations, learning capability, innovation and organizational effectiveness in the context of trade and service SMEs in Southeast Economic Region of Vietnam;

2. To investigate the direct and indirect relationships between Miles and Snow strategic orientations; learning capability; innovation; and organizational effectiveness in trade and service SMEs

2.1. To examine the direct relationships between strategic orientations, learning capability, and innovation;

2.2 To examine the direct relationship between learning capability and organizational effectiveness;

2.3. To examine the direct relationship between innovation and organizational effectiveness;

2.4 To examine the mediating roles of learning capability and innovation on the relationships between strategic orientations and organizational effectiveness.

3. To provide trade and service SMEs in Vietnam's Southeast Economic Region with evidence-based strategic guidelines on how to align their strategic orientation with learning capability and innovation to enhance organizational effectiveness.

In order to achieve the research objectives, this study aims to address the following research questions (RQ):

RQ1: How do research constructs including Miles and Snow strategic orientations, learning capability, innovation and organizational effectiveness manifest in trade and service SMEs context?

RQ2: Are there significant direct and indirect relationships between Miles and Snow strategic orientations; learning capability; innovation; and organizational effectiveness?

RQ2.1: To what extent do strategic orientations, learning capability, and innovation influence each other?

RQ2.2: To what extent does learning capability influence organizational effectiveness?

RQ2.3: To what extent does innovation affect organizational effectiveness?

RQ2.4: To what extent do learning capability and innovation mediate the relationships between strategic orientations and organizational effectiveness?

RQ3: What are the managerial implications of aligning strategic orientation with learning capability and innovation for enhancing organizational effectiveness in trade and service SMEs in Vietnam's Southeast Economic Region?

This research aims to both academic and practical contributions by developing and validating an integrated model that combines contingency theory, the knowledge-based view, and stakeholder theory to examine how strategic orientations influence organizational effectiveness in trade and service SMEs through the mediating roles of learning capability and innovation. The study advances theoretical understanding by simultaneously exploring both mediators, an approach rarely taken in prior research, and by applying these concepts in the under-researched context of SMEs in a developing country. This context-sensitive approach highlights the unique challenges faced by SMEs outside of manufacturing or developed economies. Practically, the findings provide valuable insights for SME managers, offering strategies to strengthen learning and innovation processes, improve decision-making, and enhance organizational effectiveness in uncertain and dynamic business environments.

CHAPTER 2
LITERATURE REVIEW

2.1. Research constructs and definitions

2.1.1. Defining Organizational Effectiveness

Organizational effectiveness is defined as the ability of trade and service SMEs to efficiently achieve their goals and objectives through agility, innovation, adaptability, competitiveness, effective resource utilization, and talent retention (Dhoopar et al., 2023; Yoshikuni & Albertin, 2018). Grounded in stakeholder theory and the balanced scorecard (BSC) framework, organizational effectiveness is viewed as a structured and comprehensive approach that aligns strategic goals with four key dimensions:

financial performance, customer satisfaction, internal process efficiency, and learning and growth (Freudenreich et al., 2020). This approach emphasizes not only short-term performance but also long-term sustainability by fostering stakeholder engagement and strengthening communication across all organizational levels (Mikula et al., 2020) . Recognizing the contextual limitations of SMEs, such as size and resource constraints, this study adopts forward-looking and stakeholder-oriented evaluation methods to better capture the dynamic and multifaceted nature of SME effectiveness (González-Torres & Rodríguez-Sánchez, 2024).

2.1.2. Defining Strategic Orientations

Strategic orientation is defined as the set of organizational principles rooted in values and beliefs that guide a firm's conduct, shape its responses to environmental dynamics, and influence decisions regarding resource allocation and opportunity pursuit (Didonet & Diaz-Villavicencio, 2020) . It is seen not merely as a set of strategic choices but as a reflection of a firm's culture and market alignment (Zhani et al., 2021). In this context, strategic orientation aligns closely with market orientation, encompassing firm responses to customers, competitors, and external pressures (Vlasic, 2022).

While traditional typologies such as Porter's (1991) cost leadership and differentiation or March's (1991) exploration-exploitation dichotomy have informed strategic thought, they fall short in addressing the agility and cohesion required by SMEs in volatile environments. Porter's cost leadership may undermine innovation, and differentiation can be costly and easily imitated (Rounaghi et al., 2021). March's framework also struggles to reconcile the dual demands of exploration and exploitation, especially for resource-constrained SMEs (Ibrahim et al., 2020).

Instead, this thesis adopts Miles and Snow's (1978) typology—Prospectors, Defenders, Analyzers, and Reactors, as a more dynamic and context-sensitive framework. This model integrates internal structure and external alignment, supporting strategic adaptability across volatile sectors like retail, logistics, and hospitality (Anwar & Shah, 2021) . Prospectors pursue innovation and market leadership; Defenders focus on efficiency and niche protection; Analyzers blend both to mitigate risk and leverage proven opportunities; while Reactors lack strategic consistency, often responding ineffectively to change (Anwar et al., 2021). Grounded in this typology, the thesis investigates how Vietnamese trade and service SMEs

foster organizational effectiveness through strategic orientations that enhance innovation and learning capability.

2.1.3. Defining Learning Capability

Learning capability has emerged as a vital construct in understanding how organizations, particularly SMEs, adapt and compete in dynamic environments. Strategically, learning is not merely an organizational function but a key differentiator that can drive sustained competitive advantage (Grant, 1996). Hull & Covin (2010) link learning capability to Cohen and Levinthal's absorptive capacity, emphasizing a firm's ability to recognize, assimilate, and apply new external information for commercial gain. Complementing this, Sok et al., (2013 and Sok & O'Cass, (2011) conceptualize learning capability as a set of interconnected routines and processes that facilitate learning-related activities. These include diagnosing staff training needs, evaluating failed initiatives, disseminating experiential insights organization-wide, and acquiring new, relevant knowledge to inform business operations.

This learning orientation is particularly essential for SMEs seeking to reduce reliance on outdated practices and instead leverage knowledge for innovation and strategic responsiveness (Thomä & Zimmermann, 2020). Afshari & Hadian Nasab (2021) and Freixanet & Federo (2022) further expand the definition, viewing learning capability as a firm's ability to generate, acquire, transfer, and integrate knowledge—ultimately modifying behavior to improve performance. This involves mechanisms such as R&D, knowledge transfer, and training initiatives that build a robust internal learning environment.

Zhou et al. (2023), adopting a knowledge-based view, highlight two key knowledge management practices that strengthen collective learning: external knowledge acquisition through environmental scanning and internal knowledge sharing among employees. Hervas-Oliver et al. (2021) affirm the strategic importance of learning capability for SMEs, stating that internal learning fosters both individual contributions and long-term innovation. A critical component of this capability is the systematic identification of training needs (Selvarajah et al., 2019), supported by structured insights and responsive leadership. Leadership training is essential not only for enhancing managerial effectiveness but also for improving organizational climate and resilience (Le et al., 2023).

Thus, learning capability is defined in this study as the interconnected processes through which a firm diagnoses training needs, evaluates failures, shares experiential knowledge, and acquires new knowledge to guide business activities (Afshari & Hadian Nasab, 2021; Sok et al., 2013).

2.1.4. Defining Innovation

A key issue in service innovation research is whether it differs from innovation in manufacturing (Prajogo & McDermott, 2014). Coombs & Miles (2000) identify three perspectives: assimilation, demarcation, and synthesis. The assimilation perspective sees service innovation as increasingly technology-driven, suggesting that manufacturing-based innovation theories apply equally to services (Mai et al., 2022). In contrast, the demarcation view highlights service-specific features—intangibility, co-production, simultaneity, heterogeneity, and perishability—as barriers to transferring knowledge from manufacturing (Fitzsimmons & Fitzsimmons, 2004) . The synthesis perspective combines both views, arguing for a more integrative framework that includes both technological and non-technological aspects. It acknowledges that while service innovation may differ in some ways, many principles from product development and innovation management in manufacturing are still applicable (Prajogo & McDermott, 2014).

Despite the valuable contributions of these perspectives, the definitions of service innovation vary, leading to potential confusion. Definitions range from emphasizing the technological aspects and economic value (assimilation) to asserting the distinct nature of service innovation and the importance of non-technological elements (demarcation). The synthesis perspective seeks a more comprehensive understanding, emphasizing the broader scope of innovation in both services and manufacturing. The ongoing debate about the definition of service innovation highlights the need for clarity and precision in conceptualization.

Giannopoulou et al. (2014) characterizes service innovation as a subtype of product innovation, involving the introduction of a new or significantly improved service, aligning with the assimilation perspective. Conversely, Ko & Lu (2010) emphasizes the role of technology-based inventions driven by the emergence of new markets or service opportunities. Extending this perspective, Hanaysha et al. (2022; Sundbo & Gallouj (2000) conceptualize service innovation as an organization's capacity to offer new or enhanced services, introducing novel ideas to improve

service delivery processes and customer support. According to Weerawardena et al. (2020) , service innovation is defined as adapting new knowledge to both technical and non-technical activities within a service firm, aiming to deliver innovative and value-added services. Mai et al. (2022) aligns with the definition provided by the Product Development and Management Association, describing innovation as the introduction of new ideas, methods, or devices, encompassing the creation of fresh products or procedures. This process includes both invention and the efforts to bring ideas to their final form, inspired by García-Morales et al. (2012).

While the literature offers diverse perspectives on innovation within service companies, this study deliberately focuses on a specific and precise definition of innovation. The synthesis perspective and exploratory innovation are chosen to ensure a thorough and in-depth analysis, particularly concerning trade and service SMEs in an emerging country. Innovation in this study is defined as the introduction of novel services, leveraging both technological advancements and creative ideas to address emerging customer needs and generate new market opportunities, with the ultimate goal of providing innovative and value-added solutions to clients (García-Morales et al., 2012; Prajogo & McDermott, 2014).

2.2. Theoretical Foundation

The Knowledge-Based View (KBV) emphasizes knowledge as a strategic, dynamic, and intangible asset that underpins organizational competitiveness and innovation. Building on the Resource-Based View, KBV highlights knowledge's unique development, path dependency, and potential for creating economic rent, especially within SMEs (Ferreira et al., 2023) . While strategic management recognizes knowledge as central to performance, many studies fail to establish a clear link between knowledge capabilities, strategy content, and organizational effectiveness (Salunke et al., 2019) . Knowledge creation and implementation are considered crucial for enhanced performance (López-Nicolás & Meroño-Cerdán, 2011), yet most theories narrowly associate knowledge with innovation and long-term advantage, leaving performance-behavior connections underexplored. In innovation research, KBV focuses on defining knowledge in firms, its creation, and how it supports innovation processes (Vidal et al., 2017), with several studies showing that a firm's capacity for combining knowledge promotes innovation (Grant, 1996; Ruiz-Jiménez & Fuentes-Fuentes, 2013) . Empirical studies often position innovation as a

mediator or moderator between strategic variables and performance outcomes (Dogbe et al., 2021). However, the direct relationship among learning capability, innovation, and effectiveness remains insufficiently addressed. In Vietnam's trade and service SMEs, where resources are limited and markets are volatile, KBV provides a valuable foundation by stressing absorptive capacity, structured routines, and adaptive capabilities to transform knowledge into strategic action (Gunawan et al., 2022). The theory underscores that strategic advantage stems not from merely possessing knowledge but from a firm's ability to create, integrate, and apply it, thus fostering resilience, innovation, and sustainable growth, particularly in digitally evolving and globally connected contexts (Migdadi, 2019).

Contingency theory centers on the concept of "fit," asserting that organizational effectiveness results from the alignment between internal characteristics—such as goals, structures, and resources—and external environmental factors (Danso et al., 2020). It posits that the optimal strategy depends on a range of variables, including context, technologies, and people involved, thereby rejecting one-size-fits-all approaches. This theory is primarily supported by scholars who emphasize chance and context, considering both internal resources and external conditions in strategic planning (Lartey, 2020; Toh et al., 2022). Strategic compatibility within this framework also aligns with the Resource-Based View, which emphasizes leveraging a firm's unique combination of resources and competencies to create competitive advantage (Grant, 2021). Critics, however, challenge its deterministic nature, arguing that the theory assumes organizations are primarily reactive, shaped by their environment, rather than proactive and innovative (Miles, 2012). Despite these criticisms, contingency theory remains highly relevant for SMEs in dynamic and uncertain markets, particularly in Vietnam's trade and service sectors. It offers a flexible framework to understand how internal capabilities—such as limited resources, technological capacity, and marketing skills—interact with external volatility, including digital transformation and shifting customer preferences, to influence strategic choices (Cho et al., 2023). Miles and Snow's strategic orientations further illustrate how firms can align behaviors—such as prospector or defender strategies—with both environmental demands and internal conditions. Moreover, contingency theory provides practical guidance on tailoring Quality Management practices based on factors like organizational culture, lifecycle stage, customer orientation, and strategic priorities. By emphasizing contextual fit and strategic

alignment, contingency theory supports responsive, sustainable, and effective decision-making for Vietnamese trade and service SMEs.

Stakeholder theory, particularly in its instrumental form, offers a valuable bridge between ethics-driven approaches and strategic management by explaining how stakeholder relationships affect firm performance (Bridoux & Stoelhorst, 2022). It is categorized into descriptive, normative, and instrumental types, with the latter serving as a critical link to strategy. The theory emphasizes the need to consider the interests and expectations of various stakeholders—employees, customers, suppliers, communities—in decision-making and performance evaluation (Freeman, 2010). Rather than viewing organizations in isolation, stakeholder theory highlights their embeddedness in networks of collaboration that co-create value and foster innovation (Aisjah et al., 2023). This approach is particularly relevant for Vietnamese trade and service SMEs operating in complex, evolving environments. Integrating stakeholder theory with Miles and Snow's strategic orientations deepens understanding of how firms align innovation and decision-making with stakeholder needs (Freeman et al., 2021). Prospectors, for example, must align their innovation with customer demand and policy shifts like Vietnam's digital agenda. Strong stakeholder ties, especially during crises, enhance resilience. Stakeholders also shape SMEs' learning capability—through knowledge-sharing, feedback, and collaborative problem-solving—enabling quick adaptation in high-turnover sectors like services (Tsai et al., 2022). Innovation often depends on support from stakeholders via funding, feedback, and partnerships. Additionally, stakeholder theory expands the concept of organizational effectiveness by including non-financial indicators such as employee morale, customer trust, and institutional compliance, all of which are crucial for Vietnamese SMEs. It aligns well with Vietnam's relationship-based business culture, where trust, cooperation, and collective wellbeing—often reflected in public-private partnerships—drive sustainable growth (Freudenreich et al., 2020).

2.3. Hypotheses Development

2.3.1. Strategic orientations and innovation

Leskovar-Spacapan & Bastic (2007) posited that different strategic orientations can significantly influence an organization's innovation capacity. In the same light, Al-Ansaari et al. (2014); Kafchehi et al. (2016) found that both prospector and analyzer orientations foster innovation, emphasizing the importance of a balance

between exploration and exploitation. The prospector strategy emphasizes exploratory innovation through activities such as scanning emerging business trends, establishing new ventures, and actively networking to pursue new resources and opportunities. This strategy enables agile SMEs to stay responsive to market demands and seize innovative opportunities, making it a valuable approach for SMEs to navigate crises and adapt to evolving market dynamics (Chong & Duan, 2022; Lukito-Budi et al., 2023) . Such an approach also aligns well with innovation, as it encourages experimentation and novel ideas, creating an environment conducive to fostering innovative practices (Al-Ansaari et al., 2014; O'Regan & Ghobadian, 2005) . However, Sandberg & Aarikka-Stenroos (2014) stated that too much focus on innovation without a strategic framework might lead to unmanageable risks, potentially hindering the innovation process. In addition, the analyzer strategy combines the strengths of the defender and prospector strategies by focusing on incremental innovation and efficiency while maintaining a stable core business and exploring new opportunities in a controlled manner (Riswanto et al., 2020; Steinerowska-Streb & Wziątek-Staśko, 2020). This strategy strikes a balance between stability and change, enabling SMEs to respond to crises by adapting to changing market demands while maintaining their core business. Therefore, prospector organizations typically embrace an exploratory and innovative approach, emphasizing new product development and market exploration (Kafchehi et al., 2016; Menguc & Auh, 2008) . Analyzers, on the other hand, maintain a more balanced strategy, combining innovation with a careful assessment of market opportunities (Avci et al., 2011; Laforet, 2008).

In addition, reactor organizations adapt reactively to external changes, and defenders emphasize stability and preservation of their market position. Reactor strategies imply a responsive approach, adapting to changes rather than proactively seeking new opportunities (Anwar & Hasnu, 2017). Lewin et al. (2004) suggest that reactor strategies might trigger innovation by compelling organizations to swiftly adapt and develop novel solutions in response to environmental shifts. Furthermore, while reactors may not actively seek change, their capacity for rapid adaptation could lead to innovative responses in uncertain environments (Walker, 2013) . Some scholars advocate that certain reactive strategies might trigger unexpected and innovative responses to challenges, suggesting that a reactive orientation might, in certain circumstances, lead to creative problem-solving and innovation (Angkiriwang et al., 2014; Wymer & Regan, 2005). However, the reactor orientation, characterized

by a reactive stance, faces a challenge in fostering innovation due to its lack of a coherent strategy (Sandberg & Aarikka-Stenroos, 2014). Al-Ansaari et al. (2014) argued that a reactive stance might limit proactive innovation efforts, as reactors primarily focus on adapting to immediate challenges rather than anticipating future changes. Contrastingly, many defender-oriented SMEs have tended to focus on implementing retrenchment and persevering strategies rather than embracing innovative approaches to adapt to uncertain market conditions. Defenders tend to emphasize stability and are often resistant to change, which may hinder their willingness or ability to innovate (Leskovar-Spacapan & Bastic, 2007; Li & Tan, 2013). Troilo et al. (2014) suggested that defender strategies focused on protecting market positions might restrict innovation efforts due to an emphasis on risk aversion and stability. This suggests that SMEs with a defender orientation may face difficulties in shifting towards more innovative strategies during times of volatility, resulting in lower levels of innovation and potentially hindering their ability to be resilient (Lukito-Budi et al., 2023). However, contrasting perspectives suggest that defender strategies might not uniformly impede innovation. Some studies, though limited, indicate that defenders might innovate in niche areas or in process improvements rather than in radical product innovation. This suggests that the negative relationship between defender strategies and innovation might be contingent on various factors, such as industry context, market dynamics, or the specific definition of innovation.

While prospector and analyzer strategies are expected to positively impact innovation due to their inherent emphasis on exploration, the effect of reactor strategies might vary based on how organizations manage changes (Angkiriwang et al., 2014; Kafchehi et al., 2016). Therefore, the relationship between strategic orientation and innovation is multifaceted. Several studies substantiate the positive relationship between certain strategic orientations and innovation (Cheng & Huizingh, 2014; Kim & Shim, 2018). Anwar & Hasnu (2017) also highlighted the positive impact of strategic orientations on innovation, emphasizing the significance of organizations' adaptive capabilities. Specifically, some studies suggest that a reactor orientation may benefit SMEs with low technological advancement and capabilities, enabling them to focus on incremental innovation and improve operational efficiency, potentially leading to long-term innovation outcomes (Kumar et al., 2012; Mendoza Moheno et al., 2014). Unfortunately, the relationship between reactor strategic

orientation and innovation outcomes in SMEs is complex and not well-established in the literature. Therefore, the subsequent hypotheses are proposed:

H1: Strategic orientation, including prospector (H1a), analyzer (H1b) and reactor (H1c) positively affect innovation.

H1d. Strategic orientation- defender negatively affects innovation.

2.3.2. Strategic orientations and learning capability

Contingency Theory and the KBV serve as the theoretical foundation for examining the impact of strategic orientations on learning capability in trade and service SMEs. From a KBV perspective, these orientations shape how firms acquire, integrate, and apply knowledge, which is crucial for organizational learning (Trivedi & Srivastava, 2021). These perspectives jointly emphasize the importance of strategic orientations in enhancing learning capability.

The current business landscape is characterized by rapid changes, driven by technological advancements, dynamic market trends, and evolving customer preferences (Muñoz et al., 2018). In this volatile environment, organizational agility becomes instrumental for companies to navigate uncertainties and sustain their competitiveness. Survival hinges on the adaptability and evolution of organizations through continuous learning. Learning plays a pivotal role in enabling organizations to adapt and thrive in such conditions (Kim & Shim, 2018). Strategic learning, a continuous process that involves acquiring, interpreting, and applying new knowledge, allows organizations to enhance their adaptability and responsiveness to the external environment (Duchek, 2020). Consequently, organizations that foster strategic learning tend to be more agile and resilient in the face of disruptive changes.

Strategic orientation encourages the organization to learn from both internal and external sources, assimilate new information, and integrate it into their operations. Having strong learning capability can help SMEs remain competitive in the market by quickly adapting to new technologies and changes in customer preferences (Moustaghfir et al., 2020). For instance, by investing in staff training and analyzing past experiences, SMEs can acquire new skills and knowledge and avoid repeating previous mistakes. Additionally, SMEs can also learn from the experiences of other companies in their industry and use that knowledge to improve their own business practices. Although defenders prioritize stability and efficiency, they can still develop learning capability by implementing structured training programs, knowledge-sharing

initiatives, and continuous improvement practices within their organization (Manyati & Mutsau, 2021).

Regarding strategic orientations, prospector strategies emphasize exploration, seeking new opportunities, and innovation (Al-Ansaari et al., 2014). Kim & Shim (2018); Menguc & Auh (2008) suggested that organizations adopting a prospector strategy are more inclined to foster an environment conducive to learning and acquiring new knowledge. Abdullah & Salleh (2011) highlighted that organizations with a prospector strategy often encourage experimentation and risk-taking, fostering a learning culture that supports continuous improvement. Prospector-oriented organizations actively seek novel knowledge to stay ahead in the market and foster a culture of continuous learning to adapt swiftly to emerging trends (Kafchehi et al., 2016; Walker, 2013). In addition, the analyzer strategy involves a balance between stability and innovation (Troilo et al., 2014). Analyzers typically focus on adopting successful practices from the market while maintaining stability (Song et al., 2007). Some research suggests that analyzers, by actively monitoring and evaluating market trends, may also invest in learning activities to adapt and capitalize on emerging opportunities (Zhou & Wu, 2010). Moreover, reactor strategies typically involve a more adaptive approach, responding to external changes rather than proactively seeking new opportunities (Anwar & Hasnu, 2017; Laforet, 2008). Studies highlight that reactors might be less inclined to invest in long-term learning initiatives due to their focus on immediate survival (Angkiriwang et al., 2014; Ergün & Avcı, 2018). Finally, the defender strategy emphasizes stability and maintaining the status quo (Menguc & Auh, 2008). Kalkan et al. (2014) suggested a positive relationship between a defender strategy and learning capability, indicating that defenders might focus on structured learning efforts to reinforce their existing knowledge base. Some viewpoints argue that defenders, while maintaining stability, might be less inclined to engage in learning activities due to their strong emphasis on stability and resistance to change (Jost, 2015). According to Kim & Shim (2018), this strategic orientation might foster learning more cautiously but steadily, ensuring that stability is not compromised.

H2: Strategic orientation, including prospector (H2a), analyzer (H2b), reactor (H2c) and defender (H2d) positively affect learning capability.

2.3.3. Learning capability, innovation and organizational effectiveness

Organizational learning is a key driver for SMEs to adapt, innovate, and remain competitive in today's dynamic business environment. By actively engaging in knowledge development and transfer, SMEs can continuously renew their technology, production processes, and overall business behavior (Mu et al., 2017). This emphasis on learning capability is at the core of KBV theory, which recognizes that SMEs' ability to acquire and apply knowledge internally and externally positively influences their innovation performance and competitive advantage (Singh & Misra, 2021). To foster learning capability, SMEs should invest in staff training, cultivate a culture of competence development, embrace learning and innovation orientation, and encourage diverse approaches to employee-driven innovation. These practices enable SMEs to unleash their full potential for continuous learning and promote a culture of innovation and growth.

An organization's learning capabilities play a pivotal role in enhancing its absorptive capacity, allowing it to absorb new technologies, industry trends, and market insights, which then fuel innovation efforts (Corrales-Estrada et al., 2021; Migdadi, 2019). Farzaneh et al. (2020) posited that an organization's ability to learn, adapt, and assimilate knowledge positively influences its innovative endeavors. Empirical evidence supports this assertion by suggesting that organizations that prioritize continuous learning often exhibit a higher propensity for innovation (Hussein et al., 2016; Zhao et al., 2021). This viewpoint underscores the competitive advantage derived from an organization's knowledge assets (Asiaei et al., 2021). Organizations adept at learning continuously accumulate tacit and explicit knowledge, fostering a culture where this knowledge is shared, disseminated, and utilized to innovate (Migdadi, 2019). Studies across industries often illustrate how learning-oriented cultures facilitate idea generation, experimentation, and the development of novel solutions, driving innovative outcomes (Aboobaker & KA, 2021). Therefore, this hypothesis is put forward:

H3: Learning capability positively affects innovation.

Innovation, widely regarded as the engine of growth and progress, embodies transformative power within organizations (Al-Ansaari et al., 2014). Innovation and organizational effectiveness have a positive relationship, as innovation contributes to enhanced organizational effectiveness by facilitating adaptation to dynamic environments, optimizing efficiency, and delivering customer-centric products or

services (Sawaean & Ali, 2020) . This means that the presence and cultivation of innovation within an organization directly correlate with enhanced organizational effectiveness (Grawe et al., 2009; Kim et al., 2018) . Organizations that embrace innovation exhibit higher adaptability to changing market demands, increased customer satisfaction, and a heightened ability to penetrate new markets (Migdadi, 2019). Numerous empirical studies reinforce this relationship, citing examples of how innovative cultures correlate positively with financial performance metrics and overall efficiency (Naveed et al., 2022) . Moreover, innovation can bolster employee engagement and job satisfaction, thereby bolstering organizational effectiveness through reduced turnover rates and heightened productivity. By fostering workplace knowledge, satisfaction, and flexibility, innovation augments business performance and encourages organizational change and progression (Tang et al., 2021) . Notably, innovation practices that harness external ideas and collaborations further stimulate value creation and influence management decisions, thereby nurturing innovative practices that enhance overall firm efficiency (Khizar et al., 2021).

In addition, learning capability enables organizations to thrive in the complex business landscape by adapting to changing market dynamics and customer preferences, leading to improved financial effectiveness and customer satisfaction (Idris et al., 2020) . A learning-capable organization is one that continuously absorbs new information, adapts to evolving environments, and leverages knowledge to improve its operations and strategies (Abdullah & Salleh, 2011; Pesämaa et al., 2013). Research shows that organizations placing emphasis on continuous learning tend to foster innovation, make better decisions, and achieve higher employee engagement (Migdadi, 2019) . These learning-oriented environments often exhibit greater flexibility and resilience, leading to improved overall performance and effectiveness (Patky, 2020) . Evidence from various studies demonstrates a strong link between investments in employee training, mechanisms for sharing knowledge, and the cultivation of a continuous learning culture with enhanced organizational outcomes (Alerasoul et al., 2022).

Additionally, from a knowledge-based view, learning capability is a critical organizational asset that drives innovation and, ultimately, organizational effectiveness. Learning capability encompasses processes such as diagnosing training needs, analyzing past failures, disseminating lessons learned, and acquiring new knowledge (Efendi et al., 2020) . These processes enhance absorptive capacity,

enabling firms to internalize and apply knowledge creatively (Aydin & Ceylan, 2009). In trade and service SMEs, where market dynamics and customer preferences shift rapidly, learning capability fosters innovation by promoting knowledge creation, collaboration, and openness to external ideas (Gomes & Wojahn, 2017) . This is particularly evident in innovations, such as process changes or digital service adaptations, which rely heavily on continuous learning (Valaei, 2017).

Contingency theory further supports this relationship, suggesting that the impact of learning on effectiveness depends on the firm's ability to align innovation with environmental demands. SMEs operating in volatile markets must leverage learning to generate innovations that enhance competitiveness, whether through new service offerings, operational efficiencies, or business model adjustments (Kafetzopoulos & Psomas, 2015) . Studies across sectors confirm that learning capability does not directly improve organizational effectiveness but does so indirectly by strengthening innovation (Efendi et al., 2020). For instance, Camisón & Villar-López (2014) found that organizational learning boosts performance primarily by enhancing innovation capabilities, which then drive adaptability, productivity, and goal achievement, key dimensions of effectiveness.

From a stakeholder perspective, innovation acts as a bridge between learning and effectiveness by addressing the diverse needs of customers, employees, and investors. Trade and service SMEs must continuously adapt to stakeholder expectations, and learning capability ensures that innovations, such as customer-centric service improvements or employee skill development, are aligned with these demands (Zhao et al., 2021). This alignment reinforces competitiveness, a proxy for organizational effectiveness, as firms that innovate successfully outperform peers in customer satisfaction and operational resilience (Migdadi, 2019) . Accordingly, we hypothesize the following:

H4: Innovation positively affects organizational effectiveness.

H5: Learning capability positively affects organizational effectiveness.

H6: Organizational effectiveness is indirectly affected by learning capability through the mediating role of innovation.

2.3.4. The mediating roles of learning capability and innovation

The integration of Contingency Theory, the Knowledge-Based View (KBV), and Stakeholder Theory provides a robust framework for understanding how strategic

orientations indirectly influence organizational effectiveness through learning capability and innovation. Contingency Theory posits that organizational success depends on aligning strategic choices with environmental demands (Danso et al., 2020) . For SMEs, this alignment is often mediated by their ability to learn and innovate—prospectors thrive in dynamic environments by prioritizing exploration, while defenders stabilize operations in stable contexts (Cho et al., 2023) . The KBV further clarifies this link: learning capability enables firms to convert tacit knowledge into actionable innovation (Al-Tal & Emeagwali, 2019) , which is critical for SMEs whose survival hinges on agility. Stakeholder Theory adds that innovation must address stakeholder needs (customer demands, investor expectations) to translate strategic postures into measurable effectiveness (Freeman et al., 2021).

Organizational effectiveness is a multifaceted concept encompassing various aspects of performance, such as productivity, efficiency, and adaptability (Naveed et al., 2022) . From a strategic management perspective, organizations characterized as prospectors tend to focus on innovation, exploration, and risk-taking (Abdullah & Salleh, 2011) . Analyzers balance innovation with a more conservative approach; reactors react to environmental changes; and defenders emphasize stability (Anwar & Hasnu, 2017; Troilo et al., 2014) . Prospector-oriented organizations often exhibit higher levels of innovation due to their proclivity for risk-taking and exploration (Kafchehi et al., 2016). These qualities spur creativity and novel solutions, resulting in enhanced organizational effectiveness (Otache, 2019) . Conversely, defenders may exhibit lower innovation but can foster stability and efficiency, which might positively impact effectiveness in certain contexts (Bedford et al., 2016; Troilo et al., 2014) . The mediating role of innovation is crucial here. Han et al. (1998) proposed that innovation can act as the channel through which these strategic orientations impact organizational effectiveness. Studies by AlTaweel & Al-Hawary (2021); Kasemsap (2017) demonstrated that innovation mediates the relationship between different strategies and organizational outcomes. This perspective aligns with resource-based views of the firm, suggesting that strategic orientations influence the accumulation of innovation-related resources, thereby influencing organizational effectiveness.

Nowadays, despite frequently lacking the resources to effectively manage uncertainty, SMEs strive for economic sustainability in the face of disruptions (Khan & Haider, 2022) . The study by Toubes et al., (2021) on tourism SMEs in Galicia

highlights how crises such as the COVID-19 pandemic expose vulnerabilities and force businesses to reassess their strategies. SMEs, which often lack the financial and operational resources of larger firms, tend to prioritize short-term survival over long-term sustainability during crises, missing opportunities for deeper learning (Toubes et al., 2021). However, the research shows that SMEs that actively engage in knowledge transfer, experimentation, and openness to new ideas are better equipped to navigate uncertainty and enhance their adaptive capacity (Jerez-Gomez et al., 2005). Aydin & Ceylan (2009); Kim & Shim (2018) revealed how different strategic orientations shape an organization's learning capability and how learning, in turn, influences organizational effectiveness. Moreover, a study by Al-Ansaari et al. (2014) examined the effect of strategic orientations on innovation, emphasizing that prospector strategies significantly drive innovation by fostering a culture that encourages learning and experimentation. The research conducted by Laforet (2008) also noted that different strategic orientations, specifically prospector and analyzer strategies, exhibit stronger associations with innovation due to their inherent focus on learning and adaptation. Additionally, findings from Patky (2020) underscored that learning capability can act as a mediating mechanism between strategic orientations and innovation. The concept aligns with the resource-based view, which suggests that strategic orientations shape an organization's internal resources, such as learning capabilities, affecting its innovation potential (Camelo-Ordaz et al., 2003) . By investing in employee training, service SMEs can develop the absorptive capacity necessary to assimilate and apply new knowledge, fostering innovation (Demirkan et al., 2022) . However, the effectiveness of these investments depends on contextual factors such as the level of employee education, firm size, and the continuity of R&D investments. In service-oriented SMEs, where innovation often revolves around customer-centric solutions, learning capabilities derived from training can enhance adaptability and responsiveness to market changes. The research underscores that smaller service SMEs, in particular, should prioritize targeted training to maximize innovation outcomes, as their limited resources require efficient allocation (Demirkan et al., 2022). As a result, this study highlights the need for a nuanced examination of the indirect influence of strategic orientations on innovation, mediated by learning capabilities, to fully comprehend the complexities of this relationship.

Simultaneously, innovation serves as the subsequent mediating factor. Innovation, as Caballero-Morales (2021) emphasizes, enables SMEs to adapt to and

respond to shifting market dynamics. The strategic orientations of prospector, analyzer, reactor, and defender have varying impacts on organizational effectiveness, with learning capability and innovation acting as mediating factors. Prospector firms, for instance, thrive on continuous learning and radical innovation, while defender firms rely more on incremental improvements and efficiency-driven learning. Analyzers balance both approaches, and reactors, lacking a coherent strategy, often struggle to leverage learning and innovation effectively. Learning capability facilitates the acquisition and application of knowledge, which in turn fuels innovation, while innovation transforms strategic intent into tangible performance outcomes. Innovation performance mediates the relationship between strategic orientations and business performance (Sawaean & Ali, 2020) . Furthermore, organizational learning, as a mediating factor, has been found to link knowledge management, teamwork, emotional capability, and innovativeness (Rianto et al., 2021) . Additionally, innovation itself acts as a mediator between organizational learning and gaining a competitive advantage (Gomes et al., 2022). This is one of the first studies to investigate the mediating role of learning capability and innovation individually and in combination in the relationships between SME strategic orientations and organizational effectiveness. It delves into the multifaceted relationship between strategic orientations, learning capability, innovation, and their collective impact on organizational effectiveness. The study therefore proposes the following hypotheses:

H7: Organizational effectiveness is indirectly affected by prospector (H7a), analyzer (H7b), reactor (H7c) and defender (H7d) through the mediating role of innovation.

H8: Organizational effectiveness is indirectly affected by prospector (H8a), analyzer (H8b), reactor (H8c) and defender (H8d) through the mediating role of learning capability.

H9: Innovation is indirectly affected by prospector (H9a), analyzer (H9b), reactor (H9c) and defender (H9d) through the mediating role of learning capability.

H10: Organizational effectiveness is indirectly affected by prospector (H10a), analyzer (H10b), reactor (H10c) and defender (H10d) through the mediating role of learning capability and innovation.

2.4. Research Model

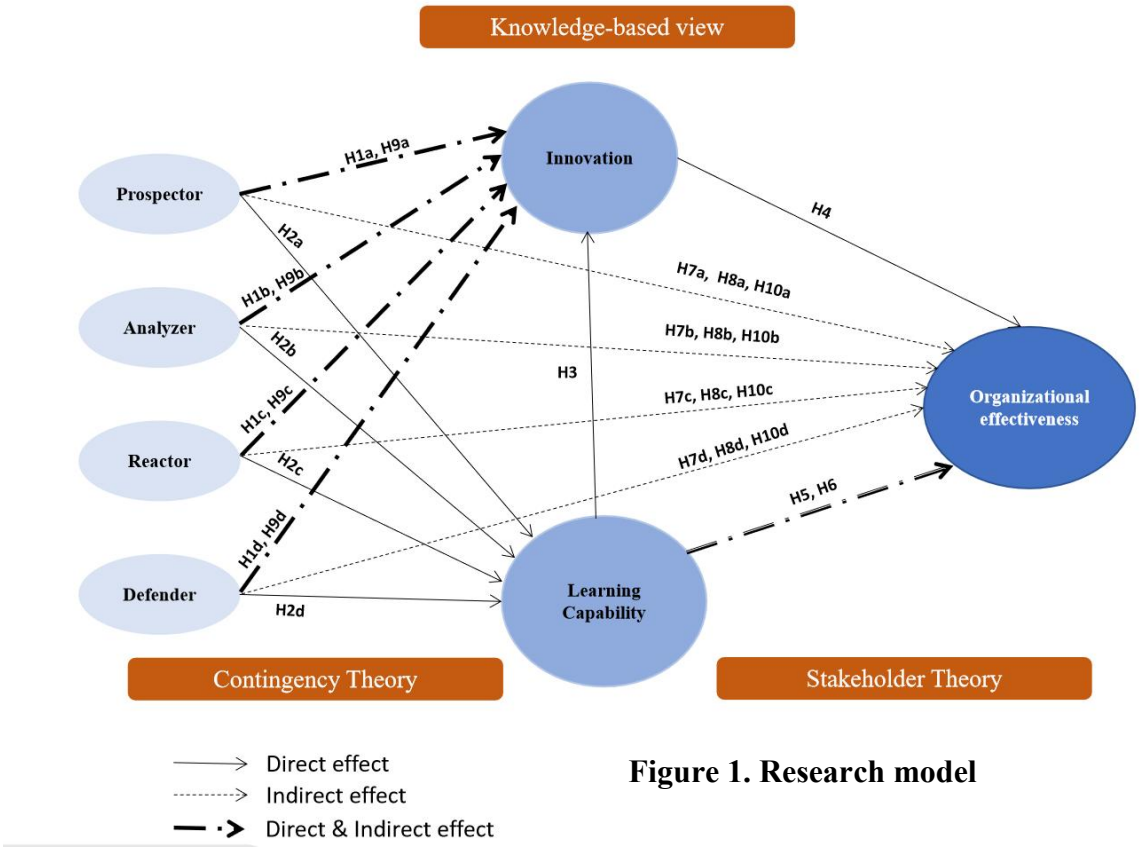

Figure 1. Research model

CHAPTER 3
METHODOLOGY

This study employed an exploratory sequential mixed-methods design to effectively address its research questions by integrating qualitative and quantitative approaches. The process began with a qualitative phase involving semi-structured interviews guided by a purposive sampling strategy, with data thematically analyzed to inform construct development and measurement. The subsequent quantitative phase targeted a broader sample using structured surveys, with instruments developed based on established measures and refined through pilot testing to ensure reliability and validity. Quantitative data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), including assessments of both measurement and structural models. The methodology also incorporated data screening, checks for common

method bias, and adherence to ethical considerations, ensuring the overall rigor and integrity of the research process.

3.1. Qualitative Phase

The qualitative phase of this study played a foundational role in shaping the subsequent quantitative approach by offering context-specific insights into strategic orientations, learning capability, innovation, and organizational effectiveness within Vietnamese trade and service SMEs. A purposive sampling strategy was used to recruit participants, with eligibility confirmed through screening questions focusing on their roles, sector, and strategic experience. Semi-structured interviews were conducted online via Zalo and Facetime between August and September 2022, allowing for flexible scheduling and greater geographic reach across regions such as Ho Chi Minh City, Binh Duong, and Dong Nai. This approach enhanced convenience, reduced logistical costs, and enabled the easy recording and transcription of data, although it also presented challenges such as limited non-verbal cues and potential technical disruptions (De Villiers et al., 2022; Harvey et al., 2024) . Each interview lasted approximately 60 minutes and was conducted in Vietnamese to ensure participant comfort and data richness. Interviews began with background questions before moving to key topics aligned with the study's constructs. Participants signed consent forms beforehand, returning images via Zalo or iMessage. Open-ended questions guided by an interview protocol enabled in-depth responses and follow-up queries in real-time. With participants' permission, interviews were recorded for later transcription and analysis. Following Creswell's (2014) guidelines, thematic content analysis (Braun & Clarke, 2006) was used to code the data, identify recurring topics, and develop meaningful themes. These themes were reviewed for consistency and contextual relevance, ensuring they accurately reflected participants' experiences. The analysis informed critical refinements to the measurement instruments, allowing them to be grounded in local business dynamics and enhancing their reliability and validity for use in the subsequent quantitative phase.

3.4. Quantitative Phase

The quantitative phase of this study focuses on examining the relationships among strategic orientations, learning capability, innovation, and organizational effectiveness within trade and service SMEs in Vietnam's Southeast Key Economic Region, comprising Ho Chi Minh City, Binh Duong, and Dong Nai. This region, identified by

the 15th Vietnam National Assembly as the primary economic growth driver toward the 2050 vision, contributes significantly to national GDP and state budget revenue, with Ho Chi Minh City alone generating USD 63.7 billion (The White Book, 2022; Tho, 2019)). It hosts over 43% of the country's businesses and is characterized by intense competition, rapid development, and a vibrant commercial environment, making it an ideal context to explore how SMEs leverage strategic orientations and innovation for organizational effectiveness (Hai et al., 2022) . Recognizing regional differences in managerial practices between the North and South—where Southern SMEs tend to adopt less formal HR systems and task-oriented leadership styles (Huynh & Hua, 2020; Tuan & Rajagopal, 2022)—this study targets SMEs with over five years of operation to ensure resilience. SMEs are defined in accordance with Decree 80/2021/ND-CP.

Due to the absence of a complete sampling frame, a non-probability sampling strategy was adopted, combining judgmental, convenience, and snowball sampling (Allaberganov et al., 2021) . Eligible participants include founders, co-founders, or managers who are part of the company's strategy team. The sample size was determined using G*Power 3.1.9.7 with a priori analysis, yielding a minimum required sample of 146 based on an alpha of 0.05, power of 0.8, medium effect size ($f^2 = 0.15$), and six predictors (Xing et al., 2024) . However, the researcher aimed to exceed this threshold to ensure greater robustness of the findings.

Most constructs are scored on a five-point Likert scale, ranging from strongly disagree (1) to strongly agree (5), except for learning capability, which is scored on a five-point Likert scale ranging from not at all (1) to extremely (5). The strategic orientations—prospector, defender, analyzer, and reactor—are based on the Miles and Snow typology. These were assessed using items initially drawn from the qualitative phase of the research. They were further refined by cross-referencing them with validated measures adapted from Andrews et al. (2007) and Avci et al. (2011) . Similarly, innovation was measured using items derived from the qualitative phase and adjusted using validated measures from García-Morales et al. (2012) . Learning capability was evaluated with items developed from the qualitative findings and then fine-tuned using measures validated by Sok et al. (2013) . Lastly, organizational effectiveness was measured using items initially drawn from the qualitative phase, which were subsequently refined by cross-referencing with validated measures adapted from Yoshikuni & Albertin (2018) , with a foundation in the Balanced

Scorecard framework by Kaplan & Norton (1992) . The final survey instrument included filter questions to confirm respondent eligibility, followed by sections on strategic orientations, learning capability, innovation, organizational effectiveness, and demographics. The questionnaire was translated into Vietnamese and back-translated into English to ensure linguistic accuracy ((Parameswaran & Yaprak, 1987).

To minimize common method biases, several design strategies were implemented. These include structuring the survey so that strategic orientations precede learning capability, innovation, and organizational effectiveness to reduce priming effects (Thau et al., 2021), and placing demographic questions at the end to sustain participant engagement (Lohr, 2021) . Anonymity and confidentiality were emphasized to mitigate social desirability bias (Krumpal, 2013).

A pilot test involving 30 SME founders, co-founders, and managers was conducted to assess the reliability and clarity of the instrument, consistent with Hill (1998) recommendation of 10–30 participants for such testing.

Data collection took place from October 2022 to May 2023 through two main methods. The first involved distributing surveys at events organized by SME associations (e.g., SECC, WTC Binh Duong) using QR codes and paper formats, facilitated by a team of trained part-time students. Measures were taken to prevent duplicate responses and track participation. The second method entailed sending online surveys via email using databases provided by the Association of Small and Medium Enterprises in the South Region of Vietnam (ASMES). Each company was asked to submit only one response. Informed consent was obtained from all participants to ensure ethical compliance

The quantitative phase employs PLS-SEM using SmartPLS to examine the relationships among strategic orientations, learning capability, innovation, and organizational effectiveness. Data normality is first tested using Mardia's multivariate test via Web Power, with p-values below 0.05 indicating non-normality (Cain et al., 2017) . PLS-SEM is chosen over CB-SEM due to its robustness against non-normal data, ability to handle complex models, and its support for composite modeling (Guenther et al., 2023; Hair et al., 2019). Data screening in SPSS involves removing invalid responses and addressing missing values, following Creswell & Creswell (2005) guidelines. Common method bias is assessed using Harman's single-factor test and an unmeasured latent method factor approach, with non-significant model differences indicating minimal bias (Podsakoff et al., 2012).

Following Hair et al. (2019), a two-stage approach is adopted—first evaluating the measurement model and then the structural model. Measurement model assessment includes internal consistency (Cronbach's Alpha, Composite Reliability), convergent validity (AVE > 0.5), and discriminant validity using the Fornell-Larcker criterion and HTMT (< 0.9) (Franke & Sarstedt, 2019) . Structural model analysis involves bootstrapping (3,000 samples) to evaluate hypotheses using t-values and p-values (Henseler et al., 2016). Model fit is assessed using R^2 (Chin, 1998), effect size f^2 (Cohen, 1988), and predictive relevance Q^2 through blindfolding (Geisser, 1975), confirming the model's reliability and explanatory strength.

CHAPTER 4
DATA ANALYSIS AND RESULTS

4.1. Qualitative Results

The qualitative phase involved nine leaders from trade and service SMEs, each with at least five years of leadership experience, across a range of industries in trade and service sector. Through semi-structured interviews guided by targeted questions, participants provided detailed insights into their firms' strategic orientations and organizational practices. Despite differences in business activities and management styles, participants showed a consistent understanding of strategic orientations and their links to business outcomes. Thematic analysis revealed a comprehensive picture of how strategic orientations, learning capability, innovation, and organizational effectiveness manifest in the SME context.

After analyzing qualitative data, the researcher has identified strategic orientations and organizational outcomes that are manifested in SMEs based on the interview results. These include four strategic orientations: (1) Prospector orientation, characterized by redefining priorities, seeking new markets, and taking calculated risks for growth; (2) Defender orientation, with a focus on maintaining stable product offerings, operating within familiar market areas, and emphasizing quality over rapid growth; (3) Analyzer orientation, combining risk-averse innovation with gradual and measured change, while maintaining customer centricity in existing markets; and (4) Reactor orientation, marked by reactive responses to market changes, limited innovation capability, and inconsistent strategic direction. Capabilities that drive

business success, such as (5) learning capability, which encompasses assessing staff development needs, enhancing skills, fostering continuous learning, and promoting knowledge sharing and communication; (6) a strong emphasis on innovation, including product development, technology investment, and the pursuit of technological leadership to maintain competitiveness; and (7) a focus on organizational effectiveness, involving profitability, cost efficiency, revenue generation, customer satisfaction and loyalty, brand reputation, process and operational efficiency, post-sale efficiency, and employee satisfaction. These strategic orientations and organizational outcomes are interconnected, contributing to the firms' resilience, agility, and long-term success in a dynamic market environment. Themes identified from the qualitative study and their relationships are depicted in Figure 2.

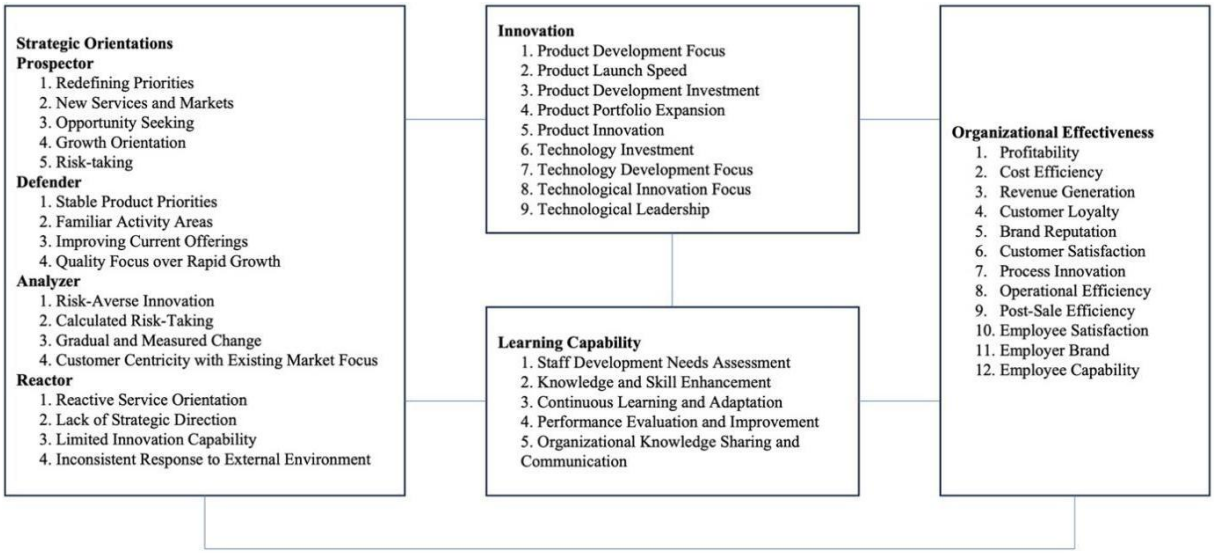

Figure 2. Strategic Orientations and Organizational Effectiveness

The themes identified from the qualitative phase (Figure 2) were carefully aligned with existing literature to develop measurement items for the questionnaire, ensuring relevance to the study's context. To establish construct validity, a pretest involving five SME managers and five business scholars was conducted to refine wording and clarity, followed by a rigorous back-translation process with bilingual experts (Cao et al., 2021; Shadish et al., 2002). The final questionnaire included 44 items covering organizational effectiveness, learning capability, innovation, and strategic orientations, plus demographic questions aligned with Vietnam's SME classification (Decree 80/2021/NDCP). A pilot test with 30 SME leaders from key regions assessed reliability via Cronbach's alpha, which confirmed strong internal consistency across constructs—organizational effectiveness scored highest at 0.926,

followed by innovation (0.889), learning capability (0.820), and the strategic orientations ranging from acceptable to strong reliability (Hair et al., 2013). Corrected Item-Total Correlations above 0.3 further supported the coherence of items within each construct, validating their suitability for the quantitative phase.

4.2. Quantitative results

4.2.1. Demographics

Demographic data in quantitative research is essential for ensuring sample representativeness and enhancing the generalizability of findings (Salkind, 2010). By capturing participant characteristics like gender, education, and job position, along with company details such as size and location, the study gains a clearer understanding of the individual and organizational context, improving reliability and interpretation (See Table 1).

Table 1. Profile of survey respondents and companies (N= 391)

Demographics	**Number of respondents**	**Percentage (%)**
Respondents		
Gender		
Male	160	40.9%
Female	231	59.1%
Educational level		
High school	12	3.1%
College	2	0.5%
Bachelor/ Engineer	300	76.7%
Postgraduate	77	19.7%
Job position		
Founder	90	23.0%
Co-founder	214	54.7%
Manager	87	22.3%
Companies		
Number of employees		
Less than 10	114	29.2%
10-50	122	31.2%
51-100	92	23.5%
101-200	63	16.1%
Capital		
Less than 10 billion VND	254	65.0%
10 - 100 billion VND	137	35.0%
Location		
Ho Chi Minh City	168	43.0%
Binh Duong	125	32.0%
Dong Nai	98	25.0%

4.2.2. Measurement model evaluation

Common method bias tests confirmed that the data were free from bias, supporting the reliability of the study's conclusions. As recommended by Hair et al. (2019), the evaluation began with the reflective measurement models. All indicator loadings surpassed the 0.60 threshold (Vinzi et al., 2010), with values ranging from 0.678 to 0.845 across constructs, demonstrating acceptable reliability and suitability for further analysis (See Table 2).

Table 2. Assessment of Reflective Measurement Model

Construct	Indicator Coding	Factor Loading	Cronbach's Alpha	CR	AVE
Prospector	PRO1	0.808	0.859	0.899	0.641
	PRO2	0.834			
	PRO3	0.804			
	PRO4	0.827			
	PRO5	0.725			
Defender	DEF1	0.794	0.817	0.879	0.646
	DEF2	0.794			
	DEF3	0.779			
	DEF4	0.845			
Analyzer	ANA1	0.810	0.843	0.895	0.680
	ANA2	0.818			
	ANA3	0.829			
	ANA4	0.841			
Reactor	REA1	0.812	0.871	0.906	0.659
	REA2	0.768			
	REA3	0.847			
	REA4	0.794			
	REA5	0.832			
Learning capability	LC1	0.723	0.862	0.901	0.645
	LC2	0.845			
	LC3	0.836			
	LC4	0.783			
	LC5	0.823			
Innovation	INO1	0.765	0.899	0.918	0.555
	INO2	0.752			
	INO3	0.757			
	INO4	0.729			
	INO5	0.796			
	INO6	0.676			
	INO7	0.760			
	INO8	0.709			
	INO9	0.753			
Organizational effectiveness	OE1	0.772	0.939	0.947	0.600
	OE2	0.785			
	OE3	0.775			

	OE4	0.771
	OE5	0.789
	OE6	0.759
	OE7	0.760
	OE8	0.737
	OE9	0.780
	OE10	0.755
	OE11	0.819
	OE12	0.788

Internal consistency reliability was evaluated using Cronbach's Alpha and Composite Reliability (CR). All CR values exceeded the 0.70 threshold (Hair et al., 2019), ranging from 0.879 to 0.947, indicating strong reliability (See Table 2). This confirms that the indicators consistently measure their intended constructs, supporting the reliability of the measurement model.

Convergent validity was confirmed, as all Average Variance Extracted (AVE) values exceeded the 0.50 threshold (Hair et al., 2019), ranging from 0.555 to 0.680 (See Table 2). This indicates that each construct sufficiently explains the variance among its items, supporting the validity of the measurement model.

Table 3. Fornell and Larcker's criterion

	REA	ANA	DEF	PRO	INO	LC	OE
REA	**0.812**						
ANA	0.598	**0.824**					
DEF	0.798	0.798	**0.803**				
PRO	0.563	0.775	0.802	**0.801**			
INO	0.615	0.615	0.577	0.638	**0.745**		
LC	0.669	0.669	0.725	0.727	0.616	**0.803**	
OE	0.564	0.564	0.585	0.623	0.743	0.639	**0.774**

Table 4. Discriminant validity-Heterotrait-Monotrait Ratio

	REA	ANA	DEF	PRO	INO	LC	OE
REA							
ANA	0.673						
DEF	0.684	0.865					
PRO	0.628	0.889	0.853				
INO	0.575	0.700	0.666	0.895			
LC	0.556	0.783	0.857	0.839	0.695		
OE	0.462	0.633	0.665	0.691	0.803	0.707	

Discriminant validity was confirmed using both the Fornell-Larcker criterion and HTMT ratio. The square roots of AVE values exceeded inter-construct correlations, and all HTMT ratios were below the 0.90 threshold (Fornell & Larcker, 1981; Franke & Sarstedt, 2019), indicating that the constructs are distinct and non-overlapping (See Table 3 and Table 4).

4.2.3. Structural model evaluation

The structural model demonstrated moderate predictive accuracy and relevance, with R^2 values of 0.589, 0.492, and 0.618 for learning capability, innovation, and organizational effectiveness, respectively, indicating substantial explanatory power (Hair et al., 2019). Q^2 values of 0.371, 0.262, and 0.363 confirmed the model's predictive relevance, validating the influence of strategic orientations on key organizational outcomes (Hair Jr et al., 2020) (See Table 5).

Table 5. Structural Model Fit

	R-square (R^2)	**Q-square (Q^2)**
Learning Capability	0.589	0.371
Innovation	0.492	0.262
Organizational Effectiveness	0.618	0.363

Direct effect analysis using bootstrapping (3,000 resamples) confirmed several key relationships (See Table 6 and Figure 3). Among strategic orientations, prospector (β = 0.265, t = 3.797), analyzer (β = 0.196, t = 2.987), and reactor (β = 0.179, t = 4.377) positively affected innovation, while defender (β = -0.100, t = 1.349) was not significant. For learning capability, prospector (β = 0.359, t = 5.032) and defender (β = 0.330, t = 4.462) had significant positive effects; analyzer and reactor did not. Innovation (β = 0.568, t = 10.446) and learning capability (β = 0.289, t = 4.623) significantly influenced organizational effectiveness. Innovation was also significantly driven by learning capability (β = 0.274, t = 4.406).

Indirect effect analysis showed that learning capability mediated the relationship between innovation and organizational effectiveness (H6 supported). Strategic orientations had varied indirect effects on organizational effectiveness via innovation (H7a–c supported, H7d not). Via learning capability, prospector (H8a) and defender (H8d) were significant; analyzer and reactor were not. For innovation via learning capability, only prospector (H9a) and defender (H9d) were supported. Dual mediation (learning capability and innovation) significantly linked prospector (H10a)

and defender (H10d) to organizational effectiveness, but not analyzer or reactor (See Table 7).

Overall, the prospector orientation had the strongest direct and indirect effects, highlighting its central role in enhancing innovation, learning capability, and effectiveness in trade and service SMEs.

Table 6. Path coefficient -direct effect evaluations

	Relationship	Path coefficient	t-value	p-value	Decision
H1a	PRO → INO	0.265	3.797	0.000***	Supported
H1b	ANA → INO	0.196	2.987	0.003**	Supported
H1c	REA → INO	0.179	4.377	0.000***	Supported
H2a	PRO → LC	0.359	5.032	0.000***	Supported
H2b	ANA → LC	0.107	1.545	0.123	*Rejected*
H2c	REA → LC	0.034	0.832	0.406	*Rejected*
H2d	DEF → LC	0.330	4.462	0.000 ***	Supported
H3	LC → INO	0.274	4.406	0.000***	Supported
H4	INO → OE	0.568	10.446	0.000***	Supported
H5	LC → OE	0.289	4.623	0.000***	Supported

Note(s): ***p< 0.001, **p< 0.01, *< 0.05

Table 7. Path coefficient- indirect effect evaluations

	Relationship	Path coefficient	t-value	p-value	Decision
H6	LC → INO → OE	0.156	3.884	0.000***	Supported
H7a	PRO → INO → OE	0.150	3.650	0.000***	Supported
H7b	ANA → INO →OE	0.111	2.878	0.004**	Supported
H7c	REA → INO → OE	0.102	4.197	0.000***	Supported
H7d	DEF → INO → OE	-0.057	1.345	0.179	*Rejected*
H8a	PRO → LC → OE	0.104	3.393	0.001**	Supported
H8b	ANA → LC → OE	0.031	1.470	0.142	*Rejected*
H8c	REA → LC →OE	0.010	0.827	0.408	*Rejected*
H8d	DEF → LC → OE	0.095	3.022	0.003**	Supported
H9a	PRO →LC → INO	0.098	3.259	0.001**	Supported
H9b	ANA → LC → INO	0.029	1.455	0.146	*Rejected*
H9c	REA → LC → INO	0.009	0.811	0.418	*Rejected*
H9d	DEF → LC → INO	0.095	3.022	0.003**	Supported
H10a	PRO → LC → INO → OE	0.056	2.995	0.003**	Supported
H10b	ANA → LC → INO → OE	0.017	1.404	0.160	*Rejected*
H10c	REA → LC → INO → OE	0.005	0.789	0.430	*Rejected*
H10d	DEF → LC → INO → OE	0.051	2.785	0.005*	Supported

Note(s): ***p< 0.001, **p< 0.01, *< 0.05

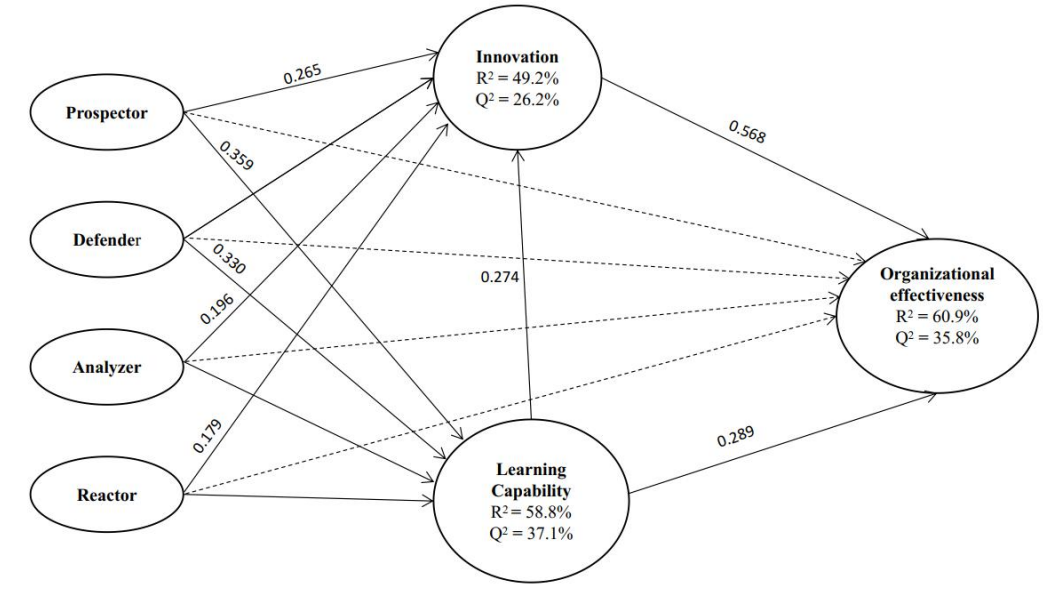

Figure 3. Path analysis results

4.3. Discussion

4.3.1. The impact of Strategic Orientations on Innovation (H1)

The analysis found that prospector, analyzer, and reactor orientations positively influence innovation (H1a, H1b, H1c), while the defender orientation has no significant effect (H1d). Among them, prospector has the strongest impact, consistent with Chong & Duan (2022); Lukito-Budi et al. (2023) . This orientation promotes market exploration, innovation, and risk-taking—fitting well within Vietnam's Southeast Economic Region, where digitalization, FDI, and innovation-supportive policies create favorable conditions (The White Book, 2023). SMEs embracing fintech, green logistics, and omnichannel strategies are better positioned to meet stakeholder demands (Nguyen, 2022).

Analyzers also support innovation but proceed cautiously, assessing risks before adopting changes. Reactors show the weakest link to innovation due to their inconsistent strategies and reactive behaviors. This is typical among family-run SMEs that adopt tools like digital payments slowly (Avci et al., 2011; Son, 2020). Without a clear strategic focus, they engage in innovation only when pressured (Sandberg & Aarikka-Stenroos, 2014).

Defenders, focused on stability, cost control, and small-scale improvements, show no significant link to innovation (Anwar & Shah, 2021). In Vietnam's price-

sensitive market, these firms prioritize efficiency over experimentation. Their limited resources and focus on short-term survival (Nguyen, 2023) restrict innovation efforts. Regulatory hurdles and informal market structures further discourage defenders from pursuing novel approaches (Bui et al., 2021).

4.3.2. The impact of Strategic Orientations on Learning Capability (H2)

The results show that only prospector and defender orientations significantly enhance learning capability (H2a, H2d), while analyzer and reactor orientations do not. This supports Moustaghfir et al. (2020), who emphasize the role of strategic orientation in organizational learning.

Prospector firms, known for exploration and innovation, promote continuous learning by encouraging risk-taking and adaptation (Abdullah & Salleh, 2011; Al-Ansaari et al., 2014). In Vietnam's fast-changing trade and service sectors, these firms invest in employee training, experiment with technologies like AI and blockchain, and support internal knowledge sharing (Ijjasz-Vasquez et al., 2024) . Their behavior reflects the knowledge-based view, where learning is a strategic asset, and aligns with contingency theory, given their responsiveness to dynamic environments. Meeting stakeholder demands through such agility reinforces their market position.

Analyzer firms, in contrast, do not show a significant link with learning capability. Though they balance innovation and stability (Anwar & Shah, 2021; Miles & Snow, 1978) , resource fragmentation and a reliance on imitation hinder deep learning (Rogers et al., 2020) . In Vietnamese SMEs, this often means superficial adoption of trends like e-commerce, without investment in training or feedback mechanisms (Castro & Moreira, 2024) . Hierarchical decision-making also restricts internal knowledge flow (Quang et al., 2022).

Reactor firms also fail to support learning capability. Their reactive and inconsistent responses limit long-term development (Anwar & Hasnu, 2017) . Examples include rapid, unstructured adoption of tech during crises like COVID-19, without aligning changes with staff training (Guo et al., 2020). The absence of clear strategies makes sustained learning difficult(Didonet & Diaz-Villavicencio, 2020).

Defender-oriented firms, despite their conservative nature, support learning through structured training and knowledge-sharing practices (Manyati & Mutsau, 2021). This aligns with the knowledge-based view by focusing on internal know-how and operational excellence. In stable environments, such an approach fosters

consistent service quality, fulfilling customer and partner expectations (Ronald & Amelia, 2023).

4.3.3. The relationships between learning capability, innovation, and organizational effectiveness

All three hypotheses (H3, H4, H5) are supported. H3 confirms that learning capability has a positive impact on innovation, consistent with Farzaneh et al. (2020); Mu et al. (2017). Trade and service SMEs that invest in continuous learning—such as training programs or knowledge-sharing systems—are more likely to innovate effectively. In Vietnam, firms training staff in AI and blockchain, or running cross-departmental workshops, are able to generate new ideas and improve fintech and retail strategies. This supports the knowledge-based view, where learning enables knowledge application for innovation.

H4 is also supported, affirming that innovation contributes significantly to organizational effectiveness. As Sawaean & Ali (2020) argue, innovation strengthens a firm's competitiveness, especially in fast-changing environments. Vietnamese SMEs benefit from digital tools like cloud POS systems to streamline inventory and cut costs, while AI chatbots enhance customer service. Some firms even use VR to expand into new markets. These outcomes align with contingency theory, which stresses responsiveness to environmental change, and stakeholder theory, where firms address evolving needs of customers and regulators.

H5 further confirms the positive relationship between learning capability and organizational effectiveness, echoing findings from Aydin & Ceylan (2009); Jiménez-Jiménez & Valle (2011) . Learning-focused SMEs tend to be more adaptive and resilient. For instance, companies that analyze failures optimize delivery routes and reduce costs. Others invest in upskilling to improve retention in Vietnam's competitive labor market. Exporters that trained staff in alternative sourcing were better able to handle supply chain disruptions. These practices reinforce the strategic value of learning under the knowledge-based view and the alignment of internal capabilities with external demands as proposed in contingency theory.

4.3.4. The mediating effects of learning capability and innovation

This study addresses key gaps in SME strategic management literature by exploring how strategic orientations affect organizational effectiveness through learning capability and innovation in Vietnam's Southeast Key Economic Region. Building on Parnell (2013) , the research highlights that SMEs in emerging economies, unlike

those in developed countries, struggle to implement hybrid (analyzer) or reactive (reactor) strategies effectively due to contextual constraints (Sayal & Banerjee, 2022; Wang, 2016) . Vietnamese SMEs often lack structured learning mechanisms, which limits their ability to innovate meaningfully, especially among analyzer and reactor types (Anwar & Shah, 2021).

The study confirms that learning capability significantly enhances innovation and organizational effectiveness (Efendi et al., 2020; Pérez-Luño et al., 2019). SMEs with systematic learning practices, such as failure analysis, knowledge sharing, and market scanning, are better positioned to generate radical innovations, particularly prospector-oriented firms (Kim & Shim, 2018) . In contrast, defender SMEs focus learning on operational efficiency, leading to only modest gains, while analyzer and reactor firms show limited or no mediation effects due to weak or fragmented learning systems (Agostini et al., 2023).

Innovation mediates the link between learning capability and effectiveness (H6), with prospector SMEs benefiting most due to alignment with digital transformation trends (Safari & Saleh, 2020) . Analyzers gain moderate benefits by adopting tested innovations, though often miss first-mover advantages (Caballero-Morales, 2021; Castro & Moreira, 2024) . Reactors innovate reactively, yielding minimal effectiveness improvements (Son, 2020) . Defenders' focus on cost control hinders competitiveness in dynamic markets (Lukito-Budi et al., 2023).

Learning capability mediates the effect of prospector and defender strategies on innovation and effectiveness (H8a, H8d; H9a, H9d), but not for analyzer or reactor types (H8b, H8c; H9b, H9c). Prospectors excel by embedding continuous learning into their innovation cycle (Ijjasz-Vasquez et al., 2024) , while defenders' learning systems support incremental process improvements (Manyati & Mutsau, 2021).

Sequential mediation analysis (H10a, H10d) confirms that prospector and defender strategies impact effectiveness via learning and innovation. Prospector SMEs leverage digital tools and structured learning to drive disruptive innovation, improving performance and competitiveness (Cho et al., 2023) . Defenders achieve moderate gains through process optimization. Analyzer and reactor SMEs lack consistent learning processes, resulting in no sequential mediation effect (H11b, H11c) (Agostini et al., 2023).

Overall, the study validates the adaptive cycle perspective of Miles and Snow's typology by revealing that only strategic orientations supported by strong

learning systems (especially prospectors) can translate knowledge into innovation and effectiveness. The findings underscore the importance of strategic clarity and structured learning in enabling SMEs to navigate rapidly changing environments in emerging markets.

CHAPTER 5
CONCLUSIONS AND IMPLICATIONS

5.1. Research implications

5.1.1. Theoretical implications

This study offers several important contributions to the strategic management literature.

First, this study is among the first to develop and validate a model that combines contingency theory, the knowledge-based view (KBV), and stakeholder theory to investigate the relationships between strategic orientations, innovation, learning capability, and organizational effectiveness in SMEs. By applying contingency theory to SME strategic management, the study highlights the nuanced interplay between organizational capabilities, market conditions, and environmental uncertainty, emphasizing how these factors shape decision-making and firm effectiveness (Cho et al., 2023). Furthermore, the integration of KBV and stakeholder theory overcomes the limitations of each framework individually (Di Domenico et al., 2009; Yang et al., 2019). While KBV emphasizes the role of knowledge acquisition and application in enhancing strategic orientations (Trivedi & Srivastava, 2021), stakeholder theory highlights the necessity of aligning with stakeholder interests to ensure long-term success, both financially and non-financially (Freudenreich et al., 2020). By bridging internal knowledge processes with external stakeholder engagement, this study provides a holistic framework that reflects the complexities faced by trade and service SMEs in navigating an increasingly uncertain and competitive business landscape.

Second, this study makes a notable theoretical contribution by simultaneously examining the mediating roles of both learning capability and innovation in the relationship between strategic orientations and organizational effectiveness in SMEs, an area that has received limited attention in prior research. While previous studies have often focused on validating the mediating effect of either learning capability or innovation independently (Ince et al., 2023; Migdadi, 2019), this research integrates

both constructs, offering a more holistic view of the mechanisms that drive organizational effectiveness in SMEs.

Third, this study offers a significant contribution by analyzing the strategic management practices of trade and service SMEs in a developing country, a critical research gap in the current literature (Ibidunni et al., 2020) . Previous studies have predominantly focused on large corporations in developed nations, particularly in manufacturing industries, overlooking the unique challenges and contextual factors faced by SMEs in emerging economies (Müller et al., 2021; Sayal & Banerjee, 2022). By focusing on trade and service SMEs in Vietnam, this research provides valuable insights into the distinct management behaviors, innovation strategies, and adaptability of SMEs in a context marked by resource constraints, informal structures, and owner-driven decision-making (AlQershi, 2021; Quansah et al., 2022) . The findings not only emphasize the need to recognize these unique dynamics but also contribute to a broader understanding of strategic management practices that can be applied to similar firms operating under comparable conditions in other emerging markets.

5.1.2. Practical implications

Fostering Innovation and Learning Capability to Enhance SME Organizational Effectiveness

Innovation plays a central role in how prospector, analyzer, and reactor-oriented SMEs improve organizational effectiveness, with its impact varying by strategic orientation. For prospector SMEs, continuous innovation is essential for success. These firms thrive by proactively exploring new markets and developing novel services. By investing in emerging technologies such as AI-enabled customer service, mobile platforms, and personalized digital marketing, they attract tech-savvy consumers and gain competitive advantage. Embracing calculated risks and rapidly launching new offerings enhances profitability, customer loyalty, and brand recognition—critical outcomes in the competitive trade and service sector.

Analyzer-oriented SMEs adopt innovation more cautiously. They typically observe early adopters before implementing new practices, balancing stability with selective change. By integrating proven innovations—such as updated customer engagement tools or streamlined operations—analyzers can improve service quality and efficiency while minimizing risk. This measured approach allows them to enhance effectiveness without disrupting core operations.

Reactor-oriented SMEs, however, often struggle with inconsistent strategic responses and lack of direction. To improve organizational effectiveness, they must take a more structured approach to innovation. Basic planning routines and internal assessments of service gaps, customer experience, and workflows can help identify priorities. Even informal innovation efforts—when systematically applied—can enhance efficiency and improve responsiveness to market demands.

Learning capability is another critical lever for improving effectiveness, especially for prospector and defender-oriented SMEs. While large firms may have access to formal training and resources, SMEs often operate with fewer assets, making agile learning systems essential. Trade and service SMEs in particular benefit from embedding learning into their daily operations through informal knowledge-sharing, on-the-job training, and open communication. These practices support rapid adaptation in volatile environments.

For prospector SMEs, learning is vital to maintain innovation momentum. Regular assessments of workforce skills, acquisition of external knowledge, and analysis of failed initiatives can foster a culture of continuous improvement. Embedding these practices helps the firm stay agile and competitive, especially when facing fast-changing market conditions.

Defender SMEs, though more focused on stability and efficiency, also benefit from strong learning capabilities. By documenting best practices, encouraging cross-functional skills, and learning from past challenges, defenders can streamline operations, reduce costs, and sustain high service quality. These activities help protect market position while gradually improving performance in resource-constrained settings.

Integrating Innovation and Learning Capability

Prospector and defender orientations can be effectively combined with both innovation and learning to enhance organizational effectiveness. In contrast to manufacturing firms, trade and service SMEs must respond quickly to customer feedback and shifting demand. With fewer resources and flatter structures, they benefit from small-scale, agile innovations and learning systems embedded into daily workflows. These dual capabilities are essential for navigating uncertainty and maintaining relevance in dynamic markets.

Prospector SMEs should align their strategic goals with continuous innovation and workforce learning. This includes redefining service priorities, exploring new

markets, and addressing skill gaps through targeted training. By fostering a culture that values experimentation and knowledge-sharing, they can sustain long-term growth and innovation leadership.

Defender SMEs, while more conservative in approach, can also enhance performance by focusing on incremental innovations and internal learning. Process improvements, technology adoption for service delivery, and retention of institutional knowledge all contribute to efficiency and customer satisfaction. By proactively identifying training needs and integrating lessons from experience, defender SMEs can balance operational stability with gradual improvement.

Policy and Ecosystem Support Implications

To support SME effectiveness, policymakers and ecosystem builders must tailor their strategies to align with different strategic orientations. Innovation funding should be differentiated: R&D grants and technology subsidies should prioritize prospector SMEs pursuing breakthrough innovation, while defender SMEs would benefit from process optimization grants and quality improvement tools.

Public training programs should evolve beyond basic skills to emphasize diagnosing learning needs, analyzing failure, and supporting knowledge-sharing. These elements build strong learning capabilities across all SME types. Additionally, policies that foster structured learning ecosystems—such as partnerships with academic institutions, peer learning networks, and knowledge hubs—can embed continuous learning into SME operations.

Ecosystem builders, including incubators and business associations, also play a crucial role. Prospectors can benefit from access to innovation coaches, startup accelerators, and market access support. Defenders require guidance from consultants specializing in operational excellence and service quality enhancement. By tailoring support mechanisms to strategic orientation, ecosystem actors can more effectively help SMEs build innovation and learning capacity suited to their goals and constraints.

5.2. Limitations and areas for future research

First, one limitation of this study is that it focused on testing SMEs in the Southeast Key Economic Zone of Vietnam, which introduces a geographical bias and may limit the generalizability of the results to the entire country. Future research could overcome this limitation by expanding the scope to include SMEs from different regions across the country.

Second, the current use of proxies to measure strategic orientations based on the Miles and Snow typology points to promising research that will examine other strategic orientations such as market orientation, entrepreneurial orientation, customer orientation, cost orientation, innovation orientation, competitor orientation, employee orientation, and interaction orientation (Ferraresi et al., 2012) undertaken by SMEs in a dynamic emerging economy such as Vietnam. Future research could investigate the relationships between these strategic orientations and various performance outcomes, such as financial performance, innovation performance, and market performance, to gain insight into the specific mechanisms through which these orientations affect the success of SMEs.

Third, the present study is limited by the absence of a control variable, as different industries have unique characteristics, challenges, and competitive landscapes (Okręglicka et al., 2015).To address this constraint, it is recommended that forthcoming investigations include industry classification as a control variable to ensure a more accurate understanding of how strategic orientations affect organizational effectiveness plays out in the context of SMEs.

Last, since this cross-sectional study collects data at a single point in time, establishing causation is challenging. The inability to track changes over time limits the study's ability to observe dynamic interactions and long-term effects of strategic orientations, innovation, and learning capability on organizational effectiveness. To address this limitation, future research should consider longitudinal designs, which would allow for data collection across multiple time points, providing deeper insights into causal pathways and accounting for external variables like economic cycles, regulatory changes, or technological disruptions that influence firm strategies and outcomes.

References

Abdullah, N. L., & Salleh, A. L. (2011). To continue prospecting: Performance implications of combinative capabilities and explorative learning. *Procedia-Social and Behavioral Sciences*, *24*, 1107–1123.

Aboobaker, N., & KA, Z. (2021). Digital learning orientation and innovative behavior in the higher education sector: effects of organizational learning culture and readiness for change. *International Journal of Educational Management*, *35*(5), 1030–1047.

Afshari, L., & Hadian Nasab, A. (2021). Enhancing organizational learning capability through managing talent: mediation effect of intellectual capital. *Human Resource Development International*, *24*(1), 48–64.

Agostini, L., Nosella, A., Sarala, R., & Nkeng, C. (2023). Emerging trends around strategic flexibility: a systematic review supported by bibliometric techniques. *Management Decision*.

Aisjah, S., Arsawan, I. W. E., & Suhartanto, D. (2023). Predicting SME's business performance: Integrating stakeholder theory and performance based innovation model. *Journal of Open Innovation: Technology, Market, and Complexity*, *9*(3), 100122.

Al-Ansaari, Y., Pervan, S., & Xu, J. (2014). Exploiting innovation in Dubai SMEs: The effect of strategic orientation on organizational determinants. *International Journal of Innovation and Technology Management*, *11*(06), 1450039.

Alerasoul, S. A., Afeltra, G., Hakala, H., Minelli, E., & Strozzi, F. (2022). Organisational learning, learning organisation, and learning orientation: An integrative review and framework. *Human Resource Management Review*, *32*(3), 100854.

Allaberganov, A., Preko, A., & Mohammed, I. (2021). Government Commitment to Tourism and Hospitality Sector During COVID-19 Pandemic. *Tourism Critiques Practice and Theory*. https://doi.org/10.1108/trc-02-2021-0004

Alqahtani, M., Beloff, N., & White, M. (2024). Empirical Insights into Cloud Adoption: A new Model Exploring Influencing Factors for Saudi Arabian Small and Medium Enterprises. *2024 19th Conference on Computer Science and Intelligence Systems (FedCSIS)*, 75–85.

AlQershi, N. (2021). Strategic thinking, strategic planning, strategic innovation and the performance of SMEs: The mediating role of human capital. *Management Science Letters*, *11*(3), 1003–1012.

Al-Tal, M. J. Y., & Emeagwali, O. L. (2019). Knowledge-based HR practices and innovation in SMEs. *Organizacija*, *52*(1), 6–21.

AlTaweel, I. R., & Al-Hawary, S. I. (2021). The mediating role of innovation capability on the relationship between strategic agility and organizational performance. *Sustainability*, *13*(14), 7564.

Andrews, R. W., Boyne, G. A., Law, J., & Walker, R. M. (2007). Centralization, Organizational Strategy, and Public Service Performance. *Journal of Public Administration Research and Theory*. https://doi.org/10.1093/jopart/mum039

Angkiriwang, R., Pujawan, I. N., & Santosa, B. (2014). Managing uncertainty through supply chain flexibility: reactive vs. proactive approaches. *Production & Manufacturing Research*, *2*(1), 50–70.

Anwar, J., & Hasnu, S. A. F. (2017). Strategic patterns and firm performance: comparing consistent, flexible and reactor strategies. *Journal of Organizational Change Management*, *30*(7), 1015–1029.

Anwar, J., Hasnu, S. A. F., Butt, I., & Ahmed, N. (2021). Miles and Snow Typology: most influential journals, articles, authors and subject areas. *Journal of Organizational Change Management*, *34*(2), 385–402.

Anwar, M., & Shah, S. Z. A. (2021). Entrepreneurial orientation and generic competitive strategies for emerging SMEs: Financial and nonfinancial performance perspective. *Journal of Public Affairs*, *21*(1), e2125.

Asiaei, K., Rezaee, Z., Bontis, N., Barani, O., & Sapiei, N. S. (2021). Knowledge assets, capabilities and performance measurement systems: a resource orchestration theory approach. *Journal of Knowledge Management*, *25*(8), 1947–1976.

Avci, U., Madanoglu, M., & Okumus, F. (2011). Strategic orientation and performance of tourism firms: Evidence from a developing country. *Tourism Management*, *32*(1), 147–157.

Aydin, B., & Ceylan, A. (2009). Does organizational learning capacity impact on organizational effectiveness? Research analysis of the metal industry. *Development and Learning in Organizations: An International Journal*, *23*(3), 21–23.

Bedford, D. S., Malmi, T., & Sandelin, M. (2016). Management control effectiveness and strategy: An empirical analysis of packages and systems. *Accounting, Organizations and Society*, *51*, 12–28.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

Bridoux, F., & Stoelhorst, J. W. (2022). Stakeholder theory, strategy, and organization: Past, present, and future. *Strategic Organization*, *20*(4), 797–809.

Bui, A. T., Pham, T. P., Pham, L. C., & Van Ta, T. K. (2021). Legal and financial constraints and firm growth: small and medium enterprises (SMEs) versus large enterprises. *Heliyon*, *7*(12).

Caballero-Morales, S.-O. (2021). Innovation as recovery strategy for SMEs in emerging economies during the COVID-19 pandemic. *Research in International Business and Finance*, *57*, 101396.

Cain, M. K., Zhang, Z., & Yuan, K.-H. (2017). Univariate and multivariate skewness and kurtosis for measuring nonnormality: Prevalence, influence and estimation. *Behavior Research Methods*, *49*, 1716–1735.

Camelo-Ordaz, C., Martín-Alcázar, F., & Valle-Cabrera, R. (2003). Intangible resources and strategic orientation of companies: An analysis in the Spanish context. *Journal of Business Research*, *56*(2), 95–103.

Camisón, C., & Villar-López, A. (2014). Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of Business Research*, *67*(1), 2891–2902.

Cao, T. H., Jung, J. Y., & Smith, S. (2021). The career intentions of gifted English as a foreign language high school students in Vietnam. *Gifted Child Quarterly*, *65*(3), 262–286.

Castro, R., & Moreira, A. C. (2024). Unveiling paradoxes: navigating SMEs readiness in the post-pandemic normality. *Cogent Business & Management*, *11*(1), 2330114.

Cheng, C. C. J., & Huizingh, E. K. R. E. (2014). When is open innovation beneficial? The role of strategic orientation. *Journal of Product Innovation Management*, *31*(6), 1235–1253.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, *295*(2), 295–336.

Cho, H. J., Jin, B. E., & Shin, D. C. (2023). Do contingencies matter between organizational capabilities and SME export performance? *Review of International Business and Strategy*, *33*(4), 605–626.

Chong, J., & Duan, S. X. (2022). Riding on the waves of the COVID-19 pandemic in re-thinking organizational design: a contingency-based approach. *Journal of Strategy and Management*.

Cirera, X., Comin, D., Cruz, M., Lee, K. M., & Soares Martins-Neto, A. (2021). *Firm-Level Technology Adoption in Vietnam*. The World Bank. https://doi.org/10.1596/1813-9450-9567

Cohen, J. (1988). Statistical power analysis for the behavioural sciences (2'EU.). *HilIsUale, NJ: Lawrence Eribaum Associates*.

Coombs, R., & Miles, I. (2000). Innovation, measurement and services: the new problematique. In *Innovation systems in the service economy: Measurement and case study analysis* (pp. 85–103). Springer.

Corrales-Estrada, A. M., Gómez-Santos, L. L., Bernal-Torres, C. A., & Rodriguez-López, J. E. (2021). Sustainability and resilience organizational capabilities to enhance business continuity management: A literature review. *Sustainability*, *13*(15), 8196.

Creswell, J. W. (2014). *Qualitative, quantitative and mixed methods approaches*. Sage.

Creswell, J. W., & Creswell, J. D. (2005). *Mixed methods research: Developments, debates, and dilemma*. Berrett-Koehler Publishers Oakland, CA.

Dalwai, T., & Salehi, M. (2021). Business strategy, intellectual capital, firm performance, and bankruptcy risk: evidence from Oman's non-financial sector companies. *Asian Review of Accounting*, *29*(3), 474–504.

Danso, A., Adomako, S., Lartey, T., Amankwah-Amoah, J., & Owusu-Yirenkyi, D. (2020). Stakeholder integration, environmental sustainability orientation and financial performance. *Journal of Business Research*, *119*, 652–662. https://doi.org/10.1016/J.JBUSRES.2019.02.038

De Villiers, C., Farooq, M. B., & Molinari, M. (2022). Qualitative research interviews using online video technology–challenges and opportunities. *Meditari Accountancy Research*, *30*(6), 1764–1782.

Demirkan, I., Srinivasan, R., & Nand, A. (2022). Innovation in SMEs: the role of employee training in German SMEs. *Journal of Small Business and Enterprise Development*, *29*(3), 421–440.

Dhoopar, A., Sihag, P., & Gupta, B. (2023). Antecedents and measures of organizational effectiveness: A systematic review of literature. *Human Resource Management Review*, *33*(1), 100915.

Di Domenico, M., Tracey, P., & Haugh, H. (2009). The dialectic of social exchange: Theorizing corporate—social enterprise collaboration. *Organization Studies*, *30*(8), 887–907.

Didonet, S., & Diaz-Villavicencio, G. (2020). Innovation management in market-oriented SMEs: learning and internal arrangements for innovation. *International Journal of Organizational Analysis*, *28*(5), 985–1003.

Dogbe, C. S. K., Bamfo, B. A., & Pomegbe, W. W. K. (2021). Market orientation and new product success relationship: The role of innovation capability, absorptive capacity, green brand positioning. *International Journal of Innovation Management*, *25*(03), 2150033.

Duchek, S. (2020). Organizational resilience: a capability-based conceptualization. *Business Research*, *13*(1), 215–246.

Efendi, S., Sugiono, E., Guritno, E., Sufyati, & Hendryadi. (2020). Building innovation and competitiveness for low technology manufacturing SMEs through imitating capability and learning: The case of Indonesia. *Cogent Social Sciences*, *6*(1), 1803515.

Ergün, E., & Avcı, Ü. (2018). Knowledge sharing self-efficacy, motivation and sense of community as predictors of knowledge receiving and giving behaviors. *Journal of Educational Technology & Society*, *21*(3), 60–73.

Farzaneh, M., Ghasemzadeh, P., Nazari, J. A., & Mehralian, G. (2020). Contributory role of dynamic capabilities in the relationship between organizational learning and

innovation performance. *European Journal of Innovation Management*, *24*(3), 655–676.
Ferraresi, A. A., Quandt, C. O., dos Santos, S. A., & Frega, J. R. (2012). Knowledge management and strategic orientation: leveraging innovativeness and performance. *Journal of Knowledge Management*, *16*(5), 688–701.
Ferreira, J. J., Fernandes, C. I., Veiga, P. M., & Dooley, L. (2023). The effects of entrepreneurial ecosystems, knowledge management capabilities, and knowledge spillovers on international open innovation. *R&D Management*, *53*(2), 322–338.
Fitzsimmons, J. A., & Fitzsimmons, M. J. (2004). *Service management: Operations, strategy, and information technology*. Irwin/McGraw-Hill.
Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models With Unobservable Variables and Measurement Error. *Journal of Marketing Research*. https://doi.org/10.1177/002224378101800104
Franke, G., & Sarstedt, M. (2019). Heuristics versus statistics in discriminant validity testing: a comparison of four procedures. *Internet Research*, *29*(3), 430–447.
Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge university press.
Freeman, R. E., Dmytriyev, S. D., & Phillips, R. A. (2021). Stakeholder theory and the resource-based view of the firm. *Journal of Management*, *47*(7), 1757–1770.
Freixanet, J., & Federo, R. (2022). The complex interplay of firm innovation, internationalization and learning capability in driving firm performance: a configurational analysis. *Journal of Strategy and Management*, *15*(4), 766–790.
Freudenreich, B., Lüdeke-Freund, F., & Schaltegger, S. (2020). A stakeholder theory perspective on business models: Value creation for sustainability. *Journal of Business Ethics*, *166*, 3–18.
García-Morales, V. J., Jiménez-Barrionuevo, M. M., & Gutierrez-Gutierrez, L. J. (2012). Transformational Leadership Influence on Organizational Performance Through Organizational Learning and Innovation. *Journal of Business Research*. https://doi.org/10.1016/j.jbusres.2011.03.005
Geisser, S. (1975). The predictive sample reuse method with applications. *Journal of the American Statistical Association*, *70*(350), 320–328.
Giannopoulou, E., Gryszkiewicz, L., & Barlatier, P.-J. (2014). Creativity for service innovation: a practice-based perspective. *Managing Service Quality: An International Journal*, *24*(1), 23–44.
Gomes, G., Seman, L. O., Berndt, A. C., & Bogoni, N. (2022). The role of entrepreneurial orientation, organizational learning capability and service innovation in organizational performance. *Revista de Gestão*, *29*(1), 39–54.
Gomes, G., & Wojahn, R. M. (2017). Organizational learning capability, innovation and performance: study in small and medium-sized enterprises (SMES). *Revista de Administração (São Paulo)*, *52*, 163–175.
González-Torres, T., & Rodríguez-Sánchez, J.-L. (2024). *Promoting Value Creation Through Organizational Effectiveness and Development*. IGI Global.
Grant, R. M. (1996). Toward a Knowledge-Based Theory of the Firm. *Strategic Management Journal*. https://doi.org/10.1002/smj.4250171110
Grant, R. M. (2021). *Contemporary strategy analysis*. John Wiley & Sons.
Grawe, S. J., Chen, H., & Daugherty, P. J. (2009). The relationship between strategic orientation, service innovation, and performance. *International Journal of Physical Distribution & Logistics Management*, *39*(4), 282–300.

Guenther, P., Guenther, M., Ringle, C. M., Zaefarian, G., & Cartwright, S. (2023). Improving PLS-SEM use for business marketing research. *Industrial Marketing Management*, *111*, 127–142.

Gunawan, J., Permatasari, P., & Fauzi, H. (2022). The evolution of sustainability reporting practices in Indonesia. *Journal of Cleaner Production*, *358*, 131798. https://doi.org/10.1016/J.JCLEPRO.2022.131798

Guo, H., Yang, Z., Huang, R., & Guo, A. (2020). The Digitalization and Public Crisis Responses of Small and Medium Enterprises: Implications From a COVID-19 Survey. *Frontiers of Business Research in China*. https://doi.org/10.1186/s11782-020-00087-1

Ha, D. T., Le, T., Fisher, G., & Nguyen, T. T. (2022). Factors affecting the adoption extent of the balanced scorecard by Vietnamese small-and medium-sized enterprises. *Accounting Research Journal*, *35*(4), 543–560.

Hai, N. C., Chuong, H. N., & Trung, T. (2022). Linkages and development of local industrial space: Research in the key economic region of Southern Vietnam. *Cogent Economics & Finance*, *10*(1), 2109273.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial Least Squares Structural Equation Modeling: Rigorous Applications, Better Results and Higher Acceptance. *Long Range Planning*. https://doi.org/10.1016/j.lrp.2013.01.001

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.

Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, *109*, 101–110.

Han, J. K., Kim, N., & Srivastava, R. K. (1998). Market orientation and organizational performance: is innovation a missing link? *Journal of Marketing*, *62*(4), 30–45.

Hanaysha, J. R., Al-Shaikh, M. E., Joghee, S., & Alzoubi, H. M. (2022). Impact of innovation capabilities on business sustainability in small and medium enterprises. *FIIB Business Review*, *11*(1), 67–78.

Handoyo, S., Suharman, H., Ghani, E. K., & Soedarsono, S. (2023). A business strategy, operational efficiency, ownership structure, and manufacturing performance: The moderating role of market uncertainty and competition intensity and its implication on open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 100039.

Harvey, O., van Teijlingen, E., & Parrish, M. (2024). Using a range of communication tools to interview a hard-to-reach population. *Sociological Research Online*, *29*(1), 221–232.

Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management and Data Systems*, *116*(1), 2–20. https://doi.org/10.1108/IMDS-09-2015-0382/FULL/PDF

Hervas-Oliver, J.-L., Sempere-Ripoll, F., & Boronat-Moll, C. (2021). Technological innovation typologies and open innovation in SMEs: Beyond internal and external sources of knowledge. *Technological Forecasting and Social Change*, *162*, 120338.

Hill, R. (1998). What sample size is "enough" in internet survey research. *Interpersonal Computing and Technology: An Electronic Journal for the 21st Century*, *6*(3–4), 1–12.

Ho, C. H. P., Nguyen, K. T., & Trinh, D. C. (2023). Business practices of trade and service firms: Evidence from Vietnam. *Journal of the Knowledge Economy*, 1–25.

Hull, C. E., & Covin, J. G. (2010). Learning capability, technological parity, and innovation mode use. *Journal of Product Innovation Management*, *27*(1), 97–114.

Hussein, N., Omar, S., Noordin, F., & Ishak, N. A. (2016). Learning organization culture, organizational performance and organizational innovativeness in a public institution

of higher education in Malaysia: A preliminary study. *Procedia Economics and Finance*, *37*, 512–519.

Huynh, T. N., & Hua, N. T. A. (2020). The relationship between task-oriented leadership style, psychological capital, job satisfaction and organizational commitment: evidence from Vietnamese small and medium-sized enterprises. *Journal of Advances in Management Research*, *17*(4), 583–604.

Ibidunni, A. S., Kolawole, A. I., Olokundun, M. A., & Ogbari, M. E. (2020). Knowledge transfer and innovation performance of small and medium enterprises (SMEs): An informal economy analysis. *Heliyon*, *6*(8).

Ibrahim, N., Rizal, A. M., Hee, O. C., Baskaran, S., & Sahimi, M. (2020). Resource allocation between exploration and exploitation strategies: a case study of a Malaysian SME family firm. *International Journal of Entrepreneurial Venturing*, *12*(4), 355–375.

Idris, B., Saridakis, G., & Johnstone, S. (2020). Training and performance in SMEs: Empirical evidence from large-scale data from the UK. *Journal of Small Business Management*, 1–33.

Ijjasz-Vasquez, E., Karp, P., & Weber-Fahr, M. (2024). *Communities of Practice at the World Bank: Breaking Knowledge Silos to Catalyze Culture Change and Organizational Transformation*. Taylor & Francis.

Ince, H., Imamoglu, S. Z., & Karakose, M. A. (2023). Entrepreneurial orientation, social capital, and firm performance: The mediating role of innovation performance. *The International Journal of Entrepreneurship and Innovation*, *24*(1), 32–43.

Jiménez-Jiménez, D., & Valle, R. S. (2011). Innovation, Organizational Learning, and Performance. *Journal of Business Research*. https://doi.org/10.1016/j.jbusres.2010.09.010

Jost, J. T. (2015). Resistance to change: A social psychological perspective. *Social Research*, *82*(3), 607–636.

Kafchehi, P., Hasani, K., & Gholami, A. (2016). The relationship between innovation orientation and strategic typology in business firms. *International Journal of Knowledge-Based Organizations (IJKBO)*, *6*(2), 1–20.

Kafetzopoulos, D., & Psomas, E. (2015). The Impact of Innovation Capability on the Performance of Manufacturing Companies. *Journal of Manufacturing Technology Management*. https://doi.org/10.1108/jmtm-12-2012-0117

Kalkan, A., Bozkurt, Ö. Ç., & Arman, M. (2014). The impacts of intellectual capital, innovation and organizational strategy on firm performance. *Procedia-Social and Behavioral Sciences*, *150*, 700–707.

Kaplan, R. S., & Norton, D. P. (1992). *Measures that drive performance*. Harvard Business Review.

Kasemsap, K. (2017). Strategic innovation management: An integrative framework and causal model of knowledge management, strategic orientation, organizational innovation, and organizational performance. In *Organizational culture and behavior: Concepts, methodologies, tools, and applications* (pp. 86–101). IGI Global.

Khan, W. S., & Haider, A. (2022). Impact of COVID-19 on SMEs of Bangladesh: How Well Have They Coped With the Situation? *Journal of Economics Finance and Accounting Studies*. https://doi.org/10.32996/jefas.2022.4.4.10

Khizar, H. M. U., Iqbal, M. J., & Rasheed, M. I. (2021). Business orientation and sustainable development: A systematic review of sustainability orientation literature and future research avenues. *Sustainable Development*, *29*(5), 1001–1017.

Kim, D., Chiou, J.-S., & Calantone, R. (2018). Strategic orientations, joint learning, and innovation generation in international customer-supplier relationships. *International Business Review*, *27*(4), 838–851.

Kim, N., & Shim, C. (2018). Social capital, knowledge sharing and innovation of small- and medium-sized enterprises in a tourism cluster. *International Journal of Contemporary Hospitality Management*, *30*(6), 2417–2437.

Ko, H., & Lu, H. (2010). Measuring innovation competencies for integrated services in the communications industry. *Journal of Service Management*, *21*(2), 162–190.

Krumpal, I. (2013). Determinants of social desirability bias in sensitive surveys: a literature review. *Quality & Quantity*, *47*(4), 2025–2047.

Kumar, K., Boesso, G., Favotto, F., & Menini, A. (2012). Strategic orientation, innovation patterns and performances of SMEs and large companies. *Journal of Small Business and Enterprise Development*, *19*(1), 132–145.

Laforet, S. (2008). Size, strategic, and market orientation affects on innovation. *Journal of Business Research*, *61*(7), 753–764.

Lartey, F. M. (2020). Chaos, complexity, and contingency theories: a comparative analysis and application to the 21st century organization. *Journal of Business Administration Research*, *9*(1), 44–51.

Le, D. V., Le, H. T. T., Pham, T. T., & Van Vo, L. (2023). Innovation and SMEs performance: evidence from Vietnam. *Applied Economic Analysis*, *ahead-of-print*.

Le, T. T., & Ikram, M. (2022). Do sustainability innovation and firm competitiveness help improve firm performance? Evidence from the SME sector in vietnam. *Sustainable Production and Consumption*, *29*, 588–599. https://doi.org/10.1016/J.SPC.2021.11.008

Leskovar-Spacapan, G., & Bastic, M. (2007). Differences in organizations' innovation capability in transition economy: Internal aspect of the organizations' strategic orientation. *Technovation*, *27*(9), 533–546.

Lewin, A. Y., Weigelt, C. B., & Emery, J. D. (2004). Adaptation and selection in strategy and change. *Handbook of Organizational Change and Innovation*, 108–160.

Li, Y., & Tan, C.-H. (2013). Matching business strategy and CIO characteristics: The impact on organizational performance. *Journal of Business Research*, *66*(2), 248–259.

Lohr, S. L. (2021). *Sampling: design and analysis*. Chapman and Hall/CRC.

López-Nicolás, C., & Meroño-Cerdán, Á. L. (2011). Strategic Knowledge Management, Innovation and Performance. *International Journal of Information Management*. https://doi.org/10.1016/j.ijinfomgt.2011.02.003

Lukito-Budi, A. S., Manik, H. F. G. G., & Indarti, N. (2023). Reorienting the organisational strategy of SMEs during the COVID-19 crisis: can entrepreneurial orientation help? *Journal of Strategy and Management*, *16*(1), 28–40.

Mai, N. K., Do, T. T., & Ho Nguyen, D. T. (2022). The impact of leadership competences, organizational learning and organizational innovation on business performance. *Business Process Management Journal*, *28*(5/6), 1391–1411.

Manville, G., Karakas, F., Polkinghorne, M., & Petford, N. (2019). Supporting open innovation with the use of a balanced scorecard approach: A study on deep smarts and effective knowledge transfer to SMEs. *Production Planning & Control*, *30*(10–12), 842–853.

Manyati, T. K., & Mutsau, M. (2021). Leveraging green skills in response to the COVID-19 crisis: a case study of small and medium enterprises in Harare, Zimbabwe. *Journal of Entrepreneurship in Emerging Economies*.

March, J. G. (1991). Exploration and Exploitation in Organizational Learning. *Organization Science*. https://doi.org/10.1287/orsc.2.1.71

Mendoza Moheno, J., Hernández Calzada, M. A., & Salazar Hernández, B. C. (2014). Implications of strategy in innovation in SMEs. *International Journal of Business Environment*, *6*(2), 161–176.

Menguc, B., & Auh, S. (2008). The asymmetric moderating role of market orientation on the ambidexterity–firm performance relationship for prospectors and defenders. *Industrial Marketing Management*, *37*(4), 455–470.

Migdadi, M. M. (2019). Organizational learning capability, innovation and organizational performance. *European Journal of Innovation Management*, *24*(1), 151–172.

Mikula, B., Vajdová, I., Koščák, P., & Jenčová, E. (2020). Learning and growth perspective in balanced scorecard. *2020 New Trends in Aviation Development (NTAD)*, 174–178.

Miles, J. A. (2012). *Management and organization theory: A Jossey-Bass reader* (Vol. 9). John Wiley & Sons.

Miles, R. E., & Snow, C. C. (1978). Organizational Strategy, Structure, and Process. *Academy of Management Review*. https://doi.org/10.5465/amr.1978.4305755

Moustaghfir, K., El Fatihi, S., & Benouarrek, M. (2020). Human resource management practices, entrepreneurial orientation and firm performance: what is the link? *Measuring Business Excellence*.

Mu, J., Thomas, E., Peng, G., & Di Benedetto, A. (2017). Strategic orientation and new product development performance: The role of networking capability and networking ability. *Industrial Marketing Management*, *64*, 187–201.

Müller, J. M., Buliga, O., & Voigt, K.-I. (2021). The role of absorptive capacity and innovation strategy in the design of industry 4.0 business Models-A comparison between SMEs and large enterprises. *European Management Journal*, *39*(3), 333–343.

Muñoz, P., Kimmitt, J., Kibler, E., & Farny, S. (2018). Living on the Slopes: Entrepreneurial Preparedness in a Context Under Continuous Threat. *Entrepreneurship and Regional Development*. https://doi.org/10.1080/08985626.2018.1541591

Naveed, R. T., Alhaidan, H., Al Halbusi, H., & Al-Swidi, A. K. (2022). Do organizations really evolve? The critical link between organizational culture and organizational innovation toward organizational effectiveness: Pivotal role of organizational resistance. *Journal of Innovation & Knowledge*, *7*(2), 100178.

Ngo-Thi-Ngoc, H., & Nguyen-Viet, B. (2021). Export performance: Evidence from agricultural product firms in Vietnam. *Cogent Business & Management*, *8*(1), 1861729.

Nguyen, N. T. (2023). The impact of intellectual capital on service firm financial performance in emerging countries: the case of Vietnam. *Sustainability*, *15*(9), 7332.

Nguyen, V. P. (2022). The critical success factors for sustainability financial technology in Vietnam: a partial least squares approach. *Human Behavior and Emerging Technologies*, *2022*(1), 2979043.

Núñez-Ríos, J. E., Sánchez-García, J. Y., Soto-Pérez, M., Olivares-Benitez, E., & Rojas, O. G. (2022). Components to foster organizational resilience in tourism SMEs. *Business Process Management Journal*, *28*(1), 208–235.

Okręglicka, M., Gorzeń-Mitka, I., & Ogrean, C. (2015). Management Challenges in the Context of a Complex View - SMEs Perspective. *Procedia Economics and Finance*, *34*, 445–452. https://doi.org/https://doi.org/10.1016/S2212-5671(15)01653-6

Onu, P., & Mbohwa, C. (2021). Industry 4.0 opportunities in manufacturing SMEs: Sustainability outlook. *Materials Today: Proceedings*, *44*, 1925–1930.

O'Regan, N., & Ghobadian, A. (2005). Innovation in SMEs: the impact of strategic orientation and environmental perceptions. *International Journal of Productivity and Performance Management*, *54*(2), 81–97.

Otache, I. (2019). The mediating effect of teamwork on the relationship between strategic orientation and performance of Nigerian banks. *European Business Review*, *31*(5), 744–760.

Parameswaran, R., & Yaprak, A. (1987). A cross-national comparison of consumer research measures. *Journal of International Business Studies*, *18*(1), 35–49.

Parnell, J. A. (2013). *Strategic management*. Sage.

Patky, J. (2020). The influence of organizational learning on performance and innovation: a literature review. *Journal of Workplace Learning*, *32*(3), 229–242.

Pérez-Luño, A., Alegre, J., & Valle-Cabrera, R. (2019). The role of tacit knowledge in connecting knowledge exchange and combination with innovation. *Technology Analysis & Strategic Management*, *31*(2), 186–198.

Pesämaa, O., Shoham, A., Wincent, J., & Ruvio, A. A. (2013). How a learning orientation affects drivers of innovativeness and performance in service delivery. *Journal of Engineering and Technology Management*, *30*(2), 169–187.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annual Review of Psychology*. https://doi.org/10.1146/annurev-psych-120710-100452

Porter, M. E. (1991). Towards a Dynamic Theory of Strategy. *Strategic Management Journal*. https://doi.org/10.1002/smj.4250121008

Prajogo, D., & McDermott, C. M. (2014). Antecedents of service innovation in SMEs: Comparing the effects of external and internal factors. *Journal of Small Business Management*, *52*(3), 521–540.

Quansah, E., Moghaddam, K., Solansky, S., & Wang, Y. (2022). Strategic leadership in SMEs: the mediating role of dynamic capabilities. *Leadership & Organization Development Journal*, *43*(8), 1308–1320.

Rhee, J., Park, T., & Lee, D. H. (2010). Drivers of innovativeness and performance for innovative SMEs in South Korea: Mediation of learning orientation. *Technovation*, *30*(1), 65–75.

Rianto, M. R., Jasfar, F., & Arafah, W. (2021). Mediating Effect of Organization Learning on the Relationship Between Strategic Change, Knowledge Management and Transformational Leadership ; Case of Indonesia Islamic Banks. *Journal of Economic Development Environment and People*. https://doi.org/10.26458/jedep.v10i3.697

Riswanto, A., Rasto, R., Hendrayati, H., Saparudin, M., Abidin, A., & Eka, A. (2020). The role of innovativeness-based market orientation on marketing performance of small and medium-sized enterprises in a developing country. *Management Science Letters*, *10*(9), 1947–1952.

Rogers, Z. S., Golara, S., Abdusalam, Y., & Rogers, D. S. (2020). A Sharing-Enabled Portfolio Approach to Distribution. *Transportation Journal*, *59*(2), 99–128.

Ronald, R., & Amelia, A. (2023). Deeper Insights into Service Quality in the Context of Commitment and Loyalty: A Study on Internet Providers in Indonesia. *Review of Integrative Business and Economics Research*, *12*(1), 134–147.

Rounaghi, M. M., Jarrar, H., & Dana, L.-P. (2021). Implementation of strategic cost management in manufacturing companies: overcoming costs stickiness and increasing corporate sustainability. *Future Business Journal*, *7*, 1–8.

Ruiz-Jiménez, J. M., & Fuentes-Fuentes, M. D. M. (2013). Knowledge combination, innovation, organizational performance in technology firms. *Industrial Management*

and Data Systems, *113*(4), 523–540. https://doi.org/10.1108/02635571311322775/FULL/XML

Safari, A., & Saleh, A. S. (2020). Key determinants of SMEs' export performance: a resource-based view and contingency theory approach using potential mediators. *Journal of Business & Industrial Marketing*, *35*(4), 635–654.

Salkind, N. J. (2010). *Encyclopedia of research design* (Vol. 1). sage.

Salunke, S., Weerawardena, J., & McColl-Kennedy, J. R. (2019). The central role of knowledge integration capability in service innovation-based competitive strategy. *Industrial Marketing Management*, *76*, 144–156.

Sandberg, B., & Aarikka-Stenroos, L. (2014). What makes it so difficult? A systematic review on barriers to radical innovation. *Industrial Marketing Management*, *43*(8), 1293–1305.

Sawaean, F., & Ali, K. (2020). The impact of entrepreneurial leadership and learning orientation on organizational performance of SMEs: The mediating role of innovation capacity. *Management Science Letters*, *10*(2), 369–380.

Sayal, A., & Banerjee, S. (2022). Factors influence performance of B2B SMEs of emerging economies: view of owner-manager. *Journal of Research in Marketing and Entrepreneurship*, *24*(1), 112–140.

Selvarajah, C., Le, T. D., & Sukunesan, S. (2019). The Vietnam project: developing conceptual knowledge on cross-cultural skills for training in SME internationalization. *Asia Pacific Business Review*, *25*(3), 338–366.

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference.* Houghton, Mifflin and Company.

Singh, K., & Misra, M. (2021). Linking Corporate Social Responsibility (CSR) and Organizational Performance: the moderating effect of corporate reputation. *European Research on Management and Business Economics*, *27*(1), 100139. https://doi.org/10.1016/J.IEDEEN.2020.100139

Sok, P., & O'Cass, A. (2011). Achieving superior innovation-based performance outcomes in SMEs through innovation resource–capability complementarity. *Industrial Marketing Management*, *40*(8), 1285–1293.

Sok, P., O'Cass, A., & Sok, K. M. (2013). Achieving superior SME performance: Overarching role of marketing, innovation, and learning capabilities. *Australasian Marketing Journal*, *21*(3), 161–167.

Son, T. H. (2020). Mobile money, financial inclusion and digital payment: the case of Vietnam. *International Journal of Financial Research*.

Song, M., Di Benedetto, C. A., & Nason, R. W. (2007). Capabilities and financial performance: The moderating effect of strategic type. *Journal of the Academy of Marketing Science*, *35*, 18–34.

Steinerowska-Streb, I., & Wziątek-Staśko, A. (2020). Innovations in family firms: A study of owner-managers' knowledge development. *Journal of Family Business Management*, *10*(3), 247–264.

Subramanian, N., & Suresh, M. (2022). The contribution of organizational learning and green human resource management practices to the circular economy: A relational analysis–evidence from manufacturing SMEs (part II). *The Learning Organization*, *29*(5), 443–462.

Sundbo, J., & Gallouj, F. (2000). Innovation as a loosely coupled system in services. *International Journal of Services Technology and Management*, *1*(1), 15–36.

Tang, T. (Ya), Zhang, S. (Katee), & Peng, J. (2021). The value of marketing innovation: Market-driven versus market-driving. *Journal of Business Research*, *126*, 88–98. https://doi.org/10.1016/J.JBUSRES.2020.12.067

Tang, Z., & Tang, J. (2012). Entrepreneurial orientation and SME performance in China's changing environment: The moderating effects of strategies. *Asia Pacific Journal of Management*, *29*, 409–431.

Thau, M., Mikkelsen, M. F., Hjortskov, M., & Pedersen, M. J. (2021). Question order bias revisited: a split-ballot experiment on satisfaction with public services among experienced and professional users. *Public Administration*, *99*(1), 189–204.

Tho, N. D. (2019). Strategic orientations and firm innovativeness: a necessary condition analysis. *Baltic Journal of Management*, *14*(3), 427–442.

Thomä, J., & Zimmermann, V. (2020). Interactive learning—The key to innovation in non-R&D-intensive SMEs? A cluster analysis approach. *Journal of Small Business Management*, *58*(4), 747–776.

Toh, S. Y., Tehseen, S., Mahmoud, A. B., Cheok, J., Grigoriou, N., & Opute, J. (2022). Mission statement effectiveness: investigating managers' sensemaking role. *Corporate Communications*, *27*(2), 329–345. https://doi.org/10.1108/CCIJ-03-2021-0031/FULL/XML

Toubes, D. R., Araújo-Vila, N., & Fraiz-Brea, J. A. (2021). Organizational learning capacity and sustainability challenges in times of crisis: A study on tourism SMEs in Galicia (Spain). *Sustainability*, *13*(21), 11764.

Trivedi, K., & Srivastava, K. B. L. (2021). A framework for integrating strategic HR and knowledge management for innovation performance. *Strategic HR Review*, *20*(1), 11–16.

Troilo, G., De Luca, L. M., & Atuahene-Gima, K. (2014). More innovation with less? A strategic contingency view of slack resources, information search, and radical innovation. *Journal of Product Innovation Management*, *31*(2), 259–277.

Tsai, F.-S., Cabrilo, S., Chou, H.-H., Hu, F., & Tang, A. D. (2022). Open innovation and SME performance: The roles of reverse knowledge sharing and stakeholder relationships. *Journal of Business Research*, *148*, 433–443.

Tuan, V. K., & Rajagopal, P. (2022). *The mediating effect of the budget process on the performance of small-and medium-sized enterprises in Ho Chi Minh City, Vietnam*.

Valaei, N. (2017). Organizational structure, sense making activities and SMEs' competitiveness: An application of confirmatory tetrad analysis-partial least squares (CTA-PLS). *VINE Journal of Information and Knowledge Management Systems*, *47*(1), 16–41.

Vidal, G. G., Campdesuñer, R. P., Rodríguez, A. S., & Vivar, R. M. (2017). Contingency theory to study leadership styles of small businesses owner-managers at Santo Domingo, Ecuador. *International Journal of Engineering Business Management*, *9*, 1847979017743172.

Vinzi, V. E., Chin, W. W., Henseler, J., & Wang, H. (2010). *Handbook of partial least squares* (Vol. 201, Issue 0). Springer.

Vlasic, G. (2022). Comparative analysis of the role of strategic orientation, strategic performance metric focus and strategic audacity in driving firm performance: family businesses vs nonfamily businesses. *Journal of Family Business Management*, *13*(1), 7–25.

Walker, R. M. (2013). Strategic management and performance in public organizations: findings from the Miles and Snow framework. *Public Administration Review*, *73*(5), 675–685.

Wang, Y. (2016). What are the biggest obstacles to growth of SMEs in developing countries?–An empirical evidence from an enterprise survey. *Borsa Istanbul Review*, *16*(3), 167–176.

Weerawardena, J., Salunke, S., Knight, G., Mort, G. S., & Liesch, P. W. (2020). The learning subsystem interplay in service innovation in born global service firm internationalization. *Industrial Marketing Management*, *89*, 181–195.

Wymer, S. A., & Regan, E. A. (2005). Factors Influencing E-Commerce Adoption and Use by Small and Medium Businesses. *Electronic Markets*. https://doi.org/10.1080/10196780500303151

Xing, S., Zainal, S. R. B. M., & Iqbal, Q. (2024). Servant leadership, environmental passion and workplace green behavior in higher education institutions. *Journal of Infrastructure, Policy and Development*, *8*(3), 6290.

Yang, D., Jiang, W., & Zhao, W. (2019). Proactive environmental strategy, innovation capability, and stakeholder integration capability: A mediation analysis. *Business Strategy and the Environment*, *28*(8), 1534–1547.

Yoshikuni, A. C., & Albertin, A. L. (2018). Effects of Strategic Information Systems on Competitive Strategy and Performance. *International Journal of Productivity and Performance Management*. https://doi.org/10.1108/ijppm-07-2017-0166

Zhani, N., Mouri, N., & Hamdi, A. (2021). Can a technology firm desire too much of a good thing? The double-edged sword effects of technology orientation on performance. *European Business Review*, *33*(5), 725–741.

Zhao, S., Jiang, Y., Peng, X., & Hong, J. (2021). Knowledge sharing direction and innovation performance in organizations: do absorptive capacity and individual creativity matter? *European Journal of Innovation Management*, *24*(2), 371–394.

Zhou, H., Uhlaner, L. M., & Jungst, M. (2023). Knowledge management practices and innovation: A deliberate innovation management model for SMEs. *Journal of Small Business Management*, *61*(4), 2126–2159.

Zhou, K. Z., & Wu, F. (2010). Technological capability, strategic flexibility, and product innovation. *Strategic Management Journal*, *31*(5), 547–561.