

Le, Thu-Hang; Mai Ngoc Khuong

Article

The influence of prospector and defender strategies on dynamic capabilities, innovation, and financial effectiveness in Vietnamese service SMEs

Entrepreneurial Business and Economics Review (EBER)

Provided in Cooperation with:

Centre for Strategic and International Entrepreneurship, Krakow University of Economics

Suggested Citation: Le, Thu-Hang; Mai Ngoc Khuong (2025) : The influence of prospector and defender strategies on dynamic capabilities, innovation, and financial effectiveness in Vietnamese service SMEs, Entrepreneurial Business and Economics Review (EBER), ISSN 2353-8821, Krakow University of Economics, Centre for Strategic and International Entrepreneurship, Krakow, Vol. 13, Iss. 1, pp. 187-205,
<https://doi.org/10.15678/EBER.2025.130111>

This Version is available at:

<https://hdl.handle.net/10419/335473>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

The influence of prospector and defender strategies on dynamic capabilities, innovation, and financial effectiveness in Vietnamese service SMEs

Thu-Hang Le, Ngoc-Khuong Mai

ABSTRACT

Objective: The article examines the relationships between prospector and defender-oriented SMEs, dynamic capabilities, innovation, and financial effectiveness within the service sector through the resource-based view (RBV) and dynamic capabilities view (DCV) perspectives.

Research Design & Methods: We tested a research model using data collected from 421 usable responses of service SME founders and managers in Southeast Vietnam. We employed PLS-SEM through SmartPLS software for analysis.

Findings: We found that prospectors significantly enhance dynamic capabilities more than defenders. Prospectors positively influence innovation, whereas defenders do not. However, dynamic capabilities drive innovation within SMEs. While we found no direct link between dynamic capabilities and financial effectiveness, innovation was a key predictor of SME effectiveness. Moreover, dynamic capabilities and innovation mediate the relationship between strategic orientations and SME effectiveness.

Implications & Recommendations: This study holds valuable implications for both SME strategists and scholars. It sheds light on the strategic pathways crucial for service SMEs, stressing the significance of aligning strategic directions with dynamic capabilities and innovation to boost SME financial effectiveness.

Contribution & Value Added: This research offers a novel perspective on strategic pathways for service SMEs in emerging markets, enriching RBV and DCV frameworks with insights specific to developing economies. It extends the Miles and Snow framework by integrating the adaptive cycle, illustrating how dynamic capabilities and innovation empower both prospectors and defenders to navigate change. Moreover, it addresses a gap in the literature by exploring the application of BSC for measuring financial effectiveness within service sectors, paving the way for its integration in measuring SME success in dynamic environments.

Article type: research article

Keywords: prospector; defender; dynamic capabilities; innovation; SME effectiveness

JEL codes: O31, L80

Received: 30 April 2024

Revised: 26 July 2024

Accepted: 2 September 2024

Suggested citation:

Le, T., & Mai, N. (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>

INTRODUCTION

The service sector in Vietnam has emerged as a pivotal force in the nation's economic landscape, undergoing a transformative journey fuelled by the economic reforms of 1986 and global integration initiatives since its entry into the World Trade Organization in 2007 (Leung, 2010). Historically overshadowed by a manufacturing-centric focus, the sector has experienced a paradigm shift in recognition of its crucial role in driving economic growth. Government initiatives, including eased regulations for foreign investors, have led to a surge in capital inflows, particularly in key areas such as finance, insurance, real estate, and advisory services (Kim & Poensgen, 2019). Small and medium enterprises (SMEs) are the lifeblood of

Vietnam's service sector, fostering a dynamic and diverse service landscape. Their deep local roots enable them to cater to specific community needs, while the ease of entry allows new businesses to emerge, fostering a competitive market environment (Rand & Tarp, 2020). This combination of localized expertise and a constantly evolving service landscape fuels the growth and dynamism of Vietnam's service sector. With diverse economic activities encompassing wholesale and retail, finance, transportation, and accommodation services, the service industry is positioned to sustain Vietnam's productivity growth and propel its journey towards achieving high-income status by 2045 (Marwah *et al.*, 2021). Notably, recent statistics highlight the sector's robust expansion, with a notable growth rate of 9.99% in 2022, outpacing other key sectors such as industry, construction (7.78%), and agriculture (3.36%), according to the General Statistics Office of Vietnam. However, the service sector is facing some roadblocks that impede its performance, positioning it behind peer countries like Malaysia, the Philippines, and Indonesia (*Taking Stock, March 2023: Harnessing the Potential of the Services Sector or Growth*, 2023).

The contemporary business landscape demands a shift from traditional performance measurement methods towards more holistic and forward-looking approaches (Kumar *et al.*, 2022). The Balanced Scorecard (BSC) stands out as a valuable tool in this regard, offering multifaceted advantages over conventional metrics by enabling organizations to evaluate their progress towards strategic objectives (Sureka *et al.*, 2021). This emphasis on financial health is particularly crucial in today's competitive environment, where success hinges on the ability to achieve significant cost reductions and enhanced return on investment (Kumar *et al.*, 2022). Small and medium-sized enterprises (SMEs) have adopted adaptive strategies to navigate uncertainty. This involves addressing three key domains – entrepreneurial, engineering, and administrative – to align resources and adapt to changing market conditions (Sollosy *et al.*, 2019). Dynamic capabilities and innovation play pivotal roles in tackling the challenges faced by SMEs within this adaptive framework (Ferreira *et al.*, 2020). The capability-based perspective highlights the critical importance of dynamic capabilities in shaping firm performance, allowing organizations to proactively adjust to changing environments and seize new opportunities (Ingram & Krašnicka, 2023; Jie *et al.*, 2023). Additionally, by fostering a culture of experimentation, innovation allows SMEs to embrace new ideas and service offerings in response to capitalize on opportunities and mitigate disruptions (Dyduch, 2019).

While the Miles and Snow framework offers a foundation for understanding strategic orientations, research often focuses solely on strategic types, neglecting the adaptive cycle that guides strategic decision-making (Anwar *et al.*, 2021). Dynamic capabilities are crucial for companies to adapt and innovate in changing environments by continually reconfiguring their resource base to create value (Ruiz-Ortega *et al.*, 2023). Research on the antecedents of dynamic capabilities has mostly focused on internal resources like experience, human capital, and leadership (Bitencourt *et al.*, 2020), as well as culture and organizational structure (Spanuth *et al.*, 2020). Integrating dynamic capabilities with broader strategic management is needed (Randhawa *et al.*, 2021; Ruiz-Ortega *et al.*, 2023). Although the relationship between business strategies, firm capabilities, and performance has been extensively researched (Desarbo *et al.*, 2005; Chereau & Meschi, 2019; Thoumrungroje & Racela, 2022), there is a gap in studies specifically examining these dynamics in the context of emerging tiger markets like Vietnamese service SMEs. This study focuses on the distinct and contrasting characteristics of prospector and defender strategies, enabling an exploration of a wide spectrum of strategic behaviours within Vietnamese SMEs. Strategic orientation is crucial for establishing new resource configurations and driving dynamic capabilities (Randhawa *et al.*, 2021). However, there is a lack of empirical studies examining the direct relationship between strategic orientation and dynamic capabilities, particularly in service SMEs. Moreover, the established link between dynamic capabilities and firm effectiveness needs further exploration within the service sector, considering potential cultural and institutional variations that might impact their effectiveness (Jie *et al.*, 2023; Zhang *et al.*, 2017). Furthermore, service innovation research, though growing, is less developed compared to its manufacturing counterpart (Saunila, 2020). Existing research on the BSC also highlights a lack of studies focusing on service sectors (Kumar *et al.*, 2022). The gaps identified in prior research create a compelling opportunity for this study. The article aims to examine the direct impact of dynamic capabilities on innovation and SME effectiveness, the influence of prospector- and defender-oriented SMEs on dynamic capabilities and innovation, and the mediating

roles of dynamic capabilities and innovation in the effectiveness of service SMEs in emerging economies like Vietnam. This study employs a theoretical lens informed by dynamic capabilities theory and the resource-based view to guide the investigation of the following three research questions:

RQ1: *Do dynamic capabilities directly impact innovation and SME effectiveness?*

RQ2: *Do prospector-oriented and defender-oriented SMEs directly influence dynamic capabilities and innovation?*

RQ3: *Do dynamic capabilities and innovation mediate the relationships between prospector-oriented and defender-oriented SMEs on SME effectiveness?*

This research has the potential to make significant contributions. While existing studies predominantly focus on manufacturing, exploring the strategic management framework within the service sector of emerging markets can yield crucial insights. This study examines how service SMEs in Vietnam, an emerging economy, leverage strategic orientation to enhance firm effectiveness through the combined lenses of the RBV and DCV. By understanding potential cultural and institutional variations, this research provides a comprehensive understanding of these relationships across different contexts. Additionally, by extending the Miles and Snow framework to integrate the adaptive cycle and examining the mediating roles of both dynamic capabilities and innovation, this study offers a nuanced perspective on how these factors interact to drive firm effectiveness. Finally, by recognizing the limited research on using the BSC to measure firm success in the service sector, this study paves the way for integrating this framework into performance evaluation for service SMEs, offering a more holistic approach to assessing success.

The next sections of this paper are structured as follows: The second section reviews the relevant literature and develops the study's hypotheses, synthesizing key theories and prior research. The third section outlines the research methodology used in the study. The fourth section presents and discusses the results. Lastly, the fifth section offers a summary and conclusion of the paper.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Prospector-oriented SME (PR) and Defender-oriented SME (DE)

The strength of the Miles and Snow typology lies in its focus on organizational adaptation to market changes, balancing internal and external factors for competitive advantage amidst uncertainty (Anwar & Shah, 2021). SMEs, often resource-constrained, can leverage this framework's flexibility to adjust strategies and utilize existing strengths for a competitive edge. Analyzer and reactor strategies, which involve detailed analysis and flexible resource allocation, can slow down decision-making or result in a lack of clear direction (Handoyo *et al.*, 2023). However, adopting prospector and defender strategies can empower SMEs to make quick decisions and adapt effectively to the dynamic environment (Handoyo *et al.*, 2023).

Prospector-oriented SMEs in the service sector are characterized by their innovative and externally focused approach (Anwar *et al.*, 2021; Avci *et al.*, 2011). These firms actively lead their market by introducing new products, services, and technologies, exhibiting a willingness for risk-taking and industry leadership. With a broad domain in both products/services and markets, they swiftly adapt to capitalize on emerging opportunities. Unlike defender-oriented SMEs that prioritize internal optimization, prospectors maintain an outside-in perspective, constantly seeking new customer needs and market openings (Osorio-Londoño *et al.*, 2020). They closely monitor customer behaviour, collaborate with forward-thinking users to anticipate trends, and conduct market experiments to validate new service concepts (Kathuria & Lucianetti, 2024). Through these proactive strategies, prospectors gather real-world feedback to refine and innovate their service offerings, ensuring alignment with evolving customer demands in the dynamic service sector. Contrastingly, defender-oriented SMEs adopt an inside-out perspective, prioritizing stability by concentrating on a narrow range of products or services tailored to specific market segments (Anwar *et al.*, 2021; Avci *et al.*, 2011). These firms prioritize market penetration rather than expanding beyond their established niche, guarding their territory and emphasizing long-term planning to enhance efficiency and cost reduction. They

tend to pursue established, low-risk opportunities, leveraging internal strengths such as customer relationships and service delivery processes to maximize efficiency and customer retention (Lukito-Budi *et al.*, 2023). By concentrating on optimizing existing capabilities, defender-oriented SMEs effectively compete within their limitations while adjusting their service offerings within internal boundaries to navigate the dynamic landscape of emerging markets.

Dynamic Capabilities (DC)

Dynamic capabilities (DC) refer to the routines and processes through which these firms continually reconfigure their resource base, encompassing shedding, acquiring, integrating, and deploying resources to formulate value-creating strategies that capitalize on existing and emerging opportunities (Jiang *et al.*, 2020; Salvato & Vassolo, 2018). Dynamic capabilities in service and trade SMEs involve three essential areas: Sensing Capabilities, which include identifying and assessing opportunities and threats by scanning the market and understanding customer needs and technological trends; Seizing Capabilities, which require mobilizing resources to capture opportunities through strategic decisions and aligning resources for new ventures; and Transforming Capabilities, which involve reconfiguring and renewing the firm's resource base to adapt to changes by restructuring and developing new skills (Teece, 2007; Jiang *et al.*, 2020). This concept underscores the importance of SMEs' ability to exploit their current assets and strategic positions while exploring new technologies and markets.

Prospector-oriented organizations focus on new product/market development and a willingness for risk-taking (Anwar *et al.*, 2021). To meet these needs, their strength lies in the ability to sense new market opportunities, seize them, and continuously reconfigure resources to thrive in the dynamic service landscape (Bonyadi Naeini & Jalilian Ahmad-kalaei, 2022). This includes systems thinking to identify connections between current and potential resources, divergent thought processing to assess diverse opportunities, and reflective abilities for decision-making amid uncertainty. Previous research indicates a positive correlation between prospector strategies and dynamic capabilities (Marozau *et al.*, 2023; Nasution *et al.*, 2021). Defenders prioritize internal efficiency, fostering a dynamic capability centred on incremental adaptation of resources and processes for competitiveness (Adegbite *et al.*, 2018). This approach allows them to optimize operations, and allocate resources to enhance existing service offerings (Restuti *et al.*, 2023). Moreover, their focus on customer retention serves as another dynamic capability, involving continuous monitoring and adaptation to meet customer preferences within their market (Lukito-Budi *et al.*, 2023). Therefore, we proposed the hypotheses as follows:

H1a: Prospector-oriented SME has a positive impact on dynamic capabilities.

H1b: Defender-oriented SME has a positive impact on dynamic capabilities.

Innovation (IN)

Coombs and Miles (2000) present three perspectives on service innovation: assimilation, demarcation, and synthesis. The synthesis approach acknowledges differences in service innovation due to unique characteristics but suggests applying insights from manufacturing innovation management processes (Witell *et al.*, 2016). Exploratory and exploitative innovations represent two distinct strategies that organizations employ to enhance competitiveness (Alabri *et al.*, 2021). For trade and service SMEs, exploratory innovation is vital for adapting to market changes, creating unique value propositions, and ensuring long-term sustainability through the continuous pursuit of new opportunities. This approach also allows SMEs to leverage emerging technologies, thereby improving customer experiences and operational efficiencies (Alabri *et al.*, 2021; Gustafsson *et al.*, 2020). By adhering to the synthesis perspective and exploratory innovation, this study defines innovation as the introduction of new services through technology and creativity to fulfil customer needs and open market opportunities, aiming to deliver innovative and value-added solutions to clients (García-Morales *et al.*, 2012; Gustafsson *et al.*, 2020).

The prospector strategy emphasizes proactive innovation through activities like monitoring emerging trends, establishing new ventures, and actively seeking resources and opportunities, which enables

SMEs to respond to market demands and capitalize on innovative prospects (Al-Ansaari *et al.*, 2014; Kim *et al.*, 2024). Conversely, defender-oriented SMEs often prioritize stability over innovation, focusing on retrenchment rather than embracing change. This conservative approach may hinder innovation efforts due to risk aversion, potentially undermining resilience during turbulent periods (Kim *et al.*, 2024; Lukito-Budi *et al.*, 2023). Consequently, we hypothesised:

H2a: Prospector-oriented SME has a positive relationship with Innovation.

H2b: Defender-oriented SME has a negative relationship with Innovation.

Service innovation is essential for service firms' growth and success in today's competitive landscape (Ziyae *et al.*, 2022). These firms strive to provide value to customers through innovative services tailored to their preferences, but implementation challenges persist, partly due to the difficulty in measuring innovation in the service sector (Intriago *et al.*, 2023). Dynamic capabilities encompass a firm's distinctive abilities to integrate and reconfigure internal and external competencies (Jiang *et al.*, 2020). These capabilities enable firms to adapt to changing market conditions by achieving new resource configurations. Dynamic capabilities include resource accumulation, firm attributes, capabilities, and innovative activities, all essential for business development and growth (Tsou & Chen, 2020). The dynamic capabilities view applies to conceptualizing service innovation, as it emphasizes the development of dynamic capabilities through innovative activities to recognize and seize opportunities (Ziyae *et al.*, 2022). Hence, we proposed:

H3: Dynamic capabilities are positively related to innovation.

SME Effectiveness (SE)

While financial metrics were traditionally the sole indicator of a company's health, Kaplan and Norton's (1992) balanced scorecard (BSC) introduced a more nuanced approach (Kumar *et al.*, 2022). For SMEs, achieving financial effectiveness is about reaching specific financial goals tightly linked to their overall corporate strategy (Albuhisi & Abdallah, 2018; Kumar *et al.*, 2022). This ensures a clear cause-and-effect relationship between financial decisions and strategic objectives (Freudenreich *et al.*, 2020). The BSC perspective emphasizes that financial effectiveness for SMEs extends beyond mere profitability, requiring a balanced set of metrics reflecting both short-term and long-term health. SME financial effectiveness encompasses the achievement of specific financial goals tightly integrated with the overarching corporate strategy, which includes robust sales growth, efficient profit generation, and vigilant cash flow management to uphold operational stability (Kumar *et al.*, 2022; Yoshikuni & Albertin, 2018).

Unlike large firms, service SMEs often face unique circumstances such as smaller resource bases, a lack of communication systems, and stronger local embeddedness (Ho *et al.*, 2023). In this context, integrative dynamic capabilities, both internal and external, play a pivotal role (Jiang *et al.*, 2020). External integrative dynamic capabilities enable SMEs to leverage resources and knowledge from external stakeholders, including suppliers, customers, and the local community, thereby addressing challenges at lower costs and adapting to market demands. This continuous adaptation enhances market performance and financial effectiveness (Cyfert *et al.*, 2021). Internally, integrative dynamic capabilities foster knowledge exchange and collaboration among employees, reducing duplication and fostering trust (Jiang *et al.*, 2020). This internal collaboration enhances operational effectiveness, reputation, and customer attraction, ultimately contributing to improved financial effectiveness for service SMEs. Furthermore, an innovation advantage involves providing customers with cutting-edge and high-value products, leading to greater satisfaction, loyalty, and perceived quality (Tai *et al.*, 2021). Similarly, firms with a market differentiation advantage can create distinct brand images, boosting customer loyalty and satisfaction, allowing them to charge premium prices and sustain higher profits (Yuliansyah *et al.*, 2021). Moreover, innovation facilitates customer attraction, and adaptation to market changes (Gustafsson *et al.*, 2020). The direct relationship between innovation and financial effectiveness has long been established (Abid *et al.*, 2023; Yuliansyah *et al.*, 2021).

Therefore, we formulate the following hypotheses:

H4: Dynamic capabilities are positively related to SME effectiveness.

H5: Innovation is positively related to SME effectiveness.

The Mediating Roles of Dynamic Capabilities and Innovation

The adaptive approach of Miles and Snow (1978), particularly emphasizing the entrepreneurial and engineering domains, along with insights from the RBV and DCV, elucidates how strategic orientations impact financial effectiveness in dynamic service sectors (Ambrosini *et al.*, 2022). Prospectors, with their external focus, can leverage strong dynamic capabilities to sense opportunities, seize them through innovation, and reconfigure resources for continual adaptation (Bonyadi Naeini & Jalilian Ahmadkalaei, 2022). This fosters the development of VRIN service offerings, leading to a positive impact on financial effectiveness (Yuliansyah *et al.*, 2021). Defender-oriented SMEs, prioritizing internal efficiency and market stability, frequently face challenges in innovating within dynamic landscapes (Chih-Yi & Bou-Wen, 2021). However, defenders can harness dynamic capabilities to optimize existing services, gaining cost advantages and enhancing overall effectiveness (Restuti *et al.*, 2023). While radical innovation may not be their strength, dynamic capabilities empower them to adapt and compete effectively in the dynamic service sector. Accordingly, we hypothesize the following:

H6a: Dynamic capabilities and Innovation mediate the relationship between Prospector and SME effectiveness.

H6b: Dynamic capabilities and Innovation mediate the relationship between Defender and SME effectiveness.

Figure 1 presents our research model.

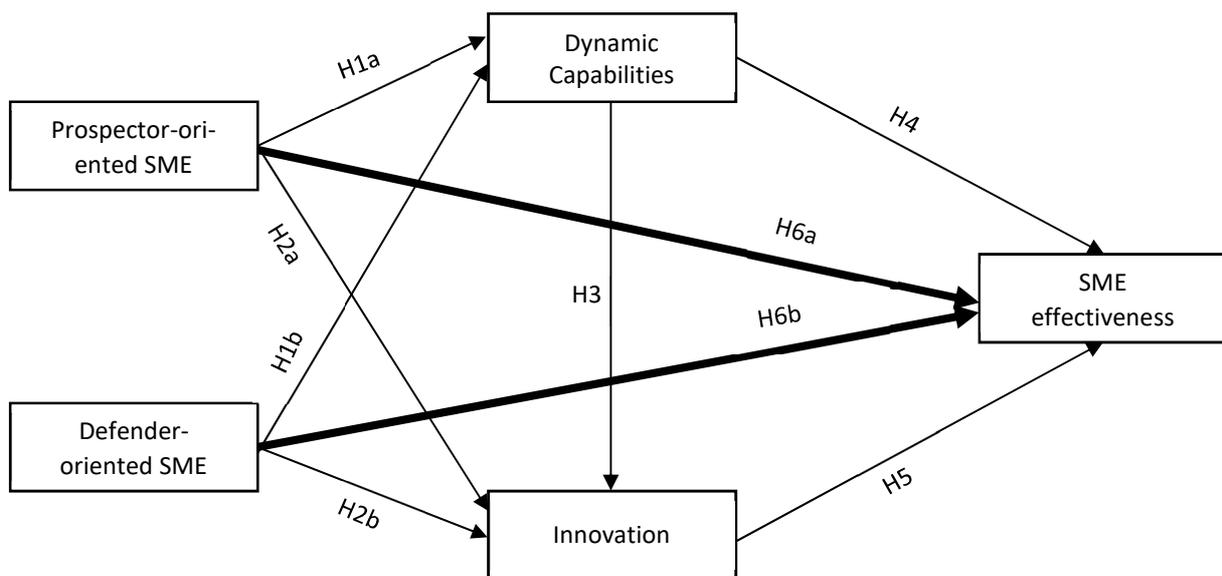


Figure 1. Research model

Source: own elaboration.

RESEARCH METHODOLOGY

Sampling and Data Collection

This research centres on service SMEs in Vietnam's Southeast Key Economic Region (SKER) due to compelling reasons. SKER represents a critical pillar of Vietnam's service sector, boasting substantial contributions to the nation's GDP (32% of the country's GDP) and state budget revenue (44.7% of the total state budget revenue) (Vietnam General Statistic Office, 2022). With prominent urban centres like Ho Chi Minh City, Dong Nai, and Binh Duong, SKER serves as a magnet for businesses, talent, and investment, fostering an environment conducive to the flourishing of service industries (Long & Ngu-

yen, 2024). SMEs and large corporations differ significantly in organizational structure, business settings, and legal contexts, with SMEs confronting unique governance challenges amidst diverse legal and regulatory environments (Hermawati & Gunawan, 2021). Moreover, Vietnam's divergent business cultures exert a substantial influence on regional decision-making approaches: while the Southern region favours collaborative and consensus-driven processes, the Northern counterpart prioritizes hierarchical structures and procedural adherence (Mai *et al.*, 2009). This regional contrast in decision-making styles may potentially contribute to variations in risk aversion strategies among businesses operating in different regions of the country (Tran, 2021). Therefore, there exists a critical need to delve deeper into the specific context of service SMEs in SKER, considering their unique attributes and operating environments, to better understand how they leverage dynamic capabilities, innovation, and strategic perspectives to enhance financial effectiveness.

The items for all constructs were sourced from previously validated scales, with slight modifications to fit the context. Face and content validity were ensured through literature examination and feedback from managers of service SMEs and business management scholars. The questionnaire underwent back-translation from English to Vietnamese and vice versa with the aid of three bilingual experts (Rafiq *et al.*, 2022). A pilot survey was conducted to validate the data set, and respondents' feedback was gathered to address any encountered issues.

This study utilizes a questionnaire survey approach to collect data for assessing the research hypotheses in the proposed model. Due to the lack of company list of trade and service SMEs, a sampling frame was unavailable. To address this, we employed judgmental sampling aiming for analytic generalization (Allaberganov *et al.*, 2021), and supplemented this with snowball sampling to expand our respondent pool through initial participants' networks. These techniques were applied from the fourth quarter of 2022 to the fourth quarter of 2023. Data collection was conducted through both article and online self-administered surveys. To ensure the reliability of the data, we used verified email lists from reputable sources, including the Southern Small and Medium Enterprise Association (ASMES) (<https://asmes.org.vn/>) and the SME portal in Vietnam (<https://sme.com.vn/>). We distributed article surveys at events organized by SME associations and agencies, such as the Saigon Exhibition and Convention Center (SECC) and the WORLD TRADE CENTER – WTC Binh Duong New City. Screening questions at the beginning of both online and article surveys confirmed that respondents were indeed founders, co-founders, or managers of trade and service SMEs, thus filtering out unqualified responses. Informed consent was also obtained from all participants, ensuring adherence to ethical standards. The study achieved a validity rate of 70.17% with 421 completed responses out of 600 distributed questionnaires. Refer to Table 1 for an overview of the surveyed firms and respondents' profiles.

Table 1. Profile of firms and respondents (N = 421)

Firms	No.	%	Respondents	No.	%
<i>Number of employees</i>			<i>Gender</i>		
Less than 10	121	28.74%	Male	174	41.33%
10-50	134	31.82%	Female	247	58.67%
51-100	101	24.00%	<i>Educational level</i>		
101-200	65	15.44%	High school	14	3.33%
<i>Capital</i>			College	8	1.90%
Less than 10 billion VND	271	64.37%	Bachelor/ Engineer	306	72.68%
10-100 billion VND	150	35.63%	Postgraduate	93	22.09%
			<i>Job position</i>		
			Founder	98	23.28%
			Co-founder	216	51.30%
			Manager	107	25.42%

Source: own study.

Measurement Constructs

All constructs were assessed using a five-point Likert scale, ranging from strongly disagree (1) to strongly agree (5). Prospector and defender orientations were evaluated with items adapted from Andrews *et al.* (2007) and Avci *et al.* (2011), with five items for the prospector and four for defender. Innovation was measured using nine items from García-Morales *et al.* (2012), while dynamic capabilities were assessed with six items from Jiang *et al.* (2020). We gauged the SME effectiveness using three items focusing on financial effectiveness, adapted from Yoshikuni and Albertin (2018) based on the Balanced Scorecard framework developed by Kaplan and Norton (Kaplan *et al.*, 2001) (See Appendix).

Analytical Procedures

The research employed partial least squares structural equation modelling (PLS-SEM) for analyzing the proposed model. PLS-SEM is well-suited for regression analysis with mediation and is particularly beneficial for assessing complex and simple research models, providing successive approximations for estimates of loadings and structural parameters (Hair Jr *et al.*, 2017; Sarstedt *et al.*, 2021). It considers various features of the model, such as common characteristics and error differences, making it suitable for measuring predictive ability (Hair Jr *et al.*, 2017). Moreover, it has been widely used in previous studies of SME strategic management (Akbar *et al.*, 2020; Kim, 2022). The two-step evaluation of PLS-SEM involves initial checks for multicollinearity and common method bias, followed by a thorough assessment of the measurement and structural models using SmartPLS (Hair Jr *et al.*, 2019). We evaluated multicollinearity using VIF values (Kock & Lynn, 2012), while we assessed common method bias using techniques like Harman's single-factor test (Kock, 2015). The measurement model assessment ensured constructs' reliability and validity, focusing on convergent validity (AVE), discriminant validity (HTMT ratio), and reliability (Cronbach's alpha and composite reliability). The structural model assessment examines the relationships between constructs, considering path coefficients, variance explained (R-squared), and predictive accuracy (Q-squared).

RESULTS AND DISCUSSION

Common Method Bias

To assess potential common method bias (CMB), we conducted various analyses. Initially, we performed a Harmon single-factor test on five factors: prospector, defender, dynamic capabilities, innovation, and SME effectiveness, using IBM SPSS. Results indicated that CMB was not a significant concern, as all factors were present and the highest covariance explained by one factor was 44.5%, below the 50% cutoff value (Kock, 2015). Moreover, we conducted a full collinearity test to identify any constructs with variance inflation factor (VIF) values equal to or higher than 3.3. All VIF values were below 3.3, indicating no significant CMB concerns (Kock & Lynn, 2012).

Measurement Model

We used Cronbach's alpha, indicator reliability, and composite reliability to assess internal consistency, while convergent and discriminant validity were evaluated to ensure the measure captured the intended construct and differed from other constructs (Hair Jr *et al.*, 2017). All indicators showed outer loadings exceeding the 0.6 threshold (Yana *et al.*, 2015), while both Cronbach's Alpha and Composite reliability (CR) values exceeded 0.7, indicating robust internal consistency (Hair Jr *et al.*, 2017; Henseler *et al.*, 2017) (Table 2). The average variance extracted (AVE) for all constructs surpassed 0.5, indicating satisfactory convergent validity (Fornell & Larcker, 1981). Additionally, discriminant validity was evaluated using the Heterotrait-Monotrait (HTMT) ratio, as shown in Table 3. The results indicate that all HTMT values are below the threshold of 0.90 (Henseler *et al.*, 2017). This confirms the discriminant validity of the constructs. Thus, the measurement model in this study met the established criteria for reliability and validity.

Table 2. Constructs' reliability and validity

Constructs	Factor loading	α	CR	AVE
Prospector-oriented SME (PR)		0.857	0.898	0.638
PR1	0.800	–	–	–
PR2	0.829	–	–	–
PR3	0.801	–	–	–
PR4	0.829	–	–	–
PR5	0.730	–	–	–
Defender-oriented SME (DE)		0.811	0.876	0.638
DE1	0.794	–	–	–
DE2	0.795	–	–	–
DE3	0.772	–	–	–
DE4	0.834	–	–	–
Dynamic capabilities (DC)		0.870	0.902	0.606
DC1	0.784	–	–	–
DC2	0.816	–	–	–
DC3	0.822	–	–	–
DC4	0.735	–	–	–
DC5	0.734	–	–	–
DC6	0.775	–	–	–
Innovation (IN)		0.897	0.916	0.549
IN1	0.757	–	–	–
IN2	0.684	–	–	–
IN3	0.704	–	–	–
IN4	0.746	–	–	–
IN5	0.719	–	–	–
IN6	0.758	–	–	–
IN7	0.756	–	–	–
IN8	0.797	–	–	–
IN9	0.743	–	–	–
SME effectiveness (SE)		0.841	0.904	0.758
SE1	0.870	–	–	–
SE2	0.874	–	–	–
SE3	0.869	–	–	–

Source: own study.

Table 3. Discriminant validity: HTMT ratio

Constructs	PR	DE	DC	IN	SE
PR	–	–	–	–	–
DE	0.897	–	–	–	–
DC	0.873	0.811	–	–	–
IN	0.714	0.674	0.642	–	–
SE	0.663	0.652	0.586	0.822	–

Notes: PR = prospector-oriented SME, DE = defender-oriented SME, DC = dynamic capabilities, IN = Innovation, SE= SME effectiveness.

Source: own study.

Structural Model

Hypothesis testing employed a bootstrapping procedure with 5 000 resamples (Hair *et al.*, 2019), allowing the computation of t-values. Thresholds for significance were set at t-values exceeding 1.96 (at a 5% significance level) and 2.57 (at a 1% significance level), following standard two-tailed hypothesis testing practice.

The findings from Table 4 and Figure 2 indicate that both prospector-oriented and defender-oriented SMEs have a significant positive impact on dynamic capabilities ($\beta = 0.571$, t-value = 9.696, p-value < 0.01, and $\beta = 0.211$, t-value = 3.649, p-value < 0.01), supporting H1a and H1b. Moreover, prospector-oriented SMEs exhibited a stronger influence on dynamic capabilities compared to defender-oriented SMEs. However, only prospector-oriented SMEs positively affected innovation ($\beta = 0.359$, t-value = 4.673, p-value < 0.01), confirming H2a, while the impact of defender-oriented SMEs on innovation was rejected (p-value > 0.05). Regarding the direct relationship among dynamic capabilities, innovation, and SME effectiveness, the study supported H3, showing that dynamic capabilities positively impact ($\beta = 0.243$, t-value = 2.656, p-value < 0.01). However, H4, which proposed a positive relationship between dynamic capabilities and SME effectiveness, was not supported (p-value > 0.05). Conversely, H5, suggesting a positive association between innovation and SME effectiveness, was confirmed ($\beta = 0.556$, t-value = 9.870, p-value < 0.01).

In terms of mediating effects, the results confirmed both H6a and H6b, indicating that dynamic capabilities and innovation concurrently mediate the relationships between prospector orientation and SME effectiveness ($\beta = 0.077$, t-value = 2.718, p-value < 0.01), as well as between defender orientation and SME effectiveness ($\beta = 0.029$, t-value = 2.140, p-value < 0.05). Moreover, prospector exerted a greater indirect impact on SME effectiveness compared to defender.

Table 4. Hypotheses testing

Relationships	Original Sample	T Statistics	P Values	Decision
Direct effects				
H1a: PR -> DC	0.571	9.696	0.000**	<i>Accepted</i>
H1b: DE -> DC	0.211	3.649	0.000**	<i>Accepted</i>
H2a: PR -> IN	0.359	4.673	0.000**	<i>Accepted</i>
H2b: DE -> IN	0.106	1.755	0.079	<i>Rejected</i>
H3: DC -> IN	0.243	2.656	0.008**	<i>Accepted</i>
H4: DC -> SE	0.066	0.995	0.320	<i>Rejected</i>
H5: IN -> SE	0.556	9.870	0.000**	<i>Accepted</i>
Mediating effects				
H6a: PR -> DC -> IN->SE	0.077	2.718	0.007**	<i>Accepted</i>
H6b: DE -> DC -> IN->SE	0.029	2.140	0.032*	<i>Accepted</i>

Notes: t-value ≥ 2.57 considers significant level at **p < 0.01 and t-value ≥ 1.96 considers significant level at *p < 0.05; PR = Prospector-oriented SME, DE = Defender-oriented SME, DC = Dynamic capabilities, IN = Innovation, SE = SME effectiveness. Source: own study.

Model Strength

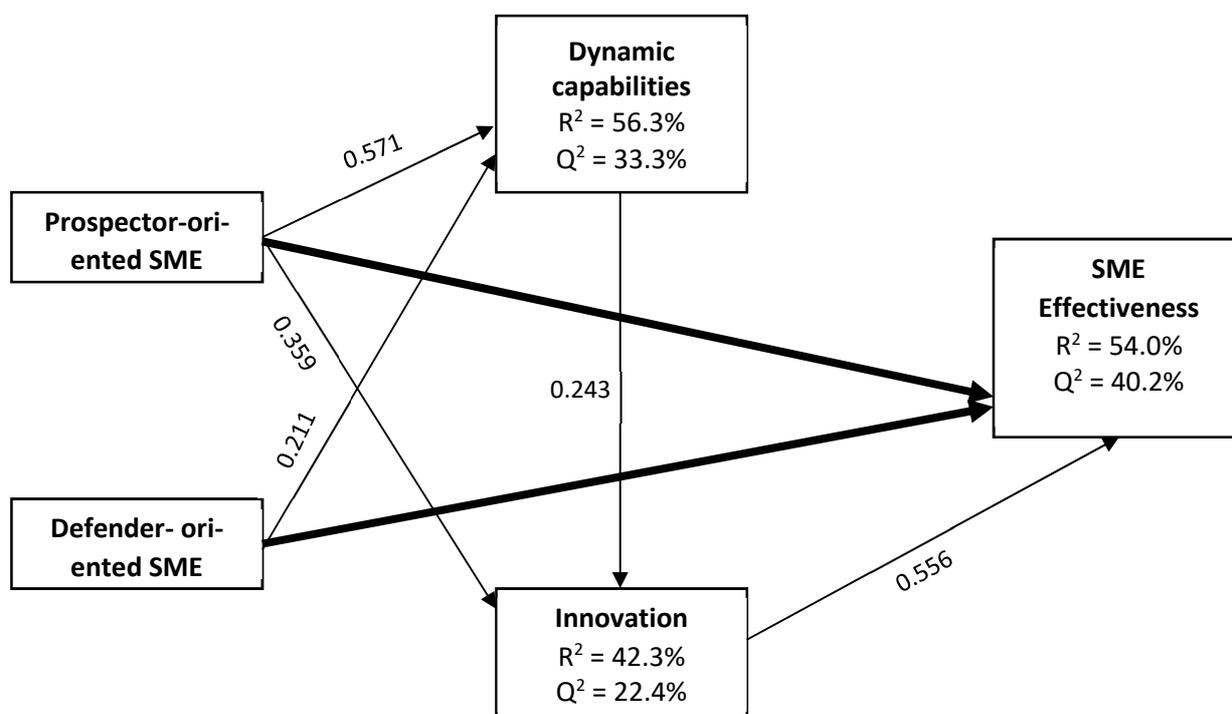
We assessed the model's predictive accuracy using R2 values, with prospector and defender explaining 56.3%, 42.3%, and 54.0% of the variance in dynamic capabilities, innovation, and SME effectiveness, respectively. These results indicate a moderate predictive accuracy (Hair *et al.*, 2019). Furthermore, we evaluated the model's predictive relevance with Q2 values, which we found to be 33.3% for dynamic capabilities, 22.4% for innovation, and 40.2% for SME effectiveness, all above zero and confirming the model's predictive relevance (Table 5).

The results of our study shed light on the intricate relationships between prospector and defender-oriented SMEs, innovation, dynamic capabilities, and SME effectiveness in Vietnam's service sector, analysed through the perspectives of RBV and the DCV.

Table 5. Model strength

Dimensions	R ²	Q ²
Dynamic capabilities	0.563	0.333
Innovation	0.423	0.224
SME effectiveness	0.540	0.402

Source: own study.

**Figure 2. Path analysis**

Source: own elaboration.

Both H1a and H1b suggest a positive influence of prospector and defender orientations on dynamic capabilities, consistent with the RBV. Prospector SMEs, driven by an external focus, actively seek new opportunities and technologies, strengthening dynamic capabilities. This aligns with previous studies linking prospectors to dynamic capabilities (Marozau *et al.*, 2023; Nasution *et al.*, 2021). Notably, prospectors exhibit a greater impact on dynamic capabilities compared to defenders. Similarly, defender SMEs, emphasizing efficiency (H1b), likely possess refined internal processes and resource management skills, which can be viewed as a form of dynamic capability, enabling them to optimize existing resources and enhance service offerings (Restuti *et al.*, 2023). Regarding the relationship between strategic orientations and innovation, our study confirmed that prospector-oriented SMEs had a positive relationship with innovation (H2a), reflecting their constant exploration of new market trends and fostering a culture conducive to generating novel service ideas, which is consistent with findings of previous studies (Kim *et al.*, 2024). However, contrary to previous studies (Kim *et al.*, 2024; Lukito-Budi *et al.*, 2023), the research found no significant relationship between defender-oriented SMEs and innovation (H2b). This can be explained by the defender mindset, which prioritizes stability and efficiency over exploratory ventures. Defenders are risk-averse, focusing primarily on optimizing internal resources and processes rather than investing in uncertain exploratory innovation (Chen *et al.*, 2023). Their internal focus leaves less emphasis on external trends, which are crucial for identifying and capitalizing on new opportunities (Handoyo *et al.*, 2023). Consequently, defenders may lack the strong external focus required for exploratory innovation compared to prospectors, who actively seek new market opportunities.

The finding supports H3 that dynamic capabilities are positively related to innovation, aligning with the established views of Tsou and Chen (2020) and Ziyae *et al.* (2022). Dynamic capabilities equip firms with the ability to accumulate and reconfigure resources, crucial for venturing into new and uncertain territories characteristic of exploratory innovation. Furthermore, they foster firm attributes like adaptability and a learning approach, essential for navigating the challenges and uncertainties of exploratory innovation (Ziyae *et al.*, 2022). Next, H4, which posited that dynamic capabilities positively related to SME effectiveness, was rejected, contradicting the findings of Cyfert *et al.* (2021) and Jiang *et al.* (2020). This suggests that although dynamic capabilities may lead to the development of new customers, marketing initiatives, suppliers, and products in a volatile environment, the observable impact on financial effectiveness might be delayed due to the time required to capitalize on these outcomes (Baía & Ferreira, 2024; Nedzinskas *et al.*, 2013). However, the study found that innovation is positively related to SME effectiveness (H5), aligning with previous research by Yuliansyah *et al.* (2021) and Abid *et al.* (2023). By successfully venturing into exploratory innovation, SMEs can create cutting-edge services that set them apart from rivals and boost customer pleasure, loyalty, and eventually financial effectiveness by successfully pursuing exploratory innovation (Yuliansyah *et al.*, 2021).

The accepted mediation hypotheses (H6a & H6b) reveal a critical aspect – dynamic capabilities and innovation act as intermediaries in translating strategic orientations into SME effectiveness, drawing on the combined insights of the RBV and DCV. Prospector SMEs leverage their dynamic capabilities to exploit their innovative service offerings, leading to better financial effectiveness (H6a). This finding is consistent with the established views of Bonyadi Naeini and Jalilian Ahmadkalaei (2022) and Yuliansyah *et al.* (2021). Prospector SMEs, driven by their thirst for novelty, develop strong dynamic capabilities to tackle uncertainty and pursue exploratory innovation (Bonyadi Naeini & Jalilian Ahmadkalaei, 2022). These capabilities empower them to create unique and financially effective service offerings by venturing into uncharted territory, ultimately achieving better financial effectiveness via premium pricing or attracting a larger customer base (Yuliansyah *et al.*, 2021). Despite their reluctance towards exploratory innovation, defenders leverage dynamic capabilities to efficiently adapt and refine their services, mitigating the constraints on innovation (Kim *et al.*, 2024; Lukito-Budi *et al.*, 2023). The acceptance of H6b emphasizes the vital role of dynamic capabilities and innovation in enhancing the financial effectiveness of defender-oriented SMEs, aligning with the insights of Chih-Yi and Bou-Wen (2021).

CONCLUSIONS

Theoretical Implications

This research offers several significant theoretical contributions. Firstly, it examined the direct relationships between prospector and defender orientations, dynamic capabilities, innovation, and financial effectiveness in service SMEs within emerging economies. This provides a comprehensive understanding of these relationships across different contexts. Secondly, by utilizing the combined lenses of the RBV and DCV and extending the Miles and Snow framework with the adaptive cycle, the study demonstrates how dynamic capabilities and innovation empower both prospectors and defenders to navigate change effectively (Ferreira *et al.*, 2020; Thomä & Zimmermann, 2019). The findings highlight dynamic capabilities as crucial in linking strategic orientations and innovation, allowing defenders to achieve effectiveness through incremental improvements. Thirdly, by addressing the lack of research on the BSC in service sectors, this study establishes a foundation for integrating the BSC into performance evaluation for service SMEs, offering a holistic approach to measuring success in dynamic environments (Freudenreich *et al.*, 2020; Kumar *et al.*, 2022).

Practical Implications

The study's empirical results underscore the significance of strategic orientations, specifically prospector and defender, in driving SME effectiveness through dynamic capabilities and innovation. For business practitioners managing service SMEs in emerging markets, these findings offer essential insights. Encouraging a prospector orientation, where there is a continual redefinition of product/service priorities and an active search for new opportunities, enhances dynamic capabilities and enables quick ad-

aptation to market changes. Embracing a growth-oriented strategy and taking calculated risks can drive innovation, thereby increasing SME effectiveness through the development of new products and services and investments in proprietary technologies. Conversely, defender-oriented SMEs should prioritize maintaining stable product/service priorities and operating within known activity areas, which allows for continuous improvement and strengthens dynamic capabilities. By integrating dynamic capabilities, defender-oriented SMEs can adapt to environmental changes and identify new business opportunities, thus enhancing effectiveness through incremental improvements. Practitioners should aim to balance prospector and defender orientations, continually develop and reconfigure operational resources and capabilities, and prioritize innovation to boost organizational effectiveness. Moreover, adopting comprehensive performance metrics like the BSC can provide a well-rounded assessment of SME success in dynamic environments.

Limitations and Future Research Directions

This study illuminated the strategic pathways for Vietnamese service SMEs by examining the interrelationships between prospector and defender-oriented SMEs, dynamic capabilities, innovation, and SME financial effectiveness. However, limitations and promising areas for future research still exist. Firstly, while our model captures key relationships through the lens of RBV and DCV, future studies should consider alternative theoretical frameworks, such as institutional theory, which might interact with prospector and defender orientations in developing dynamic capabilities (Gupta *et al.*, 2020). Investigating the moderating effects of factors like industry and firm age on the relationship between dynamic capabilities and innovation would also be beneficial (Akorede, 2023). Secondly, the sample size of 421 Vietnamese service SMEs may limit the generalizability of our findings. Future research should explore these relationships across diverse geographical and industry contexts to determine if the observed patterns hold true elsewhere (Jie *et al.*, 2023). Thirdly, relying on self-reported data introduces potential biases, such as social desirability bias. Future research could employ a multi-method approach, incorporating interviews with key informants to strengthen the validity of the findings (Farquhar *et al.*, 2020). Lastly, the cross-sectional design limits our ability to establish causal relationships between variables. Longitudinal studies tracking SMEs over time would provide a clearer picture of cause-and-effect dynamics (Ikram *et al.*, 2019). These studies could investigate how dynamic capabilities developed in one period influence innovation and effectiveness in subsequent periods.

REFERENCES

- Abid, N., Dowling, M., Ceci, F., & Aftab, J. (2023). Does resource bricolage foster SMEs' competitive advantage and financial performance? A resource-based perspective. *Business Strategy and the Environment*, 32(8), 5833-5853. <https://doi.org/10.1002/bse.3451>
- Adegbite, O.E., Simintiras, A.C., Dwivedi, Y.K., & Ifie, K. (2017). Dynamic capabilities: drivers of organisational adaptations. In *SpringerBriefs in Business* (pp. 81-94). https://doi.org/10.1007/978-3-319-63510-1_5
- Akbar, F., Khan, R.A., Wadood, F., & Bon, A.T. Bin. (2020). Entrepreneurial orientation dimension affects firm performance: A perspective from the Malaysian furniture industry. *Entrepreneurial Business and Economics Review*, 8(4), 157-181. <https://doi.org/10.15678/eber.2020.080409>
- Akorede, H. (2023). The moderating effect of age and debt on the relationship between intellectual capital and firm performance: A Developing Country perspective. *Journal of African Business*, 25(2), 181-204. <https://doi.org/10.1080/15228916.2023.2166325>
- AlAbri, S., Taghizadeh, S.K., Khan, G.M., & Rahman, S.A. (2021). Exploratory innovation, exploitative innovation and operational performance: influence of informal social relations in environmental competitiveness. *Quality and Quantity*, 56(3), 1223-1244. <https://doi.org/10.1007/s11135-021-01173-z>
- 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. <https://doi.org/10.1142/S0219877014500394>

- Albuhisi, A.M., & Abdallah, A.B. (2018). The impact of soft TQM on financial performance: The mediating roles of non-financial balanced scorecard perspectives. *International Journal of Quality & Reliability Management*, 35(7), 1360-1379. <https://doi.org/10.1108/IJQRM-03-2017-0036>
- Allaberganov, A., Preko, A., & Mohammed, I. (2021). Government commitment to tourism and hospitality sector during COVID-19 pandemic. *Tourism Critiques Practice and Theory*, 2(2), 153-169. <https://doi.org/10.1108/trc-02-2021-0004>
- Ambrosini, V., Dekker, N., & Venkitachalam, K. (2022). Towards a Better Understanding of Strategic Knowledge Dynamics: A Dynamic Capability Exploratory Study. In *The Routledge Companion to Knowledge Management* (pp. 52-66). Routledge.
- 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/jop-art/mum039>
- 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. <https://doi.org/10.1108/jocm-07-2018-0190>
- 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. <https://doi.org/10.1016/j.tourman.2010.01.017>
- Baía, E.P., & Ferreira, J.J.M. (2024). Dynamic capabilities and performance: how has the relationship been assessed?. *Journal of Management & Organization*, 30(1), 188-217. <https://doi.org/10.1017/jmo.2019.88>
- Bitencourt, C.C., De Oliveira Santini, F., Ladeira, W.J., Santos, A.C., & Teixeira, E.K. (2020). The extended dynamic capabilities model: A meta-analysis. *European Management Journal*, 38(1), 108-120. <https://doi.org/10.1016/j.emj.2019.04.007>
- Bonyadi Naeini, A., & Jalilian Ahmadkalei, S.H. (2022). The role of dynamic capability on a business model in knowledge-intensive firms. *Kybernetes*, 51(12), 3449-3469. <https://doi.org/10.1108/k-02-2021-0162>
- Chen, J., Zhou, W., & Frankwick, G.L. (2023). Firm AI Adoption Intensity and Marketing Performance. *Journal of Computer Information Systems*, 1-18. <https://doi.org/10.1080/08874417.2023.2277751>
- Chereau, P., & Meschi, P. (2019). The performance implications of the strategy–business model fit. *Journal of Small Business and Enterprise Development*, 26(3), 441-463. <https://doi.org/10.1108/jsbed-04-2018-0122>
- Chih-Yi, S., & Bou-Wen, L. (2021). Attack and defense in patent-based competition: A new paradigm of strategic decision-making in the era of the fourth industrial revolution. *Technological Forecasting and Social Change*, 167, 120670. <https://doi.org/10.1016/j.techfore.2021.120670>
- Coombs, R., & Miles, I. (2000). Innovation, Measurement and Services: the new problematique. In *Economics of science, technology and innovation* (pp. 85-103). https://doi.org/10.1007/978-1-4615-4425-8_5
- Cyfert, S., Chwiłkowska-Kubala, A., Szumowski, W., & Miśkiewicz, R. (2021). The process of developing dynamic capabilities: The conceptualization attempt and the results of empirical studies. *Plos One*, 16(4), e0249724. <https://doi.org/10.1371/journal.pone.0249724>
- DeSarbo, W.S., Di Benedetto, C.A., Song, N.M., & Sinha, I. (2004). Revisiting the Miles and Snow strategic framework: uncovering interrelationships between strategic types, capabilities, environmental uncertainty, and firm performance. *Strategic Management Journal*, 26(1), 47-74. <https://doi.org/10.1002/smj.431>
- Dyduch, W. (2019). Entrepreneurial strategy stimulating value creation: Conceptual findings and some empirical tests. *Entrepreneurial Business and Economics Review*, 7(3), 65-82. <https://doi.org/10.15678/eber.2019.070304>
- Farquhar, J., Michels, N., & Robson, J. (2020). Triangulation in industrial qualitative case study research: Widening the scope. *Industrial Marketing Management*, 87, 160-170. <https://doi.org/10.1016/j.indmarman.2020.02.001>
- Ferreira, J., Coelho, A., & Moutinho, L. (2020). Dynamic capabilities, creativity and innovation capability and their impact on competitive advantage and firm performance: The moderating role of entrepreneurial orientation. *Technovation*, 92-93, 102061. <https://doi.org/10.1016/j.technovation.2018.11.004>
- 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>
- 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. <https://doi.org/10.1007/s10551-019-04112-z>

- 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>
- Gupta, S., Modgil, S., Gunasekaran, A., & Bag, S. (2020). Dynamic capabilities and institutional theories for Industry 4.0 and digital supply chain. *Supply Chain Forum*, 21(3), 139-157. <https://doi.org/10.1080/16258312.2020.1757369>
- Gustafsson, A., Snyder, H., & Witell, L. (2020). Service Innovation: a new conceptualization and path forward. *Journal of Service Research*, 23(2), 111-115. <https://doi.org/10.1177/1094670520908929>
- Hair, 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. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hair, J.F., Risher, J.J., Sarstedt, M., & Ringle, C.M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J., Hollingsworth, C.L., Randolph, A.B., & Chong, A.Y.L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management + Data Systems/Industrial Management & Data Systems*, 117(3), 442-458. <https://doi.org/10.1108/imds-04-2016-0130>
- 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*, 9(2), 100039. <https://doi.org/10.1016/j.joitmc.2023.100039>
- Henseler, J., Ringle, C.M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hermawati, A., & Gunawan, E. (2021). The implementation of dynamic capabilities for small and medium-sized enterprises in creating innovation. *VINE Journal of Information and Knowledge Management Systems*, 51(1), 92-108. <https://doi.org/10.1108/vjikms-08-2019-0121>
- 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*, 15(1), 2037-2061. <https://doi.org/10.1007/s13132-023-01186-z>
- Ikram, M., Sroufe, R., Mohsin, M., Solangi, Y.A., Shah, S.Z.A., & Shahzad, F. (2019). Does CSR influence firm performance? A longitudinal study of SME sectors of Pakistan. *Journal of Global Responsibility*, 11(1), 27-53. <https://doi.org/10.1108/jgr-12-2018-0088>
- Ingram, T., & Krašnicka, T. (2023). The interplay of dynamic capabilities and innovation output in family and non-family companies: The moderating effect of environmental dynamism. *Entrepreneurial Business and Economics Review*, 11(2), 63-86. <https://doi.org/10.15678/eber.2023.110203>
- Intriago, V.R.C., Villaverde, D.B., & Robles, G.C. (2023). A Bibliometric Analysis of Customer Experience in Service Design from 1999 to 2020. *Vision*, 09722629231175206. <https://doi.org/10.1177/09722629231175206>
- Jiang, W., Mavondo, F., & Zhao, W. (2020). The impact of business networks on dynamic capabilities and product innovation: The moderating role of strategic orientation. *Asia Pacific Journal of Management*, 37, 1239-1266. <https://doi.org/10.1007/s10490-018-9628-2>
- Jie, S., Harms, R., Groen, A.J., & Jones, P. (2023). Capabilities and performance of early internationalizing firms: A systematic literature review. *Journal of Small Business Management*, 61(3), 1143-1173. <https://doi.org/10.1080/00472778.2021.1955124>
- Kaplan, R.S., & Norton, D.P. (1992). *Measures that drive performance*. Harvard Business Review.
- Kaplan, R.S., Robert, N.P.D.K.S., Kaplan, R.S., & Norton, D.P. (2001). *The strategy-focused organization: How balanced scorecard companies thrive in the new business environment*. Harvard Business Press.
- Kathuria, R., & Lucianetti, L. (2024). Aligning performance metrics with business strategy. *Management Decision*, 62(5), 1539-1559. <https://doi.org/10.1108/md-02-2023-0184>
- Kim, H.M. (2022). How corporate entrepreneurship affects the performance of small and medium-sized enterprises in Korea: The mediating and moderating role of vision, strategy, and employee compensation. *Entrepreneurial Business and Economics Review*, 10(2), 131-146. <https://doi.org/10.15678/eber.2022.100208>
- Kim, H.S., Akindayomi, A., Chung, C.Y., & Ogunmakin, A.A. (2024). Business Strategy and CEO Compensation: Evidence from the Hospitality and Tourism Industry. *Asia-Pacific Journal of Financial Studies*, 53(1), 87-119. <https://doi.org/10.1111/ajfs.12461>

- Kim, J., & Poensgen, K. (2019). *Transition finance country study Viet Nam: On the threshold of transition*. OECD Development Co-operation Working Papers. <https://doi.org/10.1787/22220518>
- Kock, N. (2015). Common Method Bias in PLS-SEM. *International Journal of E-Collaboration*. <https://doi.org/10.4018/ijec.2015100101>
- Kock, N., & Lynn, G.S. (2012). Lateral Collinearity and Misleading Results in Variance-Based SEM: An Illustration and Recommendations. *Journal of the Association for Information Systems*. <https://doi.org/10.17705/1jais.00302>
- Kumar, J., Prince, N., & Baker, H.K. (2022). Balanced scorecard: A systematic literature review and future research issues. *FIIB Business Review*, 11(2), 147-161. <https://doi.org/10.1177/231971452111049625>
- Leung, S.E. (2010). Vietnam: an economic survey. *Asian-Pacific Economic Literature*, 24(2), 83-103. <https://doi.org/10.1111/j.1467-8411.2010.01261.x>
- Long, N.V., & Nguyen, H. (2024). Unfolding Binh Duong's Formula to Success: A Breakthrough Strategy Towards Industry 4.0, Knowledge Economy, and Sustainable City. In *Urban Dynamics, Environment and Health: An International Perspective* (pp. 689-708). Springer.
- 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. <https://doi.org/10.1108/jsma-07-2021-0156>
- Mai, A., Bilbard, L., & Som, A. (2009). Conducting business in Vietnam: A brief for international managers. *Global Business and Organizational Excellence*, 28(3), 55-78. <https://doi.org/10.1002/joe.20259>
- Marozau, R., Aginskaja, H., & Guerrero, M. (2023). ICT-related dynamic capabilities and SMEs' performance: An analysis during the economic stagnation in Belarus. *The Journal of Technology Transfer*, 1-23. <https://doi.org/10.1007/s10961-023-10058-2>
- Marwah, R., Hãng Nga, L.T., Marwah, R., & Hãng Nga, L.T. (2021). Vietnam and India: a futuristic perspective. *India-Vietnam Relations: Development Dynamics and Strategic Alignment*, 171-199. https://doi.org/10.1007/978-981-16-7822-6_8
- Miles, R.E., & Snow, C.C. (1978). Organizational Strategy, Structure, and Process. *Academy of Management Review*. <https://doi.org/10.5465/amr.1978.4305755>
- Naeini, A.B., & Ahmadkalaei, S.H.J. (2022). The role of dynamic capability on a business model in knowledge-intensive firms. *Kybernetes*, 51(12), 3449-3469. <https://doi.org/10.1108/k-02-2021-0162>
- Nasution, M.D.T.P., Rafiki, A., Lubis, A., & Rossanty, Y. (2021). Entrepreneurial orientation, knowledge management, dynamic capabilities towards e-commerce adoption of SMEs in Indonesia. *Journal of Science and Technology Policy Management*, 12(2), 256-282. <https://doi.org/10.1108/jstpm-03-2020-0060>
- Nedzinskas, Š., Pundzienė, A., Buožiūtė-Rafanavičienė, S., & Pilkienė, M. (2013). The impact of dynamic capabilities on SME performance in a volatile environment as moderated by organizational inertia. *Baltic Journal of Management*, 8(4), 376-396. <https://doi.org/10.1108/bjm-01-2013-0003>
- Osorio-Londoño, A.A., Naranjo-Valencia, J.C., & Calderón-Hernández, G. (2020). Training and its influence on competitive strategy implementation. *Human Resource Development Quarterly*, 31(2), 149-172. <https://doi.org/10.1002/hrdq.21381>
- Rafiq, M., Jafar, R.M.S., Ahmad, W., Dastane, O., & Sial, M.A. (2022). Job embeddedness: cross-cultural comparison between China and Pakistan during COVID-19 pandemic. *Vision*, 0(0). <https://doi.org/10.1177/09722629221129980>
- Rand, J., & Tarp, F. (2020). *Micro, small, and medium enterprises in Vietnam*. Oxford University Press.
- Randhawa, K., Wilden, R., & Gudergan, S. (2021). How to innovate toward an ambidextrous business model? The role of dynamic capabilities and market orientation. *Journal of Business Research*, 130, 618-634. <https://doi.org/10.1016/j.jbusres.2020.05.046>
- Restuti, M.D., Gani, L., Shauki, E.R., & Leo, L. (2023). Cost stickiness behaviour and environmental uncertainty in different strategies: Evidence from Southeast Asia. *Business Strategy & Development*, 6(4), 972-985. <https://doi.org/10.1002/bsd2.291>
- Salvato, C., & Vassolo, R. (2018). The sources of dynamism in dynamic capabilities. *Strategic Management Journal*, 39(6), 1728-1752. <https://doi.org/10.1002/smj.2703>
- Sarstedt, M., Ringle, C.M., & Hair, J.F. (2021). Partial least squares structural equation modeling. In *Handbook of market research* (pp. 587-632). Springer.

- Saunila, M. (2020). Innovation capability in SMEs: A systematic review of the literature. *Journal of Innovation & Knowledge*, 5(4), 260-265. <https://doi.org/10.1016/j.jik.2019.11.002>
- Sollosy, M., Guidice, R.M., & Parboteeah, K.P. (2019). Miles and Snow's strategic typology redux through the lens of ambidexterity. *International Journal of Organizational Analysis*, 27(4), 925-946. <https://doi.org/10.1108/IJOA-05-2018-1433>
- Spanuth, T., Heidenreich, S., & Wald, A. (2020). Temporary organisations in the creation of dynamic capabilities: effects of temporariness on innovative capacity and strategic flexibility. *Industry and Innovation*, 27(10), 1186-1208. <https://doi.org/10.1080/13662716.2020.1842723>
- Sureka, R., Kumar, S., Kumar Mangla, S., & Hourneaux Junior, F. (2021). Fifteen years of international journal of productivity and performance management (2004-2018). *International Journal of Productivity and Performance Management*, 70(5), 1092-1117. <https://doi.org/10.1108/IJPPM-11-2019-0530>
- Tai, Y.-F., Wang, Y.-C., & Luo, C.-C. (2021). Technology-or human-related service innovation? Enhancing customer satisfaction, delight, and loyalty in the hospitality industry. *Service Business*, 15, 667-694. <https://doi.org/10.1007/s11628-021-00461-w>
- Taking Stock, March 2023: Harnessing the Potential of the Services Sector or Growth*. (2023). World Bank. <https://doi.org/10.1596/39524>
- Teece, D.J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319-1350. <https://doi.org/10.1002/smj.640>
- Thomä, J., & Zimmermann, V. (2019). 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. <https://doi.org/10.1080/00472778.2019.1671702>
- Thoumrungroje, A., & Racela, O.C. (2022). Innovation and Performance Implications of Customer-Oriented across Different Business Strategy Types. *Journal of Open Innovation*, 8(4), 178. <https://doi.org/10.3390/joitmc8040178>
- Tran, Q.H.N. (2021). Organisational culture, leadership behaviour and job satisfaction in the Vietnam context. *International Journal of Organizational Analysis*, 29(1), 136-154. <https://doi.org/10.1108/ijoa-10-2019-1919>
- Tsou, H.-T., & Chen, J.-S. (2020). Dynamic capabilities, human capital and service innovation: the case of Taiwan ICT industry. *Asian Journal of Technology Innovation*, 28(2), 181-203. <https://doi.org/10.1080/19761597.2020.1719852>
- Witell, L., Snyder, H., Gustafsson, A., Fombelle, P., & Kristensson, P. (2016). Defining service innovation: A review and synthesis. *Journal of Business Research*, 69(8), 2863-2872. <https://doi.org/10.1016/j.jbusres.2015.12.055>
- Yana, A.A.G.A., Rusdhi, H.A., & Wibowo, M.A. (2015). Analysis of factors affecting design changes in construction project with Partial Least Square (PLS). *Procedia Engineering*, 125, 40-45. <https://doi.org/10.1016/j.proeng.2015.11.007>
- 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>
- Yuliansyah, Y., Rammal, H.G., Maryani, M., Mohamed Jais, I.R., & Mohd-Sanusi, Z. (2021). Organizational learning, innovativeness and performance of financial service firms in an emerging market: examining the mediation effects of customer-focused strategy. *Business Process Management Journal*, 27(4), 1126-1141. <https://doi.org/10.1108/bpmj-10-2020-0454>
- Zhang, M., Gao, Q., & Cho, H.-S. (2017). The effect of sub-national institutions and international entrepreneurial capability on international performance of export-focused SMEs: Evidence from China and South Korea. *Journal of International Entrepreneurship*, 15, 85-110. <https://doi.org/10.1007/s10843-016-0196-6>
- Ziyae, B., Sadeghi, H., & Golmohammadi, M. (2022). Service innovation in the hotel industry: the dynamic capabilities view. *Journal of Enterprising Communities: People and Places in the Global Economy*, 16(4), 582-602. <https://doi.org/10.1108/jec-12-2020-0205>

Appendix: Measurement items

Prospector (PRO)

- PR1. We continually redefine our products/services priorities.
- PR2. It is of primary importance for our organization to develop new services and find new markets for these products/services.
- PR3. Searching for new opportunities is a major part of our overall strategy.
- PR4. Our organization adopts a growth-oriented strategy.
- PR5. Our organization is not afraid of taking risks.

Defender (DEF)

- DE1. We seek to maintain stable products/services priorities.
- DE2. Our organization prefers to operate in known activity areas.
- DE3. Instead of enriching its activities, our organization prefers to improve its present products and services.
- DE4. Instead of fast growth, our organization places importance on competing by improving the quality of its available assets.

Dynamic capabilities (DC)

- DC1. We actively search for ways to advance our operational resources and capabilities
- DC2. We frequently scan the environment to identify new business opportunities
- DC3. We are able to act quickly to seize emerging opportunities
- DC4. We are flexible enough to invest in new ventures as they arise
- DC5. We continuously recombine our resources and capabilities to align with strategic objective
- DC6. We reconfigure our resources and capabilities to align with environmental and market changes

Innovation (INO)

In the past three years, indicate whether the following have grown rapidly:

- IN1. Organization's emphasis on developing new products or services.
- IN2. Rate of introduction of new products or services into the market.
- IN3. Organization's spending on new product or service development activities.
- IN4. The number of new products or services added by the organization and already on the market.
- IN5. The number of new products or services that the organization has introduced for the first time on the market.
- IN6. Investment in developing proprietary technologies.
- IN7. Emphasis on creating proprietary technologies.
- IN8. Organization's emphasis on technological innovation.
- IN9. Organization's emphasis on pioneering technological developments in its industry.

SME Effectiveness (SE)

- SE1. Our organization reaches its goals of profitability to satisfy shareholders
- SE2. Our organization is efficient in terms of spending (*i.e.* cost management, expenses, and investments) to meet productivity goals.
- SE3. Our organization reaches its goals with respect to revenues.

Authors

The contribution share of authors is equal and amounted to 50% for each of them.

Ms. Thu-Hang Le – Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the article.

Dr. Ngoc-Khuong Mai: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data.

Thu-Hang Le

Full-time lecturer and the Entrepreneurship concentration coordinator at Becamex Business School, Eastern International University, Binh Duong. Simultaneously, she pursues her Ph.D. at the School of Business, International University, Vietnam National University, HCMC. Her research interests include strategic management, organizational behaviour, and customer behaviour.

Correspondence to: Ms. Thu-Hang Le (PhD candidate), Nam Ki Khoi Nghia Street, Thu Dau Mot, Binh Duong 820000, Vietnam, e-mail: hang.le@eiu.edu.vn

ORCID  <https://orcid.org/0000-0002-6390-6200>

Ngoc-Khuong Mai

Lecturer and Vice Dean of School of Business, International University, Vietnam National University, Hochiminh City. He holds PhD in development management at School of Public Administration of the National Institute of Development Administration, Bangkok, Thailand. His research interest include organizational behaviour, entrepreneurship, leadership, and tourism.

Correspondence to: Assoc. Prof. Dr. Ngoc-Khuong Mai, Thu Duc District, Ho Chi Minh City 721400, Vietnam, e-mail: mnkhuong@hcmiu.edu.vn

ORCID  <https://orcid.org/0000-0002-0527-3046>

Acknowledgements and Financial Disclosure

This work was supported by International University, VNU-HCM [grant number SV2022-BA-02].

We would like to thank anonymous reviewers and editors for their constructive feedback for improving this study. Their comments and suggestion helped us to enhance the robustness of our research.

Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright and License



This article is published under the terms of
the Creative Commons Attribution (CC BY 4.0) License
<http://creativecommons.org/licenses/by/4.0/>

Published by Krakow University of Economics – Krakow, Poland

