

## Implications of Contextual Ambidexterity and Digital Platform Capability on SME Performance: The Role of Absorptive Capacity as a Moderator

(Implikasi Kedwicekatan Kontekstual dan Keupayaan Platform Digital terhadap Prestasi PKS: Peranan Kapasiti Penyerapan sebagai Penyederhanaan)

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### ABSTRACT

*Contextual ambidexterity and digital platform capability can help SMEs achieve long-term success. However, achieving a balance between exploration and exploitation of contextual ambidexterity for integrating and reconfiguring organisations using digital platform capability is challenging to SMEs. The inherent disadvantage of size and lack of resources plaguing SMEs limits their market competitiveness. In this digital age, it is pertinent for SMEs to focus on capabilities development, especially capabilities that can leverage digital infrastructure to compensate for resource deficiencies. To address this issue, this study examines the implications of contextual ambidexterity and digital platform capability on SMEs performance, and the role of absorptive capacity as a moderator. Using a quantitative method, 157 responses from Malaysian SME managers were analysed using PROCESS Macro. The results show that both contextual ambidexterity and digital platform capability have positive relationships with SME performance, while absorptive capacity positively moderates the relationship between contextual ambidexterity and digital platform capability, enhancing SMEs performance. Overall, this study contributes to the current literature by highlighting contextual ambidexterity and digital platform capabilities as critical dynamic capabilities for SMEs. The findings demonstrate that organisational learning elements represented by absorptive capacity could strengthen the interplay of dynamic capabilities to achieve the competitive advantage. This study can also help SME managers in developing countries to develop strategic actions to achieve superior performance through continuous and sustainable learning, as well as provide some suggestions for future research.*

**Keywords:** SMEs performance; contextual ambidexterity; digital platform capability; absorptive capacity; organisational learning

### ABSTRAK

*Kedwicekatan kontekstual dan keupayaan platform digital boleh membantu PKS mencapai kejayaan jangka panjang. Walau bagaimanapun, mencapai keseimbangan antara eksplorasi dan eksploitasi kedwicekatan kontekstual serta integrasi dan konfigurasi semula organisasi menggunakan keupayaan platform digital adalah mencabar kepada PKS. Kelemahan yang wujud dalam saiz dan kekurangan sumber yang melanda PKS menghadkan daya saing PKS untuk bersaing dalam pasaran. Dalam era digital ini, adalah wajar bagi PKS untuk memberi tumpuan kepada pembangunan keupayaan, terutamanya keupayaan yang boleh memanfaatkan infrastruktur digital untuk mengimbangi kekurangan sumber. Untuk menangani isu ini, kajian ini mengkaji kedwicekatan kontekstual, keupayaan platform digital terhadap prestasi PKS dan peranan kapasiti penyerapan sebagai penyederhanaan. Menggunakan kaedah kuantitatif, 157 maklum balas daripada pengurus PKS Malaysia telah dianalisis menggunakan PROSES Makro. Keputusan menunjukkan bahawa kedua-dua kedwicekatan kontekstual dan keupayaan platform digital mempunyai hubungan positif dengan prestasi PKS, manakala kapasiti penyerapan menyederhanakan secara positif dalam mengukuhkan hubungan antara kedwicekatan kontekstual dan keupayaan platform digital terhadap prestasi PKS. Secara keseluruhannya, kajian ini menyumbang kepada literatur semasa dengan menonjolkan kedwicekatan kontekstual dan keupayaan platform digital sebagai keupayaan dinamik kritikal untuk PKS. Dapatan kajian ini menunjukkan elemen pembelajaran organisasi yang*

*diwakili oleh kapabilitas penyerapan berupaya mengukuhkan hubungan keupayaan dinamik dalam mencapai kelebihan daya saing. Kajian ini juga dapat membantu pengurus PKS di negara membangun untuk membangunkan tindakan strategik untuk mencapai prestasi unggul melalui pembelajaran berterusan dan mampan, serta memberikan beberapa cadangan untuk penyelidikan masa depan.*

*Kata kunci: Prestasi PKS; kedwicekatan kontekstual; keupayaan platform digital; kapabilitas penyerapan; pembelajaran organisasi*

## INTRODUCTION

Small and Medium Enterprises (SMEs) play a vital role in driving economic growth, serving as the backbone of development in many countries (Abd Aziz et al. 2021). However, in a rapidly changing business environment, SMEs face the challenge of adapting swiftly to survive (Saad et al. 2017). Limited by size and resources, SMEs often struggle to respond to fluctuations in consumer demand and supply (Fornasiero & Zangiacomini 2013). The evolving technological landscape necessitates business organisations, including SMEs, to be agile in both learning and unlearning. Studies indicate that SMEs may have a restricted capacity for rapid learning (Rangus & Slavec 2017; Strobel & Kratzer 2017). The literature emphasises that effective learning outcomes for SMEs require a combination of teaching ability (Onkelinx et al. 2016), effective communication of information (Kang & Lee 2017), sensitivity (MacBryde et al. 2013), and the ability to quickly adapt to environmental changes (Raymond et al. 2016). Therefore, SMEs must focus on developing their existing knowledge-based resources to overcome inherent structural limitations.

O'Reilly III and Tushman (2013) propose contextual ambidexterity as a strategic knowledge-based approach to enhance business performance. Conceptually, contextual ambidexterity suggests that the simultaneous application of exploitation and exploration activities can yield superior outcomes (Lubatkin et al. 2006). Here, exploitation involves leveraging the firm's existing knowledge base, while exploration encourage the pursuit of new knowledge and opportunities, crucial for innovation and adapting to market changes. Firms that utilise contextual ambidexterity effectively can achieve higher work efficiency by allowing employees to go beyond routine tasks and discover new and more effective working methods (O'Reilly III & Tushman 2013). Additionally, contextual ambidexterity enables businesses to innovate and develop new products, which is particularly crucial for SMEs in high-tech industries facing unstable environments (Gibson & Birkinshaw 2004). The integration of exploration with exploitation, therefore, directly impacts how knowledge-based resources are managed and utilised, enhancing the ability of SMEs to pursue their business goals and vision effectively. The failure of SMEs to integrate contextual ambidexterity may impact the pursuit of business goals and vision.

However, implementing contextual ambidexterity can be challenging due to inherent imbalances (Solís-Molina et al. 2018). Juggling two conflicting tasks simultaneously limits a firm's flexibility, especially when faced with resource and structural constraints (Rothaermel & Alexandre 2009). From an organisational learning perspective, engaging in exploratory activities requires allocating resources to acquire new information while also exploiting existing knowledge to boost business profits (Crossan et al. 1999). The complex combination calls for catalytic support to enhance organisational learning outcomes. Moreover, small enterprises often struggle with unexpected challenges and find it challenging to fully leverage digital platforms for increased competitiveness (Li et al. 2017). This challenge arises when SMEs face difficulties in effectively using their capacities to access specific resources, especially during the restructuring of processes and systems to absorb external knowledge through careful preparation (Cunha Filho 2022). Drawing on previous research (Yuan et al. 2022; Scuotto et al. 2017), enterprises with strong information absorption capabilities have more opportunities for reorganisation and enhancing digital platform capability, leading to improved profitability. Therefore, catalytic support mechanisms within organisational learning processes are crucial for optimising resource utilisation and achieving superior performance.

Meanwhile, the 2023 Malaysian Economic Report published by the Ministry of Economy (2023) states that SMEs can expand their businesses globally with government assistance by implementing new measures such as financial institution assistance, technological skill upgrades, improved market access, encouraging greater use of ICT, and raising awareness of product branding and intellectual property protection rights. According to research conducted by the Ministry of Entrepreneurship and Cooperative Development (MEDEC) (2022), using digital platforms is an effective approach to improving the performance of SMEs in today's dynamic economy. SMEs that use digital platforms efficiently, as highlighted by Cataldo et al. (2019), have greater potential to compete with larger enterprises and capture greater market share. In other words, embedding more sophisticated and efficient technology in business operations is advantageous for SMEs' competitiveness in the current market.

In this dynamic context, absorptive capacity plays a crucial role. According to Cohen and Levinthal (1990), organisations with superior absorptive capacity are more aggressive in seizing new possibilities by combining internal and external information sources. This ability enhances how SMEs can leverage both contextual ambidexterity and digital platforms. The outcome of the integration demonstrates that absorptive capacity is a

catalytic support that is capable of overcoming challenges caused by imbalances encountered during the application of contextual ambidexterity (Rothaermel & Alexandre 2009). In fact, absorptive capacity improves organisations' capacity to reorganise external and internal information sources, allowing them to produce new knowledge and to capitalise opportunities through digital platforms (Xie et al. 2023). This notion demonstrates that absorptive capacity serves as a catalyst in the ongoing organisational learning process, helping to strengthen the firm's knowledge competence (Jansen et al. 2009). It indicates clearly that businesses can optimise absorptive capacity to overcome the possibility of disruption due to imbalances in the firms, especially small-sized firms.

However, past empirical research that translates absorptive capacity into learning ability is extremely restricted, particularly in the context of firm performance in relation to ambidexterity (Rothaermel & Alexandre 2009; Fernhaber & Patel 2012; Sols-Molina et al. 2018; Ho et al. 2020). To offer new empirical contributions to organisational learning theory, dedicated empirical studies are required to examine absorptive capacity as a moderator in the link between contextual ambidexterity and firm performance. In a dynamic environment driven by digital technology, organisational learning is increasingly essential in improving organisational performance (Zhou et al. 2021). Although previous research has found a link between absorptive capacity and digital platform capability (Kaltcheva et al. 2014; Xie et al. 2023), how digital platform capability interacts with SMEs' performance remains unclear. Given this gap, this study explores the direct relationship of digital platform capability, as an independent variable, to SMEs' performance. Additionally, this study explores the role of absorptive capacity in moderating the relationships between contextual ambidexterity and digital platform capability to SME performance in Malaysia. The significant findings will evidently highlight that the relationships are enhanced in firms with higher absorptive capacity.

This study aims to fill the gap by conducting a thorough empirical analysis that focuses on the moderating role of absorptive capacity in the relationship between contextual ambidexterity, digital platform capability, and SME performance. By doing so, it addresses the need for a more nuanced exploration of these factors, thus contributing significant empirical insights to both theory and practice to enhance our understanding of their roles in driving SME performance to superior levels.

## LITERATURE REVIEW, THEORY AND HYPOTHESIS DEVELOPMENT

### SMES PERFORMANCE

Small and medium-sized enterprises (SMEs) in manufacturing and services are categorised based on workforce size and annual revenues (Ramdan et al. 2020). As SMEs play a crucial role in job creation and contribute significantly to national economies, it is essential to analyse their actions toward performance improvement (Abd Aziz et al. 2022; Vij & Bedi 2016). Performance evaluation, which is related to assessing the effectiveness of organisational strategies, is vital for turning actions into results (Abd Latif et al. 2020). Business performance assessment typically considers two dimensions: financial and non-financial (Avlonitis et al. 2001). Financial performance measures a firm's ability to use primary resources, like assets, for revenue generation (Tsou & Hsu 2015). On the other hand, non-financial performance focuses on achieving long-term goals related to customer loyalty, attracting new customers, and enhancing the firm's image and reputation (Blazevic & Lievens 2004). SMEs performance integrates both financial and non-financial aspects, emphasising their ability to holistically achieve objectives (Blazevic & Lievens 2004; Tsou & Hsu 2015).

### CONTEXTUAL AMBIDEXTERITY

Organisational ambidexterity is a multi-faceted concept that involves simultaneous exploration and exploitation within business units. Contextual ambidexterity (Birkinshaw & Gibson 2004) or harmonious ambidexterity (Simsek et al. 2009) denotes the firm's capacity to effectively execute exploration and exploitation capabilities concurrently, cultivating values crucial for long-term success. The ambidexterity literature suggests that successful contextual ambidexterity relies on a combination of organisational resources (Wang & Rafiq 2014; Amankwah-Amoah & Adomako 2021; Pertusa-Ortega et al. 2021). The blend of organisational resources such as effective leadership, supportive incentives, knowledge integration, and abundance of expertise ensures the creation of innovations that are challenging for competitors to replicate, sustaining the firm's success in an unpredictable environment. Therefore, contextual ambidexterity is the firm's ability to implement exploration competence and exploitation competence simultaneously in generating the values needed to achieve good performance in the long term (Atuahene-Gima 2005; Wang & Rafiq 2014).

### DIGITAL PLATFORM CAPABILITY

Rai and Tang (2010) delineate digital platform capability as a firm's adeptness in integrating platforms with timely and unique partner interactions while adjusting platform resources through modular design and standardised interfaces in applications and processes. Specifically, integration involves a firm's prowess in merging data,

employing communication technology, conducting transactions, and collaborating with third parties (Rai & Tang 2010). Cenamor et al. (2019) define digital platform capability as the firm's proficiency in utilising digital platforms to administer consumers, transactions, services, and stakeholder connections. Trieu et al. (2023) also highlight similar capabilities play a crucial role in stimulating organisational ambidexterity, resilience, and SME performance. In essence, digital platform capability embodies a firm's skill in employing digital platforms for integration and configuration, encompassing customers, transactions, services, and stakeholder interactions within the digital ecosystem (Cenamor et al. 2019; Rai & Tang 2010).

#### ABSORPTIVE CAPACITY

Cohen and Levinthal (1990) introduced absorptive capacity, emphasising three core elements: discovering, integrating, and applying new knowledge for economic objectives. Referring to Zahra et al. (2009), absorptive capacity comprises organisational processes enabling the absorption, integration, adaptation, and utilisation of external knowledge to foster organisational dynamic capability. Lewin et al. (2011) define absorptive capacity as the firm's adeptness in assimilating both external and internal knowledge. Meanwhile, a study by Lee et al. (2021) also highlighted absorptive capacity as a critical capability, especially among SMEs in emerging markets, to fully leverage their knowledge base and achieve organisational ambidexterity. Summing up past studies' interpretations of absorptive capacity, it emerges as a knowledge-centric capability enhancing a firm's innovation prowess through the systematic process of acquiring, assimilating, transforming, and leveraging new knowledge from external sources (Ho et al. 2020; Jansen et al. 2005).

#### DYNAMIC CAPABILITY THEORY AND ORGANISATIONAL LEARNING THEORY

Teece and colleagues laid the groundwork for Dynamic Capability Theory (DC), emphasising how management creatively combines, acquires, and disposes resources. Dynamic capabilities involve strategic processes, ranging from managerial decisions to organisational routines and competitive actions (Helfat & Peteraf 2009). Teece et al. (1997) identified these as distinctive traits enabling organisations to integrate, build, and reorganise resources in response to environmental changes. Eisenhardt and Martin (2000) define dynamic capability as a resource-use process involving integration, reconfiguration, acquisition, and release to adapt to market changes or modify the market environment. In competitive environments, Schilke et al. (2018) found the need for businesses to establish new ecosystems using multifaceted digital platforms, recognising the potential of digital technology in enhancing organisational performance. This emphasises the importance of leveraging digital technology resources, especially digital platform capability (Benitez et al. 2018), in shaping dynamic capabilities. Scholars like Hotho et al. (2015) and Pedler and Burgoyne (2017) expand dynamic capabilities by integrating insights from organisational learning, highlighting organisational learning as the source of a firm's dynamic capabilities (He et al. 2018). In simpler terms, developing a firm's dynamic capabilities must align with organisational learning.

Organisational Learning Theory (OL) centres on learning from experience and translating it into routines that shape organisational behaviour. Huber (1991) identified key components of the organisational learning process: knowledge acquisition, information distribution, interpretation, and organisational memory. The term "organisational learning" gains popularity since Senge's work in 1990 that highlighted five crucial components: personal mastery, mental models, shared vision, team learning, and system thinking (Hult & Ferrell 1997). Recognised as a process-based approach, organisational learning aligns resources, capabilities, and the environment, emphasising resource use involving integration, reconfiguration, acquisition, and release (Eisenhardt & Martin 2000; Lichtenthaler 2009). The fundamental belief is that renewing resources and capabilities (Crossan & Berdrow 2003) is achievable through learning, enabling firms to adapt their resource stock through internal procedures. Scholars agree that organisational learning is the primary mechanism that supports dynamic capability building and enhancing firm performance. A literature review on organisational learning reveals issues related to dynamic capabilities, such as exploration and exploitation, aiming for sustained firm performance. Additionally, organisational learning considers absorptive capacity associated with the learning process (Cohen & Levinthal 1989, 1990).

This concept reflects a firm's ability to assimilate external information based on the concurrent balance of exploration and exploitation (Rothaermel & Alexandre 2009). It is evident that the application of Dynamic Capabilities and Organisational Learning theory in this study is significant for explaining absorptive capacity. This understanding can enhance the relationship between contextual ambidexterity and SMEs performance, as well as digital platform capability and SMEs performance, to a higher degree.

#### CONTEXTUAL AMBIDEXTERITY AND SMEs PERFORMANCE

Hung et al. (2010) defines organisational learning as a process within a firm that acquires new knowledge and understanding. In the context of ambidexterity, organisational learning becomes crucial for balancing both

exploration and exploitation competencies simultaneously (Wang & Rafiq 2014). The balance not only brings in fresh information and insights but also fosters innovation, flexibility, and improved firm performance (Simsek et al. 2009). Essentially, this equilibrium is the outcome of contextual ambidexterity and the ability to enhance knowledge for higher performance. Given the rapidly changing business environment, SMEs face significant challenges (Atuahene-Gima 2005). This underscores the importance of contextual ambidexterity for SMEs to leverage, leading to the generation of more creative products or services and ultimately achieving greater performance (Cenamor et al. 2019). Cao et al. (2009) suggest that successful deployment of contextual ambidexterity can drive firm performance towards excellence. Wang and Rafiq (2014) propose that an effective learning process with contextual sensitivity can result in the creation of numerous innovation items. Based on this discussion, the study proposes the following hypothesis:

H<sub>1</sub> Contextual ambidexterity has a significant positive relationship with SMEs performance.

#### ABSORPTIVE CAPACITY AS A MODERATION BETWEEN CONTEXTUAL AMBIDEXTERITY AND SMEs PERFORMANCE

Implementing contextual ambidexterity can significantly enhance the competitiveness of SMEs. However, due to its dual nature, the execution of contextual ambidexterity often faces imbalances (Levinthal & March 1993; Sols-Molina et al. 2018). In addressing the issue of imbalances, absorptive capacity acts as a compensatory mechanism during the simultaneous pursuit of exploration and exploitation (Levinthal & March 1993). Utilising absorptive capacity in the organisational learning process helps alleviate learning challenges, enriching and accelerating the firm's knowledge growth (Rothaermel & Alexandre 2009). Essentially, this underscores the importance of contextual ambidexterity in enhancing learning outcomes. According to organisational learning theory, absorptive capacity enables the assimilation of external knowledge through employee skills and management practices, thus fostering innovation (Schmidt 2010). A robust absorptive capacity, as indicated by Rothaermel and Alexandre (2009), mitigates imbalances in the relationship between contextual ambidexterity and SMEs performance. Ho et al. (2020) found that a strong absorptive capacity enhances the association between contextual ambidexterity and marketing effectiveness among SMEs. Consequently, SMEs facing frequent changes in the business environment can reinforce themselves by blending existing and new knowledge. Moreover, a high absorptive capacity facilitates firms in carrying out exploitation to increase revenue and create opportunities for collaborative investment and networks through explorative implementation (Lavie et al. 2010). On another note, limited absorptive capacity poses challenges for firms to acquire and effectively utilise external knowledge (Lane et al. 2006). In this study, absorptive capacity acts as a catalyst, influencing the direction or the strength of the relationship between contextual ambidexterity and SMEs performance. Therefore, the following hypothesis is proposed:

H<sub>2</sub> The relationship between the contextual ambidexterity and SMEs performance is moderated by absorptive capacity significantly, where SMEs performance can be stronger if the firm has a high absorptive capacity compared to a low absorptive capacity.

#### DIGITAL PLATFORM CAPABILITY AND SMEs PERFORMANCE

Zahra et al. (2006) define dynamic capability as the ability to reorganise a firm's resources and processes in a manner accepted by the key decision-makers. In dynamic environments, managers analyse the business strategy to establish a digital platform ecosystem. Mikalef and Pateli (2017) underscore the crucial need for digital platform capability, emphasising its necessity alongside various internal and external resources. This highlights the pivotal role of digital platform capability in enabling organisations to achieve superior performance in the digital landscape. Empirical data supports the idea that business-to-business (B2B) enterprises can gain a competitive advantage in the digital market by developing digital platform capabilities, as shown by Liu et al. (2023). The introduction of digital platforms not only creates new opportunities but also provides crucial technical support to SMEs in simplifying resource procurement (Jiang et al. 2023). SMEs demonstrate greater strategic flexibility and value interaction propositions than their larger counterparts (Mei et al. 2019), allowing them to exploit the design and technological features of digital platforms to collect and integrate important resources. In essence, digital platform capability acts as a catalyst for innovation, leading to increased organisational performance (Hänninen & Smedlund 2021; Xie et al. 2023). Building on this, the study proposes the following hypothesis:

H<sub>3</sub> Digital platform capability has a significant positive relationship with SMEs performance.

ABSORPTIVE CAPACITY AS A MODERATION BETWEEN DIGITAL PLATFORM CAPABILITY AND SMEs  
PERFORMANCE

In line with the dynamic capability's theory, firms must establish a digital platform ecosystem, particularly multi-sided platforms in dynamic environment (Muller 2019). The use of digital platforms not only improves SMEs performance, but also facilitates remote collaboration that allows access to external technologies and ideas, thereby enhancing innovation management and overall firm performance (Arora et al. 2021). Absorptive capacity theory distinguishes between potential absorptive capacity, linked to evolving knowledge, and realised absorptive capacity, associated with acquiring and assimilating knowledge (Lorenz et al. 2020; Miroshnychenko et al. 2021), impacting organisations' abilities to actively gather market, technology, and industry knowledge. Existing literature suggests that firms can better meet customer expectations and adapt to market trends by acquiring and assimilating external information (Molina-Morales et al. 2019). Zahra and George (2002) emphasise the need for action after processing external knowledge, urging businesses to integrate early in digital transformation for optimised production processes (Ardito et al. 2021). Digitally proficient firms should configure aggressively and leverage absorptive capacity to identify commercial expansion opportunities (Xie et al. 2023). This highlights the critical role of absorptive capacity in enhancing digital platform utilisation. Firms' adept at absorbing and understanding change will swiftly align their internal structures accordingly (Scuotto et al. 2017). However, SMEs introducing new products or services without a unique competitive advantage may face limitation, underscoring the challenge for firms lacking robust digital platform capability (Galli-Debicella 2021). In other words, high digital platform capability among SMEs requires absorptive capacity as the driver influencing the relationship between digital platform capability and SME performance. Consequently, the following hypothesis is proposed:

- H4 The relationship between the digital platform capability and SMEs performance is significantly moderated by absorptive capacity, where SMEs performance can be stronger if the firm has a high absorptive capacity compared to a low absorptive capacity.

METHODOLOGY

SAMPLE AND COLLECTION PROCEDURES

A questionnaire survey was conducted to collect data for this study. Based on a purposive sampling strategy, the survey targeted managers of SMEs operating across Malaysia with a business history of more than three years as suggested by Ramdan et al. (2022) to ensure matured inclusion of digital platforms in their operations. Given the relatively low entry barriers for SMEs and the intense competitive environment they face, there is a heightened need for these businesses to be ambidextrous to navigate the challenges effectively. Additionally, the inherent size and resource limitations among SMEs further compound the difficulties they encounter, creating barriers to maintaining sustainability while striving for excellence in a competitive market (Ikhsan et al. 2017). This circumstance underscores the justification for selecting the SME sector as an appropriate focus for investigating contextual ambidexterity, digital platform capability, and absorptive capacity.

The questionnaire, accompanied by a letter outlining the study's objectives and confidentiality compliance, was distributed over a three-month period (April to June 2022). The questionnaire was divided into two sections and written in both English and Malay, Part A contained statements to measure relevant variables, while Part B focused on obtaining background information about SMEs, including industry, firm size, ownership type, age, and annual revenue. A total of 157 SME managers completed and returned the questionnaires. Among the responding SMEs, 52.2% operate in the services sector and 47.8% in manufacturing sector. Notably, 75.8% of the respondents hold the position of manager. Most firms (77.1%) have 5 to 30 employees, with 47.8% being sole proprietorships. Findings reveal that 64.3% of the enterprises have been in operation for 4 to 5 years old, and 75.2% generate annual revenues ranging from RM300,000 to RM3 million. According to the descriptive analysis, Facebook digital platform is utilised more frequently (34.4%) than other business applications by most of the responding SME firms (refer Table 1).

TABLE 1. Background of the firm

Background type	Category	Frequency	Percentage
Industry	Services sector	82	52.2%
	Manufacturing sector	75	47.8%
Position	Chief executive officer	11	7.0%
	Managing director	13	8.9%
	General manager	14	8.3%
	Manager	119	75.8%
Firm size	5 to 30 employees	121	77.1%
	31 to 75 employees	18	11.5%
	76 to 200 employees	18	11.5%
Type of ownership	Sole proprietorships	75	47.8%

	Partner	37	23.6%	
	Company Sdn Bhd	40	25.5%	
	Limited liability partnership	5	3.3%	
Age of the firm	4 to 5 years	101	64.3%	
	6 to 10 years	25	15.9%	
	11 to 15 years	9	5.7%	
	16 to 20 years	8	5.1%	
	More than 20 years	14	8.9%	
Yearly income	RM300,000 to RM3 million	118	75.2%	
	RM4 million to RM15 million	10	6.4%	
	RM16 million to RM20 million	25	15.9%	
	RM21 million to RM50 million	4	2.5%	
Types of digital platform applications that are often used	Facebook	54	34.4%	
	Instagram	26	16.6%	
	WhatsApp	17	10.8%	
	Email Marketing	27	17.2%	
	Website	30	19.1%	
	Search engine optimization	3	1.9%	

## MEASURES

All study constructs were evaluated using instruments previously established and widely employed in the entrepreneurial studies domain. As the original instruments were in English, a bilingual Malay-English translation approach was employed. To ensure content validity, two academics with PhD qualifications and a practitioner have independently translated and retranslated the original scale into English.

The measurement for SMEs performance utilised a ten-item instrument adapted from Chen et al. (2009), incorporating statements such as "have enhanced sales and profitability of the firm." Responses were recorded on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Contextual ambidexterity, as conceptualised and validated by Wang and Rafiq (2014), was assessed with ten items. One example is "Learned new skills for the first time (e.g., funding new technology, staffing the R&D function, training and development of R&D and engineering personnel)." A 7-point Likert scale, ranging from 1 (very limited knowledge) to 7 (very substantial knowledge) was utilised to measure the statements.

The measurement of digital platform capability is based on the work of Cenamor et al. (2019), employing eight items, including the statement "Our digital platform has the capability to exchange real-time information with our partners." Respondents rated their agreement on a Likert scale from 1 (strongly disagree) to 7 (strongly agree).

Absorptive capacity, assessed using a 10-item scale adapted from Ho et al. (2020), featured statements like "We adopt an information platform for employees to share information and practical experience." Responses were recorded on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

## DATA ANALYSIS

PROCESS macro using Statistical Package for Social Sciences (SPSS) version 26.0 using Model 1 by Hayes (2018) was employed to test the research hypothesis. Before testing the hypothesis, this study was subjected to construct validity tests, which included loading and cross-loading, construct correlation, and reliability testing.

## MEASUREMENT MODEL

In this study, the analysis involves reliability, Cronbach's Alpha, Average Variance Extracted (AVE), cross-factor loading values, Fornell-Larcker, and the HTMT-Monotrait ratio (Hair et al. 2014). Table 1 demonstrates that all the factor loading values for the measurement model are greater than 0.70 (Hair et al. 2014), and the Cronbach's Alpha reliability and composite values have been achieved indicating that all latent variables having excellent reliability values (greater than 0.90). It demonstrates that each latent variable in this model has sufficient internal consistency reliability (Hair et al. 2017).

To test for convergent validity, Hair et al. (2014) proposed that AVE should be larger than 0.50. Table 2 shows that AVE values for constructs that are more than 0.50 to ensure that the average variance extracted (AVE) for the components employed in this study exceeded the stated criterion (0.5) to establish convergent validity.

TABLE 2. Item measurement loadings

Construct	Item	Loading	Cronbach's Alpha	CR	AVE
Absorptive Capacity (AC)	AC3	0.820	0.901	0.710	0.945
	AC4	0.865			
	AC5	0.899			
	AC6	0.835			

	AC7	0.843			
	AC8	0.812			
	AC9	0.820			
Contextual Ambidexterity (CA)	AC1	0.796	0.893	0.688	0.952
	AC2	0.837			
	AC3	0.822			
	AC4	0.742			
	AC5	0.820			
	AC6	0.882			
	AC7	0.874			
	AC9	0.848			
	AC10	0.836			
Digital Platform Capability (DPC)	DPC1	0.842	0.834	0.948	0.696
	DPC2	0.827			
	DPC3	0.830			
	DPC4	0.817			
	DPC5	0.774			
	DPC6	0.860			
	DPC7	0.873			
	DPC8	0.848			
SMEs Performance (SMEP)	SMEP1	0.829	0.862	0.608	0.886
	SMEP2	0.794			
	SMEP6	0.753			
	SMEP8	0.741			
	SMEP9	0.778			

Next, we assess discriminant validity by assessing the square root of AVE to be greater than the correlation between constructs and the HTMT ratio is below 0.85. As shown in Table 3, the correlation coefficients range from 0.542 to 0.772, with the square root of AVE exhibiting the highest inter-construct correlation. These findings confirmed that discriminant validity (Fornell & Larcker 1981) is achieved. Moreover, the HTMT ratio is below 0.85, affirming the presence of discriminant validity (Hair et al. 2014) which indicates that all constructs are distinct from each other. Consequently, the construct validity, encompassing both convergent and discriminant validity, is deemed satisfactory for this study.

TABLE 3. Discriminant Validity (HTMT)

Construct	SMEs Performance	Absorptive Capacity	Contextual Ambidexterity	Digital Platform Capability
SMEs Performance				
Absorptive Capacity	0.663			
Contextual Ambidexterity	0.772	0.772		
Digital Platform Capability	0.542	0.762	0.682	
Min	5.781	6.120	5.422	6.410
Standard deviation	0.713	0.731	0.747	0.754

#### COMMON METHOD BIAS

To address any potential bias in this study, a three-step approach was employed. Firstly, to ensure objectivity in the data collection process, the respondent's identity was kept anonymous. Secondly, data were gathered from SME managers as they possess a better understanding of strategy, market conditions, and business performance. Thirdly, an Exploratory Factor Analysis was used, applying Harman's single factor test to all variables (Podsakoff et al. 2012). The findings from Harman's single factor test showed that all variables achieved less than 50% of the variation which will not pose any distortion to the findings (Podsakoff et al. 2003; Ramdan et al. 2022; Samsudin et al. 2022).

#### STRUCTURAL MODEL

Initially, we tested the total predictive effect model, examining the influence of contextual ambidexterity and digital platform capability on SMEs performance without moderation (absorptive capacity). It is imperative to establish a significant relationship between predictor variables and the outcome. The estimated causal path indicates a significant positive relationship from contextual ambidexterity to SMEs performance ( $\beta = 0.4924$ ,  $p < 0.001$ ), and likewise for digital platform capability to SMEs performance ( $\beta = 0.3270$ ,  $p < 0.001$ ). Subsequently, we explored the moderating impact of absorptive capacity on the relationship between contextual ambidexterity and SMEs performance. The moderating effect unveils a significant positive relationship ( $\beta = 0.3797$ ,  $p < 0.01$ ), with bootstrapping results confirming an interval excluding zero (CI = 0.0790 to 0.6803). Simultaneously, the moderating effect of absorptive capacity on the relationship between digital platform capability also exhibits a significant positive moderation ( $\beta = 0.3382$ ,  $p < 0.05$ ), with bootstrapping results indicating an interval excluding



zero (CI = 0.0140 to 0.6624). Consequently, H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub> and H<sub>4</sub> are supported in this study. Detailed coefficients are presented in Table 4, Figures 1, 2 and 3.

TABLE 4. Results of direct and indirect relationships (moderation)

Paths	$\beta$	SE	<i>t</i>	LLCI	ULCI
Contextual Ambidexterity → SMEs Performance	0.4924	0.0356	13.8390	0.4221	0.5627
Digital Platform Capability → SMEs Performance	0.3270	0.0402	8.1446	0.2477	0.4064
SMEs Performance					
Contextual Ambidexterity x Absorptive Capacity	0.3797	0.1522	2.4946	0.0790	0.6803
<i>R</i> <sup>2</sup>	0.5824				
$\Delta R^2$	0.0170				
<i>F</i>	6.2232				
Digital Platform Capability x Absorptive Capacity	0.3382	0.1641	2.0611	0.0140	0.6624
<i>R</i> <sup>2</sup>	0.3423				
$\Delta R^2$	0.0183				
<i>F</i>	4,2480				

Note(s): LL = Lower Limit; UL = Upper Limit; CI = Confidence Interval

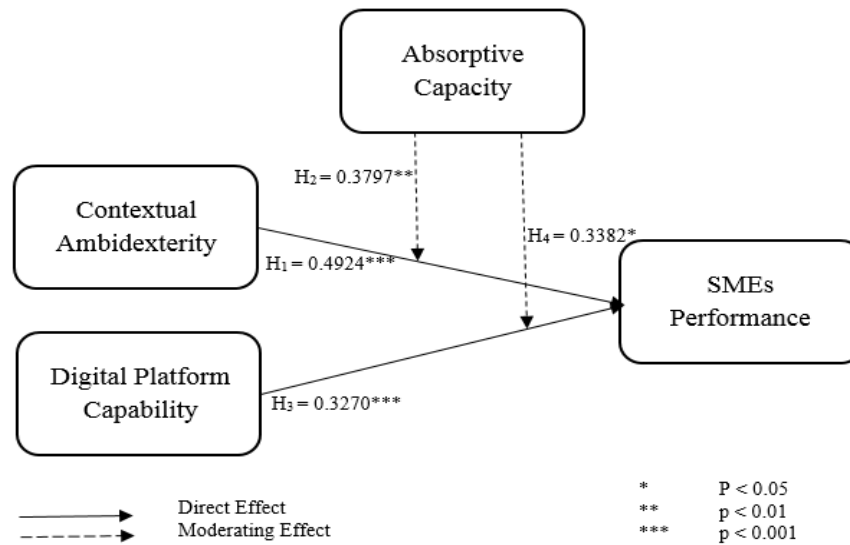


FIGURE 1. A conceptual framework for the implications of contextual ambidexterity and digital platform capability on SMEs performance as well as absorptive capacity as a moderator

Following the Cohen et al. (2003) approach, an analysis was conducted to investigate potential significant interactions. This involved analysing the simple slope and probing the interaction. An interaction is identified when a strong effect is present at a high level, while a weak effect is observed at a low level. In Figure 2, the interaction plot exhibits a steeper slope for low absorptive capacity. This indicates that at a low absorptive capacity level, the influence of contextual ambidexterity on SMEs performance is weaker compared to high absorptive capacity. Firms with high contextual ambidexterity and absorptive capacity demonstrate the highest SMEs performance. In essence, the connection between contextual ambidexterity and SMEs performance is more robust when absorptive capacity is high, confirming Hypothesis H<sub>2</sub>.

Referring to Figure 3, the interaction plot displays a steeper slope for low absorptive capacity. This indicates that at a low absorptive capacity level, the impact of digital platform capability on SMEs performance is feeble compared to high absorptive capacity. SMEs exhibit elevated performance levels when possessing high digital platform capability and absorptive capacity. Evidently, the correlation between digital platform capability and SMEs performance is strengthened at high absorptive capacity levels, supporting the assertion in Hypothesis H<sub>4</sub>.

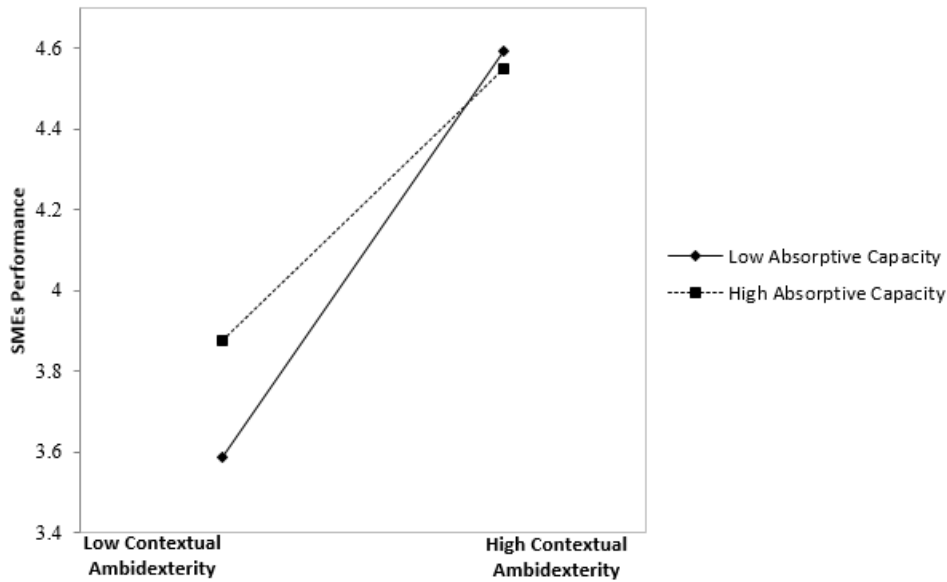


FIGURE 2. Moderating effect of H<sub>2</sub> absorption capacity

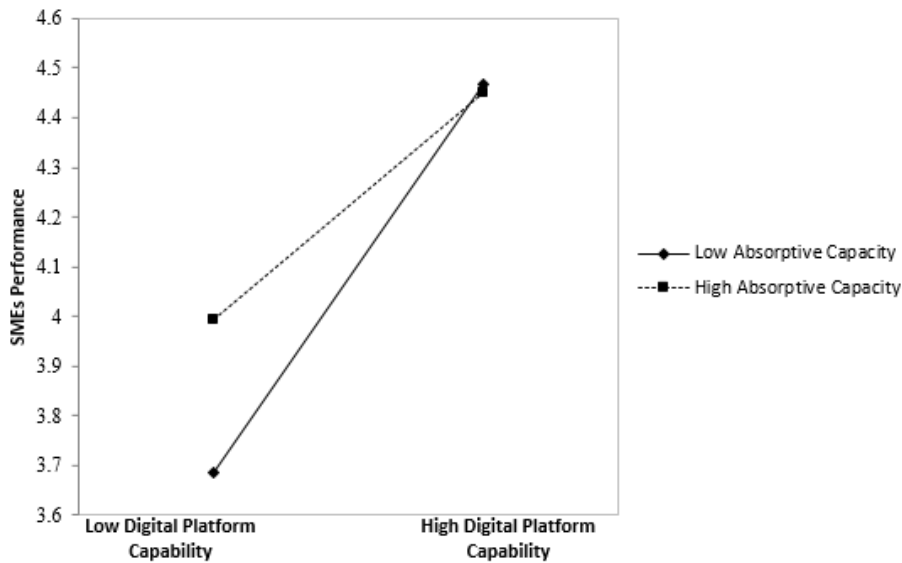


FIGURE 3. Moderating effect of H<sub>4</sub> absorption capacity

## DISCUSSION

This study aims to assess the impact of contextual ambidexterity, digital platform capability, SMEs performance, and absorptive capacity as moderators. Contextual ambidexterity that is developed through bottom-up learning processes and reinforced by effective organisational values, aids firms in integrating exploration and exploitation competencies. Simultaneously, digital platform capability emerges as a crucial source for SMEs, enabling market expansion and sustained competitiveness, particularly in dynamic environments. The study reveals a highly beneficial relationship between contextual ambidexterity, digital platform capability, and SME performance. Consequently, the interaction of these factors plays a significant role in propelling SMEs towards superior performance and competitiveness.

The findings are aligned with prior research (e.g., Cao et al. 2009; Wang & Rafiq 2014), illustrating that contextual ambidexterity fosters a learning process, enhancing knowledge for innovative product or service development. The integration of exploration and exploitation competence positively influences SMEs performance, encompassing both financial and non-financial aspects that is crucial for sustained competitiveness. Similarly, the study echoes previous research (e.g., Hänninen & Smedlund 2021; Xie et al. 2023), indicating that digital platform capability serves as a catalyst for innovation in dynamic environments, thus fostering continuous learning. The implementation of this capability facilitates streamlined business operations, efficient product

delivery, service provision, organisational structuring, and innovative business models that ultimately elevates the firm's competitive advantage.

This study adds to our understanding that SMEs can effectively embrace contextual ambidexterity at the organisational level. Supported by prior research (Birkinshaw & Gibson 2004; Gibson & Birkinshaw 2004), successful implementation fosters behaviours within SMEs, mobilising employees to explore and exploit knowledge for long-term goals. Contextual ambidexterity highlights the firm's capacity to assimilate new information and align it with organisational goals (Beda-Garca et al. 2020). This emphasises the significance of integrating dynamic capabilities in ensuring organisational adjustment and alignment (Monferrer Tirado et al. 2019). In essence, organisational-level contextual ambidexterity calls for managers and employees to utilise both existing and new knowledge for organisational success.

This study affirms the regulatory role of absorptive capacity, linking effective continuous learning to its moderating role in the relationship between contextual ambidexterity, digital platform capability, and SMEs performance. Absorptive capacity, according to Zahra and George (2002), enhances adaptability in a rapidly changing market by enabling agility to market shifts (Schildt et al. 2012). Consistent with Rothaermel and Alexandre (2009) and Ho et al. (2020), high absorptive capacity minimises disruptions in the association between contextual ambidexterity and SMEs performance. Likewise, aligned with Xie et al. (2023), a robust absorptive capacity facilitates more aggressive digital innovation and promising achievements. This underscores the proactive incorporation and responsive utilisation of newly acquired information, emphasising that the impact of contextual ambidexterity and digital platform capability on SMEs performance is heightened with high absorptive capacity.

## THEORETICAL AND MANAGERIAL CONTRIBUTIONS

The theoretical framework of this paper relies on the strategic management concepts of contextual ambidexterity (Birkinshaw & Gibson 2004; Wang & Rafiq 2014), digital platform capability (Rai & Tang 2010; Cenamor et al. 2019), and absorptive capacity (Zahra et al. 2009; Lewin et al. 2011), focusing on SMEs performance. The framework enhances the study's understanding of the impacts of contextual ambidexterity, digital platform capability, and absorptive capacity on SMEs performance in Malaysia. The investigation yields several theoretical insights. Firstly, by integrating dynamic capabilities and organisational learning theories, it is revealed that effectively utilising digital technology in a dynamic context requires robust organisational learning support (Tece et al. 1997), which is crucial for SMEs facing resource and competency limitations. These findings lay the groundwork for future researchers to delve deeper into contextual ambidexterity and digital platform capability (Cenamor et al. 2019), offering a fresh perspective on unravelling the mechanisms behind these concepts.

Next, this study illuminates how contextual ambidexterity and digital platform capability bolster core competencies and advance research on value creation through the reorganisation of digital resources (Mikalef & Pateli 2017) and simultaneous exploration and exploitation (Wang & Rafiq, 2014). The findings provide compelling evidence that the organisation and equilibrium of external and internal resources enhance corporate performance. Third, this study examines methods to enhance competitiveness through contextual ambidexterity and digital platform capabilities from the perspective of organisational learning. The findings of the study reinforce the pivotal role of absorptive capacity in contextual ambidexterity and digital platform capability, thereby contributing to the literature on absorptive capacity. In this context, the study underscores the potential role of absorptive capacity and emphasises its moderating effect on the relationship between contextual ambidexterity and SMEs performance (Rothaermel & Alexandre 2009; Ho et al. 2020), as well as digital platform capability and SMEs performance (Xie et al. 2023). In conclusion, this study establishes the foundation for future research on the significance of absorptive capacity in the context of SMEs.

From the management perspective, the finding delivers a more optimistic message to SME managers in developing countries regarding the implementation of exploration and exploitation competencies, which can be effectively balanced by contextual mechanisms, especially in a dynamic environment (Wang & Rafiq 2014; Ikhsan et al. 2017). Meanwhile, SME managers must work vigorously for high-quality competencies development to secure a distinctive competitive advantage through digital platform capability in the era of digital technology (Cenamor et al. 2019; Xie et al. 2023). The intriguing results of this study provide genuine evidence supporting the notion that organisations lacking contextual ambidexterity and digital platform capability in SME performance development may face a higher risk of failure in today's competitive business environment. Consequently, this discovery not only offers a new perspective but also encourages SME management to explore and fully exploit existing potential, engaging in innovation and optimal strategies to propel their business to the next level in an ever-evolving business environment.

At the same time, managers must thoroughly examine their firm's structure, procedures, and policies to facilitate organisational learning (Zahra et al. 2009). Without catalysing organisational learning, the business face probable risks in failing to strike the essential balance when adopting exploration and exploitation capabilities. This necessitates SME managers to develop higher absorptive capacity to address tension issues that may arise

during the adoption of contextual ambidexterity (Rothaermel & Alexandre 2009; Ho et al. 2020). Meanwhile, SMEs must ensure that digital platform capabilities are effectively applied through integration and proper setup. To maximise the influence of digital platform capability, external reorganisation of digital resources must be increased through a stronger absorptive capacity (Ardito et al. 2021; Xie et al. 2023). The findings of this study clearly demonstrate that SMEs that do not use absorptive capacity as a driving force in deploying contextual ambidexterity and digital platform capability risk failing to achieve success. As a result, this adjustment emphasises the critical necessity for SMEs to prioritise absorptive capacity as a crucial catalyst in the firm's plan to attain peak performance.

## CONCLUSION

This study delves into the dynamic interplay of contextual ambidexterity and digital platform capability, pivotal for steering SMEs amid the challenges of a dynamic business landscape. Contextual ambidexterity serves as a delicate balancing act, allowing SMEs to seamlessly blend exploration and exploitation, fostering sustained success. As SMEs navigate uncharted territories, drawing insights from past exploits through exploitation and combining new ideas through exploration will fuel innovation that brings lasting excellence. Simultaneously, digital platform capability acts as a versatile toolkit, reshaping integration and configuration to fortify SMEs competitive position. This study unveils the catalytic role of absorptive capacity in organisational learning, unleashing SMEs creative potential. Amid the digital deluge, organisational learning becomes paramount, nurturing resilience for SMEs in a changing landscape. In a Malaysian context, this initiative aims to rejuvenate the firm's knowledge reservoir, which is essential for navigating change. In essence, this study narrates an opportunity of renewal and resilience, emphasising the transformative power of contextual ambidexterity, digital platform capability, and absorptive capacity in ensuring SMEs enduring business continuity.

## LIMITATIONS AND FUTURE RESEARCH DIRECTION

The study confronts several challenges that necessitate careful consideration when interpreting its findings. A notable constraint is the absence of a well-established SME database, which makes probability sampling impossible and achieving a representative Malaysian sample challenging. However, optimism arises from larger-scale research efforts encompassing diverse SMEs, potentially enhancing generalisability. Additionally, the reliance on one-time, cross-sectional data collection offers a snapshot of contextual ambidexterity, digital platform capability, and absorptive capacity, urging the adoption of a longitudinal approach for a more profound understanding over time. Qualitative methodologies emerge as promising tools to explore the intricate relationships, providing insights into the interplay between these variables. Future studies, combining qualitative and longitudinal approaches, hold potential for unravelling contextual nuances. To create a more comprehensive understanding, future research should broaden its scope, considering aspects like empowerment, digital transformation, and innovative capabilities and enriching insights into SMEs performance.

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