





# Exploring small and medium enterprise performance through dynamic capability perspective



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**Background:** Small and medium enterprises (SMEs) are crucial to both global and national economies. They create jobs, boost competitiveness and drive economic growth. In the digital age, SMEs have increased opportunities to expand, enhance their capabilities and compete effectively.

**Aim:** This research explores how environmentally conscious SMEs improve performance using dynamic capabilities (DCs) approach. It specifically examines how e-commerce and management capabilities contribute to SME performance in the Indonesian culinary sector and highlights the role of strategic orientation in this study.

**Setting:** The study focusses on SMEs in the culinary sub-sector located in West Java, DKI Jakarta, and Banten provinces in Indonesia. These regions were selected because of their vibrant culinary industries and the significant role SMEs play in the local economy and gross domestic product (GDP).

**Methods:** A quantitative analysis was conducted using online surveys via Google Forms, collecting 236 responses. The data were analysed with Partial Least Squares Structural Equation Modeling (PLS-SEM) using Smart PLS 3.0 software.

**Results:** Four hypotheses about DCs and SME performance were tested, with three being accepted. The study found that DCs alone do not directly enhance SME performance.

**Conclusion:** The study highlights the importance of strategic orientation in mediating DCs with SME performance. In the digital era, aligning goals with market needs helps SMEs use their DCs more effectively, adapt to changes, innovate and grow sustainably.

**Contribution:** This research contributes to the literature on DCs and strategic management, offering insights into improving SME performance in Indonesia.

**Keywords:** dynamic capabilities; strategic orientation; SME; performance; e-Commerce capabilities; management capabilities.

## Introduction

Small and medium enterprises (SMEs) are known as the heart of the global economy and the lifeblood of the economy because of their role in business society's productivity and innovation of the country (Weaven et al. 2021). There are small and medium-sized enterprises (SMEs) in Indonesia that account for 99.99% of business units and significantly contribute to the country's economic growth (Hidayati & Sitompul 2022). As a result of their enormous numbers, SMEs serve as the foundation of a country, not just in Indonesia but also in other modern countries (Miller 2019).

Globally, SMEs play an important part in creating jobs, accounting for 50% of total employment, helping to reduce unemployment, promote competitiveness and contribute to global economic growth (Khan et al. 2024; Raihan 2024). In Indonesia, SMEs contributed 56.18% of the gross domestic product (GDP) rate in 2010, grew to 61.41% in 2015, and reached 61% in 2018. At the same time, from 2010 to 2018, the percentage of Indonesia's main labour absorbers remained consistent at 97% (Hidayati & Sitompul 2022).

Small and medium enterprises are clearly distinct from large businesses. Many challenges and problems have been encountered, particularly when dealing with e-commerce, therefore it is important to study SMEs, especially their performance (Burvill, Jones-Evans & Rowlands 2018). The performance of SMEs has demonstrated their dependability in the face of various challenges

during the global crisis phase (e.g. the coronavirus disease 2019 [COVID-19] and global financial crises) (Dejardin et al. 2022). Furthermore, there is an opportunity for SMEs to continuously grow in this digital era, develop their capabilities and be highly competitive by implementing e-commerce into their business development (Grimmer et al. 2017) because e-commerce is being utilised as a rapid vehicle to transform the world, and it has the potential to have a significant impact on their businesses as important variables for conducting business for the entire world's companies, including SMEs without exception (Phiri 2019). However, the literature has identified SMEs' barriers as poor planning, a lack of formal processes and a lack of understanding of the value of digital technologies and business performance (Quinton et al. 2018). To put it another way, in order to adapt to changing business environments, SMEs must have a dynamic capability (DC) perspective.

Dynamic capability is defined as the firm's ability to integrate, build and reconfigure internal and external capabilities to deal with rapidly changing situations. It reveals the ability to sense and then seize opportunities quickly and competently, recognising sensing and seizing as fundamental dimensions of DC (Zahoor & Lew 2022). Furthermore, DC activities include (1) transforming and recombining assets and resources, (2) replicating a process or system in operation, (3) experimenting and reflecting and (4) integrating assets and resources (Eikelenboom & De Jong 2019). The literature on DC and firm's performance, proposed in earlier conceptual studies, has been empirically positive and significantly proven (Dejardin et al. 2022). Performance is enhanced when specialised skills are built (e.g. information technology [IT] management and innovation) using the DCs' perspective (Muna et al. 2022). Other studies, on the other hand, have found negative effects of DC on firm's performance (Hernández-Linares, Kellermanns & López-Fernández 2021). Our research fills a knowledge gap by examining how environmentally conscious SMEs enhance performance from a DC's perspective. The research investigates e-commerce capabilities and management capabilities as extending the DCs concept in the context of SMEs. Our findings show that successful SMEs use e-commerce in their business development (Grimmer et al. 2017), and SMEs' management capability is expected to overcome internal conflicts, resulting in a competitive advantage and improved performance (Alcalde-Heras, Iturrioz-Landart & Aragon-Amonarriz 2019).

Scholars have studied a variety of factors that influence the performance of SMEs, focussing primarily on strategic, competitive, capability and managerial perspectives (Zahoor & Lew 2022). Additionally, prior studies on the performance of SMEs found that the factors that influence are entrepreneurial orientation (EO) (Hernández-Linares, Kellermanns & López-Fernández 2018), market orientation (MO) (Homaid, Minai & Al-Ansi 2018), learning orientation (LO) (Homaid et al. 2018) and a combination of these three factors (Grimmer et al. 2017) known as strategic orientation. More along the lines, SMEs should be concerning their

strategic orientation in developing DCs to improve performance (Jiang, Mavondo & Zhao 2020). Previous research has primarily focussed on how strategic orientation directly impacts DCs; however, a few studies have argued that strategic orientation plays a role in the development of DCs (Jiang et al. 2020). This study investigates whether and how complementarity between EO, MO and LO as strategic orientation can enhance business performance, adapt to changing environments by leveraging their DCs and achieve sustainability.

Based on the aforementioned backgrounds, the research question is: 'Do DCs and strategic orientation impact the performance of SMEs in Indonesia?'. The objectives of this article are: (1) to analyse the impact of DCs on the strategic orientation and performance of Indonesian SMEs; (2) to analyse the impact of strategic orientation on the performance of Indonesian SMEs; (3) to analyse whether strategic orientation mediates the impact of DCs on SME performance; (4) to contribute to the existing literature on DCs in the context of SMEs and (5) to suggest any recommendations for SMEs, academicians and the government.

These results contribute to the literature on strategic management and the DCs' perspective. This research contributes to dealing with issues such as the environment (consumers, suppliers and competitors) in this case a dynamic market environment, rapid technological growth, competition, planning future strategies, predicting opportunities and threats that will occur by exploiting existing factors based on the findings of this research later on. Specifically, the research investigates e-commerce capabilities and management capabilities as extending the DCs concept in the context of SMEs in the culinary sub-sector of the Indonesian creative industry. Furthermore, the study analyses how these DCs, along with strategic orientation, influence SME performance. The study also aims to highlight the mediating role of strategic orientation between DCs and SME performance.

## Literature review

### Small and medium enterprises' performance and dynamic capabilities

The literature on SMEs and performance issues covers a wide range of research topics, industry sectors, geographical and theoretical perspectives. For instance, a significant study has focussed on the impact factor on SME performance in a variety of industry areas, including industry (Lorenzo, Rubio & Garcés 2018), manufacturing and services (Park & Seo 2018), information technology and communication (Khin & Ho 2018), creative economy (Sabil Hussein et al. 2018), general (Campbell & Park 2016), and others, but nothing in particular has been conducted in the creative industry culinary sub-sector. Geographically, SMEs research has been conducted in both developed and developing countries, including Indonesia (Patma et al. 2021), Iran (Allameh & Khalilakbar 2018), China (Zhu, Liu & Chen 2018), Australia (Bucic, Ngo & Sinha 2017) and Malaysia (Amin et al. 2016). Theoretically, researchers have examined factors influencing

SME performance through lenses such as the resource-based view (RBV) (Oduro & Mensah-Williams 2023) and DC (Mekaniwati et al. 2023).

Furthermore, previous studies on performance have focussed on digital orientation (EO, MO, LO) (Khin & Ho 2018), strategic orientation (Grimmer et al. 2017), MO (Mahmoud et al. 2016), EO (Homaïd et al. 2018), LO (Mahmoud et al. 2016), e-business capabilities (Uwizeyemungu et al. 2018), DCs and digital innovation (Khin & Ho 2018). Despite substantial research into the factors that determine SME performance, the difficulties they face are still complex. Next, further research is needed to enhance performance and identify any important factors that might assist the entrepreneur solve the challenge. This study analyses the factors that might enhance performance, specifically SMEs' performance, in relation to DCs.

Small and medium enterprises differ from large companies in that they face challenges such as poor planning, a lack of formal processes, and a lack of awareness of the value of digital technologies and business performance; as a result, SMEs must leverage DCs to enhance their performance (Burvill et al. 2018; Canhoto et al. 2021). Empirically, prior research shows that DCs have a positive and significant effect on SMEs' performance. Businesses require DCs to improve performance and gain benefits. Moreover, DCs play an important role in helping SMEs sustain their businesses and succeed (Weaven et al. 2021).

### Dynamic capabilities perspective in small and medium enterprise

The RBV theory defines enterprises as holding a heterogeneous, firm-specific bundle of resources that are valuable, rare, inimitable and non-substitutable (VRIN); further research finds DCs have enriched the original RBV and have effects on performance (Hernández-Linares et al. 2021). The DCs' perspective proposed by Teece is based on the entrepreneur's competencies and capabilities to develop new products and respond effectively to changing dynamic market conditions, with the basis referring to sensing, seizing and transforming (Rashid & Ratten 2020).

Dynamic capabilities refer to a firm's ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments. They enable organisations to adapt, innovate and remain competitive in dynamic markets (Teece 2018). This theory assists in rapidly creating, improving or structuring resources to achieve excellence in a dynamic market environment (Owoseni & Twinomurinzi 2019), coping with change to meet market needs (Ambrosini & Altintas 2016), competition in the long term (Brown, Foroudi & Hafeez 2019), as a mediator on the performance (Bitencourt et al. 2019). This definition has been expanded over the years, resulting in various conceptualisations. Furthermore, DCs are frequently defined as process management that consumes resources, particularly the processes for integrating, reconfiguring, obtaining and releasing resources or even creating changes in the marketplace (Dejardin et al. 2022).

Dynamic capabilities enable the prospecting of new opportunities along with the conversion of resources into assets and capabilities by developing new products and services in an effective and efficient way, as a consequence, these dynamic resources reflect organisations' abilities to create, extend and intentionally modify their existing resource base (Dejardin et al. 2022). The concept of DCs emerges to address the limitation of RBV, defined as a firm's processes that integrate, reconfigure, gain and release resources to match and even create market change (Weaven et al. 2021). Therefore, DCs operate and transfer the value of resources into a company's sustainable superior advantage. Previous literature (Jiang et al. 2020) has shown in identifying various components of DCs, such as resource stock and intellectual capital, knowledge, brand orientation and formalisation, entrepreneurship, organisational sense making, organisational relationship capital, supply chain collaboration and environmental dynamism. A few SMEs adapt to volatile market conditions because of limited resources. Only those that utilize DCs are distinguished as sustainable companies. Furthermore, the existing literature demonstrates that successful SMEs utilize e-commerce and adapt their management capabilities to the dynamic market. This ultimately leads to a competitive advantage and improved performance. (Weaven et al. 2021; Alcade-Heras et al. 2019; Grimmer et al. 2017).

A qualified entrepreneur will adapt to the dynamic market by having the ability or capability to innovate and utilise technology, particularly Internet technology, information technology, computers or e-commerce such as e-commerce capability (Gregory, Ngo & Karavdic 2019). Moreover, management capability is significantly key to complementing e-commerce capability. This is crucial in dealing with an uncertain business environment, overcoming internal conflicts, creating enthusiasm and fostering coordination between teams and resources to enhance overall effectiveness. By doing so, a competitive advantage can be established, leading to significant profits and improved performance (Alcalde-Heras et al. 2019).

When running a business, operational management is required to improve performance to meet consumer's desires and needs from various segments, particularly operational capability, which will aid in establishing competitive advantage and sustainability (Chase, Jacobs & Aquilano 2004). In today's competitive environment, it is essential to utilise operational capabilities, a combination of information technology elements and non-information technology capabilities (Uwizeyemungu et al. 2018). Therefore, e-commerce and management capabilities are components of the DCs' perspective presented in this study as a combination of IT and non-IT capabilities in operational capabilities to enhance SMEs' performance.

The following propositions are presented based on the discussion:

- H1:** The combination of e-commerce capability and management capability as a component of DCs positively and significantly affects SMEs' performance.



## Strategic orientation

Management strategy conceptualisation is frequently associated with performance enhancement; moreover, many studies have addressed the effect of strategic orientation performance (Abdulrab et al. 2021). According to Sebor, Lee and Sukasame (2009), entrepreneur success is goal-oriented and an entrepreneur with goal-oriented will always have strategic plans in place to achieve their objectives (Lorenzo et al. 2018). Some empirical studies specifically address strategic orientation in the digital era (Joensuu-Salo 2021) in order to anticipate the fast-paced and digital to develop their performance. Strategic orientation leads to dynamic performance capability; however, studies on previous strategy orientation literature do not emerge to have reached a conclusion on which orientation is more influential in achieving better performance (Falahat et al. 2021).

Strategic orientation is comprised of several single orientations, such as EO (Qosasi et al. 2019), MO (Distanont & Khongmalai 2018) and LO (Harvey et al. 2019; Phiri 2019). This study addresses EO, MO and LO as components of strategic orientation. Entrepreneurial orientation is an appealing research topic, a key factor in an organisation's strategic and creative development (Abdulrab et al. 2021). The enhanced EO will increasingly push for changes in the company's capability as a competitive advantage (Raymond et al. 2015). Entrepreneurial orientation, which is innovative, proactive and risk-taking in its elements, plays an important role in exploring potential market opportunities, developing a new business and achieving a competitive advantage (Yang 2017). Subsequently, a previous study stated that MO, through three components (customer orientation, competitor orientation and inter-functional components), is an important strategic recommendation (Abdulrab et al. 2021). Market orientation has evolved into LO; learning activity affects individual behaviour to generate profit and adds to businesses' pursuit of competitive advantage, innovative success and improved performance (Baker, Mukherjee & Gattermann Perin 2022).

Factors influencing LO include strategic planning and commitment to change for the better (Mahmoud et al. 2016). Learning orientation has proven to influence positively and significantly on SMEs' performance and is a key important variable in achieving excellence competitiveness and competition in the market (Tho 2019).

This research suggests supportive elements for strategic orientation that can elevate SME performance. The following propositions are proposed based on the aforementioned discussion:

- H2:** Strategic orientation positively and significantly affects SMEs' performance.

## Dynamic capabilities, strategic orientation and small and medium enterprises's performance

Dynamic capabilities are areas of research based on resource and strategic management (Dejardin et al. 2022). This study proposes e-commerce capabilities and management

capabilities as the components of DCs. E-commerce capabilities, one of DCs' perspectives proposed, for SMEs have many challenges when using the overall e-commerce process, such as time factor, complexity and high cost (Amin et al. 2016; Lorenzo et al. 2018). However, previous literature has proven an entrepreneur who adopts this e-commerce capability is growing fast and has a positive and significant effect on performance (Phiri 2019). Furthermore, another DCs' perspective, management capabilities, can assist the business in identifying new opportunities for development and change in products or processes, in other words, have an effect on performance (Brown et al. 2019), especially on SMEs' performance. The character of SMEs is different from large companies, where the owner has almost all the decisions and focusses on operational activity's effectiveness and efficiency (Dolan & Goodman 2017) and improving their strategy (Gregory et al. 2019). Meanwhile, DCs are the main change factor in resources and capabilities (Dias et al. 2021). As a consequence, it is hoped that DCs' perspective will help SME entrepreneurs enhance their strategic orientation.

Furthermore, previous research has established a positive relationship between strategic orientation and SMEs' performance (Abdulrab et al. 2021). The rationale behind the strategic orientation mediation effect is that SMEs with strong DCs' perspectives will improve their strategic orientation to enhance performance. Based on this logic, this study suggests that strategic orientation is implemented as a mediator between DCs and improved performance. The following propositions are proposed based on the aforementioned discussion:

- H3:** Dynamic capabilities positively and significantly affect strategic orientation.
- H4:** Dynamic capabilities positively and significantly affect SME's performance through the mediation of strategic orientation.

## Research methods and design

### Overall study setting

The context of this study is the performance of SMEs, especially in the creative industry culinary sub-sector. The reason is SMEs are the backbone of economic growth and employment opportunities because of their potential to exploit new opportunities and knowledge. This study used a quantitative research method and online questionnaires in this study.

The questionnaires were collected throughout a set time period, from January 2021 to March 2021. This study used a cross-sectional technique. An online survey is shared through WhatsApp, Facebook and Go Food to owners and managers of Indonesian SMEs. A five-point Likert scale item was formulated into a statement. The rating ranged from strong disagreement (1) to strong agreement (5). The researcher generated 50-item questions for the respondents to choose from.

The study used Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the hypothesis with the Smart PLS 3.0. This study believes that the PLS-SEM is the best suited to estimate our research model to confirm in empirical research on strategic management, which frequently requires the modelling of latent constructs, in this case, the DCs' perspective on performance, as well as testing for complex relationships.

## Data collection

The study used a quantitative approach, with data collected via an online survey. The purpose of this study is to gather information from a large number of SMEs in Indonesia's creative industry culinary sub-sector. In 2019, there were 65.4 million SMEs in Indonesia, with a potential employment of 123.3 thousand (Admin [DJP Kementerian Keuangan RI] 2024). This study is conducted in Indonesia, with a specific focus on SMEs in the culinary sub-sector located in the province of West Java (791.435), the province of DKI Jakarta (65.153) and the province of Banten (167.155) (Admin [Jakarta] 2024; Rizati 2021). The areas are chosen because of their vibrant culinary industry and the significant presence of SMEs contributing to the local economy and their contribution to the GDP rate. This geographical focus allows for distributing questionnaires on how DCs, e-commerce capabilities and management capabilities influence SME performance in a region known for its diverse and thriving culinary insight.

An online Google form was used to conduct this study's survey. A total of 1000 surveys were delivered to SME owners and managers throughout Indonesia. The poll received 236 valuable responses, for a response rate of 30%. Respondents were primarily from South Tangerang (26.7%) and DKI Jakarta (18.6%). The gender distribution was 37.3% male and 62.7% female, with the majority of respondents aged 35 years to 44 years. Most respondents had an undergraduate education (61.4%), followed by those with a high school education (26.7%).

## Hypothesis model

In this study, four hypotheses are developed:

- H1:** The combination of e-commerce capability and management capability as an extension of DCs positively and significantly affects SMEs' performance.
- H2:** Strategic orientation positively and significantly affects SMEs' performance.
- H3:** Dynamic capabilities positively and significantly affect strategic orientation.
- H4:** Dynamic capabilities positively and significantly affect SMEs' performance through the mediation of strategic orientation.

## Operational variable

The DCs in this study focus on e-commerce and management capabilities. E-commerce capabilities include dimensions such as information (online catalogues and promotions), transactions

(online orders and payments) and customisation (online databases and orders). Management capabilities cover brand identity management, communication, general management, and customer relationship and service management.

Strategic orientation is a framework that helps entrepreneurs enhance organisational performance by focussing on three key types: entrepreneurial, market and LOs (Herath & Mahmood 2014). It includes various dimensions such as innovation, risk-taking, proactivity, consumer and competitor orientation, cross-functional collaboration and a commitment to learning. These dimensions emphasise the importance of being innovative, understanding consumer and competitor needs, fostering collaboration and maintaining a shared vision to drive success.

The performance in this study consists of financial performance and non-financial performance. The indicators for performance are as follows: Financial is represented by revenue growth and profit growth; non-financial is represented by productivity increase, customer service increase, innovation enhancement and channel system change.

## Ethical considerations

Ethical clearance to conduct this study was obtained from the University of Bina Nusantara, Indonesia (ref. no.: 01/ESH/IX/2024).

## Results

This study ensures that all constructs are reliable and meet the conditions for convergent validity. Additionally, the analysis of discriminant validity adheres to the criteria established by Fornell and Larcker, which states that the square root value of the Average Variance Extracted (AVE) for each construct must exceed the correlation with the other constructs in the model (Dejardin et al. 2022). The AVE of each construct is greater than the correlation of another construct. As a result, this study can consider all the measurement instrument's results to be valid and reliable for application.

Hypotheses were tested by analysing the *t*-values and *p*-values after running a bootstrap procedure with 1000 resamples. The significance level was set at *p*-values less than 0.10 for marginal acceptance and less than 0.05 for acceptance (Falihat et al. 2021). The *t*-statistic or *p*-value is used to demonstrate acceptance or rejection of a hypothesis. The path coefficient is also used to indicate the simultaneous direction of the relationship between independent and dependent variables, as well as an indirect relationship. By examining the structural model and developing a linear equation, all hypotheses were demonstrated (Prabowo, Sriwidadi & Ikhsan 2021).

The variance inflation factor (VIF) is used to assess collinearity. Multicollinearity is a statistical phenomenon in which two or more independent variables or exogenous

constructs are highly correlated, resulting in a poor predictive ability of the model. The VIF value requirement must be less than 5 because it does not indicate collinearity between constructs (Sekaran & Bougie 2016). This study shows that the VIF value is less than 5, indicating that there is no problem with multicollinearity.

The study analysed the relationships between DCs, strategic orientation and SME performance as well as the roles of e-commerce capability, management capability and strategic orientation as a mediator. Furthermore, this study analysed:

1. The impact of the combination of e-commerce capability and management capability as an extension of DCs on SMEs' performance.
2. The impact of strategic orientation on SMEs' performance.
3. The impact of DCs on strategic orientation.
4. The impact of DCs on SMEs' performance through the mediation of strategic orientation.

The results of hypothesis testing are summarised in Table 1:

**H1:** The combination of e-commerce capability and management capability as an extension of DCs positively and significantly affects SMEs' performance. The analysis shows a positive relationship between e-commerce and management capabilities and SMEs' performance, but this relationship is not statistically significant ( $\beta = 0.208, p = 0.357$ ). This suggests that these capabilities alone do not significantly enhance performance.

**H2:** Strategic orientation positively and significantly affects SMEs' performance. The result shows a positive and significant effect of strategic orientation on SMEs' performance ( $\beta = 0.400, p = 0.057$ ). SMEs with strong strategic orientation, characterised by innovation, proactiveness, and customer focus, tend to perform better.

**H3:** Dynamic capabilities positively and significantly affect strategic orientation.

Dynamic capabilities have a strong positive and significant impact on strategic orientation ( $\beta = 0.763, p = 0.000$ ). This highlights the importance of DCs in shaping strategic orientation in response to market changes.

**H4:** Dynamic capabilities positively and significantly affect performance via the mediation of strategic orientation. Strategic orientation mediates the relationship between DCs and performance ( $\beta = 0.305, p = 0.072$ ). This finding suggests that strategic orientation plays a critical role in translating DCs into improved performance outcomes.

## Discussion

This study's findings expand our knowledge of DCs' perspective. This study examined four hypotheses related to the DCs' perspective. Firstly, this study determined how positive and significant e-commerce and management capabilities as an extension of DCs can affect the performance of SMEs. The result from the research shows the path coefficient for this relationship is 0.208 with a  $p$ -value of 0.357. Therefore, even though there was a positive impact of DCs on performance, this study finds an insignificant relationship between DCs and SMEs' performance. This is

consistent with previous DC research, which found that not all DCs have a positive and significant effect on performance, implying that DC does not always generate superior performance directly (Hernández-Linares et al. 2021; Wilden et al. 2013). Furthermore, this finding interprets that e-commerce and management capabilities as components of DC were found not to impact on SME performance context directly. The result highlights that the DC-performance relationship may be mediated or moderated by other variables (Hernández-Linares et al. 2021). This finding suggests that while e-commerce and management capabilities are important, they might not directly enhance performance without other factors. Future research could explore potential mediators or moderators that could strengthen this relationship.

Secondly, this study determined a strategic orientation (SO) can positively and significantly affect SMEs' performance. The result of the research shows the path coefficient for this relationship is 0.400 with a  $p$ -value of 0.057. This hypothesis is supported at the 0.10 significance level. This finding suggests that SMEs must adopt a strategic orientation to enhance their performance. Scholars state that several single orientations, such as EO, MO and LO, have a positive and significant effect on performance; our study supports these arguments. As presented by Yang (2017), the factors that elevate SMEs' performance are SMEs with innovative, proactive, risk takers, customer orientation, competitor orientation, and inter-functional learning processes. Furthermore, the study's focus on strategic orientation as a broader construct might capture more comprehensive effects than studies focussing on single orientations. The positive impact of strategic orientation underscores the importance of SMEs adopting a proactive, customer-oriented approach to enhance performance. This supports the idea that SO is a crucial component of competitive advantage.

Thirdly, this study analysed the effects of positive and significant DCs on SO. The result shows the path coefficient for this relationship is 0.763 with a  $p$ -value of 0.000. This hypothesis is supported at the 0.10 significance level. The DC-SO relationship effect is found to be both positive and significant. This is consistent with previous literature indicating that owners who focus on the effectiveness and efficiency of operational activities (Dolan & Goodman 2017) will improve their strategy (Gregory et al. 2019). This study's strong effect size may suggest that DCs are particularly influential in environments characterised by rapid change. The significant impact of DCs on SO highlights their role in enabling SMEs to adapt and align their strategies with market demands.

Last but not least, this research highlights SO would strengthen the relationship between the combination of e-commerce capabilities and management capabilities on performance as a mediating variable. This result shows the path coefficient for this indirect relationship is 0.305 with a  $p$ -value of 0.072. This hypothesis is supported at the 0.10 significance level. This study's finding supported by



**TABLE 1:** Hypothesis testing.

Hypothesis	Path coefficient	<i>p</i>	Conclusion
H1: Dynamic capabilities → SME performance	0.21	0.36	Not significant. Positive impact, but not statistically significant. H1 Rejected.
H2: Strategic orientation → SME performance	0.40	0.06	Significant at the 0.10 level. Strategic orientation enhances SME performance. H2 Accepted.
H3: Dynamic capabilities → Strategic orientation	0.76	0.00	Highly significant. Dynamic capabilities improve strategic orientation. H3 Accepted.
H4: Dynamic capabilities (via SO) → SME performance	0.30	0.07	Significant at the 0.10 level. SO mediates the relationship between DC and performance. H4 Accepted.

SME, small and medium enterprise; SO, strategic orientation; DC, dynamic capabilities.

empirical findings suggests that SO is implemented as a mediator between DC and improved performance. This finding is consistent with previous research that used SO as a mediating variable (Abdulrab et al. 2021). The SO mediation effect is empirically proven to be that SMEs with a strong DCs' perspective will improve their strategic orientation to be more effective and efficient in operational activities, resulting in higher performance. However, the role of SO as a mediator may not be emphasised in all studies, suggesting different pathways of influence depending on the context. This finding emphasises the mediating role of SO, indicating that SMEs should focus on enhancing strategic orientation to leverage their DCs effectively.

This study has implications for SMEs seeking to develop their DC. A qualified SME will adapt to the environment by being able to solve their problems. Dynamic capability enables SMEs to establish, extend and modify their resources and capabilities to deal with uncertain business environments and internal conflict, increasing effectiveness, generating competitive advantage and profits, and achieving better performance. The findings of this study suggest that SMEs must have both e-commerce and management capabilities SMEs when dealing with the dynamic market environment. Understanding the fundamentals of the theory underlying DCs – the ability to adapt to a dynamic market environment to obtain a competitive advantage – in the context of SMEs is critical to this study. The study is designed to examine the effects of DCs' perspective on performance and highlight SO as a mediating variable. The research has several limitations. Firstly, this study examined hypotheses using cross-sectional data, which may be limited; future studies can use longitudinal data to increase confidence in the findings (Zahoor & Lew 2022). Secondly, a recommendation for future studies with a larger sample size and in the same or additional industry fields is provided. Thirdly, this study examines the impact of DC on the performance of SMEs and finds it to be insignificant. Further study is required to examine the DCs and performance of SMEs employing various resource and capability combinations.

## Conclusion

The purposes of this article are (1) to analyse the impact of DCs on the strategic orientation and performance of Indonesian SMEs; (2) to analyse the impact of strategic

orientation on the performance of Indonesian SMEs; (3) to analyse whether strategic orientation mediates the impact of DCs on SME performance; (4) to contribute to the existing literature on DCs in the context of SMEs and (5) to suggest any recommendations for SMEs, academicians and the government. The results demonstrate that DCs have a positive impact on performance but are not statistically significant. Furthermore, strategic orientation positively and significantly affects performance. Moreover, DCs have a positive and significant impact on performance. Finally, DCs play a positive and significant role in mediating SO on performance.

This study expands the literature in several ways. Firstly, these results contribute to the literature on strategic management and the DCs' perspective. Furthermore, this study highlights the examination of how strategic orientations serve as a mediating variable between DCs and SMEs' performance. Secondly, this study aims to address concerns in the business environment, such as competition, rapidly evolving technology, dynamic market conditions, future strategy planning, and the prediction of opportunities and threats. Lastly, based on the research in the literature on the effects of strategic orientation and DCs on SMEs' performance, it is expected that quality SMEs will adopt these elements in order to enhance their overall performance.

The study provides valuable insights into the dynamics between DCs, SO and performance in SMEs. While the direct impact of e-commerce and management capabilities on performance was not significant, the study highlights the critical role of strategic orientation as both a direct influencer of performance and a mediator. This suggests that SMEs should focus on cultivating a robust strategic orientation to effectively leverage their DCs.

Overall, the findings emphasise the complexity of the relationship between capabilities and performance, suggesting that strategic orientation is a key mechanism through which DCs can be translated into improved outcomes. Future research should explore these relationships further, considering different contexts and potential moderating factors to deepen the understanding of how SMEs can enhance their competitive advantage through DCs.

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### Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

### Authors' contributions

D.W. conceived and designed the study, collected and analysed data, conducted literature review, performed data analysis, wrote the article and ensured compliance with institutional guidelines. M.A. provided feedback, supervised revisions, assisted in study design, and reviewed and revised

the article for clarity and accuracy. F.A. provided technical support and expertise in strategic management, supervised the research project, made critical revisions, contributed to result interpretation, and reviewed and revised the article. R.S. provided technical support and expertise in marketing, supervised the research project, made critical revisions, contributed to result interpretation, and reviewed and revised the article.

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## Data availability

The data that support the findings of this study are available from the corresponding author, D.W., upon reasonable request. Data sharing is subject to ethical and legal considerations.

## Disclaimer

The views and opinions expressed in this article are those of the authors and are the product of professional research. It does not necessarily reflect the official policy or position of any affiliated institution, funder, agency or that of the publisher. The authors are responsible for this article's results, findings and content.

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