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DIGITAL PLATFORM CAPABILITY AND STRATEGIC AGILITY: UNCOVERING STRATEGIES TO STRENGTHEN INDONESIAN F&B SMES COMPETITIVENESS

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ABSTRACT

Background: The Indonesian food and beverages (F&B) SME sector was a major contributor to the economy but faces challenges such as intense market competition and limited digital adoption. Despite the strong potential of the digital market, only a small proportion of SMEs were integrated into digital ecosystems. Understanding how digital platform capabilities (DPC) and strategic agility (SA) influence competitiveness was crucial in this dynamic environment.
Purpose: This study examines the effect of digital platform capability on the competitiveness of small and medium-sized enterprises (SMEs), considering the mediating role of strategic agility and the moderating role of competitive intensity within Indonesia's food and beverage (F&B) sector.
Design/methodology/approach: This study was rooted in the philosophy of positivism, with a deductive design. Data were collected from 142 Indonesian F&B SMEs through structured questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The variables included DPC (independent), SA (mediator), SMEs competitiveness (dependent), and competitive intensity (moderator).
Findings/Result: SA mediates the relationship between DPC and competitiveness, which in turn increases strategic agility and the competitiveness of SMEs. The overall model explains 42% of the variance in SMEs competitiveness, which is moderately high, and competitive intensity negatively moderates the SA-competitiveness link, making agility less effective in high competition.
Conclusion: Digital platform capabilities are essential for improving SME competitiveness, particularly when they are combined with strategic agility. However, the effectiveness of agility depends on market conditions; high competitive intensity may reduce its benefits. SMEs must balance agility with operational stability, and policymakers should support digital infrastructure and capability-building initiatives.
Originality/value (State of the art): This study contributes to the literature by integrating resource orchestration theory with digital transformation and agility concepts in the context of emerging markets. It empirically demonstrates the mediating role of agility and the contextual influence of competitive intensity, offering nuanced insights for both theory development and SME digitalization strategies in volatile environments.

Keywords: SMEs competitiveness, digital platform capability, strategic agility, competitive intensity

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INTRODUCTION

The Food and Beverage (F&B) industry among SMEs in Indonesia had seen substantial growth and progression, emerging as an essential sector of the national economy (Syapsan, 2019). The trend in the food and beverage sector among small and medium-sized enterprises indicated significant growth propelled by heightened domestic consumption, evolving customer preferences, and escalating demand for varied food products (Hosseininia & Ramezani, 2016).

The expansion of culinary tourism, rise of the middle class, and surge in urbanization had significantly enhanced Indonesia's food and beverage sector (Sinurat et al. 2021; Pusung et al. 2023). The food and beverage sector contributed considerably to the economy and was crucial for creating job opportunities (Nordhagen et al. 2021). This sector offered significant job prospects, particularly in rural regions where food processing and small-scale production units occured frequently (Memon et al. 2021). The sector's capacity to generate job opportunities and revenue for millions of Indonesians indicated its significance in fostering economic growth and social stability (Tampubolon, 2023).

Despite their significant economic contribution, Indonesian SMEs faced many challenges in improving their competitiveness (Indrawati et al. 2020; Saryatmo & Sukhotu, 2021; Palupi et al. 2024; Henryanto et al. 2025). In addition, competition in the food and beverage industry was quite intense. Nauly et al. (2020) provided evidence of the high intensity of competition in Indonesia's food and beverage industry by indicating that the sector exhibits a persistent oligopoly market structure. On average, 62.60-64.50 percent of sales in the food industry were controlled by four companies (Nauly et al. 2020; Setiawan & Lansink, 2018; Setiawan et al. 2012).

ASEAN SMEs were slow to adopt new technologies, which reduced their efficiency and production (González, 2019). Given the importance of competencies and strategic flexibility, this was crucial for determining the competitive advantage of F&B SMEs in Indonesia's rapidly changing business environment (Khristianto et al. 2023; Sidabutar & Siswanto, 2024; INDEF, 2024). SMEs were less integrated into the digital ecosystem, making it difficult for them to adapt to technological developments in marketing or business operations (CSIS Indonesia, 2024).

Digital platforms capabilities (DPC) are pivotal for the competitiveness of small and medium-sized enterprises (Telukdarie et al. 2023). Digital platforms enhance operational efficiency, encourage greater consumer interaction, and reduce marketing costs (Sidabutar & Siswanto, 2024). DPC includes various implementations, such as utilizing e-commerce platforms, engaging in digital marketplaces, leveraging digital marketing strategies, managing analytical data, recording financial transactions, and maintaining customer interactions (Sarango-Lalangui, 2023).

Digital technologies strengthen the SMEs performance, in particular when dealing with global competition (Martins, 2022). Tama et al (2022) proved the potential of technology in enabling SMEs to adopt Industry 4.0, which would improve productivity and competitiveness within the Indonesian food and beverages sector. Digital tools and platforms have established themselves as vital resources for organizations, providing many kinds of advantages that increase the agility and SMEs competitiveness (Li et al. 2017).

Liu et al. (2023) have stated that digital platforms play an important role in enhancing strategic agility, which is an important characteristic of agile organizations. Digital tools improve communication by removing barriers in small and medium-sized enterprises, leading to effective collaboration, rapid information sharing, and greater co-operation among team members (Li et al. 2017). Effective communication is essential for agile organizations, facilitating quick decision-making and enabling rapid adaptation to changing market conditions (Khalil et al. 2022).

Digital technologies have been linked to firm performance, but studies often document IT use at the operational (rather than strategic) level, micro-level mechanisms (e.g., resource behaviors, employee intrapreneurship) are understudied, empirical evidence from emerging-market SMEs especially in the F&B sector is scarce, and the conditional role of market-level moderators like competitiveness is unknown (Cakmak & Tas, 2012; Le et., 2024). This study addresses these gaps by empirically examining DPC as a strategic capability, explicating SA as the mediating mechanism that converts DPC into SME competitiveness and testing competitive intensity as a boundary condition in Indonesian F&B SME contexts.

In this study, the research model postulates SA as a mediator with the argument that for many SMEs, especially in highly competitive business environments such as the food and beverage sector, the ability to adapt is not only an advantage, but also a necessity (Adomako et al. 2022). SA gives these firms the flexibility to adjust strategies, capitalize on opportunities and stay ahead of competitors, even with limited resources (Hemmati et al. 2016). By acting as a mediator, it helps explain how internal strengths are transformed into real-world success (Doz & Kosonen, 2010; Tallon & Pinsonneault, 2011; Clauss et al. 2022).

This study uses CI as a moderator to examine whether it strengthens or weakens the relationship between and competitiveness. Keskin et al. (2021) revealed that CI increases the association between firm capabilities, including agility, and export performance through competitive advantage, confirming the hypothesis that more competition makes firms more agile and innovative. Su et al. (2017) found that competitive strategy positively moderates the exploration-performance relationship, underlining the need to relate strategic initiatives to external competitive pressures.
In a contrary study, CI do not significantly affect strategic flexibility and performance of SMEs in Nigeria (Otache, 2024). Kankam-Kwarteng et al. (2019) found that CI has little or no effect on low-cost techniques and firm performance, suggesting that intense competition may reduce the benefits of agility in certain industries or economies. These differences demonstrate that theoretical and empirical understanding of the conditions under which CI promote or diminish the relationship between strategic agility and SME competitiveness is inconsistent. It is relevant for F&B related research in Indonesia to use CI as a moderator.

This conceptual research framework explores whether digital platform capabilities (DPC), strategic agility (SA), and competitive intensity (CI) impact the SMEs competitiveness in the food and beverage sector in Indonesia. Underpinned the Resource Orchestration Theory (ROT), this analysis emphasizes capability rather than resources, as capability signify an organisation's proficiency in mobilizing, coordinating and utilizing resources efficiently to build competitive advantage (Sirmon et al. 2011).

METHODS

All of the Indonesian small and medium-sized food and beverage (F&B) businesses are included in this study's population. According to the Indonesia Ministry of Trade (2022), these small and medium-sized food and beverage businesses can greatly enhance Indonesia's economy, which will benefit both current and future SMEs.

Depending on the number of employees, SMEs are classified by the World Bank (Madani, 2018). Small businesses typically employ between 10 and 49 employees, while medium-sized businesses employ between 50 and 249 employees. Many countries have adopted this definition, and they use comparable criteria to categorize SMEs. This classification is internationally significant because its application is comparable across various regions globally (Cunningham, 2010).

The research focuses on the owners or managers of F&B SMEs, as they are directly involved in business management and can offer valuable perspectives. The respondents are chosen using a stratified and purposive sampling method. This ensures that the sample is diverse and representative of F&B SMEs across Indonesia, covering different types and sizes.

This method was rooted in the philosophy of positivism, which maintained that reality was objective and amenable to methodical measurement and observation (Bryman, 2012). The study endeavored to evaluate predetermined hypotheses that were based on established theories by utilizing a deductive framework. It was specifically focused on the impact of digital platform capability, which was complemented by strategic agility and competitive intensity, as key external factors that influenced competitiveness in F&B SMEs.

In this study, a non-probability sampling technique called purposive sampling would be employed. Purposive sampling was selected because it allowed researchers to select samples based on characteristics that fulfill the criteria established (Cooper & Schindler, 2019), particularly those in the F&B sector with a formal business license and active digital engagement. Due to the diversity of SMEs in Indonesia, purposive sampling guaranteed the data's relevance and richness (Etikan et al. 2016; Palinkas et al. 2015). To augment the data's robustness and mitigate sampling bias, stratified

sampling was implemented within the purposively selected sample. There was a regional stratification of SMEs in Indonesia, with some examples being Java, Sumatra, Kalimantan, and Eastern Indonesia.

This study used SmartPLS to evaluate hypotheses using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) approach. To analyze and clarify the relationships between the variables, this study used a structured questionnaire. A seven-part questionnaire was employed in this study, with variables assessed on a 5-point Likert scale.

The minimum sample size required for the research was determined using the G*Power analysis procedure, which was based on medium effect size criteria (0.15), error 0.05, power 0.95, and four predictors. The G*Power analysis suggested that a minimum of 129 respondents would be sufficient for this investigation.

In order to enhance the reliability of the results and to account for potential non-responses, this research recruited a total of 142 respondents (over 129 respondents) from small and medium-sized enterprises in the Indonesian food and beverage sector. For studying Indonesian F&B SME competition dynamics, the sample was extensive and statistically robust. Variables and operational definitions in Table 1.

When it comes to assessing SMEs' capacity to compete in a cut-throat market, the model identifies key measurements. In order to develop variable constructs, it is necessary to examine a variety of concepts from previous research and modify them to suit the conditions of the research object. Questionnaires that will serve as research tools are developed using these constructs as a foundation.

Table 1. variables and operational definitions

Variables	Indicators	Source
SMEs Competitiveness	Competitive pricing	(Anning-Dorson, 2021)
	Distribution coverage	
	Marketing research	
	Product performance	
Digital Platform Capability (DPC)	We communicate and coordinate product/price/delivery/payment information with customers.	(Liu et al. 2023)
	We disseminate product or service information.	
	We understand product and market preference.	
	We aggregate more customers.	
	We use a platform match service to match with customers.	
Strategic Agility (SA)	Respond to changes in aggregate consumer demand	(Tallon & Pinsonneault, 2011)
	Customize a product or service to suit an individual customer	
	React swiftly to new product or service launches by competitors	
	Introduce a new pricing schedule in response to changes in competitors' prices	
	Expand into new regional or new markets	
	Change (i.e. expand or reduce) the variety of products or services available for sale	
	Adopt new technologies to produce better products or services	
Competitive Intensity (CI)	Price competition was a hallmark of our industry	(Su et al. 2017)
	Any action that a company took, others made a response swiftly	
	One heard of a new competitive move almost every day	
	Competition in our industry was cut-throat	

Both the reliability test using Cronbach's alpha and the validity test using product moment correlation (Pearson correlation) have been successfully completed by our research instruments. Digital platforms are exogenous, SME competitiveness is endogenous, strategic agility is a mediator, and competition intensity is a moderator.

Digital Platform Capability and Strategic Agility

One of the main topics of recent organizational studies has been the relation between digital platform capability (DPC) and strategic agility (SA). This has brought to light how digital infrastructure drives adaptation in dynamic company contexts. DPC enables digital-driven SA, which boosts corporate performance, according to Liu et al. (2023).

Due to this ongoing evolution, digital platforms are essential for organizations to create strategic agility to respond to obstacles and seize opportunities (Li et al. 2017; Warner & Wäger (2019)). According to their research, the key enabler of SA is the capability of digital platforms. Organizations that can maximize digital platforms' potential will be more flexible, make better decisions, and compete. From the above, we can form the hypothesis: **(H1):** Digital Platform Capability enables Strategic Agility greater

Digital Platform Capability and SMEs Competitiveness

According to Wu et al. (2023), small and medium-sized enterprises (SMEs) can gain an eco-competitive advantage by embracing digital transformation. Having the right digital capabilities can boost a small or medium-sized enterprise's competitive advantage (Salo & Matalamaki, 2023; Cakmak & Tas, 2012). Permana et al. (2019) found that digital capabilities affect competitive advantage and performance.

Qosasi et al. (2019) discovered that innovation and digilization impact a company's competitive advantage. Digitally enabled SMEs with more inventive products and services will gain a competitive edge faster. Wang et al. (2023) found that digital capabilities (basic, operations, and integration) improve firm performance using various performance metrics. DPC are regarded as a core competency for B2B enterprises seeking a competitive advantage in the digital economy, with broad features of core competencies (Liu et al. 2022). We propose the following hypothesis, which is predicated on prior research regarding the correlation between digital capabilities, competitive advantage and firm performance, postulate: **(H2)**: Digital platform capability has positive effect on the competitiveness of small and medium-sized enterprises.

Strategic Agility and SMEs Competitiveness

Arbussà, Bikfalvi, and Marques (2017) underscore the significance of strategic agility (SA)-driven business model renewal in the context of SMEs, emphasizing the role of dynamic capabilities and creativity in the cultivation of strategic agility. Strategic agility helps SME competitiveness by renewing and adapting business models.

Agile SMEs can better adjust financial resources and human resources, lower production costs, and adapt to changing customer expectations and market disruptions (Battour et al. 2021; Gerald et al. 2020; Almahamid et al. 2010). SA includes adaptive pricing, rapid product innovation, and streamlined operations, which improve market positioning and resilience.

Ogunleye et al (2021) examines the influence of SA on the performance of small and medium-sized enterprises, emphasizing the importance of a prompt response to environmental changes in establishing a competitive advantage for organizations. This supports the idea that SA helps SMEs compete by quickly adapting to market changes.

Palanisamy, Chelliah, and Muthuveloo (2022) investigate the impact of SA on organizational performance during the pandemic, emphasizing the importance of SMEs improving their SA to increase competitiveness. This suggests that SA is essential for SMEs to remain competitive and navigate challenging environments. The findings indicate that agility capabilities, including strategic agility, are critical for increasing SME competitiveness. Thus, we propose the following hypothesis: **(H3):** There is a positive relationship between Strategic Agility and SME Competitiveness.

Digital Platform Capability, SMEs Competitiveness and Strategic Agility

Vecchiato (2015) studies the value that organizations generate through foresight, emphasizing the significance of SA in adapting to external changes. This point of view fits with the idea that the abilities of

digital platforms help with strategic flexibility, which in turn affects the success of small businesses.

Relevant studies can be employed to substantiate the hypothesis that SA mediates the relationship between SME Competitiveness and Digital Platform Capabilities. Wu et al. (2023) and Liu et al. (2023) underscore the influence of DPC on business performance by utilizing digital-enabled strategic agility. In addition, Wang et al. (2017) investigate the mediating role of collaborative innovation capability in IT-enabled inter-firm collaboration. The notion that DPC, as a component of IT-enabled collaboration, contributes to SA, ultimately influencing the competitiveness of SMEs, is supported by this perspective. Therefore, we suggest: **(H4):** The relationship between Digital Platform Capability and SME Competitiveness is mediated by Strategic Agility.

Strategic Agility, SMEs Competitiveness and Competitive Intensity

Su, Z., Guo, H., & Sun, W. (2017) emphasize how competition intensity (CI) affects strategic agility (CA) and SME competitiveness. Their study shows that competitive intensity moderates SME enterprises. This suggests that SA may affect SME competitiveness depending on market or industry competitiveness. CI moderates the effects of company capabilities and competitive tactics on export performance, according to Keskin et al. (2021). The authors discovered that CI strongly affects SA and SME competitiveness, suggesting that firms in highly competitive situations must improve their strategic agility to stay ahead.

In addition, Kula (2022) examines how CI moderates the relationship between environmental turbulence and organizational agility. The results indicate that CI moderates the environmental turbulence-organizational agility relationship, demonstrating that it shapes organizational responses to turbulent situations. These empirical results allow us to assume the following research hypothesis: **(H5):** Competitive intensity moderates the relationship between strategic agility and SME competitiveness.

RESULTS

The findings are presented in three categories: measurement model validity and reliability, hypothesis testing results, and further information. Moreover, the predictive relevance of the investigation is also demonstrated. After that, the data analysis concludes with a summary of the findings.

Outer Model Testing

Following the methodology outlined by Hair et al. (2021), this study used indicator reliability, discriminant validity, convergent validity, and internal consistency reliability to assess the measurement model's reliability and validity.

Indicator reliability aims to assess whether the latent variable measurement indicators are reliable or not. This is done by evaluating the outer loading results for each indicator. In Table 2, the loading value above 0.7 indicates that the construct can explain more than 50% of the variance of its indicators (Wong, 2013; Sarstedt et al. 2017).

The outer loading value can be said to be valid with the limitation that the Outer Loading value> 0.5 is still acceptable as long as the validity and reliability of the construct meet the requirements. So based on the validity of outer loading, it is stated that all items or indicators are valid in convergent validity.

Based on Table 2, it can be seen that all constructs have Cronbach's Alpha values > 0.6 even all of them, so it can be said that all constructs are reliable. For example, the Cronbach's Alpha of the latent variable Digital Platform Capability (DPC) is 0.857 > 0.6, so DPC is reliable.

The Average Variance Extracted (AVE) value must be equal to 0.5 or more. An AVE value of 0.5 or more means that the constructs can explain 50% or more of its item variance (Wong K.K., 2013, Sarstedt et al. 2017). Table 2 shows that based on the Average Variance Extracted (AVE) value to determine the achievement of convergent validity requirements, all constructs have achieved convergent validity requirements because the AVE values are all > 0.50. For example, the AVE of the latent variable Digital Platform Capability (DPC) is 0.640 > 0.5, so DPC is convergent valid.

Based on Table 3, all the roots of the AVE (Fornell-Larcker Criterion) of each construct are greater than the correlation with other variables, so the discriminant validity requirements in this model have been met, as listed in the table above, for example

SMEs Competitiveness, the Fornell-Larcker Criterion value is 0.726. All items or indicators have met the validity and reliability requirements and there is no multicollinearity between indicators, so the next step is to analyze the inner model.

Inner Model Testing

The path coefficients between constructs are measured to see the significance and strength of the relationship and also to test the hypothesis. The path coefficient values range from -1 to +1. The closer to +1, the stronger the relationship between the two constructs. A relationship that is closer to -1 indicates that the relationship is negative (Sarstedt et al. 2017).

The results of the analysis at the inner level are as follows: (P value of the path coefficient that directs the effect)

Table 4 shows the results of hypothesis testing in this study. The results of this research indicate that the effect of digital platform capability on strategic agility has a value of 6.895 and is a positive and significant result because it has a value >1.96 so it can be concluded that hypothesis 1 is accepted ($\beta = 0.446$, $p < 0.05$). Furthermore, the path coefficient output shows that the parameter coefficient for the DPC variable on SME Competitiveness is 0.239, indicating that DPC positively affects SME Competitiveness or that DPC values increase SME Competitiveness. One unit of DPC boosts SME competitiveness 23.9%. The findings of this study reveal a significant and positive effect of Digital Platform Capability (DPC) on the competitiveness of SMEs ($\beta = 0.239$, $t = 3.130$, $p < 0.05$), thereby supporting hypothesis 2.

Table 2. Reliability and convergent validity

	Cronbach's Alpha	Composite Reliability	AVE
Competitive Intensity (Z)	0.805	0.871	0.63
Digital Platform Capability (X)	0.857	0.898	0.64
Mod_Z_Y	1	1	1
SMEs Competitiveness (Y)	0.7	0.817	0.527
Strategic Agility (M)	0.875	0.903	0.574

Table 3. Discriminant Validity

	CI (Z)	DPC (X)	Mod_Z_Y	SMEs (Y)	SA (M)
Competitive Intensity (Z)	0.794				
Digital Platform Capability (X)	0.35	0.8			
Mod_Z_Y	-0.237	0.038	1		
SMEs Competitiveness (Y)	0.36	0.463	-0.032	0.726	
Strategic Agility (M)	0.592	0.446	-0.011	0.625	0.758

Table 4. Path coefficients and hypothesis testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Remarks
Digital Platform Capability (X) → Strategic Agility (M)	0.446	0.456	0.065	6.895	0.000	Accepted
Digital Platform Capability (X) → SMEs Competitiveness (Y)	0.239	0.242	0.076	3.130	0.002	Accepted
Strategic Agility (M) → SMEs Competitiveness (Y)	0.556	0.564	0.074	7.538	0.000	Accepted
Digital Platform Capability (X) → Strategic Agility (M) → SMEs Competitiveness (Y)	0.248	0.258	0.052	4.791	0.000	Accepted
Mod_Z_Y → SMEs Competitiveness (Y)	-0.049	-0.053	0.082	0.597	0.551	Rejected

Likewise, hypothesis 3 is supported (β = 0.566, t = 7.538, p < 0.05). The path coefficient is significant, indicating that strategic agility positively affects SME Competitiveness. This means that if food and beverage SMEs in Indonesia have good adaptability and are sensitive to changes in the business environment, it can improve SME competitiveness. According to Table 4, H4 is also confirmed (β = 0.248, p < 0.05), which means there is an effect of digital platform capability on SMEs Competitiveness, mediated by Strategic Agility.

A surprising finding is that based on bootstrap or resampling calculations, the estimated coefficient of the Strategic Agility variable on SME Competitiveness moderated by Competitive Intensity bootstrap results is -0.049, with a calculated t value of 0.597. As a result, the p value is 0.551, which is greater than 0.05, and H5 is rejected. Hypotheses testing results in Figure 1.

Coefficient of Determination: R-Square and Adjusted R-Square

The coefficient of determination (R^2) is a way to evaluate how much of the endogenous constructs can be explained by the exogenous constructs. The coefficient of determination (R^2) is expected to be between 0 and 1. R^2 values of 0.75, 0.50, and 0.25 indicate that the model is strong, moderate, and weak (Sarstedt et al. 2017). Chin gives criteria for R^2 values of 0.67, 0.33 and 0.19 as strong, moderate, and weak (Chin, 1998).

Based on Table 5, the R Square value of the joint influence of SMEs Competitiveness is 0.437 with an adjusted R-square value of 0.420, it can be explained that all exogenous variables simultaneously affect SMEs Competitiveness by 42% where > 33% is moderate, so the influence of all exogenous variables on SMEs Competitiveness is moderate, while the Strategic Agility variable is weak.

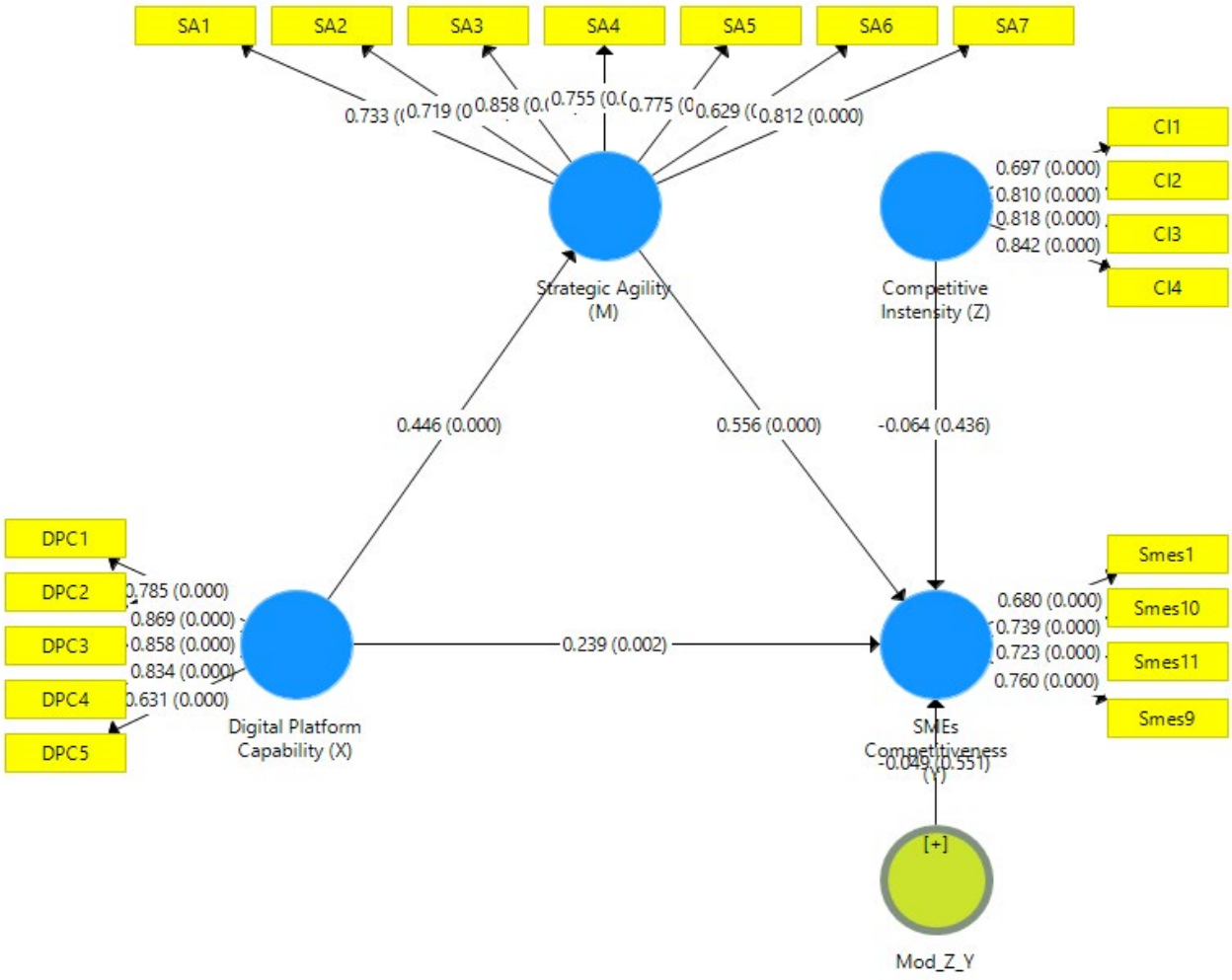

Figure 1. Hypotheses testing results

Effect Size f-square

In addition to assessing whether there is a significant relationship between variables, researchers also need to assess the magnitude of the influence between variables with Effect Size or f-square (Wong, 2013). The f^2 value of 0.02 is small, 0.15 is medium, and 0.35 is large. A value less than 0.02 can be ignored or considered to have no effect (Sarstedt et al. 2017).

Based on Table 6, F Square value above, the effect of DPC on SMEs Competitiveness includes a medium size effect. The effects of DPC on Strategic Agility and Strategic Agility on SMEs Competitiveness include large size effects, while the rest include small size effects.

Predictive Relevance or Q Square (Q^2)

Cross-validated redundancy (Q^2) or Q-square test is used to assess predictive relevance. A Q^2 value > 0.05 indicates that the model has accurate predictive relevance for a particular construct while a Q^2 value < 0.05 indicates that the model lacks predictive relevance (Sarstedt et al. 2017). Predictive relevance is to assess whether the predictions obtained are relevant or not. The calculation in PLS SEM uses Q Square.

Based on Table 7, the Prediction Relevance value of Strategic Agility and SMEs Competitiveness is relevant or accurate because the Q Square value> 0.05.

The Effect of Digital Platform Capability on Strategic Agility

Based on empirical evidence, the results of this research indicate that the effect of digital platform capability (DPC) on strategic agility (SA) is a positive and significant. This study's result is supported by earlier research that focused on the importance of DPC in helping small businesses be more strategic. Ahmed et al. (2022) discovered that strategic agility is significantly and positively influenced by DPC, particularly when mediated by intellectual capital and moderated by environmental dynamism. Investing in digital infrastructure and capabilities may help SMEs adapt faster to external changes.

Table 5. R-Square and Adjusted R-Square

	R Square	R Square Adjusted
SMEs Competitiveness (Y)	0.437	0.420
Strategic Agility (M)	0.199	0.193

Table 6. Effect size f^2

	Competitive Intensity (Z)	Digital Platform Capability (X)	Mod_Z_Y	SMEs Competitiveness (Y)	Strategic Agility (M)
Competitive Intensity (Z)				0.004	
Digital Platform Capability (X)				0.079	0.249
Mod_Z_Y				0.004	
SMEs Competitiveness (Y)					
Strategic Agility (M)				0.315	

Table 7. Predictive Relevance or Q Square (Q^2)

	SSO	SSE	Q^2 (=1-SSE/SSO)
Competitive Intensity (Z)	568.000	568.000	
Digital Platform Capability (X)	710.000	710.000	
Mod_Z_Y	142.000	142.000	
SMEs Competitiveness (Y)	568.000	448.697	0.210
Strategic Agility (M)	994.000	886.436	0.108

The findings of this study are also in line with the research results of Ashrafi et al. (2019) which show that DPC increases business innovation and agility. These capabilities help SMEs identify and seize market opportunities, improving their responsiveness to external stimuli. In addition, it is also supported by Jun et al. (2022) who emphasize that DPC enhances business innovation and agility. When combined with organizational readiness and improvisation ability, DPC enables rapid adaptation to technological and market, and policy changes, resulting in superior innovation performance.

This study confirms previous research showing that small and medium-sized enterprises (SMEs) in the food and beverage industry in Indonesia can benefit from using digital technologies like e-commerce platforms, customer analytics, and integrated digital communication tools to quickly adjust their strategies and operations (Suseno, 2023). As a result, DPC is more than just a technological asset; it is also a strategic enabler, allowing SMEs to navigate uncertainty and maintain a competitive advantage in volatile environments (Jiang et al. 2023; Reed, 2021).

The Effect of Digital Platform Capability on SMEs Competitiveness

The analysis shows that digital platform capability (DPC) positively influences SME Competitiveness. This result underscores the pivotal role of DPC in enhancing SMEs' market positioning, particularly within the food and beverage sector in Indonesia. The result aligns with previous empirical studies, such as Yusuf et al. (2023), who demonstrated that digital agility significantly boosts SME competitiveness in Makassar. Similarly, Rupeika-Apoga et al. (2022) and Liao et al. (2024) found that digital orientation and platform capabilities serve as critical enablers of digital transformation and sustainable competitive advantage in dynamic business environments.

Moreover, the implications of this study resonate with those of Le et al. (2024) and Saputra et al. (2024), who emphasize the synergistic effects of digital capabilities on SMEs' performance when leveraged alongside dynamic capabilities and intellectual capital. For food and beverage SMEs in Indonesia, the ability to coordinate product information, pricing strategies, delivery processes, and customer engagement through digital platforms plays a crucial role in market differentiation (CSIS Indonesia, 2024).

Digital tools such as e-commerce platforms and social media not only broaden customer outreach but also provide critical data for understanding consumer preferences (Novandari et al, 2023). By effectively managing these digital touchpoints, SMEs can build stronger customer relationships, adapt quickly to market changes, and enhance their overall competitiveness (Wang et al, 2023). Thus, this study reinforces the strategic importance of DPC as a key resource in the digital era, particularly for SMEs operating in highly competitive and rapidly evolving sectors.

The Effect of Strategic Agility on SMEs Competitiveness

The finding of this study found that strategic agility (SA) positively affects SME Competitiveness. This means that if food and beverage SMEs in Indonesia have good adaptability and are sensitive to changes in the business environment, it can improve SME competitiveness. The results of this study are supported by a large amount of literature that points to strategic agility as a key factor in the competitiveness of small and medium-sized enterprises (SMEs). Through improved operational efficiency and resource utilization, SA has been empirically demonstrated by Battour et al. (2021), Gerald et al. (2020), and Almahamid et al. (2010) to have a positive impact on sustainable competitive advantage.

In addition, the present result is in line with those of Tallon & Pinsonneault (2011); Kurniawan et al. (2020) and Abraheem (2023), who contend that SA enables SMEs to efficiently orchestrate internal and external resources and is more than just a reactive capability. The food and beverage sector in Indonesia is particularly volatile, so SMEs must constantly adapt to changes in consumer preferences, regulatory frameworks, and supply chain dynamics.

The Mediating Effect of Strategic Agility Between Digital Platform Capability and SMEs Competitiveness

This study found that strategic agility (SA) mediates the relationship between digital platform capability (DPC) and SME competitiveness. This supports the idea that SA firm's ability to sense, respond to, and adapt to market dynamics is necessary to enhance competitive advantage with DPC alone.

The findings of this study are supported by Adomako et al. (2022) who also found that DPC improves the competitiveness of SMEs in developing countries by increasing SA. When SMEs use digital platforms for customer engagement, data analysis, marketing, and operational coordination, they can adapt more quickly to changing market conditions (Le at al., 2024; Liao et al. 2024). SA fosters innovation, responsiveness, and dynamic resource allocation, thereby improving market competitiveness (Yousaf et al. 2021; Yusuf et al. 2022; Liu et al. 2023).

By anticipating consumer preferences and quickly refocusing their strategy, firms can stay ahead of competitors (Yang et., 2023). Therefore, when combined with agile practices, which encourage quick learning, adaptability, and responsiveness, DPC becomes a strategically useful solution (Adomako et al. 2022). In the context of food and beverage SMEs in Indonesia, this combination enables firms to adjust product offerings in real-time, optimize customer reach, and scale their operations, thereby achieving sustained competitiveness in a volatile and increasingly digital business landscape (Suseno 2023).

Competitive Intensity Moderates the Relationship Between Strategic Agility and SME Competitiveness

Strategic Agility (SA) has a negative effect on SME Competitiveness moderated by Competitive Intensity (CI), which can be explained that CI weakens the effect of SA on SMEs Competitiveness. The empirical finding that SA has a weak and statistically insignificant effect on SMEs' competitiveness under high Competitive Intensity aligns with recent scholarly work. Otache (2024) emphasizes that the effectiveness of strategic capabilities, such as agility, is highly contingent upon external environmental factors, particularly the level of competitive intensity. In intensely competitive markets, SMEs often experience pressure to adapt swiftly to rapid changes in consumer demand, technology, or pricing strategies.

Further supporting this position, Kankam-Kwarteng, Osman, and Donkor (2019) contend that SMEs operating in highly competitive environments may benefit more from operational stability and cost efficiency than from frequent strategic shifts. Their study, focused on restaurant enterprises, suggests that resource optimization and consistent service delivery can provide a more effective competitive edge than constantly reconfiguring strategies in response to external pressures.

Therefore, SME business owners/managers should assess the level of competitive intensity in their industry before investing in agility-orientated strategies. Therefore, rather than assuming that agility can universally improve competitiveness, a more focused approach that integrates internal readiness and the demand of the external environment is needed.

Managerial Implication

SME business owners/managers should prioritize building digital platform capabilities (e.g., e-commerce integration, data analytics) to enhance operational responsiveness and market reach. However, digital tools alone are insufficient; firms must concurrently cultivate strategic agility—enabling rapid adaptation to consumer trends and supply chain disruptions. In highly competitive markets, temper agility initiatives with operational stability (e.g., cost control, supply chain resilience) to avoid overextension. Policymakers should subsidize SME digital training programs and cloud-based infrastructure to lower adoption barriers. Finally, regularly audit competitive intensity to calibrate agility investments, focusing on differentiation (e.g., niche products) rather than reactive pivots in volatile segments.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study examined the relationships between digital platform capability (DPC), strategic agility, and SMEs' competitiveness in Indonesia's food and beverage sector, with competitive intensity as a moderating variable. The empirical results show that DPC improves strategic agility and SME competitiveness. Strategic agility also helps convert digital capabilities into competitive advantages.

Many studies have shown that small and medium-sized businesses (SMEs) must go digital to survive and grow in rapidly changing markets (Ashrafi et al. 2019; Yousaf et al. 2021; Adomako et al. 2022; Le et al. 2024; Liao et al. 2024). These results add to the body of work. Digital platforms help SMEs enhance their operations, expand their markets, and better serve their customers. The food and beverage industry relies on real-time decision-making, agile marketing strategies, and sustainable growth. The DPC helps with all of these things and more. In line with Liu et al. (2023); Le et al. (2024); and Saputra et al. (2024), digital capabilities enable strategic responsiveness and superior business performance.

In addition, strategic agility mediates that digital capabilities alone are insufficient without the firm's ability to adapt quickly and strategically. As a result of their agility, SMEs can better transform digital insights into strategies, respond to changing consumer tastes, and realign internal resources. This supports resources orchestration theory (ROT), which states that firms must integrate, build, and reconfigure internal competencies to adapt to environmental changes (Sirmon et al. 2011). The mediating effect confirms that strategic agility serves as a pathway through which digital capability becomes a source of competitive strength (Hemmati et al. 2016).

The effect of strategic agility on SME competitiveness is statistically insignificant when moderated by high competitive intensity. Agility may be limited by resource constraints, operational inconsistencies, and strategic overextension under extreme competitive pressure. According to Otache (2024) and Kankam-Kwarteng et al. (2019), firms in intense competition may prioritize operational stability and cost efficiency over strategic reconfiguration. Without adequate supporting infrastructure, agility may lead to misaligned strategies and poor performance.

These findings emphasize the need to match strategic capabilities with the external environment of the organization. To sustain agile transformation, business owners/managers need to determine whether their firms are digitally mature, innovative, and have adaptive leadership, and whether the market conditions are favorable to agility-based approaches. Agility should be viewed as a context-dependent capability that must be matched with environmental demands and organizational strengths when formulating strategy.

Recommendations

The findings of this study can be applied by SME owners/managers and emerging market policymakers. Investments in digital infrastructure should be supplemented by initiatives that foster adaptive capabilities and enhance organizational agility. This is especially true in fast-paced and competitive industries, such as food and beverages.

Business owners and managers are advised to assess their company's digital readiness and external market conditions before implementing an agility-based strategy approach. Policymakers, in this case the Ministry of Comdigi, the Ministry of MSMEs, and the Ministry of Cooperatives, should support the development of digital ecosystems while facilitating capacity-building initiatives to enhance the resilience of SMEs in volatile sectors. President Prabowo's flagship programme, Koperasi Merah Putih, can be a leading sector at the village level by involving universities, business associations, and technology-based startups to improve the digital capabilities of SMEs., especially for the younger generation.

To fully understand the long-term effects of digital transformation and agility, future researchers should consider using longitudinal designs. Furthermore, by examining the impact of internal enablers, including digital leadership, absorptive capacity, and innovation culture, we can gain a more comprehensive understanding of how SMEs convert agility into competitive outcomes in response to varying levels of competitive pressure.

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