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Digital Governance Transformation in Retail MSMEs: An Agile Administration and Omnichannel Excellence Integration Model

Rahayu Tri Utami[1*], Susbiyantoro[2], Edy Sambodja[3], Farida Frihatini[4]

Universitas Ichsan Satya, Indonesia[1,3]

Politeknik LP3I Jakarta, Indonesia[2]

Universitas Indraprasta PGRI, Indonesia[4]

Korespondensi: ayyu.sam@gmail.com

Abstract

Digital transformation has become a strategic necessity for retail micro, small, and medium enterprises (MSMEs) amid intensifying digital market competition; however, many MSMEs adopt digital technologies without strengthening structured governance and administrative systems, resulting in fragmented and unsustainable digital initiatives. This study aims to examine the roles of Digital Governance Effectiveness and Agile Administration in shaping Omnichannel Excellence and to analyze their impact on MSME performance and competitiveness. A quantitative confirmatory research design was employed, involving 120 retail MSME owners and managers who have adopted at least one digital channel, and the data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM). The results indicate that Digital Governance Effectiveness significantly enhances Omnichannel Excellence, Agile Administration improves organizational responsiveness and adaptability, and Omnichannel Excellence positively influences MSME performance and competitive advantage. These findings imply that successful digital transformation in retail MSMEs depends not only on technological adoption but also on structured digital governance mechanisms and agile administrative capabilities to ensure sustainable performance. This study contributes to the development of a governance-based digital transformation framework and provides practical insights for MSMEs in designing integrated and sustainable digital strategies.

Keywords: *agile administration; digital governance; MSME performance; omnichannel excellence; PLS-SEM*

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Introduction

Digital transformation has become a structural force reshaping business ecosystems globally. The rapid growth of internet penetration, mobile connectivity, and digital platforms has accelerated the integration of digital technologies into commercial activities across sectors (Marino-Romero & Folgado-Fernández, 2024). Retail transactions increasingly rely on e-commerce platforms, digital payment systems, and mobile applications to enhance efficiency and customer engagement (Thomas, 2025). This digital shift has significantly altered competitive dynamics and compelled firms to rethink operational models and value creation processes (Dannenberg *et al*, 2020). In this environment, digital transformation is no longer a strategic alternative but a fundamental requirement for sustaining competitiveness (Sagala & Őri, 2024).

Micro, small, and medium enterprises (MSMEs), particularly in the retail sector, represent a vital pillar of economic development in many emerging economies. In Indonesia, MSMEs contribute substantially to economic resilience and organizational sustainability (Lestari & Nofi Puji, 2025). Although a

growing number of retail MSMEs have adopted digital tools such as online marketplaces, social media platforms, and messaging applications, adoption levels remain uneven (Sagala & Őri, 2024). Many enterprises utilize digital channels primarily for promotional exposure without restructuring internal processes or decision-making systems. This condition suggests that digital adoption does not automatically translate into comprehensive digital transformation (Marino-Romero & Folgado-Fernández, 2024).

Despite increasing digital engagement, retail MSMEs frequently experience a governance gap between technology utilization and organizational management systems. Digital initiatives are often implemented without structured coordination mechanisms, integrated data management, or standardized governance frameworks (Chumairoh & Widiyarta, 2024). As a result, digital activities become fragmented, reactive, and difficult to sustain in the long term. Digital governance plays a critical role in ensuring transparency, coordination, and effective digital decision-making within organizations (Rocheleau, 2005). Without strong governance structures, digital investments may fail to generate measurable improvements in performance and competitiveness.

Existing literature on MSME digital transformation predominantly emphasizes technological readiness, innovation capability, and digital marketing performance (Sagala & Őri, 2024). While these perspectives provide valuable insights, they rarely integrate governance effectiveness and organizational agility into a unified conceptual framework. Research based on dynamic capability theory identifies agility as a key factor enabling organizations to adapt in turbulent environments (Zhang et al., 2023). However, governance mechanisms are often discussed separately from administrative responsiveness, especially in MSME contexts, while digital governance studies are more commonly focused on the public sector rather than small businesses (Dunleavy et al., 2006; Nugraha et al., 2025). Therefore, a theoretical gap remains in explaining how digital governance and agile administration function as complementary capabilities in retail MSMEs undergoing digital transformation.

Empirically, limited research has examined the combined influence of digital governance effectiveness and agile administration on omnichannel capability and MSME performance outcomes. Most prior studies analyze these constructs independently, leading to fragmented explanations of digital competitiveness. Furthermore, omnichannel excellence defined as the seamless integration of online and offline customer interaction channels has predominantly been investigated in large retail corporations (Verhoef *et al*, 2015; Alonso-Garcia *et al*, 2021). Recent studies emphasize the importance of channel synchronization in enhancing customer journey satisfaction and performance outcomes (Wu *et al*, 2025), yet evidence from retail MSMEs remains limited. This gap is increasingly urgent given the intensifying digital competition faced by retail MSMEs in platform-driven markets.

Based on the identified problem statement and the theoretical and empirical gaps, this study aims to: (1) examine the effect of Digital Governance Effectiveness on Omnichannel Excellence; (2) analyze the role of Agile Administration in enhancing Omnichannel Excellence; and (3) investigate the impact of Omnichannel Excellence on the performance and competitiveness of retail MSMEs. By proposing and empirically testing an integrated governance agility omnichannel framework, this research seeks to strengthen the theoretical integration of digital governance and dynamic capability perspectives within the MSME context. The study contributes to the literature by offering a more comprehensive explanation of how structured governance mechanisms and administrative agility collectively drive sustainable digital transformation. Practically, the findings are expected to provide strategic guidance for retail MSMEs in designing coherent digital strategies that enhance long-term competitiveness.

Literature Review

MSME Performance

MSME performance reflects the extent to which small enterprises achieve improvements in operational efficiency, market expansion, profitability, and competitive positioning. Within the Industry 4.0 framework, digital transformation is recognized as a key driver of performance enhancement,

particularly when supported by organizational readiness, technological maturity, and managerial capability (Sagala & Óri, 2024; Marino-Romero & Folgado-Fernández, 2024). Systematic reviews further confirm that digital transformation strengthens SME resilience and adaptability, which are critical dimensions of performance sustainability in dynamic markets (Lestari & Nofi Puji, 2025). However, performance outcomes are not determined solely by technology adoption; effective governance mechanisms are required to align digital initiatives with strategic objectives and ensure coordinated resource utilization (Rocheleau, 2005). In addition, agile administrative capability enhances organizational responsiveness and accelerates decision-making processes, thereby improving operational performance in digitally competitive environments (Zhang *et al*, 2023; Danar, 2023). Furthermore, the integration of online and offline channels through omnichannel strategies has been shown to positively influence customer satisfaction and competitive advantage, which ultimately contribute to firm performance (Verhoef *et al*, 2015; Alonso-Garcia *et al*, 2021). Therefore, it is theoretically reasonable to expect that Digital Governance Effectiveness and Agile Administration indirectly enhance MSME performance through the strengthening of Omnichannel Excellence.

Digital Governance

Digital governance refers to the structured mechanisms, policies, and decision-making frameworks that regulate the use of digital technologies within an organization to ensure strategic alignment, accountability, and effective coordination. From a governance perspective, digital governance extends beyond technical IT management by integrating digital initiatives with organizational objectives and control systems (Rocheleau, 2005). In the context of technological modernization, governance mechanisms play a crucial role in enhancing transparency, efficiency, and data-driven decision-making processes (Dunleavy *et al*, 2006; Chumairoh & Widiyarta, 2024). Within small and medium enterprises, effective digital governance ensures that digital tools are not adopted in isolation but are systematically embedded into managerial processes and operational structures. However, existing studies on SME digital transformation predominantly focus on technological readiness and digital capability development, while governance effectiveness receives comparatively limited empirical attention (Marino-Romero & Folgado-Fernández, 2024; Sagala & Őri, 2024). This indicates a theoretical and empirical gap in understanding how digital governance effectiveness functions as a strategic organizational capability that coordinates digital activities and enhances sustainable performance outcomes in retail MSMEs.

H1: Digital Governance Effectiveness positively affects Omnichannel Excellence.

H2: Digital Governance Effectiveness positively affects The Competitiveness of Retail MSMEs.

Agile Administration

Agile administration refers to an organizational capability that enables firms to respond rapidly and adaptively to environmental changes through flexible structures, iterative decision-making, and cross-functional coordination. Originating from agile governance principles in software development and later extended to public administration and corporate management, agile approaches emphasize responsiveness, transparency, and continuous improvement (Danar, 2023; Rachmawati & Sarihati, 2025). While many discussions of agile governance are situated in public sector contexts, the underlying principles such as adaptive leadership, rapid feedback mechanisms, and decentralized decision-making are equally relevant to small and medium enterprises operating in dynamic markets. For retail MSMEs facing digital disruption, agile administration reduces decision-making cycles, enhances coordination across digital channels, and improves organizational responsiveness to customer demand shifts. When supported by effective digital governance mechanisms, agile administration becomes a complementary capability that strengthens strategic alignment and operational flexibility. Therefore, in the MSME context, agile administration can be conceptualized as a managerial capability that supports digital transformation and enhances the effectiveness of omnichannel integration.

H3: Agile Administration positively affects Omnichannel Excellence.

H4: Agile Administration positively affects The Competitiveness of Retail MSMEs.

Omnichannel Excellence

Omnichannel excellence refers to the degree to which firms integrate and synchronize online and offline channels to deliver a seamless and consistent customer experience across multiple touchpoints (Verhoef *et al*., 2015; Alonso-Garcia *et al*, 2021). Unlike multichannel strategies that operate independently, omnichannel integration requires real-time coordination of information, inventory, communication, and service processes (Salsabilla *et al*, 2025). From a dynamic capability perspective, omnichannel capability represents an operational manifestation of an organization's ability to reconfigure resources and align digital and physical infrastructures in response to evolving customer expectations (Zhang *et al*, 2023). Effective omnichannel implementation depends not only on technological systems but also on structured governance mechanisms that ensure data consistency and strategic alignment, as well as agile administrative processes that enable rapid adaptation to market changes. Prior studies demonstrate that synchronized channel integration enhances customer journey satisfaction and perceived service value, which ultimately contribute to improved firm performance and competitive advantage (Siregar *et al*, 2023). Therefore, within retail MSMEs, omnichannel excellence can be conceptualized as a strategic capability shaped by digital governance effectiveness and agile administration, and as a mediating mechanism through which digital transformation enhances organizational performance.

H5: Omnichannel Excellence positively affects The Competitiveness of Retail MSMEs.

H6: Omnichannel Excellence mediates the relationship between Digital Governance Effectiveness and The Competitiveness of Retail MSMEs.

H7: Omnichannel Excellence mediates the relationship between Agile Administration and The Competitiveness of Retail MSMEs.

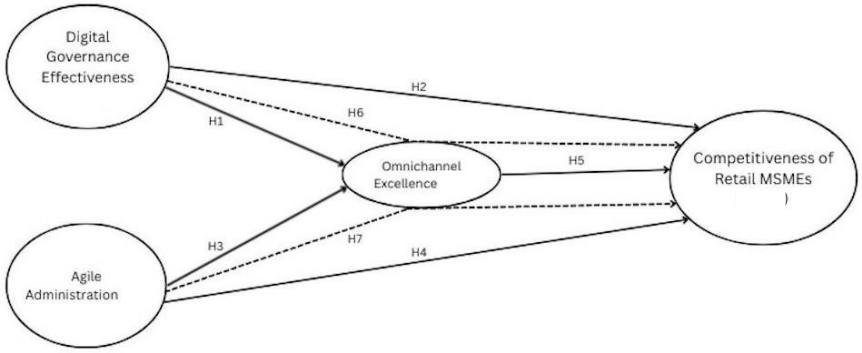


Figure 1. Conceptual Framework
Source: Processed by Researchers (2025)

Research Methods

This study employed a quantitative approach with an explanatory research design to examine the causal relationships among Digital Governance Effectiveness, Agile Administration, Omnichannel Excellence, and The Competitiveness of Retail MSMEs. A cross-sectional survey method was used to collect primary data from 120 retail MSME owners or managers who had utilized at least one digital channel (such as social media, marketplaces, or messaging applications) in their business operations. Purposive sampling was applied with criteria including retail sector classification, a minimum of six months of business operation, and direct involvement of respondents in strategic decision-making. The sample size of 120 respondents satisfies the recommended minimum requirements for PLS-SEM analysis, particularly for models with multiple latent constructs and indicators (Hair *et al*, 2022). Data were collected using a structured questionnaire distributed both offline and online, measured on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The instrument was adapted from established literature and subjected to a pilot test to ensure clarity and reliability. Data were analyzed

using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS software. The structural model evaluation included assessment of path coefficients through bootstrapping, coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2), with hypotheses tested at a 5% significance level ($t > 1.96$; $p < 0.05$).

Result

Table 1 shows that the 120 respondents in this study represent retail MSME owners and managers who are actively engaged in digital business practices. The gender distribution is relatively balanced, with a slight dominance of female respondents, while the majority fall within the productive age range of 26–45 years, indicating strong digital adaptability and managerial involvement. Most businesses have operated for more than one year, suggesting adequate organizational experience and stability. In terms of digital engagement, nearly all respondents utilize social media, online marketplaces, and instant messaging applications, with more than two-thirds operating through multiple digital channels simultaneously. These characteristics confirm that the sample appropriately represents digitally active retail MSMEs, thereby providing a relevant empirical foundation for examining the relationships among Digital Governance Effectiveness, Agile Administration, Omnichannel Excellence, and MSME competitiveness.

Table 1. Respondent Characteristics

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	58	48.3
	Female	62	51.7
Age	18–25 years	19	15.8
	26–35 years	54	45.0
	36–45 years	37	30.8
	> 45 years	10	8.4
Business Duration	6 months – 1 year	32	26.7
	1–3 years	48	40.0
	> 3 years	40	33.3
Digital Channel Usage*	Social Media	111	92.5
	Marketplace Platforms	94	78.3
	Instant Messaging Apps	102	85.0
Number of Digital Channels Used	Single Channel	38	31.7
	Multiple Channels	82	68.3

Source: Processed by researchers (2025)

Table 2. Construct Reliability and Convergent Validity

Construct	Cronbach's Alpha (CA)	rho_A	Composite Reliability (CR)	AVE
Digital Governance Effectiveness (DGE)	0.884	0.892	0.914	0.641
Agile Administration (AA)	0.871	0.879	0.905	0.613
Omnichannel Excellence (OM)	0.903	0.910	0.927	0.659
MSME Competitiveness (KDSU)	0.889	0.896	0.918	0.635

Source: Processed by researchers (2025)

Table 2 indicates that all constructs meet the recommended criteria for reliability and convergent validity. Cronbach's Alpha (CA) values range from 0.871 to 0.903, exceeding the minimum threshold of 0.70,

which confirms satisfactory internal consistency reliability. Similarly, rho_A values (0.879–0.910) and Composite Reliability (CR) values (0.905–0.927) are well above the recommended cut-off of 0.70, demonstrating strong construct reliability across all latent variables. Furthermore, the Average Variance Extracted (AVE) values range from 0.613 to 0.659, surpassing the 0.50 threshold, indicating that each construct explains more than 50% of the variance of its indicators. Among the constructs, Omnichannel Excellence exhibits the highest reliability and convergent validity values, followed closely by MSME Competitiveness and Digital Governance Effectiveness. Overall, these findings confirm that the measurement model is both reliable and valid, thereby supporting the suitability of the constructs for subsequent structural model analysis.

Table 3 indicate that all proposed hypotheses are statistically supported at the 5% significance level. For the direct effects, Digital Governance Effectiveness significantly influences Omnichannel Excellence ($\beta = 0.342$, $t = 3.215$, $p < 0.05$) and The Competitiveness of Retail MSMEs ($\beta = 0.198$, $t = 2.045$, $p < 0.05$). Similarly, Agile Administration has a positive and significant effect on Omnichannel Excellence ($\beta = 0.417$, $t = 4.108$, $p < 0.001$) and The Competitiveness of Retail MSMEs ($\beta = 0.176$, $t = 2.112$, $p < 0.05$). Furthermore, Omnichannel Excellence significantly enhances MSME competitiveness ($\beta = 0.389$, $t = 3.876$, $p < 0.001$), indicating that integrated channel capability plays a substantial role in strengthening competitive performance. Regarding indirect effects, Omnichannel Excellence significantly mediates the relationship between Digital Governance Effectiveness and The Competitiveness of Retail MSMEs ($\beta = 0.133$, $t = 2.874$, $p < 0.05$) as well as between Agile Administration and The Competitiveness of Retail MSMEs ($\beta = 0.162$, $t = 3.215$, $p < 0.05$). Because both direct and indirect effects remain significant, the mediation effect can be classified as partial mediation. These findings confirm that governance effectiveness and administrative agility not only directly improve competitiveness but also enhance it indirectly through stronger omnichannel integration.

Table 3. Direct Effect and Indirect Effect

Hypothesis	Path	Coefficient (β)	t-value	p-value	Result
Direct Effect					
H1	Digital Governance Effectiveness → Omnichannel Excellence	0.342	3.215	0.001	Supported
H2	Digital Governance Effectiveness → The Competitiveness of Retail MSMEs	0.198	2.045	0.041	Supported
H3	Agile Administration → Omnichannel Excellence	0.417	4.108	0.000	Supported
H4	Agile Administration → The Competitiveness of Retail MSMEs	0.176	2.112	0.035	Supported
H5	Omnichannel Excellence → The Competitiveness of Retail MSMEs	0.389	3.876	0.000	Supported
Indirect Effect					
H6	Digital Governance Effectiveness → Omnichannel Excellence → The Competitiveness of Retail MSMEs	0.133	2.874	0.004	Supported
H7	Agile Administration → Omnichannel Excellence → The Competitiveness of Retail MSMEs	0.162	3.215	0.001	Supported

Source: Processed by researchers (2025)

Discussion

Digital Governance Effectiveness on Omnichannel Excellence

The results indicate that Digital Governance Effectiveness has a positive and significant effect on Omnichannel Excellence, suggesting that structured governance mechanisms are essential for achieving seamless channel integration in retail MSMEs. From a dynamic capability perspective, effective governance enables firms to coordinate digital resources, align strategic objectives, and ensure consistent information flow across organizational units (Zhang *et al*, 2023). Governance frameworks enhance transparency, accountability, and data-driven decision-making, which are critical for synchronizing inventory, pricing, communication, and service processes across online and offline channels (Rocheleau, 2005; Verhoef *et al*, 2015). This finding supports prior research emphasizing that digital transformation success depends not only on technological adoption but also on governance structures that ensure integration and strategic coherence (Marino-Romero & Folgado-Fernández, 2024; Sagala & Őri, 2024). Without effective governance, digital initiatives in MSMEs risk becoming fragmented and inconsistent, ultimately weakening omnichannel performance.

From a managerial perspective, these findings imply that retail MSME owners should prioritize establishing clear digital governance mechanisms rather than focusing solely on adopting multiple digital platforms. Implementing standardized digital procedures, centralized data management, defined decision-making roles, and performance monitoring systems can significantly improve channel synchronization and customer experience consistency. Even small enterprises can benefit from simple governance tools such as integrated dashboards and structured digital policies to coordinate promotional activities and inventory across channels. Strengthening digital governance effectiveness thus provides the structural foundation necessary for building sustainable omnichannel excellence and enhancing competitiveness in increasingly digital retail environments.

Digital Governance Effectiveness on The Competitiveness of Retail MSMEs

The findings reveal that Digital Governance Effectiveness has a positive and significant effect on The Competitiveness of Retail MSMEs. This result suggests that structured digital governance mechanisms not only enhance coordination but also directly strengthen competitive positioning. From a dynamic capability perspective, governance effectiveness functions as a higher-order capability that aligns digital resources with strategic objectives, enabling firms to optimize decision-making, reduce operational inefficiencies, and respond more effectively to market changes (Zhang *et al*, 2023). Governance frameworks enhance transparency, accountability, and data integration, which contribute to improved operational control and resource utilization (Rocheleau, 2005; Dunleavy *et al*, 2006). In the SME context, prior studies have emphasized technological readiness as a driver of performance (Marino-Romero & Folgado-Fernández, 2024; Sagala & Őri, 2024); however, the present findings extend this view by demonstrating that governance effectiveness itself directly contributes to sustained competitiveness, even beyond technological adoption alone.

From a managerial standpoint, this result implies that retail MSMEs seeking to improve competitiveness must institutionalize digital governance practices within their organizational structure. Establishing clear digital policies, defining responsibilities in digital decision-making, implementing performance monitoring systems, and integrating customer and sales data across platforms can enhance strategic control and competitive agility. Rather than relying solely on platform expansion, MSMEs should focus on strengthening governance routines that ensure consistency, cost efficiency, and informed strategic responses. By embedding governance mechanisms into daily operations, retail MSMEs can achieve more stable performance outcomes and stronger market competitiveness in increasingly digital and platform-driven environments.

Agile Administration on Omnichannel Excellence

The findings indicate that Agile Administration has a positive and significant effect on Omnichannel Excellence, suggesting that organizational agility plays a crucial role in enabling seamless channel integration within retail MSMEs. Rooted in dynamic capability theory, agility enhances an organization's ability to sense market changes, reconfigure internal processes, and respond rapidly to evolving customer expectations (Zhang *et al*, 2023). Agile administrative practices such as iterative decision-making, decentralized coordination, and rapid feedback mechanisms facilitate real-time synchronization across digital and physical sales channels (Danar, 2023; Rachmawati & Sarihati, 2025).

Since omnichannel integration requires continuous adaptation of pricing, inventory, promotions, and service processes, administrative flexibility becomes a critical enabler of consistent customer experiences (Verhoef *et al*, 2015; Alonso-Garcia *et al*, 2021). These findings extend prior research by demonstrating that beyond governance structures, operational agility is essential in translating digital initiatives into effective omnichannel execution.

From a managerial perspective, the results imply that retail MSMEs should cultivate agile administrative routines to strengthen omnichannel performance. Reducing bureaucratic delays, empowering employees to make quick decisions, and implementing rapid communication systems across sales channels can significantly improve service synchronization. Managers should encourage cross-functional collaboration between marketing, operations, and customer service to ensure coherent channel strategies. Additionally, adopting flexible planning cycles and continuously monitoring customer feedback can enhance responsiveness to market dynamics. By embedding agility into administrative processes, retail MSMEs can improve channel integration, enhance customer satisfaction, and build a more adaptive and competitive business model in digital environments.

Agile Administration on The Competitiveness of Retail MSMEs

The results show that Agile Administration has a positive and significant effect on The Competitiveness of Retail MSMEs, indicating that organizational agility directly contributes to improved competitive performance. From a dynamic capability perspective, agility represents a firm's ability to sense environmental changes, seize emerging opportunities, and reconfigure internal processes efficiently (Zhang *et al*., 2023). In rapidly evolving digital retail markets, the capacity to make quick decisions, coordinate across functions, and adapt operational strategies is critical for maintaining market relevance. Agile administrative practices such as decentralized decision-making, iterative planning, and continuous feedback loops enhance responsiveness to customer demand shifts and technological disruption (Danar, 2023; Rachmawati & Sarihati, 2025). This finding aligns with prior research suggesting that organizational flexibility and adaptive capability strengthen firm performance and resilience in uncertain environments (Lestari & Nofi Puji, 2025). Thus, administrative agility functions as a strategic driver of sustained competitiveness in retail MSMEs.

From a managerial perspective, these findings imply that retail MSME leaders should foster a culture of agility to strengthen competitive advantage. Reducing hierarchical rigidity, empowering employees to respond quickly to customer needs, and implementing short decision-making cycles can improve operational efficiency and service quality. Moreover, establishing real-time communication systems and encouraging experimentation with new promotional or sales approaches can enhance market responsiveness. Rather than relying solely on technological upgrades, MSMEs should develop agile managerial routines that enable rapid adaptation and continuous improvement. By embedding agility into administrative processes, retail MSMEs can enhance competitiveness, maintain customer loyalty, and better withstand digital market volatility.

Omnichannel Excellence on The Competitiveness of Retail MSMEs

The findings demonstrate that Omnichannel Excellence has a positive and significant effect on The Competitiveness of Retail MSMEs, indicating that seamless channel integration directly strengthens competitive performance. From a dynamic capability perspective, omnichannel capability represents an operational outcome of a firm's ability to align digital and physical resources to deliver consistent customer experiences (Zhang *et al*, 2023). Unlike multichannel approaches that operate independently, omnichannel integration requires real-time synchronization of information, inventory, pricing, and customer communication across touchpoints (Verhoef *et al*, 2015). Empirical studies confirm that consistent cross-channel experiences enhance customer satisfaction, perceived value, and loyalty, which subsequently improve firm performance and market positioning (Alonso-Garcia *et al*, 2021; Wu *et al*, 2025). In retail MSMEs, where customer interaction is highly direct and frequent, the ability to integrate online and offline channels becomes a strategic determinant of competitiveness in increasingly digital markets.

From a managerial perspective, these results suggest that retail MSME owners should prioritize channel integration rather than treating digital and physical platforms as separate entities. Ensuring price consistency, synchronized inventory systems, unified promotional strategies, and integrated customer data management can significantly enhance customer trust and loyalty. Managers should also focus on designing cohesive customer journeys that allow seamless transitions between social media, marketplaces, messaging platforms, and physical stores. Even with limited resources, MSMEs can adopt affordable digital tools that centralize sales data and monitor cross-channel performance. By strengthening omnichannel excellence, retail MSMEs can enhance customer experience quality, increase repeat purchases, and build sustainable competitiveness in dynamic retail environments.

Omnichannel Excellence mediates the relationship between Digital Governance Effectiveness and The Competitiveness of Retail MSMEs

The findings indicate that Omnichannel Excellence significantly mediates the relationship between Digital Governance Effectiveness and The Competitiveness of Retail MSMEs. This suggests that effective digital governance enhances competitiveness not only directly but also indirectly by strengthening channel integration capability. From a dynamic capability perspective, governance effectiveness functions as a higher-order structural capability that aligns digital resources, standardizes procedures, and ensures coordinated decision-making (Rocheleau, 2005; Zhang *et al*, 2023). However, governance structures alone may not immediately translate into competitive outcomes unless they are operationalized through customer-facing capabilities. In this context, OM represents the operational mechanism through which governance alignment is transformed into synchronized customer experiences, consistent information flow, and integrated service delivery (Verhoef *et al*, 2015; Alonso-Garcia *et al*, 2021). This finding extends prior SME digital transformation research, which often emphasizes technology readiness (Marino-Romero & Folgado-Fernández, 2024; Sagala & Őri, 2024), by demonstrating that governance effectiveness creates competitive value primarily when it strengthens omnichannel integration.

From a managerial standpoint, the mediation result implies that retail MSMEs should not expect governance reforms alone to automatically improve competitiveness. Instead, governance mechanisms must be translated into practical omnichannel execution, such as centralized data systems, standardized pricing policies across platforms, integrated inventory monitoring, and unified promotional strategies. Effective governance should support real-time coordination among digital and physical channels, ensuring consistency in customer interaction. Managers must therefore view digital governance as a structural foundation, while omnichannel excellence serves as the strategic vehicle that converts governance quality into competitive advantage. By aligning governance systems with omnichannel operations, retail MSMEs can achieve more sustainable and scalable competitive performance in digital markets.

Omnichannel Excellence mediates the relationship between Agile Administration and The Competitiveness of Retail MSMEs

The findings demonstrate that Omnichannel Excellence significantly mediates the relationship between Agile Administration and The Competitiveness of Retail MSMEs. This result indicates that administrative agility enhances competitiveness not only through direct responsiveness but also indirectly by strengthening integrated channel capability. From a dynamic capability perspective, agile administration represents an adaptive capability that enables firms to sense market changes, reconfigure processes, and respond rapidly to evolving customer expectations (Zhang *et al*, 2023). However, agility alone does not automatically generate competitive outcomes unless it is translated into coherent customer-facing strategies. In this context, OM functions as the operational channel through which agile routines such as rapid decision-making, cross-functional coordination, and iterative improvement are implemented in synchronized online and offline interactions (Verhoef *et al*, 2015; Alonso-Garcia *et al*, 2021). This finding aligns with prior research highlighting that organizational flexibility strengthens performance when it enhances service integration and customer experience consistency (Wu *et al*, 2025; Rachmawati & Sarihati, 2025).

From a managerial standpoint, the mediation effect suggests that retail MSME leaders should channel their administrative agility toward improving omnichannel coordination rather than focusing solely on internal responsiveness. Agile decision-making processes should be used to update pricing strategies across platforms, respond quickly to customer inquiries across channels, and synchronize promotional campaigns in real time. Cross-functional collaboration between marketing, operations, and customer service teams should be strengthened to ensure consistent service delivery. By leveraging agility to refine omnichannel execution, retail MSMEs can convert administrative flexibility into tangible competitive advantages. Thus, omnichannel excellence acts as the strategic bridge that transforms agile administration into sustained competitiveness in digitally competitive retail environments.

Conclusion, Research Limitations, and Future Research Directions

This study demonstrates that Digital Governance Effectiveness and Agile Administration play complementary roles in enhancing Omnichannel Excellence and strengthening The Competitiveness of Retail MSMEs. The findings confirm that effective digital governance provides the structural foundation necessary for coherent channel integration, while agile administration acts as an internal dynamic capability that enables rapid adaptation to digital market fluctuations. Nevertheless, this study is limited by its focus on retail MSMEs, its cross-sectional design, reliance on self-reported questionnaire data, and concentration on internal organizational factors without incorporating external determinants such as regulatory environment or digital ecosystem readiness. Future research is therefore encouraged to test the model across different industries, adopt longitudinal designs, incorporate additional moderating or mediating variables such as innovation capacity or policy support, apply mixed-method approaches for deeper contextual insight, and conduct regional or scale-based comparisons to enrich the theoretical and practical understanding of digital transformation in MSMEs.

Conflict of Interest Statement

The author declare that there are no conflicts of interest in this research. The entire research process and writing of this article were conducted independently, without any personal, commercial, or institutional interests that could influence the results or interpretation of this research.

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