

The Effects of Retail Store Closure Intensity, Retailers' Digital Adoption, and Government Digital Tax Policy on Online Store Performance: The Mediating Role of Human Resource and Business Adaptation Strategies in Indonesia

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Abstract: *This study investigates the effects of retail store closure intensity, retailers' digital adoption, and government digital tax policy on online store performance, with human resource and business adaptation strategies as mediating variables. A quantitative research design was employed using a survey method involving 300 online retailers in Indonesia. Data were analyzed using Structural Equation Modeling with Partial Least Squares (SEM-PLS). The results indicate that retail store closure intensity and government digital tax policy have a positive and significant effect on online store performance. In contrast, retailers' digital adoption has a negative and significant effect on online store performance. Furthermore, retail store closure intensity has a positive and significant effect on adaptation strategies, while digital adoption and digital tax policy do not significantly influence human resource and business adaptation strategies. Mediation analysis reveals that adaptation strategies do not significantly mediate the relationships between the independent variables and online store performance. These findings suggest that external environmental and regulatory factors play a more dominant role in shaping online retail performance than internal organizational adaptation mechanisms. This study contributes to the literature on digital transformation and retail management by highlighting the importance of government policy and market disruption in determining business performance in the digital economy, particularly in the context of developing countries such as Indonesia.*

Keywords: *online store performance; digital adoption; digital tax policy; adaptation strategy*

Abstrak: *Penelitian ini bertujuan untuk menganalisis pengaruh intensitas penutupan toko ritel, tingkat adopsi digital peritel, dan kebijakan pajak digital pemerintah terhadap kinerja toko online dengan strategi adaptasi sumber daya manusia dan bisnis sebagai variabel mediasi. Penelitian ini menggunakan pendekatan kuantitatif dengan metode survei terhadap 300 peritel Online di Indonesia. Analisis data dilakukan dengan menggunakan Structural Equation Modeling–Partial Least Squares (SEM-PLS). Hasil penelitian menunjukkan bahwa intensitas penutupan toko ritel dan kebijakan pajak digital pemerintah berpengaruh positif dan signifikan terhadap kinerja toko online. Sebaliknya, tingkat adopsi digital peritel berpengaruh negatif dan signifikan terhadap kinerja toko online. Selain itu, intensitas penutupan toko ritel berpengaruh positif terhadap strategi adaptasi, sedangkan kebijakan pajak digital dan adopsi digital tidak berpengaruh signifikan. Uji mediasi menunjukkan bahwa strategi adaptasi tidak memediasi hubungan antara variabel independen dan kinerja toko online. Temuan ini mengindikasikan bahwa faktor lingkungan eksternal dan kebijakan pemerintah lebih dominan dalam menentukan*

kinerja peritel Online dibandingkan faktor adaptasi internal organisasi. Penelitian ini memberikan kontribusi empiris terhadap kajian transformasi digital dan kinerja ritel di Indonesia.

Kata Kunci: kinerja toko online, adopsi digital, pajak digital, strategi adaptasi.

INTRODUCTION

The rapid acceleration of digital transformation has compelled retail businesses to restructure their operational models, as reflected in the increasing closure of physical retail stores and the migration of consumers toward online channels. Recent studies indicate that physical store closures significantly affect omnichannel shopping behavior, including declining customer visits and reduced mobile application usage, demonstrating the interdependence between offline and online retail channels in shaping competitive strategies (Ye & Shankar, 2025). At the organizational level, digital adaptation enhances firms' adaptive capacity in responding to environmental turbulence by strengthening operational flexibility, virtual collaboration, and data-driven decision making (Browder et al., 2024). Retailers therefore face not only technological challenges but also external pressures arising from market disruption and regulatory change.

The shift of commercial transactions to digital platforms has been further reinforced by the implementation of government digital tax policies, which aim to regulate platform-based economic activities and ensure fiscal equity between conventional and digital businesses. Digital adoption has long been recognized as a key determinant of business performance, particularly in expanding market reach and improving operational

efficiency (Shen et al., 2022). At the same time, digital taxation policies influence cost structures and investment decisions among online retailers (Guo et al., 2022). Internally, human resource and business adaptation strategies such as digital skill development, restructuring of work processes, and innovation-oriented business models serve as critical mechanisms through which organizations respond to external pressures (Nurfuaddi et al., 2025; Susanto et al., 2024). This study examines how retail store closure intensity, digital adoption, and digital tax policy jointly shape online store performance through human resource and business adaptation strategies.

Contemporary literature suggests that retail transformation is driven by the interaction between external environmental pressures (store closures, regulatory frameworks, and digital taxation) and internal organizational capabilities in technology adoption and strategic adaptation. Research on traditional retail failure highlights insufficient digital readiness as a major cause of retailers' inability to adjust to changing consumer behavior (Fitra & Wahyuni, 2025; Gürlek et al., 2025; Kupfer et al., 2024). Conversely, studies on omnichannel strategies and digital innovation report that digital transformation enhances organizational resilience and performance (Browder et al., 2024; Fu et al., 2023; Ishfaq et al., 2024; Shen et al., 2022).

From a human resource perspective, digital literacy and adaptive strategy are emphasized as key mediators of successful business transformation (Ausat et al., 2025; Chapano et al., 2022; Susanto et al., 2024). In the public policy domain, research on digital taxation underscores the role of the state in shaping incentives and constraints for digital business performance (Amrillah & Gusthomi, 2025; Guo et al., 2022; Nembe & Idemudia, 2024; Parerungan, 2025).

Despite these advances, several significant research gaps remain. First, most previous studies have examined these variables in isolation, focusing either on the relationship between digital adoption and performance or on the effects of digital tax policy on compliance and revenue, without integrating retail store closure intensity, digital adoption, and digital tax policy into a single comprehensive analytical framework. Second, empirical investigation of human resource and business adaptation strategies as mediating variables remains limited, even though theoretical literature positions them as critical mechanisms of organizational adjustment (Naidoo & Hoque, 2024; Syafitri et al., 2025). Third, geographical limitations persist, as much of the existing evidence is drawn from developed economies, leaving insufficient understanding of how these dynamics operate in developing countries such as Indonesia, where online retailers face dual pressures from market disruption and emerging digital tax regimes.

The novelty of this study lies in the development of an integrated analytical model that simultaneously links external structural pressures retail store closure

intensity, retailers' digital adoption, and government digital tax policy to online store performance through the mediating role of human resource and business adaptation strategies. Unlike prior studies that treat digital transformation and taxation separately, this research adopts a multilevel perspective by connecting macro-level regulatory and market forces with micro-level organizational adaptation processes. By focusing on Indonesian online retailers, this study provides empirical evidence from a developing country context characterized by rapid e-commerce growth, increasing closure of conventional retail outlets, and the implementation of relatively new digital tax policies.

The scientific significance of this research is its contribution to organizational adaptation theory and strategic management in the digital economy. The findings demonstrate that online store performance is not merely a function of technological adoption but is shaped by the interaction between environmental pressures and internal adaptive capacities. This study strengthens the argument that adaptation strategies function as a conceptual bridge between industrial change and business performance, a relationship that has received limited empirical validation in prior research. Moreover, the Indonesian context enriches the generalizability of digital transformation theory by providing insights from an emerging economy marked by institutional transition and regulatory uncertainty.

Accordingly, this study aims to analyze the effects of retail store closure intensity, retailers' digital adoption, and government digital tax policy on online store performance, with human resource and business adaptation strategies as mediating variables. By integrating environmental, technological, and organizational perspectives into a single model, this research is expected to provide both theoretical contributions to digital retail management literature and practical implications for policymakers and online retailers in designing adaptive strategies within an increasingly regulated and competitive digital marketplace.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Retail Store Closure Intensity

Retail store closures represent structural changes in the retail industry driven by market disruption and technological transformation. Porter, (1998:34) conceptualizes business exit as a strategic consequence of a firm's failure to sustain competitive advantage, while Kotler & Keller, (2016:173) argue that physical store closures are largely triggered by shifts in consumer behavior toward digital channels. Aryadi et al., (2024:112) define store closure as an indicator of unsuccessful adaptation to digital transformation, whereas (Rajagopal, 2022) emphasizes closure intensity as a reflection of market pressure caused by technological and regulatory change.

Based on this synthesis, retail store closure intensity can be defined as the

frequency and scale of physical store shutdowns resulting from the inability of retailers to adjust their business strategies to changes in industry structure, technology, and consumer behavior. Consistent with Contingency Theory, organizational effectiveness depends on the alignment between internal strategies and external environmental demands (Daft, 2007:89). Increasing closure intensity signals environmental turbulence and compels retailers to redesign their human resource and business strategies to sustain online performance.

Retailers' Digital Adoption

Digital adoption in retail refers to the extent to which organizations implement and utilize digital technologies to enhance operational effectiveness and business performance. (Rogers, 2003:12) defines innovation adoption as a decision-making process through which organizations accept and use new technologies, while Davis, (1989:23) highlights perceived usefulness and ease of use as key determinants of technology acceptance. From a marketing perspective, Kotler & Keller, (2016:184) conceptualize digital adoption as the integration of information technology into marketing, distribution, and customer relationship management. Laudon & Laudon, (2020:97) further argue that digital adoption reflects a retailer's capability to manage transactions and customer data through integrated digital platforms.

Drawing on these perspectives, retailers' digital adoption is defined as the degree to

which retailers implement and exploit digital technologies in operational processes, marketing activities, and business decision-making in response to industrial and behavioral change. Diffusion of Innovation Theory explains that adoption occurs through stages of knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003:168). Higher levels of digital adoption enhance organizational capacity for adaptation by enabling process integration and strengthening human resource strategies aligned with technological change (Laudon & Traver, 2022:97).

Digital Tax Policy

Digital tax policy represents the government's response to the transformation of economic activity through digital platforms. Musgrave & Musgrave, (1989:6) view taxation as an instrument of allocation, distribution, and economic stabilization, while (Stiglitz, 2000:454) emphasizes that tax systems must adapt to new transaction forms to ensure fiscal fairness and efficiency. (Tanzi, 1994:102) characterizes digital taxation as fiscal modernization to prevent tax base erosion resulting from cross-border digital transactions. The OECD, (2015:15) defines digital tax policy as a regulatory framework governing taxation of platform-based economic activities independent of physical presence.

Accordingly, digital tax policy can be defined as a fiscal regulatory framework designed to impose taxes on digital economic activities in order to maintain equity, efficiency, and sustainability of

public revenue in a digitally transformed economy. In line with Welfare Economics Theory, digital tax policy functions as a corrective mechanism to address market distortions and ensure fiscal neutrality between digital and conventional businesses (Stiglitz, 2000:19). Clear and adaptive digital tax regulations are expected to enhance business certainty and support the sustainability of online retail performance.

Human Resource and Business Adaptation Strategy

Human resource and business adaptation strategies refer to organizational responses to environmental change through adjustments in structure, resources, and competencies. Chandler, (1962:13) asserts that strategy involves determining long-term organizational goals followed by the alignment of structure and resource allocation. (Ulrich, 1996) views human resource strategy as a mechanism for building organizational capability to respond to technological and market change. Dess & Beard, (1984) emphasize that environmental uncertainty requires organizational flexibility and continuous learning. This perspective is reinforced by Dynamic Capability Theory, which posits that organizational adaptation depends on the ability to integrate, build, and reconfigure internal competencies (Teece, 2007).

Thus, human resource and business adaptation strategy can be defined as a set of planned policies aimed at aligning employee competencies, organizational structure, and

business models with external environmental dynamics and digital transformation demands. Within Dynamic Capability Theory, adaptation strategies represent processes of sensing, seizing, and transforming opportunities and threats (Teece, 2007). These strategies function as a conceptual bridge between environmental pressure and organizational performance.

Online Store Performance

Online store performance refers to the level of success achieved by digital business units in attaining economic and non-economic objectives through information technology utilization and customer interaction. Kaplan & Norton, (1992:26) conceptualize performance as organizational outcomes measured through financial, customer, internal process, and learning dimensions. Laudon & Traver, (2022:60) define e-commerce performance as the ability of digital platforms to generate value through sales volume, transaction efficiency, and customer satisfaction. DeLone & McLean, (2003:16) further argue that digital system performance depends on system quality, information quality, service quality, usage, and user satisfaction.

Based on these perspectives, online store performance is defined as the extent to which digital business objectives are achieved as reflected in financial outcomes, customer satisfaction, process efficiency, and information system quality. From a Resource-Based View (RBV), sustainable performance is determined by the effective management of valuable, rare, inimitable,

and non-substitutable resources (Barney, 1991:107), including digital capabilities and human resource competencies.

Hypothesis Development

Environmental pressure in the form of retail store closures forces organizations to redesign their internal strategies. Contingency Theory posits that organizational effectiveness depends on alignment between structure and environment (Lawrence & Lorsch, 1967:5). Increasing store closure intensity compels retailers to enhance human resource and business adaptation strategies.

H1: Retail store closure intensity has a positive and significant effect on human resource and business adaptation strategies.

Digital technology adoption requires fundamental changes in work structures and employee competencies. According to RBV, competitive advantage arises from valuable and rare internal capabilities (Barney, 1991). Higher digital adoption increases the need for adaptive human resource and business strategies.

H2: Retailers' digital adoption has a positive and significant effect on human resource and business adaptation strategies.

Digital tax policy represents institutional pressure that shapes organizational behavior. Institutional Theory explains that regulations force organizations to adjust their structures and practices to gain legitimacy (Dimaggio & Powell, 2021).

H3: Digital tax policy has a positive and significant effect on human resource and business adaptation strategies.

The decline of physical retail alters market structure and shifts consumer demand to online channels. Channel substitution theory suggests that weakening one channel strengthens alternative channels (Kotler & Keller, 2016:460-470).

H4: Retail store closure intensity has a positive and significant effect on online store performance.

Digital adoption enhances efficiency and expands market reach. Innovation theory states that technology is a primary source of productivity and competitiveness (Rogers, 2003:12-15).

H5: Retailers' digital adoption has a positive and significant effect on online store performance.

Digital tax policy creates regulatory certainty and market stability. Clear regulation reduces uncertainty and improves market efficiency (North, 1990:54)

H6: Digital tax policy has a positive and significant effect on online store performance.

Adaptation strategies are central to organizational success in dynamic environments. Dynamic Capability Theory emphasizes resource reconfiguration as a determinant of long-term performance (Teece et al., 1997).

H7: Human resource and business adaptation strategies have a positive and significant effect on online store performance.

Environmental pressure influences performance through strategic response mechanisms. Contingency Theory asserts that performance outcomes depend on strategic fit (Lawrence & Lorsch, 1967:3-5).

H8: Retail store closure intensity indirectly affects online store performance through human resource and business adaptation strategies.

Technology adoption creates value only when integrated with organizational capabilities (Barney, 1991).

H9: Retailers' digital adoption indirectly affects online store performance through human resource and business adaptation strategies.

Institutional pressure affects performance through internal organizational adjustment (Dimaggio & Powell, 2021).

H10: Digital tax policy indirectly affects online store performance through human resource and business adaptation strategies.

METHODOLOGY

Research Design

This study employs a quantitative explanatory research design with a survey approach to examine the causal relationships among retail store closure intensity (X1), retailers' digital adoption (X2), digital tax policy (X3), online store performance (Y), and the mediating role of human resource and business adaptation strategies (M). A quantitative approach is appropriate because the study aims to test empirically formulated

hypotheses through numerical measurement and statistical analysis (Creswell, 2013:155; Sugiyono, 2022:37)

Data were analyzed using Structural Equation Modeling based on Partial Least Squares (SEM-PLS), which is suitable for testing complex structural models involving latent variables and mediating relationships without requiring strict assumptions of multivariate normality (Ghozali & Latan, 2014:6; Hair et al., 2019:3).

Population and Sample

The population of this study consists of online retailers in Indonesia operating through digital platforms such as marketplaces and social media. A purposive sampling technique was applied using the following criteria: (1) retailers have been operating for at least one year, (2) have adopted digital technology in their business operations, and (3) are affected by the phenomenon of physical retail store closures and digital tax policy (Sekaran & Bougie, 2016:248; Sugiyono, 2022:124).

The sample size determination followed the SEM-PLS rule of thumb, which recommends a minimum of five to ten times the number of research indicators (Hair et al., 2022:22). With 31 measurement indicators, the required sample size ranged from 155 to 310 respondents. Accordingly, this study collected data from 300 online retailers, which satisfies the recommended threshold for structural model analysis.

Data Type and Sources

This study utilizes primary data obtained directly from respondents through a structured questionnaire. The data reflect the perceptions of online retailers regarding retail store closure intensity, retailers' digital adoption, digital tax policy, human resource and business adaptation strategies, and online store performance. The use of primary data enables the collection of contextual and relevant information aligned with the objectives of the study (Creswell & Creswell, 2023:160; Sugiyono, 2022:193).

Data collection technique

Data were collected using a structured questionnaire with a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The Likert scale was chosen to measure respondents' attitudes and perceptions quantitatively and systematically (Sugiyono, 2022:134). The questionnaire was distributed online to accommodate the digital nature of the respondents and to increase response efficiency and coverage (Creswell & Creswell, 2023:160).

Measurement of Variables

Retail store closure intensity was measured through indicators reflecting the frequency and scale of physical store shutdowns and their perceived impact on business operations. Retailers' digital adoption was measured by indicators capturing the extent of technology use in operations, system integration, speed of adoption, perceived usefulness, digital

competencies, and managerial support. Digital tax policy was assessed through indicators related to regulatory clarity, compliance requirements, administrative burden, and perceived fairness of taxation. Human resource and business adaptation strategies were measured by indicators representing digital skill development, organizational restructuring, process innovation, and business model flexibility. Online store performance was measured through indicators of sales growth, profitability, customer satisfaction, process efficiency, system quality, and service responsiveness.

Data Analysis Technique

Data analysis was conducted using SEM-PLS with the assistance of SmartPLS software. The analysis followed two main stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model).

The measurement model was assessed through convergent validity, discriminant validity, and construct reliability. Convergent validity was evaluated using factor loadings and Average Variance Extracted (AVE), with acceptable thresholds of factor loadings greater than 0.70 and AVE values above 0.50 (Hair et al., 2022:106). Construct reliability was examined using Composite Reliability and Cronbach's Alpha, with minimum acceptable values of 0.70.

The structural model was evaluated using the coefficient of determination (R^2) and hypothesis testing through the bootstrapping procedure. Path coefficients were considered significant when the t-statistic exceeded 1.96 at a 5% significance level ($p < 0.05$). Mediation effects were tested to examine the role of human resource and business adaptation strategies in mediating the relationships between retail store closure intensity, retailers' digital adoption, digital tax policy, and online store performance.

RESULTS

Measurement Model Evaluation

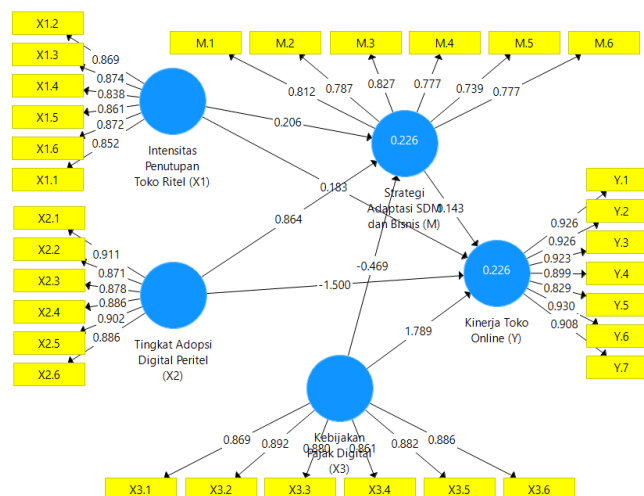


Figure 1. SEM-PLS Model Diagram

The results of the outer loading analysis indicate that all indicators of each construct exceed the recommended threshold of 0.70, confirming adequate convergent validity of the measurement model. The construct of Retail Store Closure Intensity (X1) shows factor loadings ranging from 0.838 to 0.874, indicating strong consistency in representing structural pressure within the physical retail sector. The construct of Retailers' Digital Adoption (X2) demonstrates the highest loadings, ranging from 0.871 to 0.911, reflecting robust measurement of digital technology utilization. Digital Tax Policy (X3) also presents high loading values between 0.861 and 0.892, signifying that the regulatory indicators reliably form a single construct.

For the mediating variable, Human Resource and Business Adaptation Strategy (M), factor loadings range from 0.739 to 0.827, indicating that indicators related to competency development and business process transformation adequately represent organizational adaptation. The construct of Online Store Performance (Y) records the highest outer loading values, ranging from 0.829 to 0.930, suggesting that performance indicators such as sales growth, customer expansion, and operational effectiveness strongly reflect digital business outcomes. Overall, these findings confirm that the measurement model satisfies convergent validity requirements and is suitable for further structural analysis.

Discriminant validity was assessed using cross-loading criteria. The results show that each indicator loads more highly on its

respective construct than on other constructs. Indicators of Human Resource and Business Adaptation Strategy (M1–M6) exhibit higher loadings on the adaptation strategy construct (0.739–0.827) than on other constructs, despite moderate correlations with Online Store Performance (e.g., M2 = 0.585). Similarly, indicators of Retail Store Closure Intensity (X1.1–X1.6), Retailers' Digital Adoption (X2.1–X2.6), Digital Tax Policy (X3.1–X3.6), and Online Store Performance (Y1–Y7) consistently show their highest loadings on their intended constructs. These results confirm that the measurement model meets discriminant validity criteria and that each construct is empirically distinct.

Construct reliability and convergent validity are further supported by Cronbach's Alpha, Composite Reliability, ρ_A , and Average Variance Extracted (AVE) values. Cronbach's Alpha values range from 0.888 to 0.964, indicating very high internal consistency. Composite Reliability values range from 0.907 to 0.970, exceeding the recommended threshold of 0.70. The ρ_A values for all constructs are above 0.90, further confirming reliability. The AVE values range from 0.619 to 0.822, demonstrating that each construct explains more than 50% of the variance in its indicators. Online Store Performance (AVE = 0.822) and Retailers' Digital Adoption (AVE = 0.790) show particularly strong convergent validity, while Human Resource and Business Adaptation Strategy (AVE = 0.619) remains within acceptable limits. Collectively, these results indicate that the

measurement model is reliable and valid for hypothesis testing.

Structural Model Evaluation

The structural model estimation reveals varying causal relationships among the constructs. Retail Store Closure Intensity (X1) has a positive effect on Online Store Performance (Y) with a path coefficient of 0.183 and a positive effect on Human Resource and Business Adaptation Strategy (M) with a coefficient of 0.206. These findings indicate that increasing physical store closures encourage internal organizational adaptation and are directly associated with improved online performance.

Digital Tax Policy (X3) exerts a strong positive effect on Online Store Performance (Y) with a path coefficient of 1.789. However, it shows a negative and non-significant effect on Human Resource and Business Adaptation Strategy (M) with a coefficient of -0.469 , suggesting that while digital tax regulation improves business certainty and performance, it may impose administrative pressures that limit internal adaptive flexibility.

Retailers' Digital Adoption (X2) demonstrates a strong positive effect on Human Resource and Business Adaptation Strategy (M) with a coefficient of 0.864, indicating that higher levels of digital technology utilization encourage changes in workforce competencies and business

processes. Conversely, its effect on Online Store Performance (Y) is negative (-1.500), implying that high digital adoption does not automatically translate into superior performance without adequate organizational readiness.

Human Resource and Business Adaptation Strategy (M) shows a positive but weak effect on Online Store Performance (Y) with a coefficient of 0.143, suggesting that adaptation mechanisms contribute to performance improvement but are not yet strong enough to generate substantial impact.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) indicates that the independent variables explain 22.6% of the variance in Online Store Performance (Y) and 22.6% of the variance in Human Resource and Business Adaptation Strategy (M). The adjusted R^2 values are 0.215 for Online Store Performance and 0.218 for Adaptation Strategy, reflecting stable explanatory power after adjustment for the number of predictors. These results suggest that retail store closure intensity, digital adoption, and digital tax policy provide a moderate explanation of performance and adaptation strategy, while the remaining variance is influenced by other factors such as service quality, consumer trust, competitive intensity, and market characteristics.

Hypothesis Testing Results**Table 1. Results of Hypothesis Testing (Direct and Indirect Effects)**

Hypothesis	Relationship between Variables	Path Coefficient (β)	T-Statistic	P-Value	Decision
H1	Retail Store Closure Intensity (X1) → Online Store Performance (Y)	0.212	3.877	0.000	Accepted
H2	Retail Store Closure Intensity (X1) → Human Resource and Business Adaptation Strategy (M)	0.206	4.276	0.000	Accepted
H3	Digital Tax Policy (X3) → Online Store Performance (Y)	1.722	6.535	0.000	Accepted
H4	Digital Tax Policy (X3) → Human Resource and Business Adaptation Strategy (M)	-0.469	0.987	0.324	Rejected
H5	Human Resource and Business Adaptation Strategy (M) → Online Store Performance (Y)	0.143	1.921	0.055	Rejected
H6	Retailers' Digital Adoption (X2) → Online Store Performance (Y)	-1.377	5.375	0.000	Accepted
H7	Retailers' Digital Adoption (X2) → Human Resource and Business Adaptation Strategy (M)	0.864	1.854	0.064	Rejected
H8	Retail Store Closure Intensity (X1) → Human Resource and Business Adaptation Strategy (M) → Online Store Performance (Y)	0.030	1.664	0.097	Rejected
H9	Digital Tax Policy (X3) → Human Resource and Business Adaptation Strategy (M) → Online Store Performance (Y)	-0.067	0.793	0.428	Rejected
H10	Retailers' Digital Adoption (X2) → Human Resource and Business Adaptation Strategy (M) → Online Store Performance (Y)	0.124	1.346	0.179	Rejected

Hypothesis testing using the bootstrapping procedure demonstrates that Retail Store Closure Intensity (X1) has a positive and significant effect on Online Store Performance (Y) and on Human Resource and Business Adaptation Strategy (M). Digital Tax Policy (X3) also has a positive and significant effect on Online Store Performance (Y), but its effect on Adaptation Strategy (M) is not significant. Retailers' Digital Adoption (X2) has a significant negative effect on Online Store

Performance (Y) and a non-significant positive effect on Adaptation Strategy (M). Furthermore, Human Resource and Business Adaptation Strategy (M) does not significantly affect Online Store Performance (Y).

Mediation analysis shows that none of the indirect paths through Adaptation Strategy (M) are statistically significant. This indicates that human resource and business adaptation strategies do not

mediate the relationships between retail store closure intensity, digital adoption, and digital tax policy on online store performance. Overall, these findings demonstrate that external structural and

DISCUSSION

The findings of this study demonstrate that retail store closure intensity has a positive and significant effect on online store performance. This result supports the channel substitution perspective, which suggests that the decline of physical retail channels strengthens alternative digital channels as consumers increasingly rely on online shopping platforms. The closure of physical stores creates market gaps that are rapidly filled by online retailers, thereby enhancing sales volume and customer reach. This finding is consistent with prior research indicating that physical store closures accelerate digital channel utilization and reshape consumer purchasing behavior (Kotler & Keller, 2016; Ye & Shankar, 2025). In the Indonesian context, where e-commerce penetration continues to rise, the reduction of conventional retail outlets appears to act as a catalyst for online business performance rather than as a barrier.

The study also reveals that retail store closure intensity positively influences human resource and business adaptation strategies. This finding aligns with Contingency Theory, which posits that organizational structures and strategies must adapt to environmental uncertainty to maintain effectiveness (Daft, 2007:89;

regulatory factors exert a more direct influence on online store performance than internal organizational adaptation mechanisms.

Lawrence & Lorsch, 1967:27). Physical store closures signal environmental turbulence and force retailers to restructure their internal processes, develop digital competencies among employees, and reconfigure business models toward online operations. Similar conclusions have been drawn in previous studies emphasizing that environmental pressure stimulates strategic renewal and innovation (Dess & Beard, 1984; Teece, 2007). Thus, the Indonesian retail sector demonstrates an adaptive response pattern in which structural disruption drives organizational learning and strategic realignment.

Contrary to conventional assumptions, retailers' digital adoption exhibits a negative and significant effect on online store performance. This unexpected result suggests that technology adoption alone does not guarantee improved business outcomes. From a Resource-Based View perspective, technological resources generate competitive advantage only when they are effectively integrated with organizational capabilities and managerial competencies (Barney, 1991:107). The negative relationship observed in this study may reflect overinvestment in digital technologies without sufficient alignment with business strategy, workforce readiness, or customer needs. This finding is consistent with prior research warning of the

“technology productivity paradox,” where increased technological adoption does not automatically translate into higher performance due to organizational misfit and inefficient utilization (Brynjolfsson & McAfee, 2014; Laudon & Traver, 2022).

The positive and significant effect of digital tax policy on online store performance underscores the role of regulatory frameworks in shaping business sustainability. Institutional Theory explains that formal rules and regulations influence organizational behavior by providing legitimacy and reducing uncertainty (Dimaggio & Powell, 2021). In this study, digital tax policy appears to create clearer operational boundaries and enhance business certainty for online retailers, thereby contributing positively to performance outcomes. This result is consistent with research highlighting that well-designed fiscal policies can support digital market stability and promote fair competition between conventional and online businesses (Amrillah & Gusthomi, 2025; Guo et al., 2022; Nembe & Idemudia, 2024; Parerungan, 2025). In the Indonesian context, the implementation of digital taxation may also strengthen consumer trust and platform accountability, indirectly supporting business growth.

The findings further indicate that human resource and business adaptation strategies do not significantly affect online store performance and do not mediate the relationships between the independent variables and performance. This result challenges the dominant view of Dynamic

Capability Theory, which emphasizes adaptation and resource reconfiguration as key drivers of sustained performance (Teece, 2007). One possible explanation is that adaptation strategies among Indonesian online retailers remain at an early or transitional stage, focusing primarily on operational survival rather than on long-term performance optimization. The limited impact of adaptation strategies suggests that changes in human resource practices and business processes have not yet matured into strategic capabilities capable of generating measurable performance improvements.

From a broader theoretical perspective, this study reveals that external environmental and institutional pressures exert stronger direct effects on online store performance than internal organizational adaptation mechanisms. This finding reinforces the relevance of Contingency and Institutional theories in explaining digital business performance in emerging economies. While Dynamic Capability Theory predicts that internal adaptation should mediate the effects of environmental change, the empirical evidence from this study indicates that such mediation is weak or absent. This discrepancy highlights the contextual nature of strategic adaptation, suggesting that in developing countries with rapidly evolving digital ecosystems, performance outcomes may be driven more by market structure and regulatory conditions than by internal organizational transformation.

Overall, the results contribute to the literature on digital transformation and retail

management by demonstrating that physical retail disruption and regulatory policy significantly shape online business performance. The negative effect of digital adoption and the non-significant role of adaptation strategies provide important cautionary insights: technological investment and organizational change must

be carefully aligned with strategic objectives and market realities. These findings extend existing theories by showing that the relationship between technology, adaptation, and performance is not universally positive but is contingent upon institutional and developmental contexts.

CONCLUSION

This study examines the effects of retail store closure intensity, retailers' digital adoption, and digital tax policy on online store performance, with human resource and business adaptation strategies as mediating variables. The results indicate that retail store closure intensity and digital tax policy have positive and significant effects on online store performance, while retailers' digital adoption has a negative and significant effect. Furthermore, retail store closure intensity positively influences human resource and business adaptation strategies, whereas retailers' digital adoption and digital tax policy do not significantly affect adaptation strategies. Human resource and business adaptation strategies are also found to have no significant effect on online store performance and do not mediate the relationships between the independent variables and performance.

These findings demonstrate that external environmental and institutional factors play a more dominant role in determining online store performance than internal organizational adaptation mechanisms. In the context of Indonesia's rapidly expanding digital economy, structural disruption in

physical retail and the implementation of digital tax regulations directly shape business outcomes, while internal adaptation strategies remain limited in their effectiveness. This study therefore provides empirical evidence that technological adoption and organizational change do not automatically translate into improved performance without strong alignment between strategy, human resources, and institutional conditions.

Theoretical Implications

This study contributes to the literature on digital transformation and retail management by integrating Contingency Theory, Institutional Theory, Dynamic Capability Theory, and the Resource-Based View into a unified analytical framework. The findings extend Contingency Theory by demonstrating that environmental turbulence, represented by retail store closure intensity, directly influences organizational performance rather than solely operating through internal adaptation strategies. Similarly, the results support Institutional Theory by confirming that digital tax policy significantly shapes online store performance through regulatory certainty and market stabilization.

However, the limited mediating role of human resource and business adaptation strategies challenges the assumptions of Dynamic Capability Theory, which posits that internal reconfiguration of resources should be the primary mechanism linking environmental change to performance. This discrepancy suggests that the effectiveness of dynamic capabilities is highly context-dependent and may be constrained in emerging economies where digital transformation remains uneven and institutional frameworks are still evolving. Furthermore, the negative effect of digital adoption on performance provides additional nuance to the Resource-Based View by indicating that technological resources alone are insufficient to generate competitive advantage without complementary organizational capabilities.

Managerial Implications

For online retailers, the findings highlight the importance of aligning digital technology investments with strategic and human resource readiness. Retailers should not focus solely on adopting new technologies but must also ensure that employees possess the necessary digital competencies and that business processes are redesigned to maximize the value of technological tools. Managers are encouraged to prioritize strategic integration rather than isolated technological upgrades, particularly in areas such as customer relationship management, supply chain coordination, and data-driven decision making.

The positive impact of retail store closure intensity on online store performance suggests that market opportunities arise from structural disruption. Online retailers should proactively capture consumer segments previously served by physical stores through targeted marketing, improved service quality, and platform reliability. At the same time, the limited role of adaptation strategies indicates the need for more systematic and long-term organizational transformation rather than short-term operational adjustments.

Policy Implications

From a policy perspective, the significant effect of digital tax policy on online store performance underscores the role of government regulation in shaping digital business sustainability. Policymakers should design digital tax frameworks that balance fiscal objectives with business development needs by ensuring regulatory clarity, administrative simplicity, and fairness between conventional and digital enterprises. Transparent and consistent digital tax policies can enhance business certainty, encourage compliance, and support the growth of the digital economy.

In addition, the government should complement taxation policies with capacity-building programs aimed at strengthening digital skills among small and medium-sized online retailers. Such programs can help transform adaptation strategies into effective organizational capabilities that contribute to long-term performance and competitiveness.

Limitations and Future Research

This study has several limitations. First, the data were collected using a cross-sectional design, which limits the ability to capture long-term dynamic changes in adaptation strategies and performance. Future research should employ longitudinal designs to examine how digital adoption and adaptation strategies evolve over time. Second, the study focuses on Indonesian online retailers, which may restrict the generalizability of the findings to other national contexts. Comparative studies across developing and developed economies are recommended to test the robustness of the proposed model.

Third, the explanatory power of the model remains moderate, indicating that other variables such as customer trust, service quality, competitive intensity, and platform governance may also play important roles in shaping online store performance. Future studies should incorporate these variables to develop a more comprehensive understanding of digital retail performance. Finally, qualitative approaches could be employed to explore in greater depth how retailers perceive digital tax policy and adaptation strategies in practice.

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