



RESEARCH ARTICLE

Digital Readiness and Sustainable Digital Finance Adoption among MSMEs in Mebidang: The Role of Business Innovation Orientation

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Abstract

Digital readiness determines the ability of micro, small, and medium enterprises (MSMEs) to convert access to digital financial services into sustained business value. This study analyzes the effects of digital literacy, digital infrastructure readiness, and security and privacy awareness on sustainable digital finance adoption (SDFA), as well as the subsequent impact of SDFA on business innovation orientation (BIO) among MSMEs in Mebidang, North Sumatra. Survey data from 320 MSME owners or managers in Medan, Binjai, and Deli Serdang were analyzed using partial least squares structural equation modeling with 5,000 bootstrap subsamples. The results indicate that digital literacy ($\beta = 0.312$, $p < 0.001$), digital infrastructure readiness ($\beta = 0.374$, $p < 0.001$), and security and privacy awareness ($\beta = 0.246$, $p < 0.001$) positively influence SDFA. Digital infrastructure readiness is identified as the strongest antecedent. SDFA significantly impacts BIO ($\beta = 0.681$, $p < 0.001$). The model explains 64.2% of the variance in SDFA and 46.4% of the variance in BIO. This study distinguishes sustainable adoption from sporadic digital finance usage by emphasizing continuity, efficiency, transparency, trust, recordkeeping, and responsible financial behavior. The findings suggest that regional MSME programs should integrate infrastructure support, practical digital literacy, cybersecurity capabilities, and the integration of digital finance with bookkeeping and business decision-making.

Keywords

Digital Readiness; Sustainable Digital Finance; Business Innovation Orientation; MSMEs; PLS-SEM; Mebidang.

1 | INTRODUCTION

The digital payment infrastructure in Indonesia has expanded rapidly. By August 2025, Quick Response Code Indonesian Standard (QRIS) services had reached 57 million users and 39.3 million merchants, with 93.16% of these being micro, small, and medium enterprises (MSMEs) (Bank Indonesia, 2025). This expansion presents a significant opportunity for MSMEs to enhance payment convenience, transaction records, cash flow visibility, and access to formal financial services. However, mere access to a platform does not guarantee effective adoption. The 2024 National Survey of Financial Literacy and Inclusion reported a financial literacy index of 65.43% and an inclusion index of 75.02%, indicating that access continues to surpass the capability required to select and utilize financial services appropriately (Otoritas Jasa Keuangan & Badan Pusat Statistik, 2024). The disparity between access and capability renders digital readiness a central issue in the financial transformation of MSMEs.

This issue is particularly salient in Mebidang, a metropolitan area comprising Medan, Binjai, and Deli Serdang. These three jurisdictions exhibit distinct urban, peri-urban, trade, service, and production characteristics, as documented in their respective 2025 regional statistical publications (Badan Pusat Statistik Kota Medan, 2025; Badan Pusat Statistik Kota Binjai, 2025; Badan Pusat Statistik Kabupaten Deli Serdang, 2025). Such heterogeneity creates unequal conditions for digital adoption; some MSMEs benefit from stable connectivity, digital payment facilities, and integrated applications, while others remain reliant on cash, basic devices, and informal recordkeeping. Therefore, a regional analysis must consider not only the availability of digital financial services but also whether MSMEs possess the requisite knowledge, infrastructure, and security awareness to utilize these services consistently.

Previous research has established that digital capability and digital platforms can enhance SME competitiveness and foster business model innovation (Fang *et al.*, 2024; Xie *et al.*, 2022). Other studies indicate that digital financial inclusion can support sustainable development, while capability gaps, unequal access, and weak trust may limit its benefits (Bansal *et al.*, 2025; Hasan *et al.*, 2024; Tay *et al.*, 2022). However, these two streams of research are rarely integrated at the MSME level. Digital finance research often focuses on access and inclusion, whereas SME digital transformation studies generally emphasize technology adoption or business model change. There has been less attention on the internal readiness mechanisms that enable MSMEs to transition from sporadic digital finance usage to sustained, efficient, transparent, trusted, and responsible business practices.

This study addresses this gap by modeling digital literacy, digital infrastructure readiness, and security and privacy awareness as antecedents of sustainable digital finance adoption (SDFA), with business innovation orientation (BIO) as the subsequent organizational outcome. Sustainable adoption is differentiated from ordinary digital finance use by emphasizing continuity, transaction efficiency, financial transparency, trust, recordkeeping, and support for long-term business operations. BIO is included to assess whether the adoption of digital finance translates into improved processes, payment integration, customer service, and data-driven decision-making.

Accordingly, this study aims to examine: (1) the effects of digital literacy, digital infrastructure readiness, and security and privacy awareness on SDFA; and (2) the effect of SDFA on BIO among MSMEs in Mebidang. The study contributes by providing a readiness-based explanation of sustainable digital finance adoption within the regional Indonesian MSME context and clarifying the organizational value generated post-adoption. The findings will assist local governments, financial service providers, and MSME development agencies in identifying which dimensions of readiness should be prioritized for strengthening.

2 | BACKGROUND THEORY

2.1 Theoretical Foundation

The Technology-Organization-Environment (TOE) framework provides the primary theoretical foundation for the model. TOE explains organizational technology adoption through technological readiness, organizational readiness, and environmental conditions (Tornatzky & Fleischer, 1990). In this study, digital infrastructure readiness represents the technological foundation that makes digital financial services available and operational. Digital literacy and security and privacy awareness represent organizational readiness because they reflect the knowledge, routines, and risk-management capability required to use those services. The Mebidang financial and digital ecosystem forms the contextual boundary within which these internal readiness conditions operate. Recent empirical evidence confirms that technological and organizational conditions significantly shape digital technology adoption among SMEs (Faiz *et al.*, 2024). The dynamic capability perspective complements TOE by explaining how adoption creates organizational change. Dynamic capabilities enable firms to sense opportunities, seize them, and reconfigure resources and processes in changing environments (Teece *et al.*, 1997). For MSMEs, digital readiness supports the sensing and seizing of digital-finance opportunities, while sustained use allows financial routines to be reconfigured through digital payment integration, bookkeeping, transaction monitoring, and data-based decisions.

This logic explains the pathway from SDFA to BIO. Evidence that digital capabilities and platform use facilitate SME business-model innovation further supports this relationship (Fang *et al.*, 2024; Xie *et al.*, 2022). Digital financial inclusion research supplies the outcome logic for SDFA. Digital finance can widen participation, lower transaction barriers, and contribute to economic and sustainable-development objectives; however, these benefits depend on meaningful use, trust, literacy, and adequate infrastructure (Bansal *et al.*, 2025; Hasan *et al.*, 2024; Tay *et al.*, 2022). Thus, TOE explains the readiness conditions, dynamic capability theory explains the innovation pathway, and digital financial inclusion literature explains why responsible and continuing use matters.

2.2 Construct Definitions and Measurement Logic

Digital literacy is the capability of MSME owners or managers to understand, evaluate, and operate digital financial tools. It includes using mobile banking, e-wallets, QRIS, digital transaction information, and business applications. Digital infrastructure readiness refers to the availability, reliability, and compatibility of devices, internet connectivity, payment facilities, digital banking access, and bookkeeping applications. Security and privacy awareness concerns the capability to protect accounts, recognize fraud or illegal platforms, use secure authentication, and safeguard customer and transaction data. These three constructs jointly represent digital readiness but remain analytically distinct because knowledge, infrastructure, and security capability can develop at different rates (Pingali *et al.*, 2023). SDFA refers to the continuing and responsible use of digital financial services to improve business efficiency, transparency, inclusion, financial control, and continuity. It differs from ordinary adoption, which may be indicated merely by registration or occasional use. In this study, SDFA is reflected by access, use intensity, trust, transaction efficiency, and the use of digital finance for recordkeeping and business sustainability. BIO refers to the organization-wide tendency to support and apply innovation in processes, services, and decision-making. Following Siguaw *et al.* (2006), innovation orientation is not limited to a single new product; it reflects a strategic disposition that encourages new practices and capabilities. In the MSME context, BIO is reflected in improved transaction processes, payment-sales integration, financial-data use, new service methods, and customer convenience.

2.3 Hypothesis Development

Digital literacy reduces perceived complexity and enables MSMEs to compare services, complete transactions correctly, interpret digital records, and integrate financial applications into business routines. It therefore represents an organizational capability that converts access into meaningful use (Pingali *et al.*, 2023; Tay *et al.*, 2022).

H1: Digital literacy has a positive and significant effect on sustainable digital finance adoption among MSMEs in Mebidang. Digital infrastructure readiness provides the operational foundation for sustained adoption. Even knowledgeable users cannot consistently employ digital finance without reliable devices, connectivity, payment facilities, and compatible applications. TOE therefore predicts a positive relationship between technological readiness and adoption (Faiz *et al.*, 2024). H2: Digital infrastructure readiness has a positive and significant effect on sustainable digital finance adoption among MSMEs in Mebidang.

Security and privacy awareness reduces perceived risk and strengthens confidence in digital transactions. MSMEs that can recognize fraud, protect credentials, use authentication procedures, and safeguard customer data are more likely to maintain their use of legitimate digital financial services (Otoritas Jasa Keuangan & Badan Pusat Statistik, 2024; Tay *et al.*, 2022). H3: Security and privacy awareness has a positive and significant effect on sustainable digital finance adoption among MSMEs in Mebidang.

Sustained digital-finance use can reconfigure financial and customer-facing processes. QR-based payments expand payment options, digital bookkeeping improves financial control, transaction histories support decisions, and integrated payment systems improve service speed. These changes represent innovation-oriented routines and capabilities (Fang *et al.*, 2024; Xie *et al.*, 2022). H4: Sustainable digital finance adoption has a positive and significant effect on business innovation orientation among MSMEs in Mebidang.

3 | METHOD

This study employed a quantitative, cross-sectional survey methodology alongside Partial Least Squares Structural Equation Modeling (PLS-SEM). The unit of analysis was the MSME, represented by an owner or manager directly involved in financial and transactional decisions. The target population consisted of active MSMEs operating in Medan, Binjai, and Deli Serdang. Due to the absence of a single harmonized population register across the three jurisdictions, a probability sampling frame was not utilized. Instead, purposive sampling was applied to reach respondents who operated an active enterprise, were responsible for business decisions, and had used or considered at least one digital financial service. Questionnaires were distributed both directly and online during the 2025 fieldwork period. After screening, 320 usable

responses were included in the analysis. This sample size exceeded the commonly recommended minimum for PLS-SEM models of comparable complexity and provided sufficient observations for estimating the five reflective constructs and four structural paths (Hair *et al.*, 2022). Table 1 presents the verified aggregate sample profile used in the analysis.

Table 1. Aggregate Sample Profile

Characteristic	Verified Sample Profile
Final usable responses	320 MSME owners/managers
Geographic coverage	Medan, Binjai, and Deli Serdang
Respondent role	Owner or manager involved in financial and transactional decisions
Business eligibility	Active micro, small, or medium enterprise
Digital finance eligibility	Had used or considered at least one digital financial service
Sampling approach	Purposive sampling
Survey mode and period	Direct and online questionnaire distribution in 2025

The questionnaire included a respondent screening section and 25 construct indicators measured on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Each construct was operationalized reflectively with five indicators. The wording of the indicators was adapted to reflect MSME financial activities in Mebidang and was grounded in literature on SME digital readiness, digital technology adoption, sustainable digital finance, and innovation orientation. Table 2 summarizes the operational definitions and measurement sources.

Table 2. Variables, Operational Definitions, and Measurement Basis

Construct	Code	Operational Definition and Indicators	Measurement Basis
Digital Literacy	DL	Ability to use mobile banking and e-wallets; understand QRIS; evaluate digital financial information; and use digital tools for business transactions.	Pingali <i>et al.</i> (2023); Faiz <i>et al.</i> (2024)
Digital Infrastructure Readiness	DIR	Availability of suitable devices, stable internet, digital banking/fintech access, QR payment facilities, and bookkeeping or business applications.	Tornatzky and Fleischer (1990); Faiz <i>et al.</i> (2024)
Security and Privacy Awareness	SPA	Password and authentication practices; fraud and illegal platform recognition; customer data protection; and confidence in secure transactions.	Tay <i>et al.</i> (2022); OJK and BPS (2024)
Sustainable Digital Finance Adoption	SDFA	Access, use intensity, trust, transaction efficiency, and use of digital finance for transparent records, financial control, and business continuity.	Tay <i>et al.</i> (2022); Hasan <i>et al.</i> (2024); Bansal <i>et al.</i> (2025)
Business Innovation Orientation	BIO	Improved transaction processes; payment-sales integration; financial data use; new service methods; and improved customer convenience.	Siguaw <i>et al.</i> (2006); Xie <i>et al.</i> (2022); Fang <i>et al.</i> (2024)

The model was estimated using SmartPLS 4, applying the PLS algorithm and 5,000 bootstrap subsamples (Ringle *et al.*, 2024). The measurement model was evaluated based on indicator reliability, Cronbach's alpha, composite reliability, average variance extracted (AVE), and the heterotrait-monotrait ratio (HTMT). The acceptance criteria included outer loadings above 0.70, alpha and composite reliability above 0.70, AVE above 0.50, and HTMT below 0.85 (Hair *et al.*, 2022; Henseler *et al.*, 2015). The structural model was assessed through variance inflation factors (VIF), path coefficients, t-values, p-values, coefficient of determination (R^2), predictive relevance (Q^2), and effect size (f^2).

The structural relationships were estimated using the following equations.

$$SDFA = b1(DL) + b2(DIR) + b3(SPA) + e1$$

$$BIO = b4(SDFA) + e2$$

A hypothesis was supported when its estimated coefficient was positive and statistically significant at the 5% level. Given the cross-sectional self-report design, the paths indicate predictive associations rather than temporal causality.

4 | RESULTS AND DISCUSSION

4.1 Results

4.1.1 Descriptive Results

The mean scores presented in Table 3 indicate generally favorable levels of digital readiness and digital finance utilization. Digital literacy recorded a high mean score of 3.84, while digital infrastructure readiness was moderately high

at 3.71. Security and privacy awareness had the lowest mean score of 3.56, accompanied by the largest standard deviation of 0.73, indicating greater variation in MSMEs' abilities to protect accounts, recognize fraud, and manage data risks. Both Sustainable Digital Finance Adoption (SDFA) (3.78) and Business Innovation Orientation (BIO) (3.82) were high, suggesting that many respondents had begun integrating digital finance into their business routines and innovation-related practices.

Table 3. Descriptive Statistics of the Constructs

Construct	Mean	Standard Deviation	Interpretation
Digital Literacy	3.84	0.62	High
Digital Infrastructure Readiness	3.71	0.68	Moderately high
Security and Privacy Awareness	3.56	0.73	Moderately high
Sustainable Digital Finance Adoption	3.78	0.64	High
Business Innovation Orientation	3.82	0.61	High

4.1.2 Measurement Model

All retained indicators exhibited outer loadings above 0.70; therefore, no indicators were removed. As shown in Table 4, Cronbach's alpha ranged from 0.858 to 0.889, composite reliability ranged from 0.897 to 0.918, and average variance extracted (AVE) ranged from 0.635 to 0.691. All values exceeded the recommended thresholds, confirming indicator reliability, internal consistency, and convergent validity.

Table 4. Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability	AVE	Assessment
Digital Literacy	0.881	0.913	0.677	Reliable and valid
Digital Infrastructure Readiness	0.872	0.906	0.660	Reliable and valid
Security and Privacy Awareness	0.858	0.897	0.635	Reliable and valid
Sustainable Digital Finance Adoption	0.889	0.918	0.691	Reliable and valid
Business Innovation Orientation	0.884	0.914	0.680	Reliable and valid

Discriminant validity was evaluated using the heterotrait-monotrait ratio (HTMT). All values in Table 5 were below 0.85, confirming that the five constructs were empirically distinguishable. The highest HTMT value was 0.756 between SDFA and BIO, which remained within the conservative threshold.

Table 5. Heterotrait-Monotrait Ratio

Construct	DL	DIR	SPA	SDFA	BIO
DL	—				
DIR	0.684	—			
SPA	0.641	0.672	—		
SDFA	0.721	0.748	0.703	—	
BIO	0.694	0.701	0.668	0.756	—

4.3 Structural Model and Hypothesis Testing

Collinearity did not threaten the structural estimates. Variance Inflation Factor (VIF) values ranged from 1.000 to 2.276, well below the threshold of 5.00. Table 6 shows that all four hypotheses were supported. Digital literacy positively predicted SDFA ($\beta = 0.312$, $t = 5.821$, $p < 0.001$), supporting H1. Digital infrastructure readiness produced the strongest readiness effect ($\beta = 0.374$, $t = 6.446$, $p < 0.001$), supporting H2. Security and privacy awareness also had a positive effect ($\beta = 0.246$, $t = 4.318$, $p < 0.001$), supporting H3. Finally, SDFA strongly predicted BIO ($\beta = 0.681$, $t = 15.274$, $p < 0.001$), supporting H4.

Table 6. Structural Paths and Hypothesis Decisions

Hypothesis	Path	β	t-value	p-value	VIF	Decision
H1	DL $\rightarrow$ SDFA	0.312	5.821	< 0.001	2.143	Supported
H2	DIR $\rightarrow$ SDFA	0.374	6.446	< 0.001	2.276	Supported
H3	SPA $\rightarrow$ SDFA	0.246	4.318	< 0.001	1.984	Supported
H4	SDFA $\rightarrow$ BIO	0.681	15.274	< 0.001	1.000	Supported

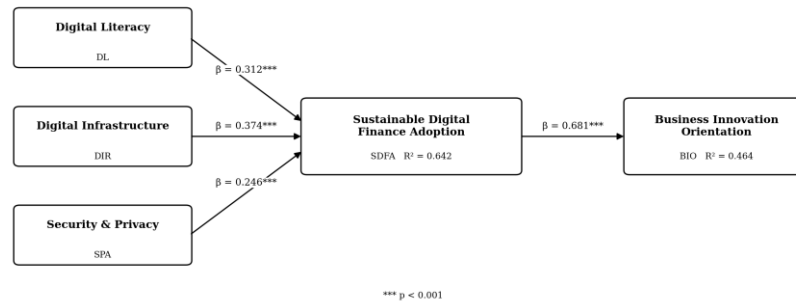


Figure 1. Final PLS-SEM Structural Model

The model explained 64.2% of the variance in SDFA and 46.4% of the variance in BIO. Both Q^2 values were above zero, confirming predictive relevance. Digital infrastructure readiness had the largest readiness-related effect size ($f^2 = 0.218$), followed by digital literacy ($f^2 = 0.146$) and security and privacy awareness ($f^2 = 0.091$). The effect of SDFA on BIO was large ($f^2 = 0.866$).

Table 7. Explanatory Power, Predictive Relevance, and Effect Size

Endogenous Construct / Path	R^2	Adjusted R^2	Q^2	f^2 / Interpretation
Sustainable Digital Finance Adoption	0.642	0.638	0.421	Substantial explanatory power
Business Innovation Orientation	0.464	0.462	0.316	Moderate explanatory power
DL → SDFA				0.146 / Small to moderate
DIR → SDFA				0.218 / Moderate
SPA → SDFA				0.091 / Small
SDFA → BIO				0.866 / Large

4.2 Discussion

The positive effect of digital literacy confirms that MSMEs require more than mere access to digital platforms. Owners and managers must possess the ability to understand transaction procedures, distinguish legitimate services, interpret digital records, and integrate financial applications with routine business activities. This finding supports the view of digital readiness as a multidimensional organizational capability rather than a simple measure of device ownership (Pingali *et al.*, 2023). It also elucidates why the national gap between financial inclusion and financial literacy remains significant: adoption may expand faster than the capability to use services productively and safely (Otoritas Jasa Keuangan & Badan Pusat Statistik, 2024).

Digital infrastructure readiness emerged as the dominant antecedent of SDFA. This finding aligns theoretically with the Technology-Organization-Environment (TOE) framework, as infrastructure determines whether knowledge and intention can be translated into consistent behavior. Practically, an MSME may understand QRIS or mobile banking but still struggle to use them consistently when faced with unstable internet access, shared or outdated devices, incompatible applications, or unintegrated transaction and bookkeeping systems. The context of Mebidang reinforces this explanation, as the technological conditions in its urban core and surrounding peri-urban business areas may differ significantly. Thus, infrastructure is not merely a supporting asset; it serves as the operational bridge between readiness and sustained financial use.

Security and privacy awareness had the smallest coefficient among the three readiness factors but remained significant. Its lower mean score indicates that cybersecurity capability is a critical concern. Issues such as fraud messages, credential theft, illegal lending platforms, weak password practices, and uncertainty regarding customer data protection can deter continued usage, even when digital services are accessible. Therefore, enhancing security awareness is essential for both adoption and trust. Financial institutions and government programs should prioritize fraud prevention, authentication, complaint channels, and data protection as core components of digital finance training rather than treating them as optional technical topics.

The strong relationship between SDFA and BIO indicates that the organizational value of digital finance extends beyond merely accepting electronic payments. For instance, QRIS can reduce payment friction and broaden customer choices; digital transaction histories can facilitate cash flow monitoring and financing applications; integrated bookkeeping can enhance inventory and supplier decisions; and real-time payment confirmations can expedite order fulfillment. These practices transform how MSMEs organize processes, utilize information, and serve customers. Thus, this finding supports dynamic capability theory and previous evidence that digital platforms and capabilities enable firms to reconfigure resources and innovate business models (Fang *et al.*, 2024; Teece *et al.*, 1997; Xie *et al.*, 2022).

The principal theoretical contribution of this study lies in the distinction between digital finance access and sustainable adoption. Registration, platform availability, or occasional payment usage alone cannot demonstrate sustained transformation. By incorporating continuity, efficiency, transparency, trust, recordkeeping, and business continuity, SDFA represents a deeper adoption outcome. The model also clarifies the sequence through which readiness precedes adoption and adoption precedes innovation orientation.

For local governments, the highest priority should be to reduce infrastructure and capability disparities across Medan, Binjai, and Deli Serdang. Basic readiness programs should combine affordable connectivity, merchant payment facilities, and device support with practical training. For banks and fintech providers, onboarding should be accompanied by simplified interfaces, transaction record features, rapid fraud response mechanisms, and integration with bookkeeping applications. For MSME owners and managers, digital payments should be linked to cash flow monitoring, customer service, inventory management, and financial records to ensure that adoption yields operational value rather than merely adding another payment channel.

The findings should be interpreted within several limitations. First, the cross-sectional design captures associations at a single point in time and cannot establish temporal causality. Second, purposive sampling limits the statistical generalization to all MSMEs within the three jurisdictions. Third, the measures rely on self-reported perceptions and practices, which may be influenced by common method bias and social desirability bias. Fourth, the analysis treats Mebidang as an aggregate regional context and does not estimate differences by city, sector, enterprise scale, or business age. Future studies should employ stratified or probability-based sampling, verified transaction records, longitudinal designs, and multigroup analysis.

5 | CONCLUSIONS AND FUTURE WORK

This study demonstrates that digital readiness is a significant foundation for sustainable digital finance adoption (SDFA) among micro, small, and medium enterprises (MSMEs) in Mebidang. Digital literacy, digital infrastructure readiness, and security and privacy awareness each positively influenced SDFA, jointly explaining 64.2% of its variance. Digital infrastructure readiness emerged as the strongest predictor, indicating that knowledge and trust must be supported by reliable devices, connectivity, payment facilities, and applications. Subsequently, SDFA had a strong positive effect on business innovation orientation (BIO), explaining 46.4% of its variance. Thus, digital finance creates greater value when used continuously for efficient transactions, transparent records, financial control, and business continuity. The practical implications are specific: regional MSME policy should extend beyond campaigns that merely increase platform registration. Local governments should focus on strengthening infrastructure and providing segmented readiness training; financial service providers should enhance usability, security support, and integration with business systems; and MSMEs should connect digital payments with bookkeeping and decision-making processes. Future research should test the model longitudinally, compare the contexts of Medan, Binjai, and Deli Serdang, and examine whether factors such as financial resilience, enterprise scale, business sector, or environmental orientation strengthen or weaken the readiness-adoption-innovation pathway.

REFERENCES

- Badan Pusat Statistik Kabupaten Deli Serdang. (2025). *Kabupaten Deli Serdang dalam angka 2025*. <https://deliserdangkab.bps.go.id/id/publication/2025/02/28/e0096832420ca2d1c3533968/kabupaten-deli-serdang-dalam-angka-2025.html>
- Badan Pusat Statistik Kota Binjai. (2025). *Kota Binjai dalam angka 2025*. <https://binjaikota.bps.go.id/publication/2025/02/28/3f9290d1da6e0b0296cefd57/kota-binjai-dalam-angka-2025.html>
- Bank Indonesia. (2025, August 4). *QRIS Jelajah Indonesia 2025 dorong digitalisasi dengan wisata budaya*. https://www.bi.go.id/id/publikasi/ruang-media/news-release/Pages/sp_2717025.aspx
- Bansal, S., Kumar, S., Ali, S., Singh, S., Nangia, P., & Bamel, U. (2025). Harnessing digital finance for sustainability: An integrative review and research agenda. *Research in International Business and Finance*, 74, 102682. <https://doi.org/10.1016/j.ribaf.2024.102682>

- Faiz, F., Le, V., & Masli, E. K. (2024). Determinants of digital technology adoption in innovative SMEs. *Journal of Innovation & Knowledge*, 9(4), 100610. <https://doi.org/10.1016/j.jik.2024.100610>
- Fang, T. M., Ahmad, N. H., Abdul Halim, H., Iqbal, Q., & Ramayah, T. (2024). Pathway towards SME competitiveness: Digital capability and digital business model innovation. *Technology in Society*, 79, 102728. <https://doi.org/10.1016/j.techsoc.2024.102728>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE.
- Hasan, M., Hoque, A., Abedin, M. Z., & Gasbarro, D. (2024). FinTech and sustainable development: A systematic thematic analysis using human- and machine-generated processing. *International Review of Financial Analysis*, 95, 103473. <https://doi.org/10.1016/j.irfa.2024.103473>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A. (2022). Digital transformation in business and management research: An overview of the current status quo. *International Journal of Information Management*, 63, 102466. <https://doi.org/10.1016/j.ijinfomgt.2021.102466>
- Otoritas Jasa Keuangan, & Badan Pusat Statistik. (2024). *Survei Nasional Literasi dan Inklusi Keuangan 2024*. <https://ojk.go.id/id/berita-dan-kegiatan/publikasi/Pages/Survei-Nasional-Literasi-dan-Inklusi-Kuangan-%28SNLIK%29-2024.aspx>
- Pingali, S. R., Singha, S., Arunachalam, S., & Pedada, K. (2023). Digital readiness of small and medium enterprises in emerging markets: The construct, propositions, measurement, and implications. *Journal of Business Research*, 164, 113973. <https://doi.org/10.1016/j.jbusres.2023.113973>
- Ringle, C. M., Wende, S., & Becker, J.-M. (2024). *SmartPLS 4*. SmartPLS. <https://www.smartpls.com>
- Siguaw, J. A., Simpson, P. M., &ENZ, C. A. (2006). Conceptualizing innovation orientation: A framework for study and integration of innovation research. *Journal of Product Innovation Management*, 23(6), 556–574. <https://doi.org/10.1111/j.1540-5885.2006.00224.x>
- Tay, L. Y., Tai, H. T., & Tan, G. S. (2022). Digital financial inclusion: A gateway to sustainable development. *Heliyon*, 8(6), e09766. <https://doi.org/10.1016/j.heliyon.2022.e09766>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
- Tornatzky, L. G., & Fleischer, M. (1990). *The processes of technological innovation*. Lexington Books.
- Xie, X., Han, Y., Anderson, A., & Ribeiro-Navarrete, S. (2022). Digital platforms and SMEs' business model innovation: Exploring the mediating mechanisms of capability reconfiguration. *International Journal of Information Management*, 65, 102513. <https://doi.org/10.1016/j.ijinfomgt.2022.102513>

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