

▪  
**Digital Consumer Literacy as a Determinant of Trust in Digital Economic Transactions**

**Leonita Maharani<sup>1</sup>, Sri Undartik<sup>2</sup>, Muhandis Difa'iy Aziz<sup>3</sup>**

<sup>1,2</sup>Politeknik LP3I Cirebon, Indonesia, <sup>3</sup>Universitas Islam Negeri Sunan Kalijaga, Indonesia

Email: [leonitamaharani@plb.ac.id](mailto:leonitamaharani@plb.ac.id)

Entered : December 27, 2025  
Accepted: February 10, 2026

Revised : January 25, 2026  
Published : February 19, 2026

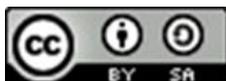
**ABSTRACT**

*This study examines the role of digital consumer literacy as a determinant of trust in digital economic transactions within the Indonesian context. The rapid expansion of the digital economy has increased reliance on online platforms, yet concerns regarding security, fraud, and data privacy continue to challenge consumer trust. Digital literacy is conceptualized as a cognitive and protective capability that enables consumers to evaluate information, understand digital risks, and engage safely in online transactions. This research employs a quantitative explanatory design using survey data collected from consumers who have conducted digital transactions in the past six months. Data were analyzed using Structural Equation Modeling (SEM) to assess the validity of constructs and to test the structural relationship between digital consumer literacy and trust. The findings indicate that digital consumer literacy has a positive and statistically significant effect on trust in digital economic transactions, with moderate explanatory power. Consumers with higher levels of digital literacy demonstrate stronger perceptions of platform integrity, security, and reliability. The discussion highlights that digital literacy reduces perceived risk and enhances confidence in digital systems. In conclusion, digital consumer literacy significantly contributes to the formation of trust and should be strengthened through integrated policy and educational strategies to support sustainable digital economic participation.*

**Keywords:** Digital consumer literacy; Digital economy; Perceived risk; Structural equation modeling; Trust.

**INTRODUCTION**

The rapid expansion of the digital economy over the last decade has fundamentally transformed the interaction between consumers and businesses, particularly through e-commerce platforms, financial technology services, and increasingly interactive social commerce ecosystems. In developing countries such as Indonesia, the acceleration of digital transactions has been driven by widespread internet penetration, the adoption of digital payment systems, and regulatory initiatives aimed at fostering a technology-based economic ecosystem. However, the nature of digital transactions, which are characterized by the absence of face-to-face interaction, algorithmic intermediation, and heavy reliance on data processing systems, introduces new forms of uncertainty for consumers. In this context, trust emerges as a fundamental prerequisite for the sustainability of online transactions, as it reduces perceived risk and uncertainty in consumer decision-making (Handoyo, 2024; Zhghenti & Chkareuli, 2021; Kumar & Sethupathy, 2025). Without trust, technological efficiency alone does not necessarily translate into higher transactional intention or sustained participation in digital markets.



Conceptually, trust in the digital economy extends beyond technical reliability and system functionality. It encompasses multidimensional elements such as integrity, transparency, and accountability of digital service providers. A comprehensive meta-analysis spanning 50 years of consumer research identifies trust as the “primary currency” in market relationships, emphasizing that integrity-based antecedents, including honesty and transparency, exert a stronger influence on trust formation than mere technical reliability (Khamitov et al., 2024). These findings suggest that digital trust is a complex construct rooted in cognitive evaluations, emotional responses, and institutional assurances. At the macro level, effective consumer protection laws and personal data protection regulations significantly enhance trust and stimulate the growth of digital economic transactions in Indonesia (Kriswandaru et al., 2025). Therefore, trust is not solely determined by platform quality but is also shaped by regulatory clarity and institutional enforcement mechanisms.

Despite the rapid growth of digital transactions, a critical research problem arises from the uneven development of trust across different consumer segments. Empirical observations indicate persistent challenges, including online fraud, data breaches, misinformation, and opaque algorithmic marketing practices. Cross-national studies conceptualize digital trust as encompassing data privacy, platform reliability, transaction security, and service transparency, all of which are vulnerable within dynamic digital ecosystems (Gupta, 2025; Tunkevichus, 2025). Consumers frequently operate under conditions of information asymmetry, limiting their capacity to accurately assess risk and credibility. Consequently, the issue of trust cannot be reduced to technological adequacy alone; it is intrinsically linked to the cognitive and protective capacities of consumers in navigating digital environments.

Within this framework, digital consumer literacy assumes strategic importance. Digital literacy extends beyond operational skills in using devices or applications; it represents a cognitive and protective capability that enables individuals to understand digital risks, ethical implications, data privacy concerns, and long-term consequences of digital engagement. Digital literacy functions as a “human firewall,” equipping consumers with the ability to critically evaluate information sources, detect fraudulent schemes, and make informed and secure transactional decisions (Imani & Prastyanti, 2025; Kozyreva et al., 2022). Accordingly, digital literacy may serve as a critical determinant in the formation of trust, rather than merely a complementary factor.

In the Indonesian context, digital financial literacy has been shown to enhance consumer protection, investor security, transactional efficiency, and trust in fintech services (Hasan, 2024). This evidence reinforces the argument that literacy influences not only financial behavior but also broader perceptions of reliability and credibility within digital systems. Furthermore, in the domain of AI-driven marketing, digital literacy demonstrates a dual effect. At higher levels, it mitigates the impact of manipulative or unethical algorithmic practices; at lower levels, it increases the vulnerability of young consumers to AI-driven persuasive tactics (Qadri et al., 2025). These findings indicate that digital literacy operates as a strategic capability that shapes consumers’ bargaining power within digital marketplaces.

Intervention-based studies further reveal that digital literacy programs significantly improve technological competence, trust in digital services, cognitive functioning, and even well-being among vulnerable populations such as older adults (Buchan et al., 2024; Lee et al., 2022). These outcomes highlight the broader socio-economic implications of digital literacy in fostering inclusive digital participation. Nevertheless, most existing studies focus on specific demographic groups or on financial literacy in isolation, while comprehensive examinations of general digital consumer

literacy as a direct determinant of trust in e-commerce and social commerce remain limited.

Meta-analytic evidence in e-commerce confirms that trust, perceived risk, security, and electronic word-of-mouth collectively influence purchasing decisions, with perceived risk acting as a strong moderator in the relationship between trust and purchase intention (Handoyo, 2024). Recent systematic and meta-analytic studies categorize the determinants of digital trust into technological factors such as security and information quality, organizational factors including reputation and regulatory compliance, and social-emotional factors such as social presence and user experience (Asiri et al., 2025; Tunkevichus, 2025). Although the determinants of trust have been extensively mapped, digital consumer literacy has rarely been positioned as a central explanatory variable within an integrated framework that connects technological, legal, cultural, and psychological dimensions.

The first research gap lies in the limited integration of these multidimensional determinants within a comprehensive trust model, particularly in emerging markets such as Indonesia. Existing studies often adopt fragmented approaches that emphasize either legal frameworks, technological attributes, or social factors independently (Gupta, 2025; Kriswandaru et al., 2025; Zhghenti & Chkareuli, 2021; Tunkevichus, 2025). However, digital trust is the product of complex interactions between individual competencies and institutional structures. The second research gap concerns the scarcity of quantitative empirical studies in Indonesia that explicitly measure general digital consumer literacy, rather than solely financial literacy, as a direct determinant of trust and transactional intention. Much of the existing scholarship remains normative or sector-specific (Imani & Prastyanti, 2025; Hasan, 2024; Kriswandaru et al., 2025). The third gap emerges from inconsistent findings in social commerce research, where social presence and customer experience sometimes outweigh trust as predictors of purchase intention, thereby calling into question the precise role of trust within highly interactive digital ecosystems (Suwanan & Allya, 2024; Asiri et al., 2025).

Moreover, the rapid diffusion of emerging technologies such as artificial intelligence, blockchain, and virtual reality introduces new dynamics in trust formation that remain insufficiently examined through robust quantitative approaches. Cultural and emotional dimensions of trust, including historical institutional distrust in transitional societies, are also underexplored in empirical modeling (Gupta, 2025; Zhghenti & Chkareuli, 2021; Pineda et al., 2024; Kaplan et al., 2021). These inconsistencies and conceptual limitations underscore the need for a more integrative empirical investigation that positions digital consumer literacy as a core determinant of trust within the digital economy.

Based on these considerations, the novelty of this study lies in the development of an empirical model that examines general digital consumer literacy as a direct determinant of trust in digital economic transactions within the Indonesian context. Unlike previous studies that treat literacy as a peripheral or mediating variable, this research conceptualizes digital literacy as a strategic capability that shapes perceptions of security, integrity, and platform reliability. By integrating technological, regulatory, and psychological dimensions into a unified analytical framework, this study contributes to the advancement of digital trust theory and addresses the contextual specificity of emerging digital markets. Accordingly, the objective of this study is to empirically analyze and test the influence of digital consumer literacy on the formation of trust in digital economic transactions in Indonesia. Through a quantitative approach, this research seeks to provide theoretical contributions to the development of an integrative digital trust model and practical implications for policymakers and stakeholders in designing

effective digital literacy programs and consumer protection strategies within the evolving digital economy.

## METHODS

This study employs a quantitative research design with an explanatory approach to examine the influence of digital consumer literacy on trust in digital economic transactions in Indonesia. The population consists of Indonesian consumers who have conducted at least one digital transaction within the last six months through e-commerce platforms, digital payment applications, or social commerce channels. A purposive sampling technique is applied to ensure that respondents possess relevant experience in digital transactions. Data are collected through a structured online questionnaire distributed via social media and digital consumer communities. The instrument is developed based on validated constructs from prior studies and measured using a five-point Likert scale ranging from strongly disagree to strongly agree. Digital consumer literacy is operationalized through dimensions such as information evaluation skills, data privacy awareness, digital security practices, and critical understanding of online content, adapted from established digital literacy frameworks (Imani & Prastyanti, 2025; Kozyreva et al., 2022). Trust is measured through indicators of perceived integrity, reliability, security, and transparency of digital platforms (Khamitov et al., 2024; Gupta, 2025). Prior to full-scale distribution, the questionnaire undergoes a pilot test to assess clarity, validity, and reliability.

Data analysis is conducted using Structural Equation Modeling (SEM) to test both the measurement model and the structural relationships between variables. The analysis begins with descriptive statistics to profile respondents and examine general patterns of digital literacy and trust. Subsequently, confirmatory factor analysis (CFA) is performed to assess construct validity, including convergent validity, discriminant validity, and composite reliability. Model fit is evaluated using standard goodness-of-fit indices such as CFI, TLI, RMSEA, and SRMR. After confirming the adequacy of the measurement model, the structural model is tested to evaluate the direct effect of digital consumer literacy on trust in digital economic transactions. Bootstrapping procedures are applied to assess the significance and robustness of path coefficients. This analytical strategy enables a comprehensive examination of the hypothesized relationship and provides empirical evidence regarding the role of digital literacy as a determinant of trust within Indonesia's digital economy context.



Figure 1. Diagram Conceptual Research

## RESULTS AND DISCUSSION

The first stage of analysis evaluates the measurement model to ensure that all constructs meet validity and reliability standards before testing the structural relationships. Confirmatory Factor Analysis (CFA) was conducted to assess factor loadings, composite reliability (CR), and average variance extracted (AVE) for each construct.

Table 1. Measurement Model Evaluation (Validity and Reliability Test)

Variable	Indicator Code	Factor Loading	Composite Reliability (CR)	AVE
<b>Digital Consumer Literacy</b>	DCL1	0.78		
	DCL2	0.81		
	DCL3	0.84	0.89	0.67
	DCL4	0.79		
<b>Trust in Digital Transactions</b>	TR1	0.83		
	TR2	0.86		
	TR3	0.80	0.91	0.71
	TR4	0.85		

The measurement model demonstrates satisfactory validity and reliability. All factor loadings exceed the recommended threshold of 0.70, indicating strong convergent validity. Composite Reliability values for Digital Consumer Literacy (0.89) and Trust (0.91) are above the minimum acceptable value of 0.70, confirming internal consistency. The AVE values for both constructs exceed 0.50, suggesting adequate convergent validity. Additionally, goodness-of-fit indices (CFI and TLI > 0.90; RMSEA and SRMR < 0.08) indicate that the model fits the data well. These results confirm that the measurement model is appropriate for further structural analysis.

After confirming the adequacy of the measurement model, the structural model was tested to examine the direct effect of Digital Consumer Literacy on Trust in Digital Economic Transactions.

Table 2. Structural Model Results (Hypothesis Testing)

Hypothesis	Path Relationship	Standardized Coefficient ( $\beta$ )	t-value	p-value	Result
H1	Digital Consumer Literacy → Trust	0.62	9.47	0.000	Supported

The structural analysis reveals that Digital Consumer Literacy has a positive and statistically significant effect on Trust in Digital Economic Transactions ( $\beta = 0.62$ ,  $p < 0.001$ ). The t-value of 9.47 exceeds the critical threshold of 1.96, confirming the significance of the relationship. This indicates that higher levels of digital literacy among consumers significantly increase their trust in digital platforms and online transactions. The  $R^2$  value of 0.38 suggests that Digital Consumer Literacy explains 38% of the variance in Trust, reflecting a moderate explanatory power. These findings empirically support the argument that digital literacy functions as a strategic cognitive and protective capability that strengthens trust formation within the digital economy context.

## Discussion

The objective of this study is to empirically analyze and test the influence of digital consumer literacy on the formation of trust in digital economic transactions in Indonesia. The findings presented in the structural model indicate that digital consumer literacy has a positive and statistically significant effect on trust, with a standardized coefficient of 0.62 and an explanatory power of 38 percent. These results confirm that digital literacy is not merely a complementary skill but functions as a central determinant in shaping consumers' trust toward digital platforms. This empirical evidence aligns with the

growing body of literature asserting that trust remains a universal determinant of online purchasing decisions and digital service adoption (Handoyo, 2024). By demonstrating a strong direct relationship between digital literacy and trust, this study contributes to clarifying the cognitive mechanisms underlying trust formation in the digital economy.

The mechanism through which digital literacy generates trust can be understood as both cognitive and protective. Digital literacy equips consumers with the ability to understand how digital systems operate, recognize security features, and assess the credibility of online platforms. In the context of mobile commerce in South Africa, digital literacy was found to enhance consumers' trust in payment systems, improve their ability to recognize fraudulent schemes, and strengthen their understanding of digital security features. The dominant theme emerging from that study was "empowering trust and security through digital literacy skills," highlighting literacy as a trust-enabling capability rather than a mere technical competence (Dinath, 2025). The present study's findings resonate with this mechanism. Indonesian consumers with higher digital literacy levels are more capable of evaluating transaction procedures, verifying platform legitimacy, and interpreting privacy policies, thereby reducing uncertainty and strengthening trust.

Similarly, cross-border e-commerce research indicates that digital literacy reduces vulnerability to fraud and manipulation while promoting safer online behavior. Consumers with higher literacy levels demonstrate better awareness of phishing tactics, data misuse risks, and secure payment verification procedures, which ultimately reinforce consumer protection and trust in cross-national transactions (Goetzinger & Spremic, 2025). In a digital environment characterized by geographical distance and regulatory heterogeneity, literacy functions as a protective buffer against perceived risks. The positive and significant effect observed in this study suggests that Indonesian consumers who possess stronger evaluative and security-oriented competencies are more confident in engaging in digital transactions, even when faced with structural uncertainties inherent in online markets.

Qualitative evidence from e-commerce contexts further supports this interpretation. Consumer knowledge regarding transaction systems, return policies, and payment security mechanisms has been shown to reduce perceived risk and increase trust in digital platforms (Nugraha et al., 2025). This reduction of perceived risk is a critical psychological pathway in trust formation. As previously established, perceived risk moderates the relationship between trust and purchase intention (Handoyo, 2024). Therefore, when digital literacy enhances consumers' understanding of transaction processes and legal protections, it indirectly weakens risk perceptions and strengthens trust. The statistical significance found in the present study provides quantitative confirmation of these qualitative insights, reinforcing the argument that knowledge and comprehension serve as foundational elements in trust construction.

Empirical findings from various national contexts further substantiate the central role of literacy in shaping trust. In Indonesia, digital financial literacy significantly increases the intention to use QRIS, a national digital payment system, by reducing uncertainty and reinforcing confidence in the security and benefits of the system (Ma'nawiyah et al., 2025). This finding parallels the results of the current study, suggesting that literacy enhances consumers' perceptions of system reliability and integrity. In Vietnam's fintech lending sector, financial literacy directly influences trust and engagement with digital platforms, with trust mediating the effect of literacy on service usage (Vuong, 2025). Although the present study examines general digital literacy rather than financial literacy alone, the positive structural relationship identified reflects a similar pattern: literacy strengthens trust, which in turn facilitates sustained digital participation.

Further evidence from Pakistan demonstrates that digital financial literacy exerts a stronger effect on trust in digital payment services than traditional financial literacy, particularly among Generation Y consumers (Khan & Zaman, 2025). This distinction underscores the importance of digital-specific competencies in addressing the technological and security complexities of online transactions. The present findings extend this insight by showing that broader digital consumer literacy encompassing information evaluation, privacy awareness, and security practices significantly predicts trust in the Indonesian context. Together, these comparative findings confirm that literacy operates as a foundational enabler of trust across diverse digital ecosystems.

Conceptually, digital literacy functions as both a cognitive and protective capability. Cognitively, it enhances consumers' understanding of technological processes, security indicators such as HTTPS encryption and padlock symbols, privacy statements, and consumer rights policies. Protectively, it empowers consumers to identify warning signals, avoid fraudulent links, and adopt secure digital practices (Dinath, 2025; Goetzinger & Spremic, 2025; Nugraha et al., 2025). This dual mechanism explains why digital literacy significantly influences trust. Trust is not formed in a vacuum; it emerges when consumers perceive that they possess sufficient competence to manage digital risks. In other words, literacy reduces cognitive ambiguity and enhances perceived control, both of which are central to trust development.

The strong path coefficient identified in this study indicates that digital literacy substantially contributes to explaining variations in trust. With an  $R^2$  value of 0.38, the model demonstrates moderate explanatory power, suggesting that literacy is a major, though not exclusive, determinant of trust. This finding is consistent with meta-analytic evidence positioning trust as a universal determinant of online purchasing decisions (Handoyo, 2024). By empirically demonstrating literacy as a direct antecedent of trust, this study addresses previous research gaps that treated literacy as peripheral or examined trust primarily through technological or regulatory lenses.

Importantly, the findings also contribute to resolving inconsistencies observed in social commerce research, where social presence and customer experience sometimes overshadow trust as predictors of purchase intention. By emphasizing the literacy–trust link, this study suggests that engagement-based factors may operate effectively only when consumers possess sufficient literacy to interpret social cues and evaluate platform credibility. In low-literacy environments, social engagement without critical evaluation may not produce sustainable trust. Therefore, digital literacy strengthens the structural foundation upon which other trust-building mechanisms operate.

From a policy perspective, the results imply that strengthening digital literacy programs can have a direct and measurable impact on consumer trust in digital transactions. Rather than focusing exclusively on regulatory reforms or technological upgrades, policymakers should consider literacy enhancement as a complementary trust-building strategy. Evidence from multiple contexts demonstrates that literacy reduces perceived risk, increases awareness of security features, and enhances platform evaluation skills (Dinath, 2025; Goetzinger & Spremic, 2025; Vuong, 2025; Khan & Zaman, 2025; Ma'nawiyah et al., 2025; Nugraha et al., 2025). Therefore, integrating literacy initiatives with consumer protection frameworks may produce synergistic effects in strengthening digital economic participation.

Theoretically, this study advances digital trust literature by positioning digital consumer literacy as a central antecedent within an integrated framework. While previous models emphasized technological quality, organizational reputation, or regulatory compliance, the present findings highlight the role of individual cognitive capacity as a determinant of trust. Trust, as confirmed by prior research, remains a

universal driver of online purchasing decisions (Handoyo, 2024). However, trust itself is shaped by consumers' ability to interpret technological signals and assess institutional safeguards. By empirically validating the literacy–trust relationship in Indonesia, this study contributes contextual evidence from an emerging digital economy and reinforces the multidimensional nature of trust formation.

In summary, the discussion confirms that digital consumer literacy significantly influences trust in digital economic transactions. Through cognitive empowerment and protective competence, literacy reduces perceived risk, enhances perceived security, and strengthens confidence in platform integrity. These mechanisms are supported by empirical findings across diverse contexts, including mobile commerce, cross-border e-commerce, fintech lending, and digital payment systems (Dinath, 2025; Goetzinger & Spremic, 2025; Vuong, 2025; Khan & Zaman, 2025; Ma'nawiyah et al., 2025; Nugraha et al., 2025). By addressing identified research gaps and integrating individual capability into trust modeling, this study fulfills its objective and provides robust empirical evidence that digital literacy serves as a strategic determinant of trust within the evolving digital economy.

## CONCLUSIONS

This study concludes that digital consumer literacy plays a significant and positive role in shaping trust in digital economic transactions in Indonesia. Consistent with the research objective, the empirical findings demonstrate that consumers who possess stronger competencies in evaluating online information, understanding data privacy and security features, and recognizing potential digital risks are more likely to develop trust in digital platforms. Digital literacy functions as both a cognitive and protective capability that reduces perceived uncertainty, enhances perceptions of platform integrity and security, and ultimately strengthens confidence in engaging in online transactions. By confirming digital literacy as a direct determinant of trust, this study contributes to the theoretical development of digital trust models and provides practical implications for policymakers and stakeholders to prioritize digital literacy enhancement as a strategic approach to fostering sustainable participation in the digital economy.

## REFERENCE

- Asiri, A., Ghani, N., & Hamid, S. (2025). Examining the predictors of consumer trust and social commerce engagement: A systematic literature review. *Journal of Theoretical and Applied Electronic Commerce Research*, 20, 247. <https://doi.org/10.3390/jtaer20030247>
- Buchan, M., Bhawra, J., & Katapally, T. (2024). Navigating the digital world: Development of an evidence-based digital literacy program and assessment tool for youth. *Smart Learning Environments*, 11. <https://doi.org/10.1186/s40561-024-00293-x>
- Dinath, W. (2025). Digital literacy as a catalyst for m-commerce adoption in South Africa. *European Conference on Innovation and Entrepreneurship*. <https://doi.org/10.34190/ecie.20.1.3837>
- Goetzinger, P., & Spremic, M. (2025). Cross-border e-commerce and its implications for consumer protection (2019–2024): A systematic literature review. *European Journal of Economics*. <https://doi.org/10.33422/eje.v5i1.972>
- Gupta, Y. (2025). Digital transformation and consumer trust in global e-commerce: A comparative study of emerging and developed markets. *International Journal for Multidisciplinary Research*. <https://doi.org/10.36948/ijfmr.2025.v07i03.49323>

- Handoyo, S. (2024). Purchasing in the digital age: A meta-analytical perspective on trust, risk, security, and e-WOM in e-commerce. *Heliyon*, 10. <https://doi.org/10.1016/j.heliyon.2024.e29714>
- Hasan, Z. (2024). Impact of digital financial literacy on consumer protection, investor security, and financial transactions in Indonesia. *International Journal of Islamic Economics and Finance Research*. <https://doi.org/10.53840/ijiefer165>
- Imani, T., & Prastyanti, R. (2025). The human firewall: Increasing digital awareness and literacy for consumer protection. *Ex Aequo Et Bono Journal of Law*. <https://doi.org/10.61511/eaebjol.v3i1.2025.1870>
- Kaplan, A., Kessler, T., Brill, J., & Hancock, P. (2021). Trust in artificial intelligence: Meta-analytic findings. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 65, 337–359. <https://doi.org/10.1177/00187208211013988>
- Khamitov, M., Rajavi, K., Huang, D., & Hong, Y. (2024). Consumer trust: Meta-analysis of 50 years of empirical research. *Journal of Consumer Research*. <https://doi.org/10.1093/jcr/ucad065>
- Khan, H., & Zaman, S. (2025). The analysis of enhancing financial literacy and digital payment behaviour among Gen Y in Pakistan. *Physical Education, Health and Social Sciences*. <https://doi.org/10.63163/jpehss.v3i1.198>
- Khan, I., Sohail, M., & Shah, B. (2025). Enhancing financial inclusion in Pakistan: Moderation mediation roles of financial digital literacy and consumer digital protection for mobile money adaptation and usage. *Journal of Accounting and Finance Review*. <https://doi.org/10.26652/jafr/25.01.005>
- Kozyreva, A., Wineburg, S., Lewandowsky, S., & Hertwig, R. (2022). Critical ignoring as a core competence for digital citizens. *Current Directions in Psychological Science*, 32, 81–88. <https://doi.org/10.1177/09637214221121570>
- Kriswandaru, A., Fachuda, F., & Risma, S. (2025). The effectiveness of digital consumer protection law in promoting trust and the growth of online economic transactions. *Perkara: Jurnal Ilmu Hukum dan Politik*. <https://doi.org/10.51903/5ayi5t34>
- Kumar, U., & Sethupathy, A. (2025). Evolving frameworks in digital payment security: Technological innovations, economic impact, and consumer trust dynamics. *International Journal of Computational and Experimental Science and Engineering*. <https://doi.org/10.22399/ijcesen.3893>
- Lee, H., Lim, J., & Nam, H. (2022). Effect of a digital literacy program on older adults' digital social behavior: A quasi-experimental study. *International Journal of Environmental Research and Public Health*, 19. <https://doi.org/10.3390/ijerph191912404>
- Ma'nawiyah, Y., Harini, D., Sucipto, H., Indriyani, A., & Riono, S. (2025). Pengaruh literasi keuangan digital, kepercayaan konsumen dan perilaku risiko keuangan terhadap minat bertransaksi menggunakan QRIS di era digital. *Jurnal Publikasi Sistem Informasi dan Manajemen Bisnis*. <https://doi.org/10.55606/jupsim.v4i3.5321>
- Nugraha, D., Haq, M., & Sudarmiati, S. (2025). The role of knowledge and trust in online purchase decisions: A case study of e-commerce users. *Formosa Journal of Multidisciplinary Research*. <https://doi.org/10.55927/fjmr.v4i5.188>
- Pineda, M., Jabba, D., & Nieto-Bernal, W. (2024). Blockchain architectures for the digital economy: Trends and opportunities. *Sustainability*. <https://doi.org/10.20944/preprints202310.1946.v1>
- Qadri, U., Moustafa, A., & Ghani, M. (2025). They misused me! Digital literacy's dual role in AI marketing manipulation and unethical young consumer behavior. *Young Consumers*. <https://doi.org/10.1108/yc-08-2024-2207>

- Suwanan, A., & Allya, H. (2024). The nexus between social presence, customer experience and purchase intention in social commerce platform toward sustainable digital economic development. *KnE Social Sciences*. <https://doi.org/10.18502/kss.v9i4.15099>
- Tunkevichus, E. (2025). Determinants of consumers' digital trust as drivers of the digital economy: Results of a systematic literature review and meta-analysis. *Journal of Applied Economic Research*. <https://doi.org/10.15826/vestnik.2025.24.2.024>
- Vuong, D. (2025). Financial literacy and consumer behavior dynamics in digital lending platforms: A structural equation modeling approach in Vietnam's emerging fintech ecosystem. *Journal of Economics, Finance and Management Studies*. <https://doi.org/10.47191/jefms/v8-i5-74>
- Zhghenti, T., & Chkareuli, V. (2021). Enhancing online business sector: Digital trust formation process. *Marketing and Management of Innovations*. <https://doi.org/10.21272/mmi.2021.2-07>