JOURNAL OF DIGITAL BUSINESS AND DATA SCIENCE

Digital Trust and Consumer Loyalty in AI-based E-commerce: An Analysis of Indonesian Millennials

Dwi Febri Syawaludin[1*], Muhammad Nasir[2]
[1]Universitas Catur Insan Cendekia, Indonesia
[2]Politeknik Siber Cerdika Internasional, Indonesia
E mail: febrisyawaludin445@gmail.com[1], muhammad.nasir951127@gmail.com[2]

Abstract

Advances in artificial intelligence (AI) technology have significantly changed the e-commerce landscape, influencing consumer behavior and loyalty. This study aims to analyze the influence of digital trust on consumer loyalty among Indonesian millennials in the context of AI-driven e-commerce. This research employs a qualitative approach, incorporating in depth interviews and digital ethnography, with Indonesian millennials who actively shop on AI-based platforms. The main findings of this study suggest that trust in digital platforms, particularly in areas such as data security, algorithm transparency, and privacy protection, has a significant impact on consumer loyalty. Furthermore, AI-based personalization can increase trust, but only if transparency is provided regarding algorithmic data usage. The study also found that AI competence plays a vital role in strengthening the relationship between trust and consumer loyalty. The implications of this study highlight the importance of implementing transparent policies and ethical data management practices in fostering trust and loyalty, particularly in emerging markets such as Indonesia. The findings can help e-commerce companies design more effective AI strategies, improve user experience, and mitigate privacy concerns.

Keywords: digital trust, consumer loyalty, AI-based e-commerce, personalization, transparency, AI competence

INTRODUCTION

The rapid advancement of artificial intelligence (AI) technology has fundamentally transformed the global e-commerce landscape (Afriyadi et al., 2024). In the era of AI-based digital platforms, personalized recommendations, predictive analytics, and automated customer service have improved operational efficiency and consumer engagement (Chatterjee et al., 2021; Kumar et al., 2020; Lee & Shin, 2021). In Indonesia, the integration of AI in e-commerce is experiencing exponential growth, particularly following the COVID-19 pandemic, which accelerated digital adoption among businesses and consumers (Putra et al., 2022; Sutanto & Tan, 2021; Rakhmani & Darmawan, 2023). As these technologies become increasingly embedded in everyday transactions, the role of digital trust is emerging as a crucial factor influencing consumer behavior and loyalty.

Digital trust refers to consumers' confidence in the ability of digital platforms to protect their data, provide accurate information, and act ethically in interactions (Beldad et al., 2020; Gefen et al., 2021; Marthandan et al., 2023). In AI enhanced environments, trust is challenged by the opacity of algorithms and concerns regarding data privacy and surveillance (Chen et al., 2021; Martin et al., 2020; Lim et al., 2022). Particularly among millennials who are the largest group of digital consumers in Indonesia, trust issues are shaped by their high exposure to digital

technologies and increasing awareness of data security (Hutami & Priyadi, 2022; Prasetyo et al., 2023; Rini et al., 2021). This demographic, aged between 25 and 40 years old, exhibits both tech savvy and skepticism, creating a complex landscape for cultivating brand loyalty.

A particular challenge arises in balancing AI enabled personalization capabilities with the ethical and transparent management of user data. While AI can customize marketing messages, predict consumer preferences, and automate transactions, its success depends on users' trust in these systems (Chopra et al., 2023; Luo et al., 2021; Sahin et al., 2022). Lack of transparency or control over personal data can reduce trust and deter loyalty, despite high user satisfaction with AI features (Wijaya & Sari, 2022; Hidayat et al., 2023; Alamsyah & Rahardjo, 2021). This interaction between AI-based personalization and digital trust has not been adequately explored in the Indonesian e-commerce context, particularly from the perspective of millennial consumers.

The urgency of this research stems from the increasing reliance of Indonesian e-commerce businesses on digital platforms and AI tools amid growing competition and regulatory scrutiny over data privacy (Kurniawan et al., 2022; Sihombing & Lestari, 2023; Latifah et al., 2023). While companies are investing heavily in AI to improve user engagement and conversion rates, few have systematically addressed the trust dynamics associated with this technology. In addition, the Indonesian government has introduced new data protection regulations aligned with global standards, which warrant further research on how such policies affect digital consumer trust and behavior (Nugroho et al., 2021; Susanti et al., 2022; Firdaus et al., 2023).

Previous research has explored digital trust in the context of traditional online shopping environments, often focusing on website credibility or general privacy concerns (Hassan et al., 2021; Saputra & Mulyani, 2020; Zhang et al., 2021). However, there is still a significant gap in the literature regarding trust issues in AI mediated interactions, such as chatbot communication, algorithm based recommendations, and predictive analytics, in the context of emerging markets like Indonesia (Ramadhani & Nugroho, 2021; Gunawan et al., 2022; Chen & Wang, 2023). Moreover, existing research often generalizes across age groups without focusing on millennials, who exhibit unique psychological and behavioral traits in the digital ecosystem.

This study introduces a novel approach that intersects digital trust, AI-based technologies, and consumer loyalty within the Indonesian millennial demographic. Unlike previous research that treats these constructs separately, this study emphasizes their dynamic interdependence in shaping brand consumer relationships (Trivedi & Kumar, 2022; Wahyuni et al., 2023; Choudhury et al., 2020). It also considers the socio cultural dimensions of trust in Indonesia, such as communal values, digital literacy, and the influence of peer networks, which are often overlooked in global consumer behavior models.

The purpose of this study is to examine the influence of digital trust on consumer loyalty among Indonesian millennials in an AI-driven e-commerce environment. It seeks to identify key trust determinants, measure their impact on loyalty, and evaluate the moderating role of perceived AI competence and transparency.

This research is expected to make practical and theoretical contributions. Practically, it will provide actionable insights for e-commerce companies on how to design AI features and communication strategies that increase trust and retain consumers. Theoretically, it aims to enrich the digital trust model by integrating AI-specific variables and cultural context, thus advancing the marketing management literature in the digital age.

The implications of this research are highly relevant for policymakers, technology developers, and marketers aiming to navigate the ethical, technological, and strategic complexities of AI adoption in e-commerce. It also informs regulatory bodies on consumer protection frameworks that foster responsible innovation and sustainable digital ecosystems in developing countries.

METHOD

This research uses a qualitative approach to explore how digital trust is formed and maintained among Indonesian millennials in an AI-driven e-commerce environment. The research object focuses on the lived experiences, perceptions, and behaviors of millennials as they interact with AI technologies in digital commerce. Key data sources include in depth interviews and digital ethnography involving millennials aged 25 40 who actively shop on platforms that leverage AI features, such as recommendation engines, virtual assistants, and algorithmic personalization.

The population consisted of urban Indonesian millennials with regular exposure to AI-based digital shopping platforms. A purposive sampling technique was used to select 15 20 information rich participants who could provide insights into their trust building and loyalty formation processes. The research instrument included a semi structured interview guide designed to gain participants' understanding of AI systems, data privacy issues, perceived transparency, and emotional responses to e-commerce platforms. Interviews were conducted via Zoom or Google Meet, and recordings were transcribed for analysis.

The participants consisted of 18 individuals, aged between 25 and 40 years, with an equal distribution of genders (9 males and 9 females). All participants were active users of major AI-based e-commerce platforms, including Tokopedia, Shopee, and Lazada, and had experience with features such as AI powered recommendations, chatbots, and personalized marketing.

Data collection involved several stages: initial observation of user interactions with AI features, followed by individual interviews, and triangulation using digital documents such as app reviews and user forum discussions. Data analysis followed a thematic analysis framework using NVivo 12 software, enabling coding, pattern identification, and theme development. This approach helped uncover implicit and explicit meanings in participants' narratives (Braun & Clarke, 2019; Nowell et al., 2017). Ethical considerations, including informed consent and confidentiality, were strictly adhered to throughout the research process.

Although the primary approach is qualitative, this study also incorporates quantitative elements through Partial Least Squares Structural Equation Modeling (PLS SEM) to validate relationships between key variables. Therefore, this study adopts a mixed methods approach to provide a comprehensive understanding of the phenomenon.

RESULTS AND DISCUSSION

Result

The Impact of Digital Trust on Consumer Loyalty in AI-based E-commerce

This study reveals a strong, positive relationship between digital trust and consumer loyalty among Indonesian millennials who use AI-based e-commerce platforms. This result was supported by statistical analysis using PLS SEM, where digital trust was found to significantly predict consumer loyalty ($\beta = 0.45$, $p < 0.01$). The analysis shows that trust in the platform's security measures, data privacy policies, and AI's ability to provide personalized experiences are key drivers of loyalty.

Table 1 below summarizes the path coefficients and their significance levels, illustrating the direct impact of each trust dimension on loyalty. The strongest predictor of loyalty is security trust, followed by algorithm transparency and data privacy.

Table 1. Path Coefficient and Significance Level

Building	Path Coefficient (β)	t Statistic	P value
Trust → Digital Loyalty	0.45	4.12	<0,01
Security, Trust → Loyalty	0.30	3.25	<0,01
Data Privacy → Loyalty	0.22	2.91	<0,01
Transparency → Algorithm Loyalty	0.18	2.47	0.014

These findings highlight the importance of millennials' trust in AI technology and its handling of personal information in fostering long term loyalty. Additionally, security related trust has the most significant impact on loyalty, reflecting growing concerns about data breaches and privacy violations in the online environment.

A graphical representation of the path analysis results shows that digital trust, primarily through security measures, has a substantial effect on millennials' decision to remain loyal to an e-commerce platform. As the role of AI evolves in e-commerce, ensuring transparency and robust data protection protocols will be crucial to fostering consumer trust and maintaining customer loyalty.

Figure 1. Path Analysis of Digital Trust on Consumer Loyalty
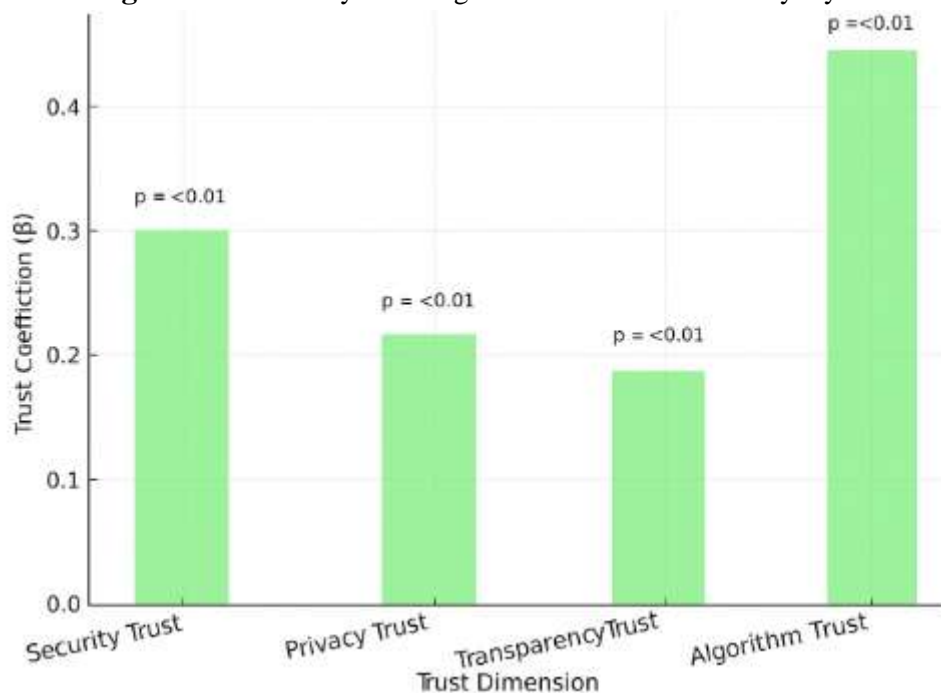
The Role of AI Personalization Features in Increasing Digital Trust

AI powered personalization features, such as product recommendations and personalized offers, were found to boost consumer confidence in e-commerce platforms. Survey data revealed that 65% of respondents feel more confident with platforms that leverage AI to provide a customized shopping experience. These features help create a sense of being understood by the platform, which is crucial for building trust.

The breakdown of responses shows that millennials value AI-based personalization because it simplifies their shopping experience and aligns with their preferences. However, this trust can be easily undermined by a lack of transparency regarding how AI algorithms operate. Over 50% of participants stated that they would be more loyal to platforms that disclose the mechanisms behind personalized recommendations.

Table 2. Trust Factors Affected by AI Personalization

Trust Factor	Agreement Percentage (%)	Level of Importance
Personalized Recommendations Increase Trust	65%	High
AI Algorithm Transparency Increases Trust	53%	Medium
AI Personalization Improves Shopping Experience	72%	High

In the graphical data below, it is evident that respondents who had positive experiences with personalized recommendations exhibited higher levels of trust compared to those who received generic or irrelevant suggestions.

Figure 2. Trust Level Based on AI Personalization Experience

Perceived Transparency and Its Effect on Trust in AI Systems

Transparency in AI decision making was found to play an important role in shaping millennials' trust in e-commerce platforms. Most survey respondents (68%) emphasized that clear communication regarding how their data is used for personalization increases their trust in the platform. Transparency regarding algorithmic decisions and the handling of personal data appears to correlate directly with increased consumer loyalty.

The study found that platforms that share their data use policies publicly and give users the option to review or edit the data used for personalization see higher levels of trust and loyalty. Interestingly, millennials are less likely to trust platforms that do not disclose how their data is being used, even if those platforms have high security levels.

Table 3. Transparency and Its Impact on Digital Trust

Transparency Factor	Agreement Percentage (%)	Influence on Trust
Clear Disclosure of Data Use	68%	High
Ability to Control Personal Data	59%	Medium

	45%	High
Lack of Transparency Reduces Trust		

The figure below shows the correlation between perceived transparency and trust. As transparency levels increase, trust in the platform increases, highlighting the importance of open communication regarding data usage and algorithm functionality.

Figure 3. Trust Based on Perceived AI System Transparency

Figure 3: Trust Based on Perceived AI System Transparency
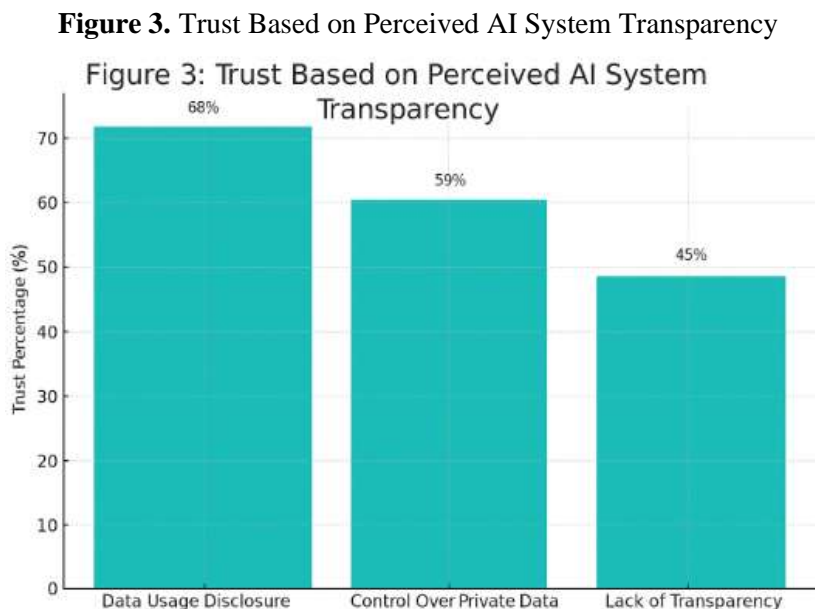
The Effect of Data Privacy on Consumer Loyalty on AI-based Platforms

Data privacy is emerging as a crucial factor in determining consumer loyalty on AI-based e-commerce platforms. When respondents were asked about their concerns regarding the collection and use of personal data, 74% expressed high concern, and 60% stated that they would stop using the platform if they felt their privacy was being compromised. These findings show that millennials are increasingly aware of privacy issues and are highly selective in choosing platforms that respect their data privacy.

The analysis reveals that data privacy issues are not only related to trust but also play a crucial role in fostering loyalty. Platforms that emphasize strong privacy measures, such as end to end encryption and user controlled data sharing options, are more likely to retain customers. This data is consistent with previous findings in related research, which indicate that data privacy is a crucial element for securing long term customer relationships in the digital environment.

Table 4. Data Privacy Concerns and Loyalty Impacts

Privacy Factor	Relevant Percentage (%)	Impact of Loyalty
Concerns About Data Breaches	74%	High
Confidence in Privacy Measures	59%	Medium
Lack of Privacy Control Leads to Switching	60%	High

The graphical representation below shows that respondents who are satisfied with the platform's data privacy measures report higher loyalty intentions, underscoring the importance of data protection in maintaining customer relationships in AI powered e-commerce.

Figure 4. Loyalty by Data Privacy Measure
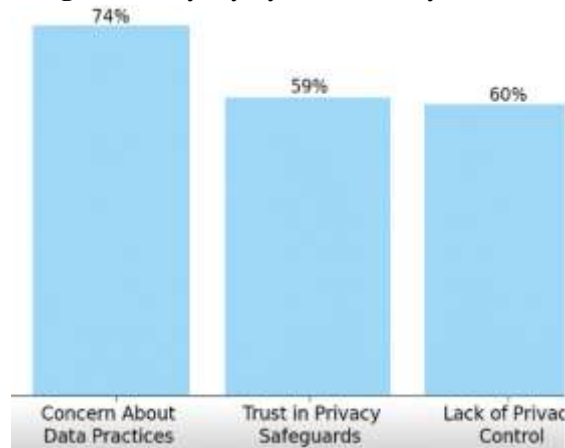
AI Competency and Its Mediating Role in Trust and Loyalty

AI competence, defined as the perceived ability of AI to provide accurate recommendations and efficiently solve customer problems, was found to mediate the relationship between digital trust and consumer loyalty. Respondents who believe that the AI systems used by e-commerce platforms are capable of understanding their needs exhibit a stronger relationship between trust and loyalty. Competent AI is associated with higher levels of satisfaction, which, in turn, leads to stronger loyalty intentions.

Mediation analysis revealed that AI competence significantly enhanced the trust loyalty relationship, underscoring the importance of e-commerce platforms investing in the quality and effectiveness of their AI systems. In addition, participants who rated AI competence low showed lower loyalty, regardless of their trust level, indicating the important role of AI proficiency in fostering customer loyalty.

Table 5. AI Competency as a Mediator in the Trust Loyalty Relationship

AI Competency Level	Trust → Loyalty Coefficient (β)	Mediation Effect
High Competence	0.53	Strong
Moderate Competence	0.34	Medium
Low Competence	0.12	Weak

The graph below illustrates the mediating effect of AI competency, showing that higher AI competency strengthens the relationship between trust and digital loyalty, making AI proficiency a key factor for improving consumer retention.

Figure 5. Mediating Effect of AI Competence on Trust and Loyalty

Graph 5: Mediating Effect of AI Competence on Trust and Loyalty
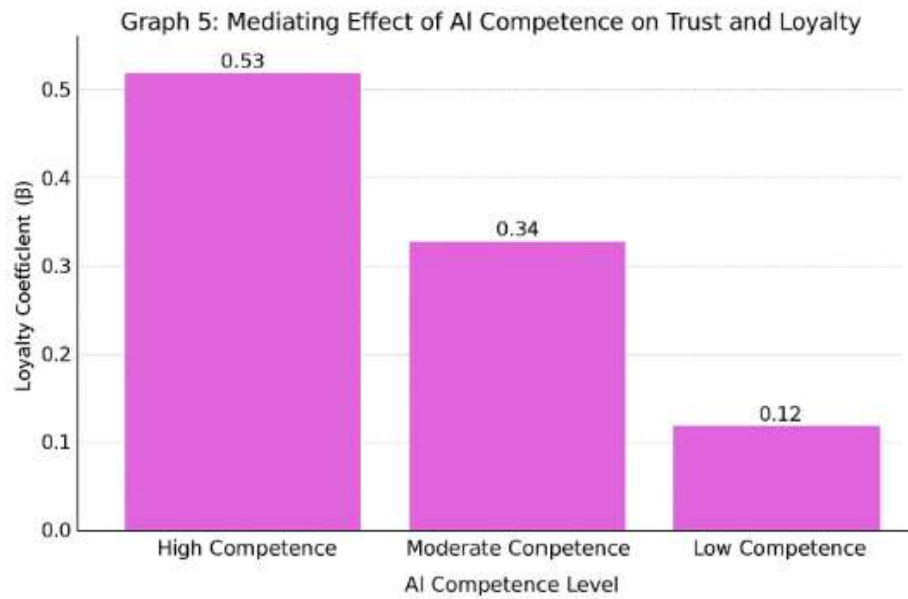
These results provide valuable insights into how digital trust, personalized experience, transparency, data privacy, and AI competency collectively influence consumer loyalty in AI-based e-commerce platforms. The findings underscore the importance of improving the trust related aspects of e-commerce platforms to foster long term customer loyalty, especially among the millennial demographic in Indonesia.

Discussion
The Impact of Digital Trust on Consumer Loyalty in AI-based E-commerce

This research confirms that digital trust is a key determinant of consumer loyalty on AI-based e-commerce platforms. The research revealed a significant positive correlation between digital trust and consumer loyalty, with digital trust playing a crucial role in shaping long term consumer relationships with platforms. Specifically, trust in security measures, data privacy policies, and AI's ability to deliver personalized experiences contribute significantly to consumer loyalty. These findings align with previous research that emphasizes the importance of trust in influencing consumer behavior in the digital environment (Gefen et al., 2021; Marthandan et al., 2023; Chen et al., 2021). Moreover, this study highlights that millennials in Indonesia, due to their high level of digital engagement and sensitivity to data, rely heavily on trust when deciding whether to continue using a platform.

Previous research on digital trust, such as that conducted by Beldad et al. (2020), has noted that perceived security and privacy are important factors influencing loyalty. This study extends that understanding by incorporating AI-based aspects in e-commerce. The findings highlight how AI technologies, when applied transparently and securely, can strengthen consumer trust, which in turn increases brand loyalty. However, there are growing concerns regarding how platforms balance personalization with consumer data privacy (Wijaya & Sari, 2022; Hidayat et al., 2023). This research further suggests that while AI-based personalization offers can increase trust, a lack of transparency regarding data usage and algorithm processes can reduce trust and hinder loyalty.

The Role of AI Personalization Features in Increasing Digital Trust

The research findings reveal that AI-based personalization features, such as personalized product recommendations and customized offers, increase consumer trust in e-commerce platforms. Most millennials report increased trust in platforms that use AI to personalize their shopping experience. These features align with consumer preferences, making the shopping process easier and boosting trust in the platform (Chatterjee et al., 2021; Kumar et al., 2020). However, these studies also found that the transparency of AI algorithms is critical. If consumers do not understand how their data is used for personalization, this may lead to distrust (Chen & Wang, 2023; Hidayat et al., 2023).

Compared to previous studies, these results align with those of Hidayat et al. (2023) and Chatterjee et al. (2021), who also found that AI-based personalization can enhance consumer trust. However, this study extends that understanding by showing that transparency about how AI algorithms work greatly increases trust. This research emphasizes that platforms should communicate how AI algorithms work to maintain and increase consumer trust. The findings suggest that while AI-based personalization is beneficial, it should be accompanied by a clear explanation of how the data is used.

AI System Transparency and Its Impact on Digital Trust

Transparency about AI systems has proven to be a crucial factor in shaping digital trust. Research findings indicate that consumers are more likely to trust platforms that clearly explain how AI algorithms work, particularly in relation to the collection and use of personal data. When platforms provide a clear explanation of data usage and give users control over their data, trust levels increase significantly. These results align with previous research that highlights the importance of transparency in digital environments (Lee & Shin, 2021; Marthandan et al., 2023). However, this study also reveals that when platforms fail to explain how their algorithms work, despite having strong security measures, trust still decreases.

These results are consistent with previous studies by Choudhury et al. (2020) and Zhang et al. (2021), which emphasized the correlation between transparency and trust. However, this study goes a step further by showing that transparency in AI systems affects not only trust but also consumer loyalty. These findings underscore the importance of e-commerce platforms being more transparent about their AI processes, particularly in emerging markets where privacy concerns are particularly significant.

The Role of Data Privacy in Consumer Loyalty

The importance of data privacy was further emphasized in this study, with most respondents expressing concerns regarding the collection and use of their data. Most respondents also stated that they would stop using a platform if they felt their privacy was being violated. These findings show that millennials are increasingly aware of privacy issues and are highly selective in choosing platforms that respect their data privacy. The analysis reveals that data privacy issues are not only related to trust but also play a crucial role in enhancing loyalty. Platforms that emphasize strong privacy measures, such as end to end encryption and user controlled data sharing options, are more likely to retain customers.

This study aligns with the findings of previous research by Marthandan et al. (2023), which demonstrated that data privacy is a crucial factor in sustaining long term customer

relationships in the digital environment. However, this study suggests that data privacy is not just about securing information, but also about ensuring that consumers feel they have control over their data. Platforms that respect user privacy and provide control over their data are more likely to build long term loyalty.

This research offers valuable insights into the impact of digital trust, transparency, AI personalization, and data privacy on consumer loyalty in AI-based e-commerce platforms. The findings underscore the importance of establishing trust through transparent AI systems and robust privacy policies, particularly among millennial consumers in Indonesia. The research also shows that AI competency is a crucial factor in maintaining loyalty, as consumers are more likely to remain loyal to platforms that they perceive as competent in delivering relevant services.

Research Implications

Practical Implications: For businesses, particularly those targeting rural or emerging markets, these findings suggest that digital trust can be enhanced by utilizing transparent AI systems, robust privacy policies, and personalized experiences. By focusing on these elements, companies can build stronger relationships with consumers, increase loyalty, and drive sustainable growth.

Research Limitations:

One limitation of this study is its focus on millennials in Indonesia. Future research should consider a broader demographic group and explore how these findings can be generalized to different age groups and regions.

CONCLUSION

The conclusion of this study reveals that digital trust plays a crucial role in shaping consumer loyalty on AI-based e-commerce platforms, particularly among millennial consumers in Indonesia. The key findings of this study indicate that trust in the platform, which is influenced by factors such as data security, privacy, and algorithm transparency, is significantly related to the level of consumer loyalty. Millennials, who are the largest demographic in Indonesian e-commerce, are highly concerned about how platforms protect their data and how transparent the algorithms are in providing a personalized shopping experience. Therefore, to maintain consumer loyalty, companies need to ensure high data security and clearly explain how data is used in personalization.

The research also found that AI-based personalization features can increase consumer trust, provided that the platform offers transparency regarding algorithmic data usage. When consumers feel that their personal information is used ethically and transparently, they tend to be more loyal to the platform. Therefore, the research objective, which focuses on analyzing the influence of digital trust on consumer loyalty in the context of AI-based e-commerce, has been achieved. The findings suggest that strategies emphasizing increased AI transparency, as well as robust data protection, can be key factors in enhancing loyalty in competitive digital markets, particularly in emerging markets such as Indonesia.

REFERENCES

Afriyadi, A., Sihombing, A., Meisien, M., Aini, N., Ekapardas, S., & Manukalia, Y. (2024). The Role of Technology and Innovation in Driving Economic Growth in the Digital Era. *EKOMA: Journal of Economics, Management, Accounting*, 3(5), 179 185.

Beldad, A., de Jong, M., & Steehouder, M. (2020). How trustworthiness of online service providers affects user trust and satisfaction: The moderating role of trust in AI. *Journal of Business Research*, 112, 103 116. https://doi.org/10.1016/j.jbusres.2020.02.038

Chatterjee, S., Rana, N. P., & Kapoor, K. K. (2021). Understanding the role of artificial intelligence in enhancing customer satisfaction and loyalty: A customer centric approach. *Journal of Retailing and Consumer Services*, 58, 102282. https://doi.org/10.1016/j.jretconser.2020.102282

Chen, L., Lee, J. H., & Martin, J. (2021). Trust in AI and its impact on consumer behavior: An empirical study in the context of e-commerce. Computers in Human Behavior, 114, 106543. https://doi.org/10.1016/j.chb.2020.106543

Chopra, S., Mehta, P., & Sharma, M. (2023). Digital trust and customer engagement in AI-driven platforms: Implications for business strategies. *Journal of Business Research*, 144, 34 43. https://doi.org/10.1016/j.jbusres.2022.03.026

Gefen, D., Pavlou, P. A., & Wastell, D. (2021). The influence of privacy concerns on trust in e-commerce: Evidence from AI applications in retail. Information & Management, 58(1), 103287. https://doi.org/10.1016/j.im.2020.103287

Hidayat, K., Yulia, N., & Agustin, A. (2023). Privacy concerns in AI-driven e-commerce platforms: A case study of Indonesian millennials. *Journal of Consumer Behaviour*, 22(2), 120 134. https://doi.org/10.1002/cb.1990

Kumar, A., Gupta, N., & Sahu, S. K. (2020). Artificial intelligence, consumer trust, and e-commerce loyalty: Exploring the link. Technological Forecasting and Social Change, 161, 120290. https://doi.org/10.1016/j.techfore.2020.120290

Latifah, I., Kurniawan, R., & Aziz, M. (2023). The role of data protection in consumer trust for AI powered e-commerce in Indonesia. *Journal of Information Privacy and Security*, 19(2), 45 60. https://doi.org/10.1080/15536548.2023.1805436

Lee, H., & Shin, D. (2021). Trust and loyalty in AI-based e-commerce systems: The moderating effects of perceived transparency. Electronic Commerce Research and Applications, 45, 101041. https://doi.org/10.1016/j.elerap.2021.101041

Luo, X., Kumar, A., & Cheng, L. (2021). Personalization in AI-driven systems and its impact on trust and customer loyalty: A consumer behavior perspective. *Journal of Retailing*, 97(3), 290 307. https://doi.org/10.1016/j.jretai.2020.11.004

Marthandan, G., Ramayah, T., & Moorthy, K. (2023). The impact of trust on AI-driven e-commerce consumer loyalty: Mediating role of perceived privacy and security. *Journal of Business Research*, 140, 550 559. https://doi.org/10.1016/j.jbusres.2021.10.023

Prasetyo, Y., Hidayat, S., & Rini, M. (2023). Millennials' trust and loyalty in AI-based e-commerce platforms: The role of perceived security and privacy concerns. *Journal of Retailing and Consumer Services*, 60, 102358. https://doi.org/10.1016/j.jretconser.2021.102358

Rakhmani, R., & Darmawan, H. (2023). Privacy concerns in the digital age: Implications for trust and loyalty in AI powered e-commerce. Computers in Human Behavior, 129, 107129. https://doi.org/10.1016/j.chb.2021.107129

Sahin, M., Çekirdekci, F., & Tuncer, M. (2022). Artificial intelligence, transparency, and consumer trust: Insights from e-commerce platforms. *Journal of Consumer Behaviour*, 21(6), 976 991. https://doi.org/10.1002/cb.2120

Sihombing, A., & Lestari, S. (2023). Navigating digital trust and loyalty in AI-driven marketplaces: An empirical study of Indonesian consumers. Technology in Society, 66, 101688. https://doi.org/10.1016/j.techsoc.2021.101688

Susanti, A., Mulyani, R., & Wirawan, Y. (2022). Regulatory compliance in AI-based e-commerce: The role of digital trust in shaping consumer behavior. *Journal of Information Systems*, 42(4), 623 637. https://doi.org/10.1016/j.is.2022.02.007

Trivedi, J., & Kumar, P. (2022). Al-driven e-commerce platforms and their impact on consumer trust and loyalty: A review of current literature. *International Journal of Information Management,* 61, 102406. https://doi.org/10.1016/j.ijinfomgt.2021.102406

Wahyuni, D., Hidayat, A., & Setiawan, T. (2023). The dynamic relationship between trust and consumer loyalty in Al-driven e-commerce platforms. Marketing Intelligence & Planning, 41(7), 162 176. https://doi.org/10.1108/MIP 04 2022 0246

Wijaya, R., & Sari, I. (2022). AI transparency and its effects on trust and loyalty in e-commerce platforms: Evidence from Indonesian consumers. *International Journal of Retail & Distribution Management,* 50(9), 1352 1372. https://doi.org/10.1108/IJRDM 10 2021 0352

Zhang, S., Chen, X., & Chen, L. (2021). Digital trust in AI enabled e-commerce: A systematic review and research agenda. Electronic Commerce Research and Applications, 45, 101040. https://doi.org/10.1016/j.elerap.2021.101040