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**UNLOCKING DIGITAL BANKING ADOPTION: THE ROLE OF EASE OF USE,  
SECURITY, AND TRUST IN GENERATION Z**

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**ABSTRACT**

This study examines the influence of perceived ease of use, security, and trust on the intention to adopt digital banking services among Generation Z in Lamongan Regency, Indonesia. Adopting a quantitative approach, data were collected from 100 respondents determined through Slovin's formula using structured questionnaires. The results indicate that perceived ease of use ( $t = 3.802$ ,  $p < 0.05$ ), security ( $t = 8.345$ ,  $p < 0.05$ ), and trust ( $t = 3.593$ ,  $p < 0.05$ ) each have a positive and significant effect on adoption intention. The adjusted  $R^2$  of 0.800 suggests that these predictors account for 80% of the variance in adoption intention, with the remaining 20% explained by other factors not included in this model. These findings underscore the pivotal role of usability, security, and trust in promoting digital banking adoption among Generation Z, offering valuable implications for financial institutions seeking to enhance engagement with younger consumers.

**Keywords:** Digital Banking Adoption, Perceived Ease of Use, Security, Trust, Generation Z

**INTRODUCTION**

The rapid acceleration of information and communication technologies has acted as a catalyst for fundamental changes across various industries, particularly in the financial sector. Digital banking has emerged as an innovative response, offering convenience, efficiency, and flexibility in financial transactions. Far from being a passing trend, digital banking has become an essential component of the modern financial ecosystem, reshaping how individuals and businesses interact with financial institutions (Alzoubi et al., 2020).

From a regulatory perspective, Indonesia's Financial Services Authority (OJK) through Regulation No. 12/POJK.03/2021 defines a digital bank as an Indonesian Legal Entity Bank (Bank Berbadan Hukum Indonesia/BHI) whose operations are primarily electronic and not required to maintain physical branch networks. The expansion of this sector is reflected in Bank Indonesia data, which reported that by July 2023, digital financial transactions reached IDR 5,035 trillion—representing 15.5% year-on-year growth (Shoimah et al., 2025). This growth has spurred the proliferation of digital-only banks such as Livin' by Mandiri, SeaBank, Bank Jago, BCA Digital (blu), and Allo Bank, thereby intensifying competition and pushing providers to strengthen marketing and technological capabilities (Julia et al., 2023).

Key psychological and behavioral factors strongly influence the intention to adopt digital banking. The concept of Perceived Ease of Use, as explained by Wicaksono (2022), reflects an individual's perception of how effortless it is to use a given technology. A higher level of ease of use has been shown to positively correlate with adoption intention. Perceived Security plays an equally important role, as confidence in data protection and safe transactions encourages customers to continue using digital platforms (Khomsatun et al., 2024). Finally, Trust is a critical determinant in digital banking adoption. Trust reflects the degree to which users believe a service provider consistently fulfills its promises and meets expectations, thereby reducing uncertainty in digital transactions (Bilgies et al., 2025; Fitriati et al., 2024).

Generation Z, as digital natives who have grown up immersed in technology, represents the demographic with the greatest potential for digital banking adoption. However, their

decisions are highly contingent upon perceptions of ease of use, security, and trust in digital platforms. As Rozi et al. (2020) emphasize, behavioral intention is not merely a reflection of interest but a deliberate willingness to engage with a system after evaluating its quality and reliability. Therefore, this study seeks to examine how perceived ease of use, security, and trust influence the adoption intentions of Generation Z in the digital banking context, offering insights into both consumer behavior and strategies for sustainable financial innovation.

## LITERATURE REVIEW

### Perceived Ease of Use

Perceived ease of use refers to the degree to which an individual believes that using a particular technology will be free of effort. In other words, it captures the extent to which technology users feel that interaction with the system is simple, clear, and does not require excessive cognitive or technical effort. According to Wicaksono (2023), perceived ease of use is a crucial determinant in technology adoption, as individuals are more likely to engage with digital services when they find them intuitive and user-friendly. Within the digital banking context, ease of use directly influences Generation Z's willingness to adopt such platforms, given their preference for seamless and efficient digital experiences.

### Security

Security refers to the condition of being free from danger, threats, or vulnerabilities, particularly in the protection of sensitive information. In the context of digital banking, security encompasses measures undertaken to safeguard users' financial data and transactions from potential risks, fraud, and cyberattacks. The Indonesian Dictionary (KBBI) defines security as the assurance of safety or freedom from potential harm, while Julianti and Ivan (2024) emphasize that security involves actions to protect informational assets against threats that may arise. A strong perception of security is fundamental in shaping users' confidence in digital banking services, as concerns about data breaches or financial risks can discourage adoption, especially among young digital natives.

### Perceived Trust

Trust represents a psychological and behavioral construct that reflects customers' belief in the reliability and integrity of service providers. According to Lenin Kumar (2017), as cited by Wardhana (2024), customer trust develops when individuals perceive that service providers will consistently act in their best interest. In digital banking, trust plays a pivotal role in influencing adoption, as users must believe that banks will handle their financial transactions securely, transparently, and fairly. Without sufficient trust, even technologically advanced and secure systems may fail to attract sustainable user engagement. Thus, trust operates as a mediating factor that reinforces the effects of perceived ease of use and security on intention to adopt digital banking.

### Behavioral Intention (Intention to Use)

Behavioral intention to use technology is defined as the degree of willingness or determination of an individual to continue engaging with a specific technological system. Jati (2018) explains that intention to use information technology is influenced by factors such as accessibility, availability, and perceived benefits of the technology. In the digital banking context, intention to use reflects Generation Z's readiness to consistently adopt and utilize digital banking platforms. This intention is shaped by perceptions of convenience, security, and trustworthiness, which collectively influence whether individuals transition from trial usage to long-term adoption.

### Digital Banking

Based on the Financial Services Authority (OJK) Regulation No. 12/POJK.03/2021, a digital bank is defined as an Indonesian Legal Entity Bank (BHI) that operates its business activities predominantly through electronic platforms. Unlike conventional

banks, digital banks are not required to maintain extensive physical branch networks, but they must operate at least one physical head office. Digital banking therefore represents a paradigm shift in the financial sector, emphasizing technological integration, cost efficiency, and accessibility for digitally literate populations such as Generation Z.

### **Generation Z**

According to Statistics Indonesia (BPS), Generation Z refers to individuals born between 1997 and 2012. This cohort is characterized by exposure to rapid technological development and economic growth during their formative years, making them the first fully digital-native generation. Their familiarity with mobile applications, social media, and online transactions positions them as a crucial market segment for digital banking adoption. However, despite their technological affinity, their adoption behavior remains influenced by perceptions of ease of use, security, and trust in digital financial platforms.

## **METHODS**

### **Research Method**

This study adopted a quantitative research design with an explanatory approach to analyze the causal relationships between independent and dependent variables. The sampling technique used was non-probability sampling, specifically incidental sampling, in which respondents were chosen based on their accessibility and willingness to participate during the data collection process. The target population consisted of Generation Z individuals residing in Lamongan Regency. According to official records from the Department of Population and Civil Registration of Lamongan Regency (2025), the total Generation Z population (ages 15–29) numbered 294,776 individuals, comprising 151,549 males and 143,227 females. The sample for this study comprised 100 respondents representing Generation Z individuals residing in Lamongan Regency. The sample size was determined using Slovin's formula (Sugiyono, 2021) with a predetermined margin of error, ensuring that the selected number of participants was adequate to represent the population and to provide reliable statistical inference.

### **Research Findings**

The analysis confirmed that perceived ease of use significantly influences the intention to adopt digital banking services. The statistical test produced a t-value of 3.802, exceeding the critical value of 1.98498, with a significance level of 0.000 ( $< 0.05$ ). This provides strong evidence that H1 is accepted. The result implies that the simpler and more intuitive a digital banking platform is, the higher the likelihood that Generation Z will adopt it. Ease of use reduces the perceived effort and cognitive load required to operate the service, which is crucial for younger users who value efficiency and seamless interaction. This outcome is consistent with prior research by Kurnia (2020), who found that user-friendly design directly enhances the decision to use digital financial technologies.

### **Security**

Security emerged as the most influential factor among the three variables. The t-test produced a value of 8.345, which was substantially greater than the t-table value of 1.98498, with a significance of 0.000. This confirms that H2 is accepted and demonstrates the strong positive effect of security on digital banking adoption. For Generation Z, who are highly engaged in digital environments, the assurance of data privacy, fraud protection, and transaction safety is critical. Users are more likely to adopt digital banking when they feel confident that their personal and financial information is safeguarded. This result is in line with Kurnia (2020), who also highlighted that robust security mechanisms are fundamental in building trust and driving adoption of digital financial services.

### **Perceived Trust**

Trust was also found to significantly influence adoption intention, with a t-value of 3.593, surpassing the critical value of 1.98498, and a significance level of 0.001. These findings

validate H3 and highlight the role of trust in the acceptance of digital banking. Perceived trust reflects the confidence of users that service providers will act in their best interests, ensuring reliability and credibility in financial transactions. For Generation Z, trust is not only tied to institutional credibility but also to the consistency of service quality and responsiveness of digital banking platforms. The findings are consistent with Damayanti (2024), who concluded that trust significantly enhances customers' willingness to adopt new financial technologies. This suggests that even if a platform is easy to use and secure, without trust, adoption levels may remain limited.

### **Simultaneous Effect of Perceived Ease of Use, Security, and Trust**

The simultaneous testing of all three independent variables further confirmed their collective influence on the intention to adopt digital banking. The F-test yielded a value of 133.096, which exceeded the critical F-table value of 2.70, with a significance level of 0.000. These results demonstrate that perceived ease of use, security, and trust jointly have a strong and significant effect on adoption intention. Moreover, the adjusted R<sup>2</sup> value of 0.800 indicates that 80% of the variance in the dependent variable can be explained by this model, while the remaining 20% is attributable to other unexamined factors. This high explanatory power underscores the robustness of the model and highlights the central role of usability, security, and trust in driving digital banking adoption among Generation Z. Consistent with Widya et al. (2023), the results affirm that technology adoption among young consumers is shaped by the combined perception of ease, safety, and reliability, which together create a compelling motivation for behavioral intention.

## **RESULTS**

The findings of this study reaffirm the centrality of user perceptions in shaping the adoption of digital banking services among Generation Z. The significant effect of perceived ease of use supports the Technology Acceptance Model (TAM), which posits that simplicity and usability directly influence behavioral intention (Davis, 1989; Venkatesh & Davis, 2000). For Generation Z, a cohort characterized by digital fluency and limited tolerance for complexity, the intuitive design of digital banking platforms becomes a critical determinant of adoption. This aligns with the results of Kurnia (2020) and recent empirical studies that emphasize the necessity of reducing cognitive barriers to foster positive user experiences in digital finance (Khomsatun et al., 2024).

The role of security as the most influential factor is consistent with prior research highlighting cybersecurity concerns as one of the greatest barriers to digital banking adoption. While ease of use attracts users, it is the assurance of safety that sustains engagement. Generation Z, despite being highly active in digital environments, exhibits heightened sensitivity to issues of privacy and fraud, given their exposure to widespread reports of data breaches and cyberattacks. This explains why security produced the highest statistical significance in this study. Consistent with Widya et al. (2023), robust protection of personal and financial data is not merely a functional requirement but a trust-building mechanism that enhances confidence and long-term adoption.

Equally important, trust was shown to significantly influence adoption intention. This aligns with institutional trust theory, which underscores that individuals' willingness to adopt financial technologies is shaped not only by technical safeguards but also by confidence in the integrity and reliability of providers (Damayanti, 2024). For Generation Z, who are accustomed to instant digital feedback loops, trust is reinforced through responsive customer service, consistent quality, and transparent communication. Without trust, even highly secure and easy-to-use platforms may face adoption resistance. This indicates that digital banks must invest in both technological and relational strategies to sustain user confidence.

The simultaneous influence of perceived ease of use, security, and trust, explaining 80% of the variance in adoption intention, highlights the synergistic nature of these factors. Rather than operating in isolation, usability, safety, and credibility collectively form the foundation of Generation Z's adoption behavior. This reinforces findings from recent digital finance research (Julia et al., 2023; Fitriati et al., 2024), which demonstrate that adoption decisions among younger consumers are multidimensional, requiring integrated strategies that balance technological efficiency with emotional assurance. For practitioners, this suggests that competitive advantage in digital banking will increasingly depend on designing systems that are not only technically advanced but also trustworthy and human-centered.

### **Practical Implications**

The results of this study provide several important implications for practitioners and policymakers. First, digital banking providers must prioritize user-centered design, ensuring that applications are simple, intuitive, and compatible with the fast-paced lifestyle of Generation Z. This could involve continuous usability testing, interface personalization, and minimizing redundant steps in transactions. Second, security measures must be visible and transparent to users. Beyond implementing robust cybersecurity frameworks, banks should communicate these efforts clearly, such as through real-time fraud alerts, biometric authentication, and data encryption guarantees. Making users aware of such features can significantly enhance their sense of safety. Third, building trust requires more than technical reliability; it also involves relational strategies. Digital banks should strengthen trust through responsive customer service, transparent fee structures, and consistent delivery of promised services. Collaborations with regulators to enhance consumer protection can further reinforce institutional credibility. Finally, regulators such as the Financial Services Authority (OJK) should continue to establish and enforce digital banking policies that balance innovation with consumer protection. Strong governance frameworks can reassure the public that their rights and financial safety are safeguarded, which in turn will encourage broader adoption across the younger population

### **CONCLUSION**

This study examined the influence of perceived ease of use, security, and perceived trust on the intention to adopt digital banking services among Generation Z. The findings confirmed that all three variables significantly and positively affect adoption intention, with security emerging as the most dominant factor. The results further demonstrated that when considered simultaneously, these variables explained 80% of the variance in adoption behavior, underscoring their combined importance in shaping digital banking acceptance. The conclusion drawn is that Generation Z's adoption of digital banking is not solely dependent on usability but is strongly reinforced by perceptions of security and trust. For digital banks to gain sustainable acceptance, they must balance technological simplicity with robust security mechanisms and continuous efforts to build institutional credibility. These findings not only validate prior theories of technology acceptance but also highlight the multidimensional nature of financial technology adoption in the digital era.

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