

## **The Impact of Digital Financial Services on Financial Literacy in South Kalimantan, Indonesia**

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**Abstract:** The rapid advancement of digital financial services has reshaped the global financial ecosystem, offering enhanced accessibility and efficiency while also requiring users to possess a certain level of financial and digital literacy. This study aims to examine the impact of digital financial services on financial literacy in the city of Banjarmasin, South Kalimantan, Indonesia. Employing a quantitative research design, data were collected from 100 users of mobile and internet banking services at Bank Kalsel through structured questionnaires. Analysis was conducted using descriptive and simple linear regression methods. The findings reveal a strong positive relationship between digital financial services and financial literacy, with an elasticity coefficient of 8.172 and a correlation coefficient (R) of 0.662. The coefficient of determination ( $R^2 = 0.438$ ) indicates that 43.8% of the variation in financial literacy is explained by digital financial services. These results underscore the importance of digital financial inclusion, technology adoption, and service quality in enhancing users' financial knowledge, skills, and behavior. The study recommends integrated efforts from the government, financial institutions, and digital service providers to develop inclusive, user-friendly, and secure digital platforms, supported by targeted financial education programs to promote financial empowerment and reduce socio-economic disparities in South Kalimantan.

**Keywords:** Digital Banking, Digital Transaction, Financial Inclusion, Financial Literacy

### **A. Introduction**

The rapid emergence of digital financial services has transformed the global financial landscape, offering increased accessibility and efficiency in financial transactions. Services such as mobile banking, digital payments, and online lending platforms have played a central role in promoting financial inclusion by extending financial tools beyond traditional banking limitations (Ahmad, 2022) (Ahmad, 2022). However, these innovations also require users to possess a certain level of financial knowledge and digital competence to make informed decisions and avoid risks (Kumar et al., 2023). According to (Koskelainen et al., 2023), globally, digital financial literacy levels remain relatively low, highlighting the need for targeted

interventions and educational programs. In addition, individuals will gain greater awareness of the implications of digital financial literacy, empowering them to make informed decisions (Kumar et al., 2023).

Regionally, Indonesia has embraced digital transformation through initiatives like the Digital Indonesia Roadmap 2020, which supports digital development in areas such as digital infrastructure and the digital economy (Wadipalapa et al., 2024). With a tech-savvy population and growing internet penetration, the country presents a unique opportunity to study the interplay between digital financial service adoption and financial literacy (Al-shami et al., 2024) (Abbas & Gohar Mehmood Khan, 2024).

In this context, Banjarmasin, a rapidly growing urban center in South Kalimantan, provides a relevant setting to explore these dynamics. The city's expanding digital ecosystem and diverse socio-economic demographics highlight both the potential and the challenges of digital financial inclusion (Riha Parvin & Panakaje, 2022) (Mishra et al., 2024). Although digital financial services are increasingly accessible, it remains unclear to what extent this translates into improved financial literacy among residents – particularly in terms of budgeting, saving, borrowing, investing, and risk management (Katnic et al., 2024) (Van Nguyen et al., 2022).

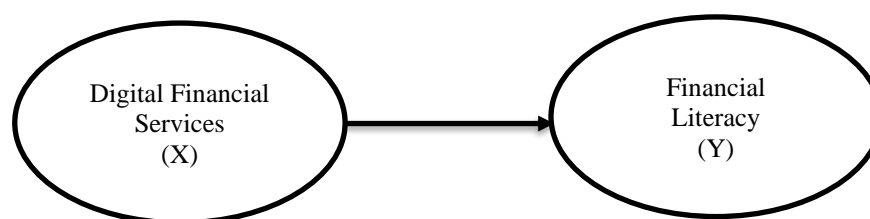
Previous studies have noted that despite increased access to financial tools, gaps in financial literacy persist globally, including in developing regions (Yadav & Banerji, 2024) (Choung et al., 2025). In Banjarmasin, factors such as age, education, income level, and access to technology may significantly influence individuals' ability to benefit from digital financial services. Understanding these relationships is critical for designing effective financial education initiatives and inclusive policy interventions.

This study aims to investigate the impact of digital financial services on financial literacy in the city of Banjarmasin, South Kalimantan. As digital financial platforms become increasingly integrated into everyday life, understanding how they influence individuals' financial knowledge, attitudes, and behaviors is critical. The research explores how services such as mobile banking, digital payments, and online lending affect financial literacy levels among different segments of the population.

In addition to examining the direct relationship between digital financial service usage and financial literacy, the study also seeks to identify the key determinants that shape financial literacy in the digital era. Factors such as age, education, income, digital access, and exposure to financial education programs are expected to play a role in shaping how individuals understand and manage their personal finances in a digital context.

Furthermore, the study evaluates whether access to digital financial services contributes to broader financial empowerment or, conversely, reinforces existing

socio-economic inequalities. While digital platforms offer new opportunities, they may also create barriers for individuals with limited technological skills or low levels of financial knowledge. As such, the research considers both the inclusive potential and the risks of exclusion associated with digital financial services. Ultimately, this study seeks to provide evidence-based insights that can inform the development of policies and programs by government bodies, financial institutions, and community organizations. By understanding the dynamics between digital finance and financial literacy, the findings aim to support efforts to enhance financial inclusion and promote equitable economic development across South Kalimantan. Based on this background, the Figure 1 is conceptual framework can be created:



**Figure 1. Conceptual Framework**

## **B. Methods**

This study adopts a quantitative research approach grounded in positivist philosophy, aiming to objectively measure and analyze the relationship between digital financial services and financial literacy within the urban context of Banjarmasin, South Kalimantan. The research design follows a field research model, where empirical data were directly obtained through structured instruments administered to the target population.

### **Population and Sampling**

The population in this study comprises active users of digital financial services in South Kalimantan Province, specifically individuals using mobile banking (m-banking) and internet banking (i-banking) platforms. Based on 2022 data, this population totals 87,924 users. A sample of 100 respondents was determined using the Slovin formula, ensuring proportional representation with a margin of error acceptable for social science research.

The sampling technique used was non-probability purposive sampling, wherein respondents were selected based on specific criteria—namely, having prior experience and active usage of digital financial services, particularly from Bank Kalsel. Although not randomized, this method ensured relevance and depth of response in relation to the study objectives.

## **Instrument Development and Validation**

Data were collected through a structured, closed-ended questionnaire designed to measure perceptions and behaviors on a 5-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree). The instrument included indicators of both digital financial service usage and financial literacy dimensions (knowledge, skills, attitudes, behavior).

To ensure instrument validity and reliability, a pilot test was conducted prior to the full survey rollout. Content validity was assessed through expert judgment, and internal consistency was evaluated using Cronbach's alpha. The resulting reliability coefficient was  $\alpha = 0.872$ , indicating a high level of internal consistency for the questionnaire items.

## **Data Analysis Techniques**

Data in this study were analyzed using SPSS (Statistical Package for the Social Sciences), which facilitated both descriptive and inferential statistical analysis. Descriptive statistics were employed to summarize the demographic characteristics of the respondents and to capture general trends in their responses related to digital financial services and financial literacy.

To test the research hypothesis, a simple linear regression analysis was conducted. This method was deemed appropriate given the study's objective: to examine the direct effect of a single independent variable digital financial services on a single dependent variable financial literacy. Prior to conducting the regression analysis, a series of assumption tests were performed to ensure the robustness of the model.

Normality of the data was evaluated using the Kolmogorov-Smirnov test, which yielded a p-value greater than 0.05, indicating that the data were normally distributed. The linearity assumption was verified through scatter plot visualization and correlation matrices, confirming a linear relationship between the variables. Due to the model's simplicity, involving only one independent variable, additional tests for homoscedasticity and multicollinearity were not required.

The regression analysis produced several key findings. The elasticity coefficient was calculated at 8.172, indicating that a 1% increase in the use of digital financial services corresponds to an 8.172% increase in financial literacy. The correlation coefficient (R) was 0.662, suggesting a moderate to strong positive relationship between the two variables. Additionally, the coefficient of determination ( $R^2$ ) was 0.438, which means that 43.8% of the variance in financial literacy can be explained by digital financial service usage, while the remaining 56.2% is likely influenced by other external factors.

The results of the t-test revealed a t-value of 7.132 with a p-value of 0.000 ( $p < 0.05$ ), indicating that the relationship between digital financial services and financial literacy is statistically significant. These findings provide strong empirical support for the study's alternative hypothesis.

The hypotheses tested in this study were as follows:  $H_0$ : Digital financial services do not have a significant effect on the financial literacy of the Banjarmasin city community.  $H_1$ : Digital financial services have a significant effect on the financial literacy of the Banjarmasin city community.

Based on the results, the null hypothesis ( $H_0$ ) was rejected, and the alternative hypothesis ( $H_1$ ) was accepted. This outcome aligns with theoretical expectations and suggests that increased access to and engagement with digital financial services contribute positively to individuals' financial literacy levels in Banjarmasin.

### **C. Results and Discussion**

This study investigates the significant influence of digital financial services on financial literacy, considering the dimensions of digital financial inclusion, digital technology adoption, digital service quality, customer satisfaction, ease of use of platforms, and digital transaction security as indicators of digital financial services. Meanwhile, financial literacy is measured through digital financial knowledge, digital financial skills, digital financial attitudes, and digital financial behavior (Normawati et al., 2021; Shehadeh et al., 2025). The results of the study show that there is a positive and significant correlation between digital financial services and financial literacy. This indicates that the higher the level of digital financial inclusion, digital technology adoption, service quality, customer satisfaction, ease of use of platforms, and digital transaction security, the higher the level of knowledge, skills, attitudes, and digital financial behavior of the community (Afroze & Rista, 2022).

Digital financial inclusion plays an important role in improving financial literacy because it opens up access to financial information and resources that were previously difficult to reach (Kumar et al., 2024; Mpofu, 2023). The adoption of digital technology allows people to interact with financial services more efficiently and effectively, thereby increasing their understanding of financial products and services (Kaur et al., 2021). Digital service quality, customer satisfaction, ease of use of the platform, and security of digital transactions also contribute positively to financial literacy because they create a pleasant and safe experience in using digital financial services, thus encouraging people to continue learning and improving their understanding of finance.

The results of the study showed that there was a positive and significant correlation between digital financial service indicators and financial literacy indicators in South Kalimantan. This indicates that the higher the level of digital financial inclusion,

digital technology adoption, digital service quality, customer satisfaction, ease of use of digital platforms, and digital transaction security, the higher the level of digital financial knowledge, digital financial skills, digital financial attitudes, and digital financial behavior of the community. The implication of this finding is that the development of inclusive, easy-to-use, safe, and quality digital financial services can be an effective strategy to improve public financial literacy. The government, financial institutions, and technology service providers need to work together to create a digital financial ecosystem that supports improving financial literacy. Financial education and literacy programs also need to be integrated into digital financial platforms and services to ensure that the community has sufficient knowledge and skills to manage their finances effectively.

Digital financial services can be an effective tool to improve people's financial literacy, especially if supported by the right policies and programs. The government and financial institutions need to work together to:

- a. Improve access and quality of digital infrastructure: Ensure that all people in South Kalimantan have affordable and reliable access to the internet and digital devices.
- b. Develop an inclusive and easy-to-use digital financial services platform: Design a digital financial services platform that takes into account the needs and preferences of various community groups, including those with low levels of digital literacy.
- c. Provide digital financial education and training: Organize comprehensive education and training programs to improve people's digital financial knowledge and skills.
- d. Increase awareness of the risks and benefits of digital financial services: Effectively communicate the risks and benefits of digital financial services to the public, as well as provide tips on how to protect themselves from online fraud and other illegal financial practices.

#### **D. Conclusion**

Digital financial services have great potential to improve financial literacy in South Kalimantan Province. By addressing challenges and implementing appropriate recommendations, we can create an inclusive, safe, and empowering digital financial ecosystem that helps people achieve their financial goals.

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