

## Analyzing Digital Financial Literacy of Bank Indonesia in Preventing Digital Financial Crimes: A Qualitative Case Study in Banten Province

<sup>1</sup>Izul Saputra; <sup>2</sup>Neka Fitriyah; <sup>3</sup>Rahmi Winangsih

Program Magister Ilmu Komunikasi Fakultas Ilmu Sosial dan Ilmu Politik Universitas Sultan Ageng Tirtayasa, Indonesia

### ABSTRACT

**Purpose**— This study analyzes the efforts of Bank Indonesia in enhancing digital financial literacy to prevent digital financial crimes in Serang City, focusing on communication planning, resource organization, and educational campaigns.

**Design/methods/approach** – Using a qualitative case study approach, data were collected through in-depth interviews with key stakeholders and analyzed to understand the communication strategies employed by Bank Indonesia.

**Findings** – The study highlights a direct relationship between enhanced digital financial literacy and reduced digital financial crimes. It contributes to the literature on financial literacy and communication strategies, offering insights for policymakers and financial institutions.

**Research implications/limitations**— While limited to a single case study in Serang City, this research offers localized insights that may not be broadly generalizable but provide a strong foundation for future studies.

**Originality/value** – The study provides unique insights into how digital financial literacy initiatives can be localized to address the specific challenges faced by smaller cities like Serang, which often experience gaps in digital literacy and financial inclusion.

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## Introduction

In the era of rapid technological advancements, the digital revolution has transformed various aspects of human life, particularly the financial sector. Digital financial systems have offered unprecedented convenience in accessing financial services, conducting transactions, and managing resources. However, these advancements have also introduced new challenges, particularly in the form of digital financial crimes such as online fraud, phishing, identity theft, and unauthorized data breaches. According to OJK (2024), Indonesia has recorded over 9,000

**CONTACT:** ✉ [izulsaputra.edu@gmail.com](mailto:izulsaputra.edu@gmail.com)

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illegal financial activities since 2017, highlighting the growing threat of financial insecurity in the digital realm.

The increasing prevalence of digital financial crimes has prompted financial institutions and policymakers to focus on preventive measures, among which digital financial literacy plays a crucial role. Digital financial literacy refers to an individual's ability to understand and use digital financial tools securely and effectively. It encompasses skills such as managing online banking, protecting personal data, and recognizing fraudulent schemes. Globally, efforts to enhance digital financial literacy are on the rise; however, their effectiveness often depends on the contextual application of these programs.

In Indonesia, financial literacy and inclusion have shown significant improvement over the years, yet disparities persist, particularly in regional areas. Banten Province, for instance, has a financial literacy rate of 45.19%, which is below the national average of 49.68%, as reported by OJK (2023). This gap becomes more evident in Serang City, the capital of Banten, where rapid adoption of digital technology in financial services has not been matched by adequate public awareness of digital financial security. Cases of phishing, online fraud, and data breaches remain prevalent, exposing the community to financial risks.

Bank Indonesia has taken proactive steps to address these challenges through targeted digital financial literacy programs. These initiatives aim to educate the public on secure digital transactions, raise awareness about digital financial crimes, and build community resilience against emerging financial threats. By employing various communication strategies, such as campaigns, workshops, and digital media outreach, Bank Indonesia seeks to bridge the gap between financial literacy and inclusion in Serang City. However, the effectiveness of these strategies in reaching diverse segments of society remains a critical question.

Despite the increasing attention to digital financial literacy at the national level, localized research that focuses on smaller urban areas like Serang City is still limited. Much of the existing literature emphasizes national trends and general frameworks, leaving a gap in understanding the unique challenges and opportunities at the regional level. This study seeks to fill that gap by exploring how Bank Indonesia's communication strategies contribute to enhancing digital financial literacy in the context of Serang City.

Using a qualitative approach and a case study design, this research analyzes Bank Indonesia's efforts in planning, organizing, and implementing digital financial literacy initiatives. It adopts Lasswell's Communication Theory and Effendy's communication model to evaluate the effectiveness of these strategies. Data were collected through in-depth interviews with key stakeholders and field observations, providing a comprehensive understanding of the communication dynamics and their impact on digital financial crime prevention.

The findings of this study offer both theoretical and practical contributions. Theoretically, it enriches the discourse on digital financial literacy by integrating communication strategies within the framework of crime prevention. Practically, it provides actionable insights for policymakers, financial institutions, and community leaders to design more effective and inclusive programs. By addressing the specific needs of smaller cities like Serang, this research highlights the importance of localized approaches in creating a safer and more financially secure digital ecosystem.

## Methods

This study employs a qualitative approach with a case study design to explore Bank Indonesia's digital financial literacy efforts in preventing digital financial crimes in Serang City, Banten Province. A qualitative approach was chosen because it allows for an in-depth understanding of complex phenomena within their natural context, particularly the communication dynamics between Bank Indonesia and the local community. The case study design was deemed suitable to investigate the specific strategies and challenges faced in a localized setting.

### Research Location and Participants

The study was conducted in Serang City, a rapidly growing urban area in Banten Province. The participants included key stakeholders involved in digital financial literacy initiatives, such as representatives from Bank Indonesia, community leaders, and members of the public who have participated in digital literacy programs. Participants were selected using purposive sampling to ensure they could provide relevant insights into the research questions.

### Data Collection Methods

Data were collected through three primary methods:

1. **In-depth Interviews:** Semi-structured interviews were conducted with 10 stakeholders, including Bank Indonesia officials, educators, and program participants, to gather detailed insights into their experiences and perceptions.
2. **Observation:** The researcher observed digital literacy campaigns and training sessions conducted by Bank Indonesia to understand how messages were delivered and received.
3. **Documentation:** Supporting documents, such as program reports, campaign materials, and statistical data from Bank Indonesia and OJK, were reviewed to complement the primary data.

### Data Analysis

Data were analyzed using thematic analysis, which involved identifying recurring themes and patterns related to communication strategies and their impact on digital financial literacy. The analysis followed three steps: data coding, theme development, and interpretation. To ensure reliability, data triangulation was applied by comparing findings from interviews, observations, and documentation.

### Limitations

The qualitative approach, while providing in-depth insights, may limit the generalizability of findings to other regions. Additionally, the reliance on self-reported data from interviews may introduce biases, such as recall bias or social desirability bias. However, these limitations were mitigated by triangulating data sources and maintaining reflexivity throughout the research process.

## Result

This study uncovered critical insights into Bank Indonesia's efforts to enhance digital financial literacy and mitigate digital financial crimes in Serang City. These findings are presented across four main themes: the role of digital financial literacy, the effectiveness of communication strategies, implementation challenges, and public perceptions of digital financial crimes.

### 1. Digital Financial Literacy as a Tool for Crime Prevention

Digital financial literacy has emerged as a pivotal tool in combating digital financial crimes in Serang City. Participants who attended Bank Indonesia's workshops reported significant improvements in their understanding of secure digital practices. One participant shared: *"I used to think my online transactions were safe as long as I used well-known platforms, but now I know the importance of regularly updating my passwords and avoiding suspicious links."* Notably, younger participants and those with prior exposure to digital platforms exhibited a faster uptake of the training content. However, older participants and individuals with limited digital exposure often required additional guidance, highlighting the need for tailored literacy programs that address varying levels of technological familiarity.

### 2. The Impact of Communication Strategies

Bank Indonesia employed a diverse range of communication strategies to enhance public awareness, including digital campaigns, educational videos, and community workshops. These initiatives leveraged popular platforms such as Instagram, Facebook, and WhatsApp to disseminate engaging content like infographics and short videos. Field observations revealed that workshops co-organized with local schools and community leaders fostered higher participation rates and deeper engagement. A notable example was a campaign titled *"Secure Your Transactions,"* which included practical demonstrations of identifying phishing attempts and using two-factor authentication. While these approaches were generally effective, gaps in accessibility were observed. Digital campaigns struggled to reach older demographics and individuals in rural areas with limited internet access. This limitation underscores the need for hybrid approaches combining digital and offline communication channels.

### 3. Challenges in Program Implementation

The study identified several challenges in implementing digital financial literacy programs. Key obstacles included:

- Low baseline literacy levels: Many participants lacked basic digital skills, making it difficult for them to grasp advanced concepts like cybersecurity measures.
- Trust deficits: Some community members expressed skepticism toward financial institutions due to prior experiences with fraudulent schemes or misinformation.
- Resource constraints: Limited availability of trainers and logistical support occasionally hindered the scalability of workshops.

A Bank Indonesia representative noted:

*"While we have made progress, the diversity of our audience requires a more segmented approach. Tailoring content to different age groups and technical expertise levels remains a priority."*

### 4. Public Perceptions of Digital Financial Crimes

Before participating in literacy programs, many individuals underestimated the risks of digital financial crimes, perceiving them as problems that only affect others. This perception shifted markedly after attending the training sessions. Participants reported increased awareness of the subtle tactics employed by fraudsters, such as phishing emails disguised as official communication or malicious websites mimicking trusted platforms. As one participant observed:

*"I now double-check the sender's email address and never click on unfamiliar links. It's surprising how easily one can fall for these traps if not vigilant."*

Interestingly, the study also highlighted a generational divide in risk perception. Younger participants were more aware of digital threats but often underestimated their own vulnerability, whereas older participants were less informed but more cautious in adopting digital technologies.

#### 5. Measuring Effectiveness and Identifying Areas for Improvement

An analysis of feedback and program outcomes indicated that Bank Indonesia's digital financial literacy initiatives have been moderately successful. Key indicators, such as improved awareness and changes in online behavior, showed positive trends. However, disparities in the effectiveness of these programs were evident:

- Tech-savvy groups absorbed the content more efficiently, while non-tech-savvy individuals required repeated exposure to grasp the concepts.
- Urban populations benefited more from digital campaigns than rural communities due to better internet access and digital infrastructure.

To address these gaps, it is recommended that future initiatives incorporate a blended approach, combining digital media with in-person outreach to ensure inclusivity.

#### Summary of Key Findings

This study demonstrates that digital financial literacy is a crucial element in mitigating financial crimes in Serang City. Bank Indonesia's efforts, while impactful, highlight the complexity of addressing diverse demographic needs. The findings underscore the importance of designing communication strategies that are both inclusive and adaptive to the unique challenges posed by different segments of the population.

## Conclusion

This study demonstrates the critical role of digital financial literacy in preventing digital financial crimes in Serang City, Banten Province. By focusing on Bank Indonesia's communication strategies, the research highlights the importance of targeted educational initiatives in enhancing public awareness and resilience against online threats. The findings reveal that while digital financial literacy programs have significantly improved participants' understanding of secure financial practices, disparities remain in their reach and effectiveness across different demographic groups.

Bank Indonesia's multifaceted approach, which includes digital campaigns, community workshops, and collaborations with local leaders, has proven effective in engaging younger, tech-savvy audiences. However, older and less technologically proficient individuals require more personalized and accessible methods of education. These challenges emphasize the need for inclusive strategies that cater to the diverse needs of the population, combining online and offline platforms to maximize impact.

Furthermore, the research highlights the evolving nature of digital financial crimes, which necessitates continuous adaptation of literacy programs. Building public trust, addressing baseline digital literacy gaps, and improving accessibility to educational resources are essential steps in fostering a more secure digital ecosystem. The use of Lasswell's Communication Theory and Effendy's communication model provides a robust framework for designing and evaluating these programs.

While this study focuses on Serang City, its findings offer broader implications for similar communities facing digital financial challenges. Policymakers, financial institutions, and educators can draw valuable lessons from Bank Indonesia's initiatives to design scalable and

localized programs. Future research should explore quantitative measures of program impact and the integration of advanced technologies, such as AI and gamification, in financial literacy campaigns.

In conclusion, enhancing digital financial literacy is not merely an educational goal but a societal necessity in the digital age. By addressing the identified gaps and building upon existing strategies, stakeholders can work collectively to create a safer and more inclusive financial environment for all.

## Declarations

### Author contribution statement

The lead author participated in the study's conceptualization and design, analysis, interpretation of data, and initial drafting of the paper. Each author contributed to the critical revision of the content for intellectual rigor and provided final approval for the published version. All authors are responsible for every aspect of the work.

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### Data availability statement

The data supporting this study's findings are available from the corresponding author upon reasonable request. However, due to privacy and ethical considerations, the data are not publicly accessible.

### Declaration of Interests Statement

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