

# DIGITAL TRANSFORMATION IN THE BANKING AND FINANCIAL INSTITUTION SECTOR ON CAPITAL MARKET DYNAMICS IN INDONESIA: A QUALITATIVE STUDY THROUGH ONLINE OBSERVATION

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## Abstract

### Keywords:

Digital Transformation,  
Banking,  
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Capital Markets,  
Online Observation

*This study aims to understand how digital transformation in the banking sector and financial institutions affects the dynamics of the capital market in Indonesia through online observation of various digital financial platforms. The qualitative method is used with online observation techniques on the bank's official website, digital securities applications, and investment platforms such as Bibit, Bareksa, and Ajaib. The focus of observation is directed at the form of digital service innovation, ease of access to investment, and changes in user behavior towards capital market financial products. The results of the study show that digitalization expands public participation in the capital market through the process of opening a securities account quickly, integrating payments via mobile banking, and integrated investment education in the application. Additionally, fee transparency features, real-time portfolio reports, and a two-factor security system increase investor confidence in the digital platform. However, challenges such as uneven financial literacy and personal data security are still major obstacles. This research provides an empirical overview of how digital innovation drives financial inclusion and changes the face of the capital market in the era of technological transformation.*

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## INTRODUCTION

Digital transformation has become a major force that is changing the face of the financial industry in Indonesia. Along with the development of financial technology (fintech) and the integration of digital banking systems, the investment process in the capital market is now becoming more and more accessible to the wider community. This change is not only happening in non-bank financial institutions, but also in the



traditional banking sector that is starting to adopt digital-based investment services, such as the integration of mutual funds and stocks in mobile banking applications.

The emergence of various digital platforms such as Bibit, Bareksa, Pluang, and Ajaib marks a new era of financial inclusion where retail investor participation has increased significantly. The Financial Services Authority (OJK) reported that the number of Indonesian capital market investors increased rapidly after 2020, along with the widespread use of mobile phone investment applications. This phenomenon shows that digitalization not only changes the way people manage their finances, but also shapes new investment behaviors that are faster, more transparent, and more efficient.

Based on a survey conducted by Finder.com, Indonesia ranked as the third-largest country in terms of digital banking usage in 2021. Approximately 24.9% of the total population in the country had adopted digital banking services. This condition highlights that the challenges and opportunities of digital banking have become key issues requiring in-depth understanding to support the sustainability and success of the financial industry. The data place Indonesia among the top ten countries with the largest digital banking user base worldwide in 2021.

The capital market plays a significant role in increasing investment interest among the younger generation, particularly in the current digital era. Technological advancements and easier access to information have created greater opportunities for young people to better understand and participate in capital market investments. Through user-friendly online investment platforms, young investors can begin investing with relatively small amounts of capital, learn about financial instruments such as stocks, bonds, and mutual funds, and take advantage of various online educational resources. These developments make investment more attractive and accessible, thereby encouraging young individuals to manage their finances from an early stage, which ultimately contributes to broader economic growth.

Various digital platforms and investment applications have emerged to facilitate capital market transactions, eliminating the need for complex procedures that were previously required. The younger generation, known for its high adaptability to technology, can now enter the investment world more easily through practical, fast, and affordable methods (Zubaidah, 2018). They are able to learn about investment instruments such as Islamic stocks, sukuk, and Islamic mutual funds with just a few taps on their smartphone screens.

Investment is considered an appropriate option for achieving significant returns (Utami & Kartika, 2020). Both tangible and digital forms of investment can be conducted through various approaches (Saroh et al., 2023). One investment option that continues to grow is participation in the capital market. The capital market offers attractive long-term return potential, which can serve as additional motivation for young people to learn about and become more deeply involved in investment activities (Wijaya & Sudarmawan, 2019). The role of technology in facilitating access to information, transactions, and investment education has therefore become a key factor in increasing investment interest among the younger generation in the digital era.

The significance of this research lies in its contribution to enhancing the understanding of digital banking dynamics, particularly in terms of the challenges faced and the opportunities that can be leveraged. By comprehensively examining these issues, industry practitioners, regulators, and academics can take strategic measures to optimize the potential of digital banking and effectively address emerging challenges.

Given the substantial influence of digital banking on national economic development, further exploration of banking digitalization is essential, as it plays a crucial role in supporting sustainable economic growth.

The capital market functions as a mechanism for channeling capital into productive economic sectors by serving as a bridge between parties that require funding (issuers) and those with excess funds (investors). This mechanism enables companies to expand their businesses, increase production capacity, and create new employment opportunities. In recent years, advances in digital technology have brought significant changes to the investment industry by opening access to opportunities that were previously difficult to reach. From cryptocurrencies and technology company stocks to fintech- and e-commerce-related investments, a wide range of new investment options has emerged, attracting investors from diverse backgrounds. Overall, digital development has fundamentally transformed the investment landscape.

## LITERATURE REVIEW

### 1. Digital Transformation in the Banking and Financial Services Sector

Digital transformation refers to the comprehensive integration of digital technologies into business processes, organizational culture, and service delivery models. In the banking and financial services sector, digital transformation has reshaped how institutions interact with customers, manage data, and deliver financial products. In Indonesia, this transformation has accelerated rapidly due to increased internet penetration, smartphone usage, and supportive regulatory frameworks. Traditional banks are no longer limited to physical branches; instead, they increasingly rely on mobile banking applications, digital onboarding, and real-time transaction systems to remain competitive.

The adoption of digital technologies such as cloud computing, big data analytics, artificial intelligence, and application programming interfaces (APIs) has enabled banks and financial institutions to offer faster, more personalized, and more efficient services. These innovations have significantly reduced operational costs while improving customer experience. Moreover, digital transformation has allowed financial institutions to collaborate with fintech companies, creating an ecosystem that supports innovation and financial inclusion. Such collaborations are particularly important in emerging markets like Indonesia, where a large portion of the population was previously underserved by formal financial institutions.

From an academic perspective, digital transformation is viewed not only as a technological shift but also as a strategic and organizational change. Scholars emphasize that successful digital transformation requires changes in governance, risk management, and human resource capabilities. In the context of capital markets, digitalized banking services play a critical role in connecting retail investors with investment instruments. As banks integrate investment features into their digital platforms, they become important intermediaries that influence investor access, behavior, and decision-making. Therefore, understanding digital transformation in the banking and financial services sector is essential to analyze its broader implications for capital market dynamics in Indonesia.

### 2. The Role of Fintech Platforms in Enhancing Capital Market Accessibility

Financial technology, commonly known as fintech, has emerged as a disruptive force within the financial sector by leveraging digital innovation to deliver financial

services more efficiently. In Indonesia, fintech platforms such as Bibit, Bareksa, Ajaib, and Pluang have significantly lowered entry barriers to capital market participation. These platforms provide user-friendly interfaces, simplified account opening processes, and educational features that enable first-time investors to access investment products with minimal capital.

The rise of fintech investment platforms has transformed capital market accessibility, particularly for young and retail investors. Traditional investment processes were often perceived as complex, costly, and exclusive. Fintech platforms address these challenges by offering digital onboarding, automated investment recommendations, and real-time portfolio monitoring. As a result, individuals with limited financial knowledge can participate in the capital market more confidently. Academic literature suggests that such accessibility contributes to increased market liquidity and broader investor diversification.

Furthermore, fintech platforms promote transparency and efficiency through digital disclosure, instant transactions, and integrated information systems. These characteristics align with modern investor preferences for speed and convenience. In Indonesia, the rapid growth of fintech adoption after 2020 coincided with a surge in retail investor numbers, indicating a strong relationship between digital platforms and capital market expansion. From a theoretical standpoint, fintech-driven accessibility supports financial inclusion and democratizes investment opportunities, ultimately influencing the structure and dynamics of the capital market.

### **3. Digital Banking Integration and Investment Services**

Digital banking integration refers to the incorporation of non-traditional banking services, including investment products, into digital banking platforms. Indonesian banks have increasingly integrated services such as mutual funds, government bonds, and stock trading into their mobile banking applications. This integration represents a strategic response to competition from fintech platforms and changing consumer expectations. By offering investment services within familiar banking applications, banks enhance customer retention and expand their role in the financial ecosystem.

The integration of investment services into digital banking platforms simplifies the investment process by allowing users to manage savings, payments, and investments within a single application. This convenience reduces transaction costs and minimizes the psychological barriers associated with investing. Studies in financial behavior suggest that ease of access and platform familiarity significantly influence investment participation. Consequently, digital banking integration contributes to the growth of retail investors in the capital market.

From a market perspective, digital banking integration strengthens the link between the banking sector and capital markets. Banks act as gateways that channel household savings into productive investments. In Indonesia, this role is particularly important given the large population and growing middle class. The literature highlights that digital integration enhances market efficiency by improving information flow, transaction speed, and investor responsiveness. Therefore, digital banking investment services play a vital role in shaping capital market dynamics in the digital era.

### **4. Regulatory Framework and the Role of the Financial Services Authority (OJK)**

Regulation plays a crucial role in ensuring the stability and integrity of the financial system amid rapid digital transformation. In Indonesia, the Financial Services Authority (Otoritas Jasa Keuangan or OJK) is responsible for regulating and supervising banking

institutions, capital markets, and fintech companies. The OJK has introduced various policies to support digital innovation while maintaining consumer protection and financial stability.

The regulatory framework for digital banking and fintech investment platforms emphasizes licensing, risk management, data security, and transparency. These regulations aim to build public trust in digital financial services, which is essential for sustained capital market participation. The OJK has also actively promoted financial literacy and inclusion through digital education initiatives, recognizing that informed investors contribute to healthier market dynamics.

Academic studies highlight that effective regulation can accelerate digital adoption by reducing uncertainty and fostering innovation. In Indonesia, the alignment between regulatory support and technological advancement has contributed to the rapid growth of retail investors after 2020. By monitoring digital platforms and enforcing compliance, the OJK ensures that digital transformation positively influences capital market development rather than introducing systemic risks. Thus, the regulatory perspective is a critical component in understanding the relationship between digital transformation and capital market dynamics.

## 5. Digitalization and Changes in Investor Behavior

Digitalization has fundamentally altered investor behavior by changing how individuals access information, make decisions, and execute transactions. Online investment platforms and digital banking applications provide real-time market data, educational content, and analytical tools that empower investors to act quickly. This immediacy has led to more active trading behavior, particularly among retail investors.

Research in behavioral finance indicates that digital environments influence risk perception and decision-making patterns. Features such as automated recommendations, notifications, and social investment trends can shape investor preferences and strategies. In Indonesia, the rise of digital investment platforms has been associated with increased participation from younger demographics, who are more familiar with digital technologies and social media-driven information.

While digitalization enhances efficiency and transparency, it also introduces new challenges, including information overload and speculative behavior. Therefore, understanding changes in investor behavior is essential for assessing the overall impact of digital transformation on capital market dynamics. The literature suggests that digitalization reshapes not only market access but also the psychological and behavioral dimensions of investing, making it a key area of analysis in qualitative studies of capital markets.

## RESEARCH METHODS

This research uses a descriptive qualitative approach, which aims to describe in depth the phenomenon of the application of digital services in the banking sector and capital market in Indonesia. This approach was chosen because it allows researchers to understand the meaning, process, and context of digital service practices based on direct observation of online activities, rather than just numerical data.

### 1. Types and Approaches to Research

A descriptive qualitative approach is used to gain a comprehensive understanding of the digital strategies applied by banks and securities companies in providing investment services to the public. The main focus is on the description and

interpretation of phenomena without performing variable manipulation. This research was conducted through online observation by utilizing official websites, digital.

## 2. Research Time and Location

Observations were carried out during the period of September-December 2025 with the coverage of the research location being virtual. This means that all data collection is done online without being tied to a specific geographical area. The focus of observation is directed to digital activities carried out by Indonesia-based financial institutions.

## 3. Research Object

The objects in this study consist of three main categories: The official website of banks that have investment and capital market services such as: Bank Central Asia (BCA) through BCA Investasi, Bank Negara Indonesia (BNI Sekuritas), Bank Mandiri through Mandiri Investasi. Digital securities applications include: Bibit (mutual fund and stock platform), Bareksa (digital investment marketplace), Ajaib (stock and mutual fund investment application). Official social media and digital education channels, such as Instagram, YouTube, and TikTok belong to each platform, which are used to provide education, promotion, and communication with customers.

## 4. Data Collection Techniques

Data collection was conducted through online non-participant observation, meaning that the researcher did not directly engage in interactions but solely observed digital activities and recorded relevant phenomena.

The data collection procedures included the following steps:

1. Accessing official websites and applications to review features, services, and user interface (UI) design.
2. Documenting investment education materials, such as articles, webinars, infographics, and instructional videos provided by the platforms.
3. Analyzing user interactions in comment sections, community forums, or user reviews on social media and the Play Store/App Store.
4. Recording aspects of digital services, including fee transparency, service response speed, security systems, and the ease of access and usability of the applications.

## 5. Data Analysis Techniques

The observational data were subsequently categorized into several main themes, namely:

- Digital service innovation, encompassing new features, automation systems, and service personalization.
- Accessibility, including ease of registration, application navigation, and multi-platform support.
- Digital financial education, related to learning content and the enhancement of users' investment literacy.
- Digital security and trust, covering fee transparency, personal data protection, and user authentication systems.

The analysis was conducted using a qualitative descriptive approach, in which the observational findings were interpreted to identify patterns, trends, and comparisons across platforms. The data were presented in the form of descriptive narratives to explain how each platform implements its digital strategies within the context of the Industry 5.0 era.

## 6. Data Validity

To ensure the validity of the research findings, source triangulation was employed by comparing information obtained from various media, including websites, applications, and social media platforms. In addition, information was validated through cross-checking with official websites and public statements issued by the relevant financial institutions.

## RESULTS AND DISCUSSION

### 1. Digital Service Innovation

The results of the observation show that banking and securities institutions in Indonesia have undergone a significant transformation in digital services. The electronic Know Your Customer (e-KYC) registration and verification process allows prospective customers to open an investment account without having to come to a branch office. This system not only speeds up the registration process but also increases the efficiency of financial institutions in reaching the wider community. In addition, many platforms are now integrated with digital wallets and electronic payment systems such as GoPay, OVO, or Dana, which makes it easier for users to top-up their investment balances. The real-time notification feature also helps investors monitor market movements, dividend distribution schedules, and changes in asset value in real-time. Banks and securities institutions are thus shifting their function from mere transaction intermediaries to financial technology ecosystem providers (fintech enablers) that are proactive in developing digital product and service innovations.

### 2. Accessibility and Investor

Participation Digitalization has opened up a wider space for participation, especially for beginner investors with limited capital. Through the micro investment feature, users can start investing with a small nominal, even starting from IDR 10,000. This approach has a positive impact on increasing national financial inclusion, especially among the younger generation and digital native urban communities. The integration between investment platforms and mobile banking services also plays an important role in speeding up transactions. Investors can buy mutual fund products or stocks directly from the app without the need to switch platforms. The results of observations on applications such as Bibit and Ajaib show that the ease of navigation, intuitive interface, and speed of the transaction process contribute to increasing public participation in the capital market. Thus, digitalization not only expands access, but also lowers psychological and administrative barriers for people who are new to the world of investment.

### 3. Digital Financial Education and Literacy

Education is a central element in building trust and sustainability of the digital ecosystem. Based on observations, almost all platforms provide digital educational content in various formats ranging from articles, short videos, podcasts, webinars, to interactive quizzes. This material discusses basic topics such as mutual fund introduction, risk management, and long-term investment tips. Platforms such as Bareksa and Mandiri Investasi are actively conducting digital literacy campaigns through their social media and official YouTube channels. This approach not only serves as a marketing strategy, but also as a form of financial empowerment of the community. Engaging and accessible digital education helps users understand the risks and benefits of investment, while fostering trust in the credibility of digital financial

institutions. However, the results of the observation also show that the level of depth of educational content still varies between platforms. Some applications emphasize the promotional aspect more than the delivery of comprehensive information, so there is a need for standardization and supervision of educational content to be in line with the principles of consumer protection.

#### **4. User Security and Trust**

Digital security is a crucial aspect in users' trust in online investment services. Most platforms have implemented layered security systems such as Two-Factor Authentication (2FA), end-to-end data encryption, and biometric logins using fingerprints or facial recognition. This step provides additional security for users to access accounts and make financial transactions. However, the results of observations show that cybersecurity issues are still a major concern, especially related to the potential for personal data leakage, phishing, and fake investment fraud that impersonates official platforms. New users tend to be more vulnerable to these threats because they don't have a good understanding of digital security mechanisms. Therefore, education about cyber security ethics (cyber hygiene) is an urgent need to support the sustainability of a safe and reliable digital ecosystem.

#### **5. Challenges and Limitations**

Although digitalization has brought great progress, the results of the study also found several obstacles that need to be considered. First, the digital literacy gap is still high between users in big cities and regions. People in non-urban areas tend to have difficulty understanding investment terms, capital market mechanisms, and how digital platforms work. Second, cost transparency in some applications is still suboptimal. Information about management fees, commissions, or taxes is sometimes difficult to find or written in technical language that is difficult for ordinary users to understand. Third, supervision of educational content has not been fully standardized, so the potential for misinformation or excessive promotion still exists. This condition demands synergy between financial institutions, regulators, and society to ensure that digitalization is truly inclusive and responsible.

### **CONCLUSION**

This study concludes that digital transformation has played a significant role in reshaping the banking sector and capital market dynamics in Indonesia. The integration of digital banking systems and fintech-based investment platforms has expanded public access to capital market instruments, particularly among retail and beginner investors. Through online non-participant observation, this research demonstrates that digital services have reduced administrative and psychological barriers to investment by offering simplified registration processes, micro-investment features, and user-friendly interfaces.

The findings indicate that innovation in digital services, including e-KYC, platform integration with digital payment systems, and real-time notifications, has enhanced efficiency and convenience for investors. These innovations position banks and securities institutions not only as financial intermediaries but also as digital ecosystem enablers that actively support financial inclusion. Furthermore, the availability of digital financial education across multiple platforms contributes to improving investment literacy and building user trust, although the depth and quality of educational content remain uneven among providers.

From a behavioral perspective, digitalization has influenced investor participation and decision-making by enabling faster access to information and transactions. However, challenges related to digital literacy gaps, cost transparency, and cybersecurity risks persist, particularly for new and non-urban users. These issues highlight the importance of continuous regulatory oversight and public education.

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