

## THE ROLE OF FINTECH APPLICATIONS IN IMPROVING INVESTMENT EASE IN INDONESIA

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Article Info	Abstract
<p><b>Article history:</b></p> <p>Received 08 07, 2024 Revision 08 20, 2024 Received 08 28, 2024</p> <p><b>Keywords:</b></p> <p>Fintech Digital Investment Financial Literacy Bibit Indodax</p>	<p>The development of financial technology (fintech) in Indonesia has transformed how people invest by providing accessibility, transparency, and efficiency in digital financial management. This study aims to analyze the roles of two major fintech applications, Bibit and Indodax, in facilitating investment access and improving digital financial literacy among users. The research employed a literature review and descriptive observation method using data from the Financial Services Authority (OJK), Commodity Futures Trading Regulatory Agency (BAPPEBTI), academic publications, and official company reports. The results show that Bibit excels in user-friendliness and investment education, while Indodax emphasizes flexibility in crypto-asset trading. Both contribute positively to the expansion of digital financial inclusion, although they differ in risk levels. In conclusion, fintech-based investment platforms play a crucial role in promoting more inclusive, efficient, and secure investment practices, yet continuous financial literacy improvement is necessary to ensure responsible risk management among users.</p>

## 1. INTRODUCTION

### Background Problem

The development of digital technology over the past decade has transformed the way people access financial services and invest. This progress is marked by the emergence of various forms of financial technology (fintech), which combine traditional financial services with digital technology to create a more efficient, inclusive, and accessible financial system for all levels of society [1] (Addo, Asantey & Awadzie, 2022).

In Indonesia, fintech is growing rapidly. According to data from the Financial Services Authority (OJK), by the end of 2024, there will be more than 500 registered and supervised fintech companies, spanning various categories such as digital payments, financing (P2P lending), and digital investment [2] (OJK, 2024).

This phenomenon also shows a change in people's behavior, as they become more accustomed to using digital financial applications for saving, transacting, and investing.

One rapidly growing fintech sector is investment fintech, a digital platform that facilitates investment in various financial instruments such as mutual funds, bonds, stocks, and crypto assets. Apps like Bibit and Indodax are successful examples of financial technology implementation in the investment sector.

Bibit, for example, helps novice investors with a Robo Advisor system that provides automated recommendations based on the user's risk profile [3] (Ayu Aprialita et al., 2024). Meanwhile, Indodax facilitates secure trading of digital assets such as Bitcoin and Ethereum through Know Your Customer (KYC) and Two-Factor Authentication (2FA) systems [4] (Charfeddine, Umlai & El-Masri, 2024).

The increasing number of fintech investment users demonstrates that people are starting to trust the convenience and transparency offered by technology. Data from Statista (2024) estimates that the value of digital investment transactions in Indonesia reached USD 9.8 billion, with annual growth of over 18%. This demonstrates that fintech adoption is not just a trend, but a new necessity in modern financial management.

However, this progress is also accompanied by several challenges. One of these is low financial and digital literacy among new users. According to a 2023 OJK survey, Indonesia's financial literacy index only reached 49.68%, while the financial inclusion index had reached 85.10%. This means that many people still access financial products without adequate understanding of the risks and investment mechanisms [5] (OJK, 2023).

In addition, digital investments, especially crypto assets, have high volatility which requires in-depth understanding so that users do not experience large losses [6] (Mishra et al., 2024).

Thus, it is crucial to further examine how fintech applications like Bibit and Indodax play a role in expanding investment access while simultaneously improving digital financial literacy and security for Indonesians. This study is expected to provide insight into the benefits and challenges of digital investment and serve as a basis for developing inclusive and sustainable fintech policies.

### Problem Formulation

Based on the background above, this study attempts to answer several main questions as follows:

- a. What role do fintech applications like Bibit and Indodax play in facilitating investment access in Indonesia?
- b. What are the advantages and disadvantages of each application in helping users manage investments?
- b. How do fintech applications contribute to improving digital financial literacy and inclusion among Indonesians?

### Research Purposes

The purpose of writing this article is to:

- a. Describes the function and role of fintech applications in supporting the ease of digital investment in Indonesia.
- b. Analyzing the advantages and disadvantages of the Bibit and Indodax applications as two examples of popular investment platforms.
- c. Providing information and education to the public so they can utilize fintech wisely, safely, and according to their individual risk profiles.

## 2. LITERATURE REVIEW

### **Financial Technology (Fintech) Concept**

Financial technology, or fintech, is an innovation in the financial services sector that leverages advances in digital technology to increase efficiency, inclusion, and convenience. Fintech encompasses a wide range of products and services, including digital payments, online loans, digital investments, financial management, and technology-based insurance.

According to Addo, Asantey, and Awadzie (2022) [1], fintech can bridge the financial access gap between bankable and unbankable communities by providing faster, more affordable, and more flexible services. This supports the national vision of financial inclusion, which aims to provide everyone with easy access to formal financial services.

The Financial Services Authority (OJK, 2024) [2] also defines fintech as a digital-based financial system supervised to maintain security, consumer protection, and national economic stability. The regulatory role is crucial because fintech developments also carry potential risks such as data security, digital fraud, and unequal financial literacy.

### **Technology Adoption Theory**

To understand people's behavior in using fintech applications, we can use the Technology Acceptance Model (TAM) developed by Davis (1989). This model states that the level of technology acceptance is influenced by two main factors:

- a. Perceived Usefulness — the extent to which a person believes that using technology will improve his or her performance.
- b. Perceived Ease of Use (Persepsi Kemanfaatan) — the extent to which a person feels the technology is easy to understand and use.

In the context of investment apps like Bibit and Indodax, both factors are clearly visible. Bibit offers easy mutual fund investing through its portfolio automation (robo-advisor) feature, while Indodax provides easy direct access to the global crypto market. A study by Mishra et al. (2024) [6] also found that digital literacy and ease of use of applications have a positive influence on users' investment intentions on digital platforms.

Research by Charfeddine, Umlai, and El-Masri (2024) [4] also added that perceptions of security and access to digital finance also determine the level of fintech adoption by MSMEs and individuals in developing countries.

### **Digital Financial Inclusion Theory**

Digital financial inclusion is a condition where all levels of society have access to formal financial services through digital technology. According to the Financial Services Authority (OJK) (2023) [5], digital financial inclusion in Indonesia continues to increase year after year, primarily due to the convenience offered by technology-based applications.

Charfeddine, Umlai, and El-Masri (2024) [4] explain that digital financial literacy is a key factor in supporting successful financial inclusion. People who understand the risks and benefits of using fintech will be better prepared to actively participate in the digital financial ecosystem. This demonstrates the close relationship between financial literacy, trust in digital systems, and financial technology adoption.

In this context, applications like Bibit act as a literacy bridge, providing educational features like the "Bibit Academy," while Indodax has its "Indodax Academy" to help users understand the basics of digital asset investment. These educational efforts have proven effective in increasing public knowledge and trust in fintech investment (Ayu Aprialita et al., 2024) [3].

### **Previous Research**

Various studies have been conducted to identify the role of fintech and financial literacy in increasing digital inclusion and investment. Some key findings include:

- a. Efendi, Wati, & Kuraesin (2023) [7] found that financial literacy strengthens the relationship between fintech use and access to capital for MSMEs in Jakarta.

- b. Fajarika, Trapsilawati, & Sopha (2024) [8] stated that regulatory support and digital infrastructure are the keys to the growth of technology-based investment.
- c. Hasan et al. (2024) [9] emphasized that the combination of financial, digital, and entrepreneurial literacy influences the creativity and success of fintech-based businesses.
- d. Lu, Wu, Li, & Nguyen (2022) [10] showed that the role of local banks in supporting fintech can reduce financing barriers for MSMEs in China.
- e. Gosal & Nainggolan (2023) [11] proved that digital financial literacy has a positive influence on the financial welfare of MSMEs in Indonesia.
- f. Ariana et al. (2024) [12] studied that digital and financial literacy simultaneously increase people's financial resilience through better financial decisions.
- g. Anshika & Singla (2022) [13] in a systematic study found that digital knowledge management and training play a role in the successful adoption of fintech by small entrepreneurs.
- h. Kusumawardhani, Ningrum, & Rinofah (2023) [14] revealed that the use of digital financial tools has a positive impact on the performance of MSMEs in Indonesia.
- i. Widystuti & Hermanto (2022) [15] showed that social media and fintech have a significant influence on business capital in the creative industry sector.
- j. Rahim Khan, Rabbani, & Kadoya (2020) [16] found that the level of financial literacy is directly positively correlated with an individual's tendency to invest in the capital market.

In general, the results of previous research strengthen the conclusion that the success of fintech as an investment instrument is highly dependent on the level of financial literacy, perception of benefits, and trust in the security of the technology.

### 3. RESEARCH METHODS

This article uses literature review and descriptive observation methods for two leading fintech applications: Bibit and Indodax. Information was gathered from official company sources, OJK (Financial Services Authority) and BAPPEBTI (Indonesian Commodity Futures Trading Regulatory Agency), and user reviews on various digital platforms.

### 4. RESULTS AND DISCUSSION

#### RESULTS

##### Overview of Fintech Applications in Indonesia

Fintech development in Indonesia has shown a rapid growth trend over the past five years. According to data from the Financial Services Authority (OJK, 2024), the number of fintech service users has increased by more than 60% compared to 2020, with digital payments, online lending, and app-based investments dominating the sector.

Platforms like Bibit and Indodax occupy the top positions in the investment fintech category, each representing two market segments: mutual funds (Bibit) and crypto assets (Indodax).

Both apps offer easy investment without requiring in-depth financial knowledge. This aligns with research by Mishra et al. (2024) [6], which shows that low digital literacy levels can be offset by intuitive and educational app interfaces.

#### Bibit Application

Bibit is a technology-based mutual fund investment app launched by PT Bibit Tumbuh Bersama in 2019. Bibit helps users choose investment portfolios tailored to their risk profile through its Robo-Advisor feature. Its key advantages include investments starting from IDR 10,000, easy digital transactions, and direct supervision by the Financial Services Authority (OJK).

Main features:

- a. Automated recommendations (Robo Advisor)
- b. Portfolio diversification

- c. Auto debit for regular investments
- d. "Bibit Academy" educational features
- e. Sharia options and SBN products are available

Pros: Safe, easy to use, no commission fees, and suitable for beginners. Cons: Limited product selection and general recommendations.

### Indodax Application

Indodax (Indonesia Digital Asset Exchange) is the largest crypto asset trading platform in Indonesia, founded in 2014. It facilitates the buying and selling of digital currencies such as Bitcoin, Ethereum, and hundreds of other assets. Indodax is registered with BAPPEBTI and holds ISO 27001 certification for data security.

Main features:

- a. Lite Mode (beginners) and Pro Mode (experienced traders)
- b. Staking and periodic investment (Dollar Cost Averaging)
- c. Multi-layered security: biometrics, 2FA, KYC
- d. "Indodax Academy" educational feature

Pros: Secure, transparent, and supports a wide range of crypto assets. Cons: High risk due to crypto price fluctuations and requires in-depth understanding.

### Advantages and Disadvantages of Bibit and Indodax

The following is a comparison between Bibit and Indodax based on observations, literature, and user reviews.

**Table 1. Comparison Between Bibit and Indodax Based on Observation Results, Literature, And User Reviews.**

Aspek	Bibit	Indodax
Jenis Investasi	Reksa dana dan obligasi pemerintah	Aset kripto (Bitcoin, Ethereum, dsb.)
Target Pengguna	Investor pemula dan menengah	Investor digital dan trader kripto
Fitur Unggulan	Robo advisor, auto rebalancing, investasi mulai Rp10.000	Marketplace kripto, fitur trading, dan keamanan berlapis
Kemudahan Penggunaan	Sangat mudah, user-friendly, edukatif	Perlu pemahaman dasar kripto
Regulasi & Legalitas	Diawasi oleh OJK dan terdaftar di APERD	Terdaftar di BAPPEBTI (legal untuk perdagangan aset kripto)
Keamanan Data & Transaksi	Sertifikasi keamanan data (ISO 27001)	Sistem two-factor authentication dan cold storage
Risiko Investasi	Relatif rendah karena diversifikasi portofolio	Sangat tinggi karena volatilitas harga kripto
Kelebihan Utama	Aman, mudah, edukatif	Potensi keuntungan besar, likuiditas tinggi
Kekurangan Utama	Keuntungan relatif kecil dalam jangka pendek	Risiko kerugian tinggi jika tidak paham pasar

Source: Processed by the author, 2024

This analysis shows that both applications hold strategic positions in Indonesia's digital investment ecosystem. Bibit focuses on education and convenience, while Indodax emphasizes innovation and market freedom. However, their risk levels differ significantly. Bibit is suitable for conservative investors, while Indodax is more appropriate for aggressive investors with a high risk tolerance (Gosal & Nainggolan, 2023) [11].

### **The Role of Fintech in Facilitating Investment Access**

Before the advent of fintech apps, investing was often considered a complicated, expensive activity, and only accessible to a select few. Fintech is changing this paradigm by opening investment access to all levels of society through smartphones.

The Bibit application plays a role in facilitating mutual fund investment through a robo-advisor system, namely an algorithm that recommends an automatic investment portfolio based on the user's risk profile. Meanwhile, Indodax provides direct access to the crypto asset market, allowing individual investors to buy and sell digital assets without intermediaries.

Research by Addo et al. (2022) [1] supports this by stating that fintech increases financial accessibility and strengthens risk-taking behavior in society, especially among the younger generation. In addition, OJK (2023) [5] emphasized that financial digitalization is one of the main factors that expands national financial inclusion, especially in areas that were previously not covered by formal financial services.

### **Fintech's Contribution to Financial Literacy and Inclusion**

One of the most significant impacts of fintech development is the increase in digital financial literacy. Fintech applications are now not only a means of transaction but also a tool for financial education.

Bibit, for example, offers the Bibit Academy feature and an educational blog that helps users understand mutual fund products, risk profiles, and long-term investment strategies. Meanwhile, Indodax offers the Indodax Academy, which explains the basics of crypto assets, blockchain, and digital transaction security.

These findings align with research by Ayu Aprialita et al. (2024) [3] and Ariana et al. (2024) [12], which emphasize that digital literacy has a direct impact on people's financial resilience, especially during times of economic uncertainty. Furthermore, Fajarika et al. (2024) [8] adds that fintech acts as a catalyst for financial inclusion, expanding the economic participation of people previously excluded from formal financial services. The research findings of Hasan et al. (2024) [9] also demonstrate that the combination of financial literacy and digital skills is a key component in creating an inclusive and sustainable investment ecosystem.

### **Implications for the World of Education and Business**

From an educational perspective, the presence of fintech offers opportunities to strengthen practical financial literacy learning in universities. Students can learn directly through digital investment simulations, understand risk concepts, and manage virtual portfolios. Meanwhile, for business owners, fintech serves as a strategic tool for managing cash flow, funding, and corporate investments.

Research by Efendi et al. (2023) [7] proves that MSMEs utilizing fintech have higher growth rates and financial efficiency than those not using digital technology. Thus, fintech is not simply a technological trend, but rather part of a structural transformation towards an inclusive and intelligent digital economy.

## **DISCUSSION**

The analysis results show that P2P lending can be a solution to the challenges of access to financing in Indonesia [5][8]. With the convenience and speed it offers, P2P lending can help marginalized MSMEs access capital [2][5]. However, challenges such as the risk of default and high interest rates must be managed properly [6][7].

Strong regulation and transparency in P2P lending operations are crucial to building trust among borrowers and investors [9][10]. The Financial Services Authority (OJK) has issued new regulations to maintain the industry's sustainability, including limiting daily interest rates on online loans and requiring providers to provide risk insurance [4][10]. Furthermore, the OJK has imposed administrative sanctions on a number of financing companies and fintech lenders that violate applicable regulations [10]. With the right approach, P2P lending can contribute significantly to economic growth and financial inclusion in Indonesia [5][8].

## **5. CONCLUSION**

Based on the results of literature analysis and observations of two fintech investment applications, namely Bibit and Indodax, several important things can be concluded as follows:

#### 1. The Role of Fintech in Investment Access

Fintech has become a major catalyst in expanding public access to the investment world. Apps like Bibit and Indodax make it easier for people to invest using only a smartphone and affordable capital. This aligns with findings by Addo et al. (2022) and the Financial Services Authority (OJK) (2024), which show that fintech strengthens financial accessibility and supports national financial inclusion.

#### 2. Advantages and Disadvantages of Fintech Applications

Bibit excels in ease of use, security, and educational features like robo-advisors and Bibit Academy. This app is suitable for beginner investors with a low to medium risk profile. Indodax excels in innovation and flexibility in crypto asset transactions, but requires higher digital and financial literacy due to the higher risks. These differences in characteristics indicate that the two apps target different user segments, yet both support the growth of digital investment in Indonesia.

#### 3. Contribution to Digital Financial Literacy and Inclusion

Fintech serves not only as an investment tool but also as a means of financial education. Learning features in the Bibit and Indodax apps contribute to increasing user knowledge about financial products, risks, and investment strategies. Research by Ayu Aprialita et al. (2024) and Hasan et al. (2024) supports that improving digital and financial literacy significantly impacts people's financial resilience and well-being.

#### 4. Social and Economic Implications

The use of fintech is creating an inclusive digital economic transformation. People can now manage their finances independently, transparently, and efficiently. From an educational perspective, fintech can serve as a practical learning tool for teaching financial literacy and investment. Meanwhile, for the business sector, fintech serves as a strategic tool for optimizing technology-based funding and investment.

### 6. SUGGESTION

#### a. For the Community and Fintech Users

The public is advised to improve their digital financial literacy before deciding to invest, to better understand the risks and potential rewards offered by fintech applications. Users should also ensure that the platform they use is registered with and supervised by the Financial Services Authority (OJK) or the Indonesian Financial Services Authority (BAPPEBTI), ensuring the security of funds and personal data. Furthermore, educational features such as Bibit Academy and Indodax Academy can be utilized to broaden horizons and hone skills in managing investments wisely and responsibly.

#### b. For Government and Regulators

The government, through the Financial Services Authority (OJK) and the Indonesian Financial Services Authority (BAPPEBTI), is expected to continue strengthening national financial and digital literacy programs, particularly in areas with low access. Implemented regulations must also be adaptive and educational, allowing fintech innovation to thrive without neglecting security and consumer protection.

#### c. For Researchers and Academics

Further research can be conducted using quantitative or mixed methods approaches to more deeply assess the impact of fintech on investment behavior. Furthermore, fintech can be utilized as a practical learning tool in financial education, enabling students to understand digital investment concepts directly and contextually.

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