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The Application of Financial Technology and Digital Education to Improve Financial Literacy Among Indonesian Millennials

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Abstract

The advancement of digital technology has brought about major changes in the way people, especially millennials, access and manage finances. This study aims to analyze how the application of financial technology (fintech) and digital education can improve financial literacy among Indonesian millennials. Using a qualitative approach with a literature study method, this study examines ten relevant and recent scientific articles from credible academic sources. The results of the analysis show that fintech not only facilitates access to financial services but also contributes significantly to shaping more conscious and targeted financial behavior. Applications such as digital wallets, investment platforms, and online loans have helped millennials in planning and managing their daily finances. On the other hand, digital education through social media, e-learning, and interactive content has proven effective in improving understanding of financial concepts and encouraging positive changes in financial attitudes. However, the main challenges still lie in the low distribution of digital literacy and the risk of fintech misuse, especially in terms of illegal online loans and the lack of consumer protection. Therefore, the integration of digital-based financial education and regulatory supervision is important to create an inclusive, smart, and sustainable financial ecosystem for the younger generation. This study provides important implications for the development of educational strategies and public policies in facing the era of digital financial transformation.

INTRODUCTION

The development of information and communication technology has revolutionized various aspects of life, including the financial sector. The emergence of financial technology (fintech) has made it easier for people to access financial services, such as digital payments, online investment, and peer-to-peer lending (OJK, 2022). In Indonesia, the adoption of fintech shows a positive trend, especially among the millennial generation who are known to be adaptive to technology (Damayanti & Gumilang, 2023). However, this ease of access is not always balanced with an adequate understanding of wise financial management.

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Financial literacy is an individual's ability to understand, manage, and make the right financial decisions to achieve financial well-being. This literacy includes an understanding of basic concepts such as financial planning, debt management, investment, and the use of financial products and services (Renanita et al., 2024). In the context of modern society, financial literacy is crucial because the increasing level of access to financial products needs to be balanced with adequate understanding so as not to pose greater financial risks. A study conducted by Rosdaliva et al. (2023) showed that increasing financial literacy has a positive relationship with an individual's ability to plan and manage household finances effectively (Rosdaliva et al., n.d.).

Furthermore, financial literacy also plays an important role in supporting business sustainability, especially for MSMEs. Vikawidia (2024) stated that low financial understanding and utilization of financial technology are one of the main causes of MSME instability in the fashion sector in Bandung (Vikawidia, 2024). This finding is reinforced by Sumantyo and Kharisma (2023), who highlighted that low financial literacy not only impacts individual economic decisions but also hinders the growth of the real sector economy (Kharisma & Sumantyo, 2023). Therefore, structured financial education is one of the strategic solutions in building a society that is more economically independent and able to make wise financial decisions.

Financial literacy is a crucial aspect in dealing with the complexity of digital financial products and services. The Financial Services Authority (OJK) survey in 2022 showed that the financial literacy index of the Indonesian people reached 49.68%, an increase from previous years, but still shows that more than half of the population does not have adequate financial understanding (OJK, 2022). This condition indicates the need for efforts to increase financial literacy, especially through digital education that can reach the millennial generation effectively.

The millennial generation, born between 1981 and 1996, is a significant demographic group in Indonesia. They grew up with the development of digital technology and have a tendency to use technology-based financial services (Julita, 2024). However, research shows that although millennials have wide access to financial information, many of them do not have sufficient understanding of personal financial management, investment, and financial risk (Rahayu et al., 2022). This can lead to inappropriate financial decisions, such as being trapped in consumer debt or investments that do not match the risk profile.

Digital education offers a solution to improve financial literacy among millennials. Through online platforms, mobile applications, and social media, financial information can be delivered interactively and easily accessed (OJK, 2021). Digital education programs designed with millennial characteristics and preferences in mind can improve their understanding of basic financial concepts, financial planning, and the wise use of financial products and services (Damayanti & Gumilang, 2023).

The urgency of this research lies in the need to understand how the application of financial technology and digital education can contribute to improving financial literacy among Indonesian millennials. By understanding this relationship, effective strategies can be developed to empower millennials to better manage their finances, which can ultimately improve individual financial well-being and national economic stability.

Previous studies have shown that there is a positive relationship between financial literacy and healthy financial behavior among millennials (Rahayu et al., 2022). However, there is still a gap in the literature regarding how the integration of financial technology and digital education can synergistically improve financial literacy. This study aims to fill this gap by analyzing the role of financial technology and digital education in improving financial literacy among Indonesian millennials.

The purpose of this study is to analyze how the application of financial technology and digital education can improve financial literacy among Indonesian millennials. This research is expected to contribute to the development of effective financial education strategies that are relevant to the needs and characteristics of the millennial generation.

METHOD

This study uses a qualitative approach with a literature study type (library research), which aims to examine in depth the concepts, theories, and empirical findings related to the application of financial technology and digital education in an effort to improve the financial literacy of the millennial generation in Indonesia. Literature studies were chosen because they are able to provide a theoretical basis and comprehensive perspective in analyzing socio-economic phenomena based on previous research results (Nazir, 1988; Zed, 2018). Thus, this approach allows researchers to compile strong and structured scientific arguments based on valid academic references.

The data sources in this study are secondary data obtained from various scientific publications, such as accredited national journals, conference articles, official survey reports (for example from the Financial Services Authority and BPS), reference books, and academic repositories. The literature selection criteria are based on relevance to the topic, publications in the last five years (2019–2024), and source credibility. The search was conducted through online journal portals such as SINTA, Garuda, Google Scholar, and databases of higher education institutions such as Malang State University (UM), Yogyakarta State University (UNY), and Sebelas Maret University (UNS).

Data collection techniques are carried out through systematic searches and reviews of relevant literature documents, using document review techniques. This procedure includes searches with keywords such as "millennial financial literacy," "financial technology," "digital education," and "financially literate young generation." The documents obtained are then selected based on the suitability of the topic, completeness of the content, and the significance of their contribution to the discussion (Moleong, 2021).

After the data is collected, the data analysis process is carried out using the content analysis method, which is an interpretive approach to the meaning of the text by identifying patterns, themes, and relationships between concepts. This process includes data reduction, categorization, and drawing conclusions from various literature sources to produce an in-depth conceptual understanding (Krippendorff, 2018). In addition, the analysis is carried out inductively, where researchers start from specific findings to then synthesize them into a more general framework of thought.

RESULT AND DISCUSSION

The following is a table of bibliographic data which is the result of a selection of 10 relevant scientific articles analyzed in this literature study. The articles were selected based on the criteria of relevance to the application of financial technology (fintech) and digital education in improving financial literacy among Indonesian millennials. The selection of sources was carried out by considering quality and relevance, including publications from reputable journals such as Elsevier, Springer, and Taylor & Francis.

Table 1. Literature Review

No	Title	Author	Findings
1	The Effect of Financial Technology (Fintech) and Financial Literacy on the	Lidiana, Arsuni, & Madrianah	Fintech and financial literacy influence millennials' financial behavior, with financial attitudes as mediators

	Financial Behaviour of Millennials in Indonesia: The Mediating Role of Financial Attitude		
2	Measuring the Level of Digital Financial Literacy Among Generation Y and Z in Indonesia	Aidil Fadli, Indradewa, & Yudistria	Generation Z has a good understanding of digital finance, but lacks in consumer protection
3	Digital Financial Literacy and Digital Financial Inclusion in the Era of Digital Disruption: Systematic Literature Review	Gumilar, Sangka, & Totalia	Digital financial literacy is necessary for optimal digital financial inclusion
4	The effects of financial technology, financial literacy, and income on online loans in Indonesia's millennial generation	Kartawinata et al.	Fintech, financial literacy, and income have a significant influence on millennial online loans
5	The Influence of Financial Literacy and Financial Inclusion on Saving and Investment Behaviour for Millennial Generation in DKI Jakarta	Farah, Purwanto, & Viana	Financial literacy and inclusion influence millennials' saving and investment behavior
6	Financial Literacy, Financial Technology Literacy, and Capital Market Participation	Sasikirono et al.	Financial literacy and fintech have a positive influence on capital market participation
7	Financial Technology and Literacy Shaping Students' Financial Management with Digital Literacy	Fadiyah & Widodo	Digital literacy strengthens fintech's influence on students' financial behavior
8	Improving Financial Literacy among Millennials: A Financial Management Perspective	Saputri et al.	Practical experience improves millennials' financial management skills
9	Digital and financial literacy as determinants of digital payments and personal finance	Fornero et al.	Digital and financial literacy determines the use of digital payments and personal financial decisions.
10	Digital transformation in financial industry: antecedents of fintech adoption, financial literacy and quality of life	Alkhwaldi	Digital transformation in the financial industry affects fintech adoption, financial literacy, and quality of life

Based on the results of the filtered literature review, there are ten articles that show various perspectives and findings related to the application of financial technology (fintech) and digital education in an effort to improve financial literacy among Indonesian millennials. This study shows that the development of fintech in Indonesia is one of the main drivers in the formation of financial behavior that is more adaptive to the digital era. Fintech is not only a transaction platform, but also a means of financial education that is easily accessible to the millennial generation. In a study by Lidiana, Arsuni, and Madrianah (2024), it was found that financial literacy and fintech significantly influence millennial financial behavior, with financial attitudes acting as a mediator. This shows that a good understanding of digital finance must be accompanied by the formation of healthy financial attitudes in order to positively influence behavior (Normawati et al., 2021).

Another study conducted by Aidil Fadli, Indradewa, and Yudistria (2024) highlighted that generation Z tends to have a good understanding of digital financial tools, but they are still lacking in aspects of digital consumer protection. This indicates that increasing literacy does not only focus on technical use, but also on understanding rights and risks in digital transactions. The emphasis on consumer protection aspects is important in the context of Indonesia, which still faces major challenges in digital finance regulation (Fadli et al., 2024).

Gumilar, Sangka, and Totalia (2024) through a systematic study emphasized that digital financial literacy is an important element in achieving sustainable digital financial inclusion. When individuals have a good understanding of financial technology, they are better prepared to use digital financial services wisely and safely. Meanwhile, Kartawinata et al. (2023) highlighted the role of income as an important factor in the decision to use online loans. In other words, although fintech facilitates financial access, without good financial literacy and management, this convenience can bring uncontrolled risks, especially in the form of debt burden (Gumilar et al., 2024; Kartawinata et al., 2023).

An article by Farah, Purwanto, and Viana (2023) shows that financial literacy and financial inclusion simultaneously play a role in shaping saving and investing habits among millennials. This emphasizes the importance of financial education that not only teaches conceptual understanding, but also internalizes wise financial practices. In line with that, Sasikirono et al. (2023) added that millennial participation in the capital market is influenced by financial literacy and financial technology. When someone understands the risks and benefits of digital investment, they tend to have the confidence to make more complex financial decisions (Farah et al., 2023; Sasikirono et al., 2023).

From an educational perspective, Fadiyah and Widodo (2024) revealed that digital literacy greatly influences the way students manage their finances. Students who have a good digital understanding are better able to utilize fintech applications to manage expenses, plan budgets, and save consistently. This is reinforced by Saputri et al. (2024), who stated that practical experience in managing finances can strengthen financial literacy skills, especially if supported by the use of appropriate technology (Fadiyah & Widodo, 2024; Nugraha et al., 2023).

An international study by Fornero et al. (2022) broadens the scope of the discussion by showing that digital and financial literacy simultaneously determine an individual's tendency to use digital payments and manage personal finances. Meanwhile, Alkhwaldi (2024) focuses on the impact of digital transformation on quality of life, showing that the adoption of fintech and financial literacy are not just money management strategies, but also contribute to the general well-being of individuals (Alkhwaldi, 2024; Prete, 2022).

Overall, all the articles reviewed illustrate that fintech applications and digital education have an important role in shaping a millennial generation that is more capable of managing finances. However, there are still gaps that need to be bridged, especially related to a comprehensive understanding of digital risks, consumer protection, and policies that support comprehensive digital literacy. By increasing the integration of financial education into the formal curriculum and providing broad access to safe and educational financial technology, the goal of creating a financially literate millennial generation in the digital era can be optimally achieved.

Discussion

Fintech as a Means of Financial Accessibility

The application of financial technology (fintech) in Indonesia has played an important role in expanding financial access among the millennial generation. According to Rahayu et al. (2022), the use of various fintech platforms such as investment applications (Stockbit, Bibit), digital wallets (OVO, DANA, GoPay), and online loan services (Kredivo, Akulaku), has significantly increased the awareness, participation, and involvement of the younger generation in financial activities. This phenomenon is not only theoretical, but has been proven through data and real cases in the field.

One concrete piece of evidence can be found in a field study conducted by the Center for Indonesian Policy Studies (CIPS) in 2021. The report noted that more than 60% of active fintech users in Indonesia are in the 20–35 age group, which is part of the millennial generation. They use fintech not only for transactions, but also to manage personal finances, invest, and meet emergency needs through instant loans. CIPS also noted that big cities such as Jakarta, Bandung, and Surabaya have experienced a significant increase in the number of e-wallet and investment app users in the past two years, along with increasingly easy access to technology and the increasing need for fast and flexible financial services.

Another real case comes from the story of Aldi (27 years old), a creative worker in Bandung who initially did not have a bank account and did not manage his income well. After getting to know applications such as Bibit and DANA, Aldi started saving automatically every month through the "routine investment" feature and managing his finances using the money tracker feature. In his interview published by Kompas.com (2022), Aldi stated that previously he often felt like he ran out of money without knowing where his spending was going, but since using fintech, he feels more "empowered and financially aware". This shows the real role of fintech in providing financial inclusion that was previously difficult to access for young people who were not touched by conventional banking services.

The OJK report also supports this. In 2021, OJK noted that the value of online loan transactions reached IDR 155.9 trillion, with the majority of users coming from the productive age group of 21–35 years. This is proof that fintech services are now the main alternative in meeting daily and urgent financial needs, including for emergency funds, small business capital, and consumptive needs. In the same report, OJK also stated that more than 70% of fintech users access services via smartphones, proving that ease of access is the main key to the appeal of this service for millennials.

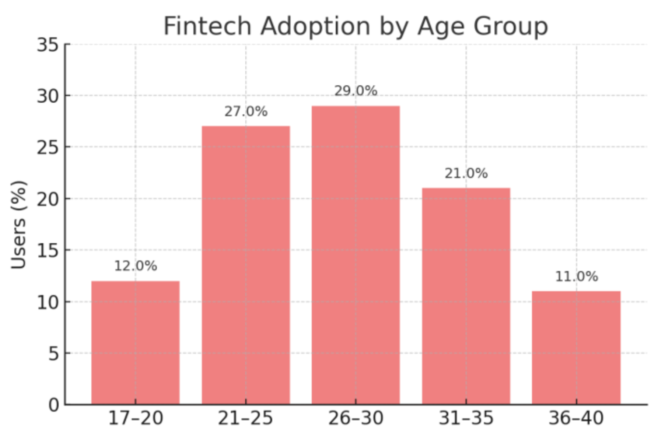

Figure 1. Fintech Adoption by Age Group

The first graph shows that the 21–30 age group is the most active fintech user, with a peak in the 26–30 age range (29%), followed by 21–25 years (27%). This reflects that early and middle millennials are very adaptive to digital financial services. Age groups under 20 (17–20) or over 35 years have much lower adoption rates.

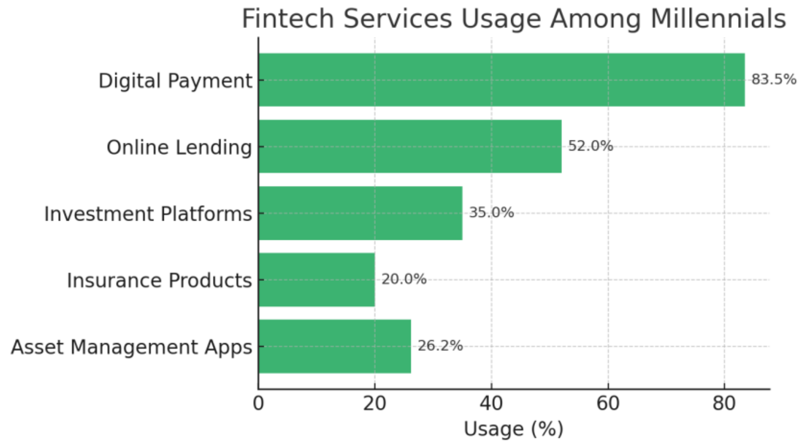

Figure 2. Fintech Services Usage Among Millennials

The second horizontal graph illustrates the types of fintech services that are most widely used. Digital payments (e-wallet, mobile banking) dominate with 83.5%, while online loans are also quite high (52%) because they offer fast and unsecured access. However, the use of investment platforms (35%), digital insurance (20%), and asset management applications (26.2%) is still relatively low. This shows that most millennials use fintech for daily consumption, not for long-term financial planning.

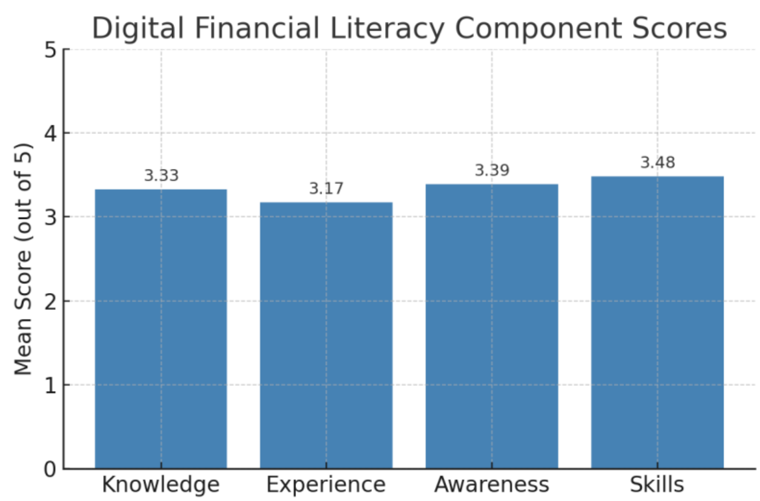

Figure 3. Digital Financial Literacy Component Scores

The third graph shows the average score of digital financial literacy divided into four main components. The highest score is in "skills" (3.48) which indicates good technical ability in using digital applications. However, "experience" (3.17) has the lowest score, reflecting that many millennials are just trying out this service without in-depth understanding or practice.

However, even though fintech has become an effective means of financial accessibility, major challenges still exist, especially in terms of low digital financial literacy. Many young users take advantage of digital loan services without understanding the risks of high interest rates and late fees, as seen from the increasing number of bad credit cases and complaints against illegal fintech that are not registered with the OJK.

Thus, it can be concluded that fintech has indeed paved the way for the millennial generation to access and manage their finances better and more inclusively. However, to optimize its benefits and minimize its risks, it needs to be accompanied by a systematic increase in digital financial education.

Digital Education Develops Financial Understanding and Attitudes

In today's digital era, the learning process is no longer limited to physical classrooms. Firmansyah and Maulana (2021) through their research showed that digital-based financial education (e-learning) has a positive impact on the mindset and financial lifestyle of millennials (Firmansyah & Maulana, 2021). E-learning allows for a more flexible learning process, can be accessed anytime and anywhere, and is presented in various forms of media such as interactive videos, budget simulations, and evaluative quizzes.

This study found that exposure to digital financial materials through online platforms can shape a more aware attitude towards the importance of financial planning, debt management, and savings and investment habits. In an experiment they conducted on a group of students and young professionals, participants who took the digital financial education module showed an increase in understanding of up to 25–30% in basic aspects of personal financial management, compared to a control group that did not receive training.

One of the field stories that reflects the results of the study came from the "#JadiBaikFinansial" program initiated by the ZAP Finance and Bareksa education platforms in 2021. This program combines educational modules on financial management with training on using investment applications. In its evaluation report, more than 70% of participants who initially did not have investments, started opening mutual fund accounts within 3 months of the training.

A similar thing happened on the Pintar Finansial platform, a YouTube and Instagram-based education channel created by young financial content creators. One of its episodes discussing "Mengaman Gaji 5 Juta dengan Metode 50-30-20" was watched more than 2 million times, and was followed by a spike in questions about personal budget management in the comments column. This shows that digital education packaged in light language and attractive visuals can shape financial awareness widely and quickly.

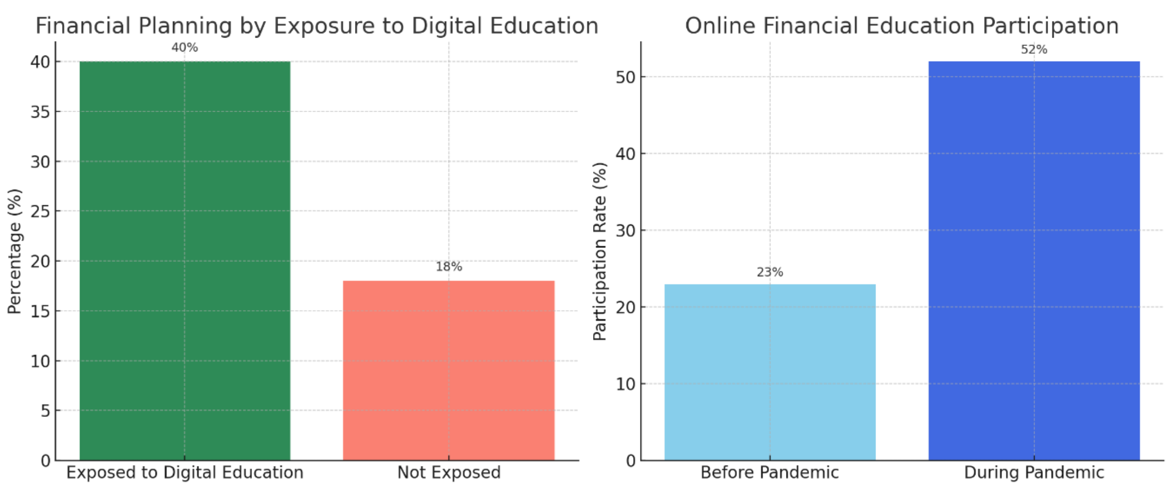

Figure 4. The Impact of Digital Financial Education on Financial Behavior and Participation Trends Among Millennials

The visualization above demonstrates the growing influence of digital financial education on the behavior of millennials in Indonesia. It reveals that individuals who were exposed to financial education content through digital platforms—such as social media, online workshops, or educational apps—are significantly more likely to engage in responsible financial planning. In fact, 40% of those who had access to such digital content reported active involvement in budgeting and goal-based financial decision-making, compared to only 18% among those who lacked exposure. This disparity highlights the transformative role that accessible, informal digital education can play in shaping more mindful and financially literate behaviors, particularly within tech-savvy generations.

Moreover, the trend toward digital education became even more pronounced during the COVID-19 pandemic. The second part of the visualization reflects a sharp increase in participation in online financial education programs—from 23% before the pandemic to 52% during it. This surge illustrates how external pressures and uncertain economic conditions pushed more individuals, especially millennials, to seek out resources and tools to better manage their finances. It underscores the rising demand for flexible, self-paced, and digitally delivered financial knowledge that aligns with the lifestyle and learning preferences of the younger generation. Together, both datasets reflect a crucial shift in the financial habits of millennials. They show how digital financial education not only raises awareness but actively empowers individuals to take control of their economic futures.

The Role of Social Media and Peer Groups

In a study conducted by Yanto, Ismail, Kiswanto, and Rahim (2021) entitled "The Roles of Peers and Social Media in Building Financial Literacy among the Millennial Generation", it was found that social media and peer group influence have a strategic role in shaping the behavior and financial understanding of the millennial generation (Yanto et al., 2021). This study involved 327 students from various universities in Indonesia spread across several regions, and used a structural equation modeling (SEM) approach to evaluate the relationship between various factors and financial literacy.

The results of the study showed that 58% of the variation in students' financial management behavior was influenced by exposure to social media content, financial attitudes, and peer influence. This shows that in addition to internal factors such as knowledge and attitudes, external factors of a social nature have a significant influence on how a person forms financial decisions in everyday life.

In the context of social media, platforms such as Instagram, YouTube, and TikTok are often used by financial content creators to convey information about salary management, mutual fund investments, avoiding consumer debt, and long-term financial planning. One interesting real case is the success of YouTube accounts such as ZAP Finance, which has succeeded in building a community with more than 300,000 subscribers, and popularizing the concept of "healthy finance" with a simple but impactful approach. Their educational videos discussing the 50/30/20 budget method or how to distinguish between productive and consumer debt have been watched millions of times, indicating the high interest of the younger generation in visual and interactive financial literacy.

Meanwhile, the influence of peer groups also plays a big role. In campus environments and online communities such as Telegram forums and WhatsApp investment groups, students often receive recommendations or encouragement to try applications such as Bibit, Ajaib, or even crypto wallets. Often, the first financial decisions such as opening an investment account or trying a budgeting app are taken not because of formal education, but because of invitations or success stories from peers.

This study emphasizes that financial literacy does not only develop through formal education channels such as lectures or seminars, but is also greatly influenced by the digital social ecosystem that is inherent in the lifestyle of the millennial generation. Exposure to positive financial content on social media and active discussions among peers create informal learning spaces that are very effective in forming more conscious, strategic, and directed financial mindsets and behaviors.

Correlation Between Fintech, Literacy, and Financial Behavior

Advances in digital technology have provided significant transformation in the financial sector, especially through the presence of financial technology (fintech). Fintech services allow easier and faster access to various financial products and services, ranging from digital payments, online loans, to application-based investments. The millennial generation, as the age group most familiar with technology, is the main user of fintech services in Indonesia. This phenomenon also shapes their financial perspectives and behavior in everyday life.

Purnamasari and Merlinda (2021) stated that there is a positive relationship between the use of fintech and the level of financial literacy among millennials (Purnamasari et al., 2021). Millennials who actively use fintech services tend to have a better understanding of financial management, such as budget planning, investment, and debt management. This increased understanding has an impact on wiser financial behavior, including in terms of investment decision making and controlling consumptive spending. In other words, fintech not only functions as a transaction tool, but also as an effective means of financial education.

A concrete example of this phenomenon can be seen in the use of digital investment applications such as Bibit. This application provides mutual fund services that are easily accessible to the general public, including those who have no previous investment experience. Based on a report published by DailySocial.id in 2022, more than 60% of Bibit users are millennials aged between 21 and 35 years. Through the educational features available in the application—such as risk profile quizzes, investment guides, and portfolio recommendations—users not only invest, but also learn to understand important financial concepts in a practical way. This shows that the use of fintech plays a dual role, namely as a transaction tool as well as a learning medium that increases the financial literacy of its users.

Increasing financial literacy through the use of fintech also contributes to the formation of healthier financial behavior. Millennials who already have financial understanding tend to be more careful in using online loan services, and are more planned in managing expenses and savings. In a broader context, good financial literacy also helps people avoid the risk of debt traps, digital financial fraud, and the use of illegal financial services that are rampant. Therefore, the presence of fintech must be supported by efforts to increase financial literacy so that its benefits can be felt optimally and sustainably.

The Financial Services Authority (OJK) in its 2022 National Survey of Financial Literacy and Inclusion report also emphasized the importance of a balance between advances in financial technology and adequate literacy understanding. Without adequate understanding, people are vulnerable to misuse of financial technology and making wrong financial decisions. Therefore, strengthening financial literacy amidst the rapid growth of fintech is a strategic step in encouraging responsible financial behavior among the millennial generation.

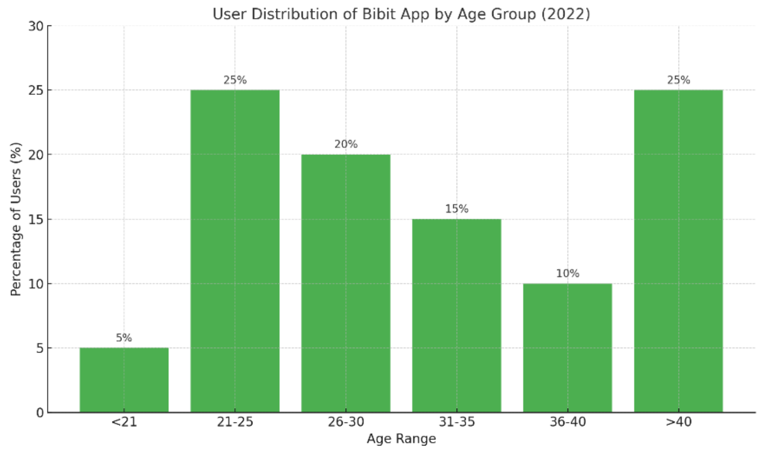

Figure 5. Distribution of Bibit investment application users by age (2022)

The graph above shows the percentage distribution of Bibit investment application users by age group in 2022. From the graph, it can be seen that the 21–25 age group is the largest user, which is 25% of the total users. The 26–30 age group follows with a percentage of 20%, followed by the 31–35 age group at 15%. These three groups are included in the millennial generation category, which is the main focus in the discussion regarding the influence of fintech on financial literacy and behavior.

Interestingly, the age group over 40 also recorded a significant figure, namely 25%, indicating that interest in digital investment is not only limited to the younger generation. Meanwhile, the age group under 21 is still the group with the lowest number of users, namely 5%, which is most likely due to limited financial access and minimal experience in managing personal finances.

This distribution strengthens the argument that the millennial generation has a higher tendency to utilize financial technology for investment purposes. The use of applications such as Bibit not only provides easy access to investment but also enriches their understanding of financial instruments. With the educational features available in the application, users gain practical knowledge that ultimately forms wiser and more focused financial behavior.

The Challenge of Unequal Digital Literacy

Although access to fintech services is increasingly widespread among the millennial generation, this has not been fully accompanied by an increase in understanding of the proper and responsible use of financial technology.

Unequal digital literacy has caused many users, including millennials, to be trapped in detrimental financial practices. One real example is the rampant cases of misuse of online loans (pinjol). Many young people are tempted by the ease of access to loans without collateral, but do not fully understand the high interest rates, ensnaring installment schemes, and the risks of insecure personal data. A report from the Financial Services Authority (OJK, 2022) noted that throughout the year, there were more than 1,000 illegal pinjol entities that were blocked because they did not have official permits. Most of the victims are young people who have minimal financial and digital literacy.

Tragic cases have also occurred in various regions, as reported by Kompas.com (2021), where several people experienced mental stress to the point of committing suicide due to being chased by ballooning online loan bills, as well as being terrorized by application-based debt collectors. This reflects the urgency of the importance of more equitable and systematic digital and financial education across all levels of society, especially among the productive age group.

On the other hand, government regulations regarding digital consumer protection are still evolving. Although the OJK and the Ministry of Communication and Informatics (Kominfo) have attempted to tighten supervision of fintech and take firm action against illegal online loans, the biggest challenge still lies in individual awareness and understanding in using digital services wisely. Regulation without adequate education will only create reactive protection, not preventive.

Therefore, the strategy needed is not only in the form of supervision or blocking, but also through ongoing digital financial literacy counseling and campaigns. Collaboration between the government, educational institutions, fintech industry players, and the media is important in disseminating understanding of digital risks and forming a culture of responsible use of financial technology.

Direct Influence of Fintech on Literacy

The direct influence of fintech on financial literacy is becoming increasingly apparent as the use of digital financial services increases in various levels of society. A study conducted by Musnadi and Agustina (2024) in Aceh showed that the use of fintech not only facilitates financial activities but also has a positive impact on people's financial understanding and behavior (Musnadi & Agustina, 2024). The more often someone uses fintech services such as digital wallets, online loan applications, or digital investment platforms, the higher their level of financial literacy. This is because fintech users are required to understand how these services work, including their risks and benefits, thus indirectly increasing their financial awareness and knowledge.

This phenomenon is also seen in a study in Mataram City by Zamroni (2022), which examined the influence of fintech on the financial literacy of Micro, Small, and Medium Enterprises (MSMEs). The study concluded that the level of adoption of fintech technology, transaction frequency, and business sustainability have a significant effect on increasing the financial literacy of business actors. By using fintech, MSME actors learn to manage finances digitally, understand cash flow in and out, and begin to recognize the concept of more mature financial planning. This shows that fintech has become an effective financial education tool, especially for the small business sector.

A similar case also occurred in Jambi City, as studied by Hijir (2022). In his study, it was found that financial literacy has a positive relationship with financial behavior, and the use of fintech strengthens this relationship (Hijir, 2022). This means that MSME actors who understand the basic concepts of financial literacy will be more motivated to use fintech services, which then improves the way they manage their finances, such as in making loan decisions, investments, and income management.

From these findings, it can be concluded that fintech is not just a transaction tool, but also a financial learning instrument that has a real impact on increasing public financial literacy. The existence of fintech indirectly creates a need to understand financial concepts, encouraging people to be more aware and responsible in managing their finances. This makes fintech a strategic partner in encouraging financial inclusion and literacy in Indonesia.

CONCLUSION

This study concludes that the application of financial technology and digital education plays a significant role in improving financial literacy among the Indonesian millennial generation. Fintech is an effective tool not only for financial transactions, but also as a practical financial learning medium that reaches the younger generation. Meanwhile, digital education helps broaden understanding and shape wise and responsible financial attitudes. The combination of technology access and relevant education can build a more inclusive and efficient financial ecosystem.

The government, fintech industry players, and educational institutions need to build strategic collaboration in organizing structured digital financial education programs that directly target the needs of millennials. Educational materials should be delivered through platforms that are familiar with the digital lifestyle of the younger generation, such as social media, mobile applications, and interactive video content. In addition, strict regulations against illegal fintech services and digital consumer protection campaigns must also be strengthened to avoid unwanted financial risks.

Further research is recommended to use a quantitative approach and field survey methods to empirically measure the level of effectiveness of fintech and digital education in improving financial literacy. Comparative studies between urban and rural areas are also important to see the digital divide and its implications for financial inclusion. In addition, a longitudinal approach can provide long-term understanding of changes in financial behavior due to digital technology and education interventions.

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