



Research Paper

Analysis of the Effect of Financial Literacy On the Use of Financial Technology in the Society 5.0 Era

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Abstract.

The emergence of disruptive innovation, experienced worldwide, is causing changes in systems and market patterns. This innovation has succeeded in introducing practicality, ease of access, convenience, and economical cost. These innovations also occur in the global financial services industry. The development of financial technology in Indonesia has increased quite rapidly from 2015 until now. Starting in 2006 the entry of financial technology in Indonesia continues to experience encouraging changes and innovations. The literacy of Indonesian people, especially the millennial generation is still very low; therefore, this study aims to find out how much influence financial literacy has on the use of financial technology among FEB Unesa students. This research is a quantitative study and uses primary data using simple linear regression data analysis techniques. The results of this study show that financial literacy has a significant positive effect on the use of financial technology. Understanding financial literacy has an impact on abilities in financial planning, determining appropriate financial products and services, understanding benefits and risks, and can improve welfare for themselves and the environment.

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1. INTRODUCTION

The emergence of disruptive innovations experienced by almost all countries has made changes in systems and market patterns. This innovation has successfully introduced practicality, ease of access, convenience, and economical cost. These innovations also occur in the global financial services industry. These changes start from the structure of the industry, and its intermediation technology to the marketing model to consumers. This encourages the emergence of a new phenomenon called financial technology (Fintech). Financial technology is a new product, technology service, and business model that uses technology in the financial system and can have an impact on monetary system stability, finance, efficiency, smoothness, security, and payment system constraints (Peraturan Bank Indonesia, 2017). Many problems occur in the community,

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such as the traditional financial industry which causes the community to be unable to be served because banks are bound by strict rules and the limitations of the banking industry in serving the community in certain areas. These difficulties then encourage people to look for alternative funding other than traditional financial industry services that offer more democratic and transparent financing and efficient service costs that also reach the wider community. The use of technology makes it easier for people to access information on a financial product without the need to come directly to the bank (Yolanda & Dessyana, 2022)

The development of financial technology in Indonesia has increased quite rapidly from 2015 until now. Starting in 2006 the entry of financial technology in Indonesia continues to experience encouraging changes and innovations. Supported by the COVID-19 pandemic which forces people to limit their mobility, financial technology is a solution, even people flock to use these financial technology services. Fintech players in Indonesia who are still dominant in the payment business are 43%, loans are 17% and the rest are in the form of aggregators, crowdfunding, and others (D.Hadad, 2017). The large potential for fintech in Indonesia to grow more rapidly and be able to accommodate the needs of the community requires adequate arrangements considering the large risks involved. Financial technology that continues to develop will support the achievement of the three targets of the master plan for the Indonesian financial services sector. The master plan is contributive, namely optimizing the role of the financial services system in supporting the acceleration of national economic growth. Maintaining financial system stability is the basis for sustainable development and inclusive functions, namely opening up access to finance to improve welfare among the community (D.Hadad, 2017).

Financial technology is the use of technology in the financial system that produces new products, services, technology, and or business models and can have an impact on monetary stability, financial system stability and/or efficiency, smoothness, security, and payment system constraints (Bank Indonesia, 2013). Fintech itself as an innovation in financial services is growing rapidly. Its existence will not appear much if it does not have a big role. One of its roles is that people who do not have bank accounts already have other digital-based financial accounts. In addition, fintech can improve people's lives in terms of capital and consumption loans. Many merchants provide debit and credit card payments and get discounts. In addition, fintech can also build banking infrastructure as a solution to increasing people's purchasing power (Laut & Hutajulu, 2019). Some of the factors that affect someone using fintech are the convenience of features, the social influence of performance expectations, and system security (Boonsiritomachai & Pitchayadejanant, 2019).



Financial technology in Indonesia has a major role which is expected to encourage the export capability of MSMEs, which is currently still low, encourage an even distribution of the level of welfare of the population, and assist the fulfillment of domestic financing which is still very large, encourage the distribution of national financing which is still uneven and which is no less important. increase national financial inclusion. In the current digital era, technological innovation is a driver of economic growth. when linked to the financial sector, financial technology becomes a new instrument that can be used to increase financial growth and financial inclusion (Laut & Hutajulu, 2019). The presence of financial technology is in line with the concept of the financial services sector master plan (MPSJKI) and synergizes with the financial industry to provide multiple benefits to the community.

In addition to bringing important benefits to society and the country, the presence of fintech is like a double-edged sword that also carries risks. Various potential risks and vulnerabilities of fintech services, including digitalization and automation, make online crimes very vulnerable to incidents such as wiretapping, burglary, and cybercrime (fictitious transactions, carding/using other people's credit cards, fraud in the marketplace). Not all financial technology service providers have a license to collaborate with Islamic banking institutions or carry out financial transactions systematically and legally, so it is possible to practice abuse of authority or transactional irregularities, which will harm the Islamic banking institution itself. In general, the risks that may arise from Fintech companies in Indonesia are Fraud risk, data security risk (cybersecurity), and market uncertainty risk (SetiyonoWisnu Panggah & Detak, 2021).

The metamorphosis of financial technology is an important instrument in accelerating development. Effective and efficient financial technology has resulted in a shift in public interest in the banking sector, both in the payment process, investment, saving, and so on. These conditions directly accelerate the growth of banking and financial inclusion among the public. Financial inclusion policy innovation is a banking policy package that was set after the global financial crisis. Based on the World Bank report (2008), explains the importance of inclusive finance to accelerate development, especially in the financial sector for the poor, so that this fintech revolution is a driver of financial sector growth. Financial development through financial inclusion with technological intervention has been intensively carried out in developing countries that are vulnerable to global shocks such as Asian countries including Indonesia. The financial development program through financial inclusion is a form of deepening financial services and access for people who are in the lower middle class to be able to reach and utilize formal



financial services in the form of loans, savings, and transactions safely, easily, and efficiently.

Financial inclusion index data compiled from the financial services authority (OJK) explains that financial inclusion has increased quite rapidly. The financial inclusion index in 2013 was 59.74%, a good increase in 2016 which was 67.8%. Then in 2019, it continued to rise to reach 76.19%. It is believed that this increase will consistently increase after the COVID-19 pandemic. In this situation, people are forced to turn to technology to minimize face-to-face and social distancing. The COVID-19 pandemic has also emphasized the urgency to accelerate the transformation of and digital economic and financial ecosystem. The challenges ahead are the master plan of the Indonesian financial services sector, and the need for equitable distribution of financial literacy and inclusion, especially for the minority target given the rise in investment. Technological changes that occur in society are also expected to increase the national financial inclusion index.

The dynamics of the concept of financial literacy in various countries encourage the Financial Services Authority to improve the definition of financial literacy by adding aspects of financial attitudes and behavior in addition to knowledge and belief in financial institutions, products, and services. The definition of complete financial literacy according to the Financial Services Authority is knowledge, skills, and beliefs that influence attitudes and behavior to improve the quality of decision-making and financial management to achieve prosperity (Otoritas Jasa Keuangan, 2021). Financial literacy is very important for individuals to help in handling daily finances. Financial literacy will result in planning, individual finances in managing their finances. It would be better if the implementation of financial literacy is done early. If you are financially literate from a young age, there will be good financial management for the individual (Tristiarto & Wahyudi, 2022). The fact that makes the urgency for financial literacy even more inevitable is that empirically it has been shown that those who are not financially literate have been highly correlated with sub-optimal financial behavior that ultimately results in long-term losses (Stolper & Walter, 2017).

Based on a national survey of financial literacy and inclusion by the Financial Services Authority, shows that Indonesia's financial literacy rate is still much lower than the financial inclusion rate. In 2013 financial literacy was still at 21.84%, in 2016 it increased by 29.7% and in 2019 the financial literacy rate still reached 38.03%. This low financial literacy rate has brought Indonesia to be below neighboring countries, namely Malaysia, Myanmar, and Singapore, where three countries already have financial literacy rates above 50%. The vast disparity between financial literacy and financial inclusion in

Indonesia results in an imbalance that is dangerous for society because it can have a major impact on financial health. This defines that many individuals in the community already understand access to financial services but do not understand in detail the benefits and impacts. The Financial Services Authority (OJK) also confirmed that the financial inclusion index increased from year to year but was not followed by the financial literacy index which made the public suffer from the problem of fraud in fintech services. The national survey of financial literacy and financial inclusion explains that the percentage of financial literacy index by age is as follows:

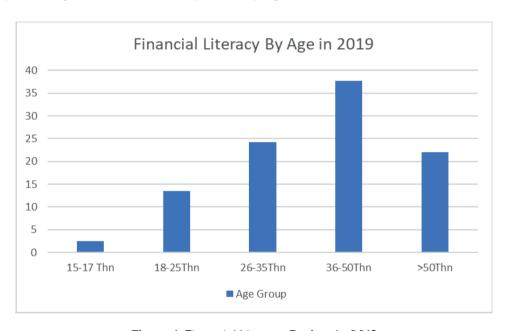


Figure 1: Financial Literacy By Age In 2019.

Financial literacy by age 2019 explains that at the age of 18-25 years, the so-called millennial generation is still low in financial literacy. Millennials are the generation born in the 1980s to 2000s. The behavior of millennial generation in Indonesia is very addicted to the internet and the majority of millennials prefer to use non-cash transactions. If this is not well-literate, then the tendency to experience fraud and experience the risks of financial technology is very large. The importance of financial literacy becomes inevitable when the current economic situation is at stake. In the future, Indonesia has many golden opportunities to take advantage of its economic advantages through the use of demographic bonuses and growing fintech trends. However, millennials do not yet have adequate capabilities to take advantage of this opportunity. Based on data from the Financial Services Authority (OJK), the financial literacy index which has only reached 38.03% (OJK, 2019) makes this opportunity cannot be utilized optimally. Based on the above background, the authors are interested in researching the analysis of the use of financial technology in the millennial generation to improve financial literacy.



2. RESEARCH METHODS

This research uses quantitative methods. The data used in this study is primary data where the data is obtained directly from respondents' answers to the questionnaire that has been distributed to students of the Faculty of Economics and Business UNESA. The respondents to this study were Unesa FEB students because they represented the millennial generation born in 1982-2002. It is assumed that this generation is the generation that was born during the internet boom so that they are very familiar with the use of technology.

Other types of data used in this study are secondary data from the Financial Services Authority (OJK), Bank Indonesia (BI), and the Central Statistics Agency (BPS). To obtain the data needed in the study, the object of this research is the students of the Faculty of Economics and Business, State University of Surabaya, Class of 2019, 2020, and 2021. The location of this research is on Jl. Ketintang No.2, Ketintang, Kec. Gayungan, Surabaya City, East Java. s

The data analysis technique in this study used simple linear regression with the SPSS25 application. Linear regression analysis is a statistical method used to analyze the direct effect of one or several independent variables on an independent variable (Sulianto, 2011 in Wufron). In this study, the independent variable was previously determined in the form of financial technology, while the dependent variable was financial literacy. Wufron added that after the data processing has been completed, the next step is to interpret the output of simple regression research data by analyzing two main tables, namely Model Summary and Coefficients, while if multiple regression analysis is carried out, three main tables are analyzed, namely the Model Summary table, ANOVA, and Coefficients.

3. RESULT AND DISCUSSIONS

This research was conducted by distributing online questionnaires with a total of 259 students consisting of 189 women and 70 men with an age range of 17-20 years as many as 195 students and 21-25 as many as 64 students. All student respondents came from various majors within the Faculty of Economics and Business, the State University of Surabaya starting from the 2019 batch, 2020, 2021, and 2022 as for the data:

The majority of students from the Faculty of Economics and Business at the State University of Surabaya are domiciled in the East Java Province with the employment status of 194 people who have never worked and 65 people who have worked. Seeing

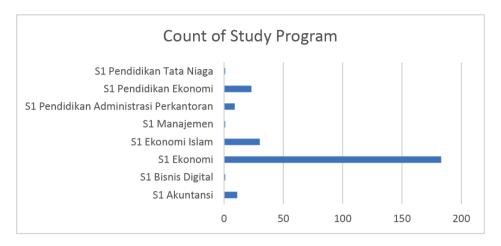


Figure 2: Data of FEB UNESA Students. Source: Primary Data Processed by the Author.

this, then each student managed to collect the total daily needs for 1 month with an estimated expenditure of:

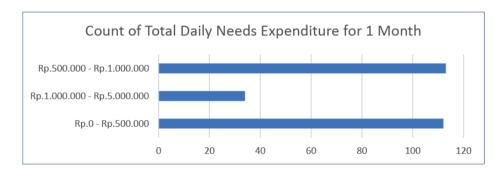


Figure 3: Total Student Expenditure Data FEB UNESA. Source: Primary Data Processed by the Author.

- 1. Rp. 0 to Rp. 500,000 as many as 112 students
- 2. Rp. 500,000 to Rp. 1,000,000 as many as 113 students
- 3. Rp. 1,000,000 up to Rp. 5,000,000 34 students
- 4. Rp. 5,000,000 up to above Rp. 10,000,000 0 students

To obtain more in-depth information related to the use of financial technology for students of the Faculty of Economics and Business, State University of Surabaya, and its relation to financial literacy, the following data was collected:

 Buying and selling activities through an online marketplace
From 259 respondents, it was found that the majority of online applications used by students within the Faculty of Economics and Business, State University of



Surabaya, were Shoope as many as 243 people. Meanwhile, other applications used by students include Tokopedia as many as 63 people, Lazada as many as 22 people, Zalora as many as 3 people, Bukalapak as many as 3 people, Blibli as many as 2 people, Sociolla as many as 3 people, Facebook as many as 2 people, Tik Tok Shop as many as 5 people, Gojek as many as 1 person, Not using an online marketplace as many as 3 people from the total number of respondents.

2. Non-Cash Payment System Service Provider Platform

From 259 respondents, it was found that the majority of the non-cash payment systems (E-Money) are the most widely used by students within the Faculty of Economics and Business, State University of Surabaya, namely Shoopepay as many as 203 people. Meanwhile, other applications used by students include Funds as many as 87 people, Gopay as many as 79 people, OVO as many as 61 people, Link Aja as many as 44 people, M-Banking as many as 11 people, Ipotpay as many as 1 person, and students who are not using the payment system non-cash as many as 14 people.

3. Online loan services that have been licensed by the OJK

From 259 respondents, it was found that among 240 students of the Faculty of Economics and Business, State University of Surabaya, the majority did not use online loan services. The remaining 19 people were used, including Danamas as many as 4 people, Adakami as many as 4 people, Indodana as many as 4 people, Easycash as many as 4 people, and Shoopepaylater as many as 3 people.

4. The online investment that has been licensed by the OJK

From 259 respondents, the results showed that among 179 students of the Faculty of Economics and Business, State University of Surabaya, the majority did not use online investment. The remaining 84 people used them, including Indopremier for as many as 13 people, Seeds for as many as 38 people, Bareksa for as many as 7 people, Magic for as many as 20 people, and so on for as many as 6 people.

Based on the result of research on the constan value of financial technology variables influenced by financial literacy variable of 26,879. Then the coefficient value the regression on financial technology is 0,959 > 0,10 has a significant effect if there is an addition the financial literacy variable of one unit to the financial literacy variable will increased by 0,959. Meanwhile the results of the T test show that the t value of t count > t table with a result of 16,321> 1,969, so it can be concluded that the financial literacy variable (X) has an effect significant positive to the financial technology variable (Y) or



the hypothesis is accepted, this study is in line with research (Fajar & Larasati, 2021). (Saleh & F, 2020) dan (Aditya & Mahyuni, 2022).

The result of the research above explain that the development of financial technology in Indonesia, especially for the younger generation has made a shift in consumerism patterns. The ease and sophistication of technology encourage the younger generation start trying to make online shopping transaction, investment and online loan. Knowledge about financial literacy among students who are still quite good is also and influence in the use of financial technology. This knowledge is the key to increasing the use of financial technology in Unesa FEB students.

4. CONCLUSIONS

The supporting data that has been collected shows that the current technological sophistication is increasing the consumerism lifestyle for students of the Faculty of Economics and Business, State University of Surabaya. This can be seen from the data which shows as many as 3 students out of 259 respondents who do not use the online trading platform. The need for the role of financial literacy in the use of financial technology is none other than to increase productivity and better financial management. One of the risks faced by students when they are not educated is that they can get into online loan debt, which is one of the biggest factors due to the consumerism lifestyle. This confirms the previous research that has been done by (Rahadiyan & Sari, 2019) related to the risk arising from the implementation of Fintech. The limitation of this research is a case study on FEB Unesa students class of 2019-2022

Good use of financial technology is influenced by how much understanding of finance students have, therefore financial literacy is very important to support the proper implementation of economic functions. According to (Cahyaningtyas et al., 2020) the more people who know the benefits of financial products and services, the greater the financial transactions that will be created so that they can become the driving wheel of the economy faster. This research also continues the research that has not been discussed previously, where this research (Prete, 2022) related to digital and financial literacy has not considered other dimensions such as digital payments, personal finance, and individual data. This study includes dimensions not described in Lo Prete's, Anna (2022). The relationship with students within the Faculty of Economics and Business, State University of Surabaya, understanding financial literacy will have an impact on abilities in financial planning, determining appropriate financial products and services,



understanding benefits and risks, and being able to improve future welfare for themselves and their environment.

The limitation of this research is a case study on FEB Unesa students class of 2019-2022. This research has a novelty, namely the research subjects are Unesa FEB students who are the millennial generation

References

- [1] Aditya, T., & Mahyuni, L. P. (2022). Volume . 24 Issue 2 (2022) Pages 245-258 FORUM EKONOMI: Jurnal Ekonomi , Manajemen dan Akuntansi ISSN: 1411-1713 (Print) 2528-150X (Online) Pengaruh literasi keuangan , persepsi kemudahan , manfaat , keamanan dan pengaruh sosial terhadap minat pen. 2(2), 245–258. https://doi.org/10.29264/jfor.v24i2.10330
- [2] Bank Indonesia. (2013). Peraturan Bank Indonesia Nomor 15/2/PBI/2013 Tentang Penetapan Status dan Tindak Lanjut Pengawasan Bank Umum Konvensional. In Peraturan Bank Indonesia Nomor 15/2/PBI/2013 Tentang Penetapan Status dan Tindak Lanjut Pengawasan Bank Umum Konvensional (Vol. 53, Issue 9).
- [3] Boonsiritomachai, W., & Pitchayadejanant, K. (2019). Determinants affecting mobile banking adoption by Forecasting equilibrium quantity and price on the world generation Y based on the Unified Theory of Acceptance and natural rubber market Use of Technology Model modified by the Technology Suratwadee Arunwa. *Kasetsart Journal of Social Sciences*, 40(1), 8–16.
- [4] Cahyaningtyas, S. R., Ramadani, R. S., & Isnaini, Z. (2020). Edukasi Literasi Keuangan Kepada Masyarakat Desa Mekarsarinarmada. *Abdimas independen*, 1(2), 86–90.
- [5] D.Hadad, M. (2017). Financial Technology (Fintech) di Indonesia.
- [6] Fajar, M., & Larasati, C. W. (2021). Peran Financial Technology (Fintech) dalam Perkembangan UMKM di Indonesia: Peluang dan Tantangan. *Humanis (Humanities, Management and Science Procedings)*, 1(2), 702–715.
- [7] Laut, L. T., & Hutajulu, D. M. (2019). Kontribusi Financial Technology Dalam Meningkatkan Inklusi Keuangan di Indonesia. *Prosding Seminar Nasional Dan Call For Papers*, 326–336.
- [8] Otoritas Jasa Keuangan. (2021). Strategi Nasional Literasi Keuangan Indonesia 2021-2025. Otoritas Jasa Keuangan, 130. https://www.ojk.go.id/id/beritadan-kegiatan/publikasi/Documents/Pages/Strategi-Nasional-Literasi-Keuangan-Indonesia-2021-2025/Strategi Nasional Literasi Keuangan Indonesia 2021-2025.pdf



- [9] Peraturan Bank Indonesia. (2017). Peraturan Anggota Dewan Gubernur Nomor 19/15 /PADG/2017 (pp. 1–8). https://www.bi.go.id/elicensing/helps/PADG TEKFIN.pdf%0Ahttps://www.bi.go.id/id/fungsi-utama/sistempembayaran/ritel/financial-technology/faq.aspx#heading3
- [10] Prete, A. Lo. (2022). Digital and financial literacy as determinants of digital payments and personal finance. *Economics Letters*, 213, 110378. https://doi.org/10.1016/j.econlet.2022.110378
- [11] Rahadiyan, I., & Sari, A. R. (2019). Peluang Dan Tantangan Implementasi Fintech Peer To Peer Lending Sebagai Salah Satu Upaya Peningkatan Kesejahteraan. 4(September), 16–23.
- [12] Saleh, M., & F, F. S. (2020). Pengaruh Literasi Keuangan Dan Kualitas Pembelajaran Keuangan Terhadap Penggunaan Fintech Mahasiswa Manajemen Dan Akuntansi Universitas Fajar. *Jurnal Manajemen & Organisasi Review (Manor)*, 2(2), 94–105. https://doi.org/10.47354/mjo.v2i2.243
- [13] SetiyonoWisnu Panggah, S., & Detak, P. (2021). Financial Technology. In T. Multazam (Ed.), *Gastronomía ecuatoriana y turismo local*. (Vol. 1, Issue 69). UMSIDA PRESS.
- [14] Stolper, O. A., & Walter, A. (2017). Financial literacy, financial advice, and financial behavior. *Journal of Business Economics*, 87(5), 581–643. https://doi.org/10.1007/s11573-017-0853-9
- [15] Tristiarto, Y., & Wahyudi, W. (2022). Analisis Literasi Keuangan dan Inklusi Keuangan Financial Technology Terhadap Personal Finance Usaha Kecil dan Menengah Di Kabupaten Lebak Banten. *Ikra-Ith Ekonomika*, *5*(1), 190–200. https://journals.upi-yai.ac.id/index.php/IKRAITH-EKONOMIKA/article/download/1725/1424
- [16] Yolanda, Y., & Dessyana. (2022). Pengaruh fintech, teknologi informasi dan ecommerce terhadap kepuasan financial masyarakat kota Medan. *Jurnal Ilmiah Mahasiswa Akuntansi Universitas Pendidikan Ganesha*, 13, 271–280.