How is Digital Financial Literacy of FEB Unesa Students?

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Abstract. This research aims to analyze the level of digital financial literacy of students at the Faculty of Economics and Business (FEB) Universitas Negeri Surabaya in facing the challenges of the digital economy which is increasingly developing rapidly. Digital financial literacy refers to an individual's ability to use digital technology to manage, understand and make decisions related to finances. In the era of industrial revolution 4.0 and the development of financial technology, digital financial literacy has become a crucial competency, especially for the younger generation who are about to enter the professional world. This research uses a quantitative approach with a survey method to measure students' level of digital financial literacy. Data was collected through a questionnaire designed based on indicators of digital financial literacy. Total 300 questionnaires were distributed to students randomly. This research uses IBM SPSS Statistics 25 software as a descriptive data processing process. The research results show that the digital financial literacy level of FEB students is generally in the high category. Most students understand the basics of using digital financial instruments such as e-wallets and mobile banking. Other factors such as class year also influence digital financial literacy, where final year students have a higher literacy level than first year students. This may be due to longer experience and exposure to various digital financial tools and platforms. The implications of these findings indicate that although FEB students have basic skills in using digital financial services, there is still a need to improve their understanding of more complex financial instruments and the importance of digital risk management.

Keywords: digital financial literacy; digital financial instruments; digital risk management

Introduction

The phenomenon of financial illiteracy is spreading in Indonesian society. The 2019 National Financial Literacy and Inclusion Survey (SNLIK) of 12,773 respondents in 67 cities/districts and 34 provinces in Indonesia showed a national financial literacy index of 38.03% and a national financial inclusion index of 76.19% (OJK, 2019). Chen & Volpe (1998) revealed that there are three groups of financial literacy levels, namely first, less than 60% is classified as low, second, 60% -79% is classified as medium, and finally above 80% is classified as high.

The level of financial literacy in East Java is higher than the national financial literacy level, namely 48.95% (OJK, 2019). Surabaya is the capital of East Java Province with GRDP at current prices reaching IDR 554.51 trillion and GDP per capita reaching IDR 190.90 million, this figure is the highest in East Java (BPS Surabaya, 2021). Due to the high pace of the economy in Surabaya, financial literacy is increasingly needed so that people able to achieve financial success, especially for students (Yushita, 2017).

Students are an element of society that has quite an impact on a country's economy (Nababan & Sadalia, 2013). Herawati (2017) found that the financial literacy level of students was 48.6%, and Margaretha & Pambudhi (2015) found it was 48.9%. Adipradana (2021) said that students obtained a medium financial literacy level of

66%. This research aims to analyze the level of digital financial literacy of students at the Faculty of Economics and Business (FEB) in facing the challenges of the digital economy which is increasingly developing rapidly. Digital financial literacy refers to an individual's ability to use digital technology to manage, understand and make decisions related to finances. In the era of industrial revolution 4.0 and the development of financial technology, digital financial literacy has become a crucial competency, especially for the younger generation who are about to enter the professional world. FEB students, as potential future economic actors, are expected to have good financial literacy, not only in traditional aspects, but also in the context of digital financial technology.

Adequate digital financial literacy is really needed by individuals today and it is not enough just to have good financial literacy. Digital financial literacy is a multi-dimensional financial literacy concept that includes financial literacy and digital literacy (OECD, 2018). Meanwhile, digital financial literacy has the same basis as financial literacy and adds digital aspects (Tony & Desai, 2020). Adopting the same patterns in understanding financial literacy, in this research digital financial literacy is conceptualized similarly and explained through the three dimensions proposed by the OECD, namely financial knowledge, digital financial knowledge, attitude and behavior.

Digital financial literacy has become a concern for various groups, including the government, financial services companies and society, since the rise of digital financial services (DFS) in society (Lyons & Kass-Hanna, 2021). Digital financial literacy was born in line with the rapid development of digital financial technology in the last two decades, which has brought about significant changes in the financial industry. The rise of DFS, on the one hand provides many benefits, but on the other hand creates new risks that previously may not have existed in conventional financial services (OECD, 2018; OJK, 2020).

Literature Review

Planned Behavior

Planned Behavior Theory reveals that individual or group achievement can be predicted by the components of planned behavior theory, perceived behavioral control, and behavioral intentions, meaning that individual perceptions and intentions in achieving something can be used as predictions of individual achievement. Intention is a component in theory that functions as a capture of motivational factors to influence individuals in determining their behavior. The performance of individual behavior will be greater if the intention involved is at a strong level (Ajzen, 1991).

Digital Financial Literacy

This study intends to delve into the various dimensions of digital financial literacy. Thus, each dimension will be examined and analyzed separately to achieve a thorough understanding. The selected dimensions of digital financial literacy are the most often stated in the literature (Lyons and Kass-Hanna (2021) and are appropriate for the Kuwaiti setting.

Table 1. Dimensions of Digital Financial Literacy

Dimension 1	**Financial Knowledge** Lyons and Kass-Hanna (2021) define financial knowledge as understanding basic financial concepts such as numeracy, compound interest, inflation and risk diversification. Financial knowledge can be assessed both objectively and subjectively. Objective assessment, the preferred method according to many researchers (Lusardi and Mitchell, 2011; Bucher-Koenen et al., 2016), comprises knowledge-based questions (multiple choice or true-false questions), whereas subjective assessment is a form of self-assessment (Lind et al.,2020; Amalia et al., 2023) refer to financial knowledge as an individual's understanding of different concepts and risks in the financial industry which includes the ability to apply this understanding to make suitable and successful financial decisions, with the aim of achieving financial well-being for oneself and the wider community. Valaskova et al. (2019) argue that individuals should have essential skills and primary financial knowledge to conduct sound financial activities.
Dimension 2	**Digital Knowledge** Digital knowledge pertains to basic knowledge and simple hardware skills, such as sorting and saving information on the computer, tablet, mobile phone and software, creating and logging into accounts and managing privacy settings (Lyons and Kass-Hanna, 2021). "The lack of skills and knowledge of operating and using Information and Communications Technology is a critical barrier to enhancing digital literacy" (Lee, 2014).

Dimension 3	**Practical know-how.** Operating digital financial services necessitates understanding and practical know-how of the operational and technological prospects involved. Practical know-how refers to the ability and knowledge to access and use digital financial services. It includes the skills and mastery that enable consumers to easily navigate digital financial services and carry out transactions to effectively and efficiently handle daily finances (Lyons and Kass-Hanna, 2021). Consumers with practical know-how are more likely to use digital financial services more frequently (Malady, 2016).
Dimension 4	**Awareness** OECD (2018) interprets "Awareness" as the level of knowledge and understanding individuals have about the purposes, features, benefits and risks of various digital financial services such as mobile banking, e-wallets, digital credit and electronic money. This involves distinguishing between reliable, unreliable, regulated and unregulated digital financial services. It also includes informing of new digital developments (OECD, 2018b). Awareness can positively influence customers' intention to use digital financial services (Rai and Sharma, 2019).
Dimension 5	**Decision-making** Lyons and Kass-Hanna (2021) maintained that there are two subdimensions within the "Decision-making" dimension, namely, "positive financial attitudes" and "positive financial behaviors through digital financial services." Positive financial attitudes contribute to healthy financial outcomes such as proper management of everyday finances, self-discipline about saving and planning for retirement and borrowing wisely. Positive financial behaviors through digital financial services refer to the ability to make responsible decisions regarding selecting the appropriate digital financial services and providers (Lyons and Kass-Hanna, 2021). Financial decision-making involves individuals selecting different financial options to maximize their wealth (Kumar et al.,2023).
Dimension 6	**Self-protection** Self-protection refers to individuals' preventive measures to secure themselves against fraudulent activities such as phishing, identity theft, credit card scams, investment fraud and hacking (Dewi et al., 2020). It also includes educating oneself and developing skills in information security to be better prepared to mitigate risks associated with digital financial services (Jansen and van Schaik, 2019).

Sources : Author (2024).

Methods

This research uses a quantitative approach with a survey method to measure students' level of digital financial literacy. Research respondents were FEB undergraduate students from various majors, such as Management, Accounting and Development Economics. Data was collected through a questionnaire designed based on 6 dimensions of digital financial literacy, such as Financial Knowledge, Digital Knowledge, Practical know-how, Awareness, Decision-making, Self-protection. Primary data was obtained by distributing questionnaires about digital financial literacy online in the form of a Google form distributed via Whatsapp Group, and 300 respondents were selected using a random sampling method. This research uses IBM SPSS Statistics 25 software as a descriptive data processing process.

Result and Discussion

The beginning of the results section of this research shows that (see table 2) there are 300 respondents with a gender distribution that reflects the diversity of the population. Female respondents dominated with 173 people (57.7%), while male respondents were 127 people (42.3%). This distribution shows a higher participation of females than males, which could be due to population characteristics or the focus of this study. However, both genders still have sufficient representation to ensure comprehensive research results.

In this research, information about the income or money managed by students in one month is collected for discussion so that we understand their financial management patterns. Most students' main income comes from pocket money given by their parents, with an average amount ranging from IDR 500,000 to IDR 1,500,000 per month. Additionally, some students have additional sources of income, such as part-time jobs, small businesses, or scholarships. This additional income ranges from IDR 200,000 to IDR 1,000,000 per month, depending on the type of activity they carry out.

In terms of distribution, students with monthly income between IDR 500,000-1,000,000 account for around 11.3% of respondents, indicating that they tend to manage their finances more strictly to meet their

daily needs. The group of students with income in the range of IDR 1,000,000-1,500,000 is 30.3%. The next result represents the majority of respondents, namely around 40.3%, which shows a level of income sufficient to meet basic needs, entertainment and savings in a limited amount, namely reaching IDR 1,500,000-2,000,000. The remainder, around 18%, have income above IDR 2,000,000, which is generally used for wider needs, such as investment, travel or purchasing valuables.

This difference in income influences students' spending patterns. Students with lower incomes tend to prioritize basic needs, such as food, housing, and transportation. Meanwhile, students with higher incomes have greater flexibility for secondary expenses, such as entertainment, social activities, or shopping for electronic goods. This pattern shows that students' monthly income plays an important role in determining their lifestyle and ability to manage their finances independently.

Table 2. Respondents Characteristic

Respondents Characteristic	Frequency	%
Gender		
Female	173	57,7%
Male	127	42,3%
Total	300	100%
Monthly income		
IDR 500.000-1.000.000	34	11,3%
IDR 1.000.000-1.500.000	91	30,3%
IDR 1.500.000-2.000.000	121	40,3%
> IDR 2.000.000	54	18,0%
Total	300	100%

Sources : Author (2024)

This research also found differences in digital financial literacy levels based on demographic factors. Students majoring in Digital Business and Accounting tend to have a better understanding of digital financial management than students from other majors. Other factors such as class year also influence digital financial literacy, where final year students have a higher literacy level than first year students. This may be due to longer experience and exposure to various digital financial tools and platforms. Furthermore, in table 3 below, the results of the validity and reliability of the questionnaire asked and the overall level of digital financial literacy of FEB Unesa students will be explained.

Table 3. Validity, Reliability, and Mean Factor

Dimenssion	Item	Correlation	Cronbach Alpha	Mean	Mean Variable
Financial knowledge	FK1	0.645	0.743	3.91	
	FK2	0.882			
Digital knowledge	DK1	0.712	0.721	4.13	
	DK2	0.736			
	DK3	0.671			
	DK4	0.729			
Practical know-how	PK1	0.633	0.702	3.67	
	PK2	0.657			
	PK3	0.628			
	PK4	0.698			3,85
Awareness	AW1	0.785	0.814	4.01	
	AW2	0.812			
	AW3	0.797			
	AW4	0.773			
Decision-making	DM1	0.684	0.764	3.79	
	DM2	0.672			
	DM3	0.634			
	DM4	0.609			
Self-protection	SF1	0.732	0.715	3.57	

Dimenssion	Item	Correlation	Cronbach Alpha	Mean	Mean Variable
	SF2	0.706			

Sources : Author (2024)

Validity testing using the corrected total item correlation method is used to evaluate whether each item in a measurement instrument has an adequate correlation to the total score. This approach ensures that each question or item asked is truly relevant and consistent in measuring the same construct. Corrected total item correlation is the correlation value between the score of an item and the total score of all items, but the item score is excluded from the total calculation to avoid bias. The validity test results in the third column show that a correlation value ≥ 0.3 is considered valid.

The reliability test uses Cronbach's Alpha value. Cronbach's Alpha is a method used to measure the internal consistency of a research instrument, such as a questionnaire or measurement scale. The Cronbach's Alpha value shows the extent to which the items in the instrument are related to each other and consistently measure the same construct. The results show that the Cronbach's Alpha value is > 0.700, so it can be concluded that all dimensions of the variables tested are considered reliable.

Based on table 3, it shows that the largest mean value is for the digital knowledge indicator. This result can occur because students aged 19-22 years tend to be more digitally literate because they grew up in an era of rapidly developing technology. This generation, often referred to as digital natives, has been accustomed to technological devices from a young age, such as computers, smartphones and the internet. This experience gives them an edge in understanding and using technology for various purposes, from communication, entertainment, to learning. Easy access to digital information means students in this age range have the ability to adapt quickly to new devices and applications.

Student respondents are also usually at the peak of educational and social activities that utilize technology intensively. In a campus environment, they are often faced with the need to use software such as online learning applications, data analysis tools, and digital collaboration platforms. On the other hand, their social lives are also largely connected through social media and communication applications, so that digital skills become an inseparable part of their daily lives. This strengthens their digital skills while broadening their knowledge of the latest technology.

Based on table 3, it shows that the largest mean value is for the self protection indicator. This result can occur because their ability to protect themselves in the digital financial world is still relatively weak. One of the main reasons is a lack of in-depth understanding of the risks associated with transactions and use of digital financial services. Many students are not fully aware of threats such as identity theft, online fraud, or vulnerability to cyber attacks. As active users of digital payment platforms, e-wallets and investment applications, this lack of understanding can make them easy targets for cybercriminals. Some students do not have sufficient knowledge about how to manage their finances safely, including using strong passwords, securing personal data, and verifying the security of digital transactions.

In conclusion, the average respondent's answer shows that the digital financial literacy level of FEB students is generally in the high category. Most students understand the basics of using digital financial instruments such as e-wallets and mobile banking. However, when asked about more complex instruments such as cryptocurrencies and digital investment platforms, their level of understanding was still low. As many as 68% of respondents admitted to regularly using digital financial services for daily transactions, such as online payments and money transfers. However, only 27% of respondents actively utilize digital investment services, indicating a gap in understanding between daily transactions and long-term financial management. Another factor that makes students this age more digitally literate is their ability to adapt to global technology trends. With exposure to innovations such as artificial intelligence (AI), blockchain, and financial technology (fintech), students tend to have high curiosity and an openness to trying new things. Their ability to learn independently through online sources, such as tutorials, articles or educational videos, also supports rapid mastery of technology. With a combination of experience, need, and accessibility, students aged 20-23 years are one of the most adaptive and fluent groups in the digital world.

Conclusion

Finally, this research highlights that the digital financial literacy level of FEB students is currently at a high level, with several areas requiring improvement, especially in terms of understanding digital investment instruments and risk management. To increase this literacy, collaborative efforts are needed from campuses,

regulators and fintech industry players to create an educational ecosystem that better supports the development of diigital financial literacy among students. Developing better digital financial literacy will contribute to the readiness of FEB students to adapt to digital transformation in the economic and financial sectors in the future.

The implications of these findings indicate that although FEB students have basic skills in using digital financial services, there is still a need to improve their understanding of more complex financial instruments and the importance of digital risk management. Therefore, educational institutions need to strengthen educational programs related to digital financial literacy, both through formal curricula and additional seminars and training. Good digital financial literacy will help FEB students not only in managing their personal finances, but also in preparing them for a world of work that is increasingly influenced by financial technology.

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