

Determinant Factors of Digital Financial Literacy: A Study of Women Entrepreneurs

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Abstract

Micro, Small and Medium Enterprises contribute to 61% of economic growth in Indonesia. The financial gap in MSMEs financing is based on data from the Ministry of Cooperatives and MSMEs. Women comprised the majority of MSMEs (61.8%). There were 38.03% literacy problems and 76.19% inclusion criteria. This study investigated the digital financial literacy of female entrepreneurs in Central Java. A survey method was used in this study with 100 women entrepreneurs. Digital Financial Literacy is identified in the three OECD components: Digital Financial Knowledge, Digital Financial Behavior and Digital Financial Attitudes. The results of this study indicate that the average respondent had sufficient knowledge of digital finance. Limited knowledge of insurance services and capital markets. Meanwhile, the digital financial behavior and attitude components show that digital security protection measures are still low. It is hoped that digital financial literacy can support female entrepreneurs in developing their businesses.

Keywords: Digital Financial Literacy, Women Entrepreneurs.

INTRODUCTION

The Industrial Revolution 4.0 encourages the emergence of digitalization in various sectors of life, including the economic sector. The development of digital technology brings about innovations that change people's economic activities. Technological developments encourage the emergence of new digital-based business models that are more optimal for increasing business efficiency and productivity, thus creating opportunities and challenges that need to be managed properly.

The Industrial Revolution requires the business sector to adapt and make changes in line with changes in consumer behavior in the digital era. Micro, Small and Medium Enterprises are the business sectors that make the largest contribution to economic growth in Indonesia, amounting to 61.07 percent. Java Island is the region with the main contributor to the economy in Indonesia, based on data from the Central Statistics Agency in the first quarter of 2022, amounting to 57.78 percent of economic growth (BPS, 2022). Central Java Province is one of the regions on the island of Java which is the fourth largest contributor to the national economy, namely 8.98 percent or 14.53% in the first quarter of 2022 (BI, 2022).

The high contribution to Central Java's economic growth is supported by the MSME sector. Based on employment data from Central Java Province, there are more female entrepreneurs than men, namely 1,623,064 (BPS, 2021).

Based on data from the Ministry of Women's Empowerment and Child Protection in 2019, the financial literacy index for women is still lower than men, namely 36.13 percent. Based on the results of the 2019 Financial Services Authority literacy and inclusion survey, it is known that there is a gap between financial literacy and inclusion. Financial literacy is 38.01 percent while inclusion is 76.19 percent (OJK, 2020). This is in line with the relatively low level of digital financial literacy of the Indonesian people, which reaches 35.5 percent.

Digital Financial Literacy is knowledge about the online service system of spending and saving through online payment and banking (Prasad et al., 2018). Azeez & Akhtar (2021) defines digital financial literacy by considering the basics of digital financial risk. better utilization of the knowledge of digital financial products and risk control. Wide knowledge of consumer rights and redress procedures are also attributing to digital financial literacy. Lyons & Kass-Hanna (2021) Liu et al., (2021) defines digital financial literacy by connecting financial literacy with digital literacy. The OECD (2022) combines financial knowledge, behavior and attitudes in explaining digital financial literacy.

Morgan et al., (2019) divide knowledge into three explanations. First, knowledge of digital financial products and services, which is the basis of knowledge about financial products and services. Awareness of the existence of digital financial products and services, both internet-based and mobile phones. Second, knowledge of digital financial risk control related to how to protect yourself from the risks that arise from its use. How to use a computer or mobile application to avoid data theft etc. The need to know how to protect PIN and personal data information when using digital financial services. Third, knowledge of consumer rights and redress procedures, where users must know the rights and procedures for using them and how to obtain compensation if they become victims of fraud.

Digital financial literacy assessment is carried out to identify the level of digital financial literacy (Prasad et al., 2018; Azeez & Akhtar, 2021; Yang et al., 2020; Hayati & Syofyan, 2021; Anane & Nie, 2022). Meanwhile, the Digital Financial Literacy Assessment with considerations on digital payments and personal finance aspects was carried out by Prete (2021) Oggero et al., (2019). This research differs from previous research in terms of instrument, object and research area. This study tries to complete the previous research instrument in identifying the level of digital financial literacy in women entrepreneurs. It is hoped that the results of this study can provide an overview of the level of digital financial literacy among women entrepreneurs in Central Java. This research

will be able to provide useful information for financial institutions, MSMEs and stakeholders about the condition of society in understanding digital financial literacy. Thus, it can make financial institutions continue to innovate in providing services that are more user friendly and secure.

METHOD

Research design is a systematic framework used to carry out research. The research design aims to produce an effective and efficient research process, namely providing an overview of the procedures for obtaining the information or data needed to answer research questions (Nuridin & Hartati, 2019). The design of this study used a survey method. This study was conducted to investigate Digital Financial Literacy on women entrepreneurs in Central Java.

Participants in this study were Women Entrepreneurs in Central Java. The population in this study were women entrepreneurs based on data from the Central Java Statistics Agency totaling 1,623,064 entrepreneurs (BPS, 2021). The research sample was determined using the slovin formula with a significance level of 10% obtained a sample of 100 respondents collected on Februari – June 2022. Purposive sampling technique was chosen to determine the research sample with the criteria of Women Entrepreneurs who are members of employers' organizations in Central Java.

The data in this study were obtained using a questionnaire. The questionnaire consists of two sections. In the first part of the questionnaire in the form of demographic data of the respondents. The second part of the questionnaire consists of 16 questions to measure Digital Financial Literacy. The questionnaire contains question items regarding Digital Financial Knowledge, Digital Financial Behavior and Digital Financial Attitude. Question items refer to question items developed by the OECD in measuring Digital Financial Literacy with modifications. In Digital Financial Knowledge, researchers divide it into knowledge of digital financial products and services, knowledge of digital financial risk control, and knowledge of customer rights and redress procedures (Morgan et al., 2019). Meanwhile, the question item Digital Financial Behavior and Digital Financial Attitude emphasizes aspects of digital financial behavior and attitudes. The assessment was carried out using a five point Likert scale from 1 (strongly disagree) to 5 (strongly agree).

Data analysis in this study began by testing the research instrument consisting of validity and reliability tests. These two tests were carried out to ensure that the questions prepared were valid and reliable for research. Descriptive statistical analysis was conducted to describe the demographic of respondents and the components of Digital Financial Literacy.

RESULTS

Respondents

The respondents of this research are 100 Women Entrepreneurs who are located in various regions in Central Java. Characteristics of respondents in terms of age, education, business period and monthly income.

Table 1. Characteristics Respondents

Characteristics Respondents		Percent (%)
Age	15-24	55
	25-34	22
	35-44	9
	45-54	7
	55-64	6
	More than 65	1
Education	Elementary School	1
	Junior High School	3
	Senior High School	40
	Diploma	7
	University	49
Business Period	Less than 1	29
	1-5	54
	6-10	13
	11-15	3
	More than 15	1
Monthly Income	Less than Rp. 500.000	29
	Rp. 500.001 to Rp. 1.000.000	28
	Rp.1.000.001 to Rp. 5.000.000	28
	Rp. 5.000.001 to Rp. 10.000.000	9
	More than Rp. 10.000.000	6

Table 1 informs the characteristics of the respondents used in identifying the level of digital financial literacy among women entrepreneurs in Central Java. It is known that the majority of respondents are aged 15 – 24 years and have the education at university. This result is in line with the majority of research respondents who 80 percent came from female entrepreneurs who are members of the Indonesian Young Entrepreneurs Association of Higher Education in Central Java. It is known that the majority of respondents have a business that has been running for 1-5 years and the monthly income is less than Rp. 500,000. This condition shows that at that age, women entrepreneurs from universities are in the business development phase.

Validity and Reliability Test

Research instrument testing is carried out to ensure that the question items used are in accordance with the research objectives. The test is carried out using SPSS 23. Validity is a measure that shows the level of validity of an instrument. It is said to be valid if corrected item total

correlation more than 0.3 (Sugiyono, 2013). It is known that the five components of Digital Financial Literacy have a value of more than 0.3, so it can be said that the five elements are valid.

Reliability test is used to measure the extent to which the results of a measurement can be trusted, meaning that in several measurements of the same group, relatively the same results are obtained. It is said to be reliable if the alpha value is greater than 0.6 (Sekaran, 2006). Table 2 shows that the alpha value is 0.712 or more than 0.6, so it can be said that the digital financial literacy component is said to be reliable.

Table 2. Reliability Statistics in Digital Financial Literacy

Components	Item	Validity	Reliability
Digital Financial Products and Service Knowledge	4	0.460	0,712
Digital Financial Risk Control Knowledge	2	0.581	
Digital Financial Consumer Rights and Redress Procedures Knowledge	3	0.470	
Digital Financial Behaviour	4	0.578	
Digital Financial Atitude	3	0.350	

Descriptive Statistics

Table 3. Digital Financial Literacy

Item	Not Literate (%)	Good Literate (%)	Mean
E-wallet (go pay, ovo, shopee pay, DANA, etc.)	24	76	3.95
Mobile banking	15	85	4.14
Online stock trading	73	27	2.97
Internet-based insurance services	78	22	2.84
Protect PIN	23	77	3.96
Protect Personal Information	28	72	3.88
Rights as a user	23	77	3.92
Report victim of fraud	31	69	3,77
Compensation victim of fraud	55	45	3,36
Share Bank account password and PIN	6	94	1.48
Check provider licensed	12	88	4.27
Share Personal Finances	17	83	1.84
Safe public wifi network	69	31	2.81
Pay attention security	10	90	4.29
Term and condition	23	77	2.02

Digital Financial knowledge show that the majority of respondents do not have knowledge of internet-based insurance services and online stock trading. Respondents do not have knowledge about how to get compensation if they become victims of digital financial fraud. Digital financial behaviour show that the majority of respondents do not share bank account passwords and PINs

with friends. Respondents have not regularly changed passwords on personal finance. Digital Financial Attitudes shows that the majority of respondents feel safe shopping online using a public Wifi network. The use of a Wifi connection in transactions can increase the risk of hacking. This is because the internet network that is used is publicly owned where other people can access and hack data.

DISCUSSION

Digital Financial literacy on knowledge of digital services at institutions was identified to determine the extent of knowledge possessed by women entrepreneurs. Knowledge of mobile banking is mostly owned by women entrepreneurs. These results indicate that the business sector has fast financial flows so that the use of mobile banking can facilitate transactions.

The Business Sector in the Pandemic utilizes digital applications in marketing followed by increasing the use of e-wallet services. Based on data from the Financial Services Authority (2021), e-wallet is a digital service whose usage during the Covid-19 pandemic increased the highest by 81 percent. Women entrepreneurs in Central Java show that they have good knowledge in using e-wallet. However, there is still relatively limited knowledge of women entrepreneurs in using internet-based insurance services and online stock trading. Based on data on the level of national financial literacy released by the Financial Services Authority (2019), it shows that financial literacy based on the financial services sector, capital market literacy and insurance is still relatively low at 4.92 percent in the capital market and 19.40 percent in insurance.

The Digital Financial Risk Control Knowledge shows that women entrepreneurs have knowledge of how to protect PINs and personal data information. Knowledge of digital financial risk control is important for women entrepreneurs. The protection of personal data affects the development of digital services. Protection is a determining factor of trust in digital transactions. Customer data is considered important because users on the network will not conduct digital transactions if they feel that the security of their personal data is threatened.

The Digital Financial Consumer Rights and Redress Procedures Knowledge shows that women entrepreneurs know their rights as users of digital financial services and products, and know where to report if there is a crime. However, some respondents know how to get compensation if they become victims. Data shows that the biggest cyber attacks occurred in the financial sector, so users are expected to be aware and understand the digital financial services used.

Digital financial behavior is intended to identify the behavior carried out by respondents in using digital financial services and products. A total of 94 percent of respondents do not share their passwords and PINs with other parties. More than 80 percent check the legality of digital financial service providers and do not share their data to the public. It is important to know not to give

passwords or personal financial data to anyone, friends or family or other parties to avoid misuse of the account. However, the results of this study also show that literacy in changing passwords regularly is still limited to some respondents. It is necessary to change passwords regularly to avoid data leakage and account abuse.

Digital Financial Attitudes is intended to identify respondents' attitudes towards digital financial services and products. The results show that 90 percent of respondents pay attention to application security aspects before transacting digitally. And consider it important to read the terms and conditions in the transaction. However, there are still limited respondents who consider the use of public wifi network connections to be dangerous. The use of a public wifi connection network in conducting transactions can increase the risk of hacking personal data. Because the internet network used is public property so people can easily access that data hacking. Digital financial literacy is needed to minimize the risks in using digital financial services and products. The use of digital services by women entrepreneurs is needed in business development. The Covid-19 pandemic has made the acceleration of digital technology an opportunity for the business sector to transact without face-to-face but can still meet consumer needs.

CONCLUSION

Digital Financial Literacy is needed by women entrepreneurs in managing finances and business activities. Entrepreneurs need to have good digital financial literacy to avoid bad risks in using digital financial services and products. Digital financial literacy encourages the use of digital financial services. Digital financial literacy in women entrepreneurs was investigated in this study using a qualitative descriptive survey method. The results of this study indicate that women entrepreneurs in Central Java have a good average score of digital knowledge in three aspects, namely Knowledge of Digital Financial Products and Services, Knowledge of Consumer Rights and Compensation Procedures, Knowledge of Digital Financial Risk Control. However, knowledge is limited to insurance services and capital markets. The need for socialization of digital services by institutions in improving literacy, especially in capital market and insurance literacy. Digital Financial Behavior component shows that respondents have not regularly changed passwords on online shopping and personal finance websites. Changing passwords regularly can prevent data leakage and account abuse. The Digital Financial Attitudes component shows that the majority of respondents feel safe shopping online using public Wifi networks. The use of a public wifi connection network in conducting transactions can increase the risk of hacking personal data. Because the internet network that is used is public property so it can easily access that data hacking.

Digital financial literacy can minimize the risks in using digital financial services and products. The potential use of digital technology by women entrepreneurs is needed in business

development. The Covid-19 pandemic has accelerated digital technology which can be an opportunity for the business sector to be able to transact without having to meet face to face but still be able to meet consumer needs. The need for efforts to increase digital financial literacy that is more for women entrepreneurs in an effort to increase productivity and financial inclusion. More massive socialization for women entrepreneurs, especially on aspects of low digital financial literacy, is expected to increase digital financial literacy. Further research can involve stakeholders in increasing digital financial literacy in women entrepreneurs.

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