

Advances in Economics, Business and Management Research, volume 192 Proceedings of the Seventh Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA 2021)

# Analysis of Student Digital Financial Literacy in the Era of Industrial Revolution 4.0

Annur Fitri Hayati<sup>1</sup>, Rita Syofyan<sup>2</sup>

<sup>1,2</sup> Universitas Negeri Padang, Padang, Indonesia, \*Corresponding Author. Email: <u>annurfitrihayati@gmail.com</u>

#### ABSTRACT

Financial literacy is a basic need that a person needs, so that they can avoid financial problems. The emergence of financial problems is not only due to a low level of income, but can also come from a person's lack of knowledge in managing their finances. Students who are part of the community that is in the productive age range plays a role in the progress and change of the nation (agent of change) which is expected to be a financially savvy economic actor. Students who have the opportunity to study at universities, especially in the faculty of Economics certainly get the opportunity to have more financial monitoring than students who are in other faculties. The opportunity to acquire such knowledge certainly has an implication on their financial knowledge. Learning in college plays an important role in the process of establishing student financial literacy. Through a combination of various teaching methods, media and learning resources that are well planned and in accordance with competence, it is expected to provide provisions for students to have skills in the field of finance, so that students become ready and able to face their current and future lives that are increasingly complex. This research is descriptive research, using survey method. Descriptive research is research that examines an object, a condition, a system or a number of people who describe, describe systematically, factually and accurately in accordance with the facts, characteristics of the researched. Based on the results of this study, it can be concluded that the digital financial literacy of Universitas Negeri Padang's students of 67.85% is still in the Enough category. This makes the government, especially Padang State University, need to design learning that can improve students' digital financial literacy. So that students from an early age can have knowledge of digital finance and are able to use digital finance well so that the goal of producing graduates who are able to compete in the era of the industrial revolution 4.0 can be realized.

Keywords: Lecturer Competence, Internet of things, industrial revolution 4.0.

# **1. INTRODUCTION**

Financial literacy is a basic need that a person needs, so that they can avoid financial problems. The emergence of financial problems is not only due to a low level of income, but can also come from a person's lack of knowledge in managing their finances. In the current era of information technology, access to financial information can provide opportunities to increase income [1] Financial Literacy shows the ability of individuals to utilize their resources to achieve and improve welfare. Access to financial information in financial literacy occurs when individuals have a set of skills and abilities that enable them to utilize existing resources to achieve the expected goals.

The development of digital finance is very rapid and

closely related to everyday life, but the development of digital literacy must be accompanied by financial intelligence such as the ability to manage finances as a form of financial intelligence. Good financial information management has an impact on good decision making [2] So, it can be concluded that financial intelligence is absolutely necessary so that a person can continue to enjoy prosperity. The sooner you have high financial intelligence, the more prosperous someone's life will be because you have good financial planning.

Based on the results of a survey related to student financial literacy conducted to assess student knowledge related to financial products, knowledge about the use of financial products and the benefits associated with these financial products, the results obtained are still low, this is relevant to the data obtained from the relevant OJK. the percentage of the age range of the Indonesian people who are financially literate. The level of use of formal financial services is only 59.74%. This problem certainly has a serious impact on improving people's welfare in the use or access of finance

Students who are part of society who are in the productive age range play a very important role in the progress and change of the nation (agents of change) who are expected to become financially intelligent economic actors. [3] describe financial literacy into 4 dimensions, namely: a) Personal financial management (personal finance) is the process of planning and controlling finances from individual or family units that can be done in the form of savings (some of the community's income that is not spent is stored as a reserve). as a precaution in the short term), time deposits (deposits with banks whose withdrawals can only be made within a certain period of time), certificates of deposit (term deposits whose proof of deposits can be traded), and demand deposits (savings in banks that can be used as a means of payment). c) Insurance is a form of risk control that is carried out by transferring/transferring risk from one party to another (in this case an insurance company). Another definition of insurance is a transfer of risk from the first party to another party. d) Investment is a form of income allocation that is carried out at this time to obtain benefits (return) in the future which can exceed the investment capital issued at this time. Another definition of insurance is a transfer of risk from the first party to another party. d) Investment is a form of income allocation that is carried out at this time to obtain benefits (return) in the future which can exceed the investment capital issued at this time. Another definition of insurance is a transfer of risk from the first party to another party. d) Investment is a form of income allocation that is carried out at this time to obtain benefits (return) in the future which can exceed the investment capital issued at this time. The ability to manage financial information can facilitate the selection of the right investment in the future [4].

Based on the context of financial literacy in students and college students, [5] suggests that the socioeconomic status of parents has an influence on the behavior and experiences of their children. Differences in the level of socioeconomic status will have an impact on the emergence of different perceptions of a physical object or object of behavior, which in turn will form different attitudes. A positive perception of the characteristics or properties of the object will also form a positive attitude and in this case includes the perception of financial management. Students who have a high socioeconomic status also have a high level of financial knowledge, attitudes, and behavior. Students who have the opportunity to study at a university, especially in the Faculty of Economics, of course, have the opportunity to have more financial knowledge than students in other faculties. The opportunity to acquire this knowledge certainly has implications for their financial knowledge. Learning in higher education plays an important role in the process of forming students' financial literacy [6]. Through a combination of various teaching methods, media and learning resources that are well planned and in accordance with competencies, it is expected to be able to provide students with skills in the financial sector, so that students become ready and able to face their current and increasingly complex life in the future. The opportunity to acquire this knowledge certainly has implications for their financial knowledge. Learning in higher education plays an important role in the process of forming students' financial literacy. Through a combination of various teaching methods, media and learning resources that are well planned and in accordance with competencies, it is expected to be able to provide students with skills in the financial sector, so that students become ready and able to face their current and increasingly complex life in the future. The opportunity to acquire this knowledge certainly has implications for their financial knowledge. Learning in higher education plays an important role in the process of forming students' financial literacy. Through a combination of various teaching methods, media and learning resources that are well planned and in accordance with competencies, it is expected to be able to provide students with skills in the financial sector, so that students become ready and able to face their current and increasingly complex life in the future.

In addition, other factors that are thought to have an influence on financial literacy are gender, gender differences also have an impact on differences in behavior and understanding of the use of financial products, research conducted by [7] states that there are different levels of student understanding of financial literacy based on gender, understanding The financial status of female gender students is higher than that of male gender students. However, another study yielded the opposite finding, namely that the level of financial literacy of male students was higher when compared to female students [7] Based on the above problems, it is necessary to conduct research on the analysis of student digital financial literacy, this is to obtain information related to students' understanding of digital financial literacy, financial products and understanding of using existing digital services.

#### 2. METHODS

This research is descriptive research, using survey method. [8] Descriptive research is research that examines an object, a condition, a system or a number of people who describe, describe systematically, factually and accurately in accordance with the facts, characteristics of the researched. The survey method is a method that seeks facts, factual information from a group or an area, whether social, economic or political.

The sample in this study amounted to 115 students of the Faculty of Economics, Padang State University. The number of samples was obtained after being calculated using the formula from Slovin, where the population of this study was active students.

Samples were taken in each batch using [9] so that each level could represent the population. The tool used in data collection is using a questionnaire whose answer choices use a Likert scale with 5 choice categories, namely (1) Strongly Agree, (2) Agree, (3) Neutral, (4) Disagree and (5) Strongly Disagree.

# **3. RESULT AND DISCUSSION**

#### 3.1. General knowledge of digital finance

The first indicator regarding digital financial literacy is General knowledge of digital finance which includes financial knowledge, especially digital finance, including knowledge related to financial issues, and the risks of financial products and services, as well as rights and obligations as consumers of financial services users and so on [10]. The number of questions to determine the general knowledge of digital finance owned by students is 15 questions where the results of data processing can be seen in table 1:

 Table 1. General knowledge of digital finance

No Item	SS	S	Ν	TS	STS	TCR
1	10,43	52,17	36,52	0,87	0	74,43
2	13,04	66,96	19,13	0,87	0	78,43
3	11,30	62,61	25,22	0,87	0,00	76,87
4	13,04	59,13	24,35	3,48	0,00	76,35
5	11,30	48,70	37,39	2,61	0,00	73,74
6	12,17	44,35	37,39	6,09	0,00	72,52
7	10,43	50,43	38,26	0,87	0,00	74,09
8	7,83	46,96	42,61	2,61	0,00	72,00
9	9,57	33,91	45,22	11,30	0,00	68,35
10	5,22	31,30	49,57	13,91	0,00	65,57
11	4,35	30,43	45,22	18,26	0,87	63,30
12	10,43	49,57	31,30	7,83	0,87	72,17
13	5,22	34,78	46,09	13,04	0,87	66,09
14	5,22	46,09	40,00	8,70	0,00	69,57
15	6,09	40,87	40,87	10,43	1,74	67,83
Average					71,42	

Table 1 shows that the average general knowledge of digital finance owned by UNP students is 71.42% including the Enough level. The highest TCR value is in the statement that students use digital finance according to their needs and the lowest is regarding financial management using digital applications.

Regarding general knowledge of digital finance, there are three dimensions to focus on: digital financial risk control, which is related to users' understanding of how to protect themselves from risks arising from such use. Users should know how to use computer programs and mobile applications to avoid spam, phishing, etc. Users should also know how to protect their personal identification number (PIN) and personal information when using financial services provided through digital means [11].

#### 3.2. Understand of Financial Institutions

The results of the Understand of Financial Institutions currently owned by students related to digital finance are as follows:

No Item	SS	S	Ν	TS	STS	TCR
16	11,30	48,70	33,91	5,22	0,87	72,87
17	21,74	49,57	26,96	1,74	0,00	78,26
18	13,91	65,22	20,87	0,00	0,00	78,61
19	15,65	58,26	24,35	1,74	0,00	77,57
20	9,57	41,74	46,09	2,61	0,00	71,65
Average					75,79	

Table 2. Understand of financial institutions

From table 2, we can see that the average TCR Understand of Financial Institutions owned by UNP students is 75.79% included in the Enough category, which refers to the TCR value category 0-54% is Poor, 55-64% is Not Good, 65-80% is Enough, 81-90% is Good and 91-100% is Very Good [12]. The results showed that students were more comfortable using the services of financial institutions for convenience in banking transactions.

## 3.3. Savings and Money Loans

Savings management is a process that helps the placement of surplus funds owned by a person with the aim of easy access to liquidity, financial planning and security [13]. In addition to someone doing Saving money, the usual economic activity is Money Loans which they usually use to finance their daily lives or increase business capital.

The following are the results of research on Savings and Money Loans:

No Item	SS	S	Ν	TS	STS	TCR
21	9,57	40,00	42,61	6,96	0,87	70,09
22	6,09	20,00	54,78	17,39	1,74	62,26
23	11,30	54,78	33,91	0,00	0,00	75,48
24	10,43	30,43	45,22	13,04	0,87	67,30
25	4,35	9,57	18,26	40,87	26,96	44,70
26	4,35	24,35	40,00	24,35	6,96	58,96
27	3,48	20,00	34,78	28,70	13,04	54,43
Average					61,89	

Table 3. Savings and Money Loans

From the table above, it can be seen that the TCR value of 61.89 % for the Savings and Money Loans indicator is in the Not Good category. This is because there are not many students who have income from work or the business they do 44.70% of students take online loans to increase capital from their business.

#### 3.4. Insurance

Insurance is a form of risk control that is carried out by transferring/transferring risk from one party to another (in this case an insurance company) [14]. Insurance has many types, there are life insurance, vehicle insurance, education insurance, etc., which now insurance is widely done digitally. The results of research on digital financial literacy in terms of insurance can be seen in table 4.

Table 4.	Insurance
----------	-----------

No Item	SS	S	Ν	TS	STS	TCR
28	9,57	46,96	33,04	9,57	0,87	70,96
29	3,48	27,83	52,17	12,17	4,35	62,78
30	3,48	23,48	57,39	13,04	2,61	62,43
31	4,35	31,30	54,78	7,83	1,74	65,74
Average					65,48	

The results of the study which can be seen in table 4 the average use of insurance are 65.48% which is included in the Enough category. From question number 30, it can be seen that 62.43% of students said using online insurance is easier than conventional insurance, but this convenience does not make students use insurance a lot.

# 3.5. Investation

Investment is placing money or funds in the hope of obtaining additional or certain benefits for the money or funds in order to obtain profits in the future [13]. Today there are so many online investment applications, but among students, it can be seen in table 5 how they know and invest online.

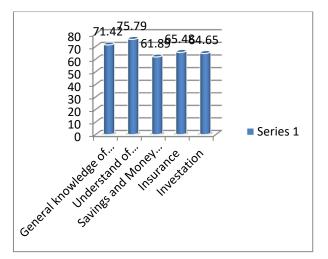
 Table 5. Investation

No Item	SS	S	Ν	TS	STS	TCR
32	7,83	34,78	42,61	14,78	0,00	67,13
33	6,09	28,70	51,30	12,17	1,74	65,04
34	4,35	19,13	60,00	15,65	0,87	62,09
35	5,22	20,00	66,09	8,70	0,00	64,35
Average					64,65	

Table 5 shows that the understanding of investment owned by students is 64.65% including the Not Good category. Only 67.13% understand the online investment and 62.09% say that investing online is safer and easier to do. Although currently there are many online investment applications, UNP students are still very low in their use.

Table 6. Recap of TCR Results per Indicator

No	Indicator	TCR	Description
1	General knowledge of digital finance	71,42	Enough
2	Understand of financial institutions	75,79	Enough
3	Savings and Money Loans	61,89	Not Good
4	Insurance	65,48	Enough
5	Investation	64,65	Not Good
	Average	67,85	Enough



# Figure 1. Graph of TCR Results on Digital Financial Literasy per Indicator

Based on Figure 1, it can be seen that the average digital financial literacy of UNP students is 67.85% which is in the Bad category. Of all the indicators, the lowest is literacy knowledge about Savings and Money Loans and the most students master digital literacy is Understand of financial institutions. Even though Understand of



financial institutions has the highest score, the category is only good enough.

Efforts are needed to improve students' digital financial literacy because according to the results of research conducted which says that if everyone knows digital financial products, it will significantly increase the level of inclusion. thus contributing to economic growth [14].

## 4. CONCLUSSION

Students are the next generation who are in technological sophistication, where technology is not only growing rapidly in the industrial or educational sectors but also in the economic sector. Nowadays more and more people make digital payments, internet banking, debit and credit cards, mobile banking. Awareness about the use of various digital platforms and the frequency with which they are used is digital financial literacy.

Based on the results of this study, it can be concluded that the digital financial literacy of Padang State University students of 67.85% is still in the Enough category. This makes the government, especially Padang State University, need to design learning that can improve students' digital financial literacy. So that students from an early age can have knowledge of digital finance and are able to use digital finance well so that the goal of producing graduates who are able to compete in the era of the industrial revolution 4.0 can be realized.

#### ACKNOWLEDGMENTS

The researcher expresses high appreciation and thanks to the Institute for Research and Community Service, Padang State University, which has funded this research with research contract number: 789/UN35.13/LT/2021.

#### REFERENCES

- Putra, D. G., & Rahayu, R. (2020). The Role of Information Technology Governance Implementation as An Important Factor in Improving The Company's Performance. Journal of Economic Education Innovation (JIPE), 10(1), 01-07.
- [2] Syofyan, R., & Putra, D. G. (2020, March). The Role of Good Corporate Governance (GCG) Implementation in Indonesian Company. In 4th Padang International Conference on Education, Economics, Business and Accounting (PICEEBA-2 2019) (pp. 819-825). Atlantis Press.

- [3] Lestari, A. F., &Irwansyah, I. (2020). Line Webtoon As a Digital Comics Industry. SOURCE: Journal of Communication Sciences, 6(2), 134-148.
- [4] Sofyan, R., Putra, D. G., & Aprayuda, R. (2020, November). Does the Information on the Internet Media Respond to the Stock Market?. In The Fifth Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA-5 2020) (pp. 510-520). Atlantis Press.
- [5] Selvia, S. (2020). Designing Motion Comic as An Educational Media on Concern for Social Anxiety Disorders in Adolescents. Intuition: Journal of Scientific Psychology, 12(1), 48-65.
- [6] Dwiastanti, A., &Hidayat, W. (2016). Financial Literacy of Housewives in Shaping Family Financial Behavior. Proceedings SNA MK, 1-12.
- [7] Widyawati, I. (2012). Factors that affect the financial literacy of students of the faculty of economics and business, Brawijaya University. Assets: Journal of Accounting and Education, 1(1), 89-99.
- [8] Laily N. The influence of financial literacy on student behavior in managing finances. Journal of Accounting and Business Education. 2016 Sep 6;1(4).
- [9] Morgan, Peter J., Bihong Huang, and Long Q. Trinh. "The need to promote digital financial literacy for the digital age." *IN THE DIGITAL AGE*. 2019.
- [10] Alma B. Easy Learning Research. Bandung : Alfabeta, 2010,pp.89
- [11] Akmal, Huriyatul, Yogi Eka Saputra. "Analysis of financial literacy levels." JEBI (Journal of Islamic Economics and Business) 1.2 (2016): 235-244.
- [12] Latifiana, Dwi. "Study of Financial Literacy of Small and Medium Enterprises (SMEs)."
   Proceedings of The Seminar on Economic and Business Education. Vol. 3. No. 1. 2017,pp.4
- Tony N, Kavitha D. "Impact of digital financial literacy on digital financial inclusion". International Journal of Scientific & Technology Research. 2020;9(1), pp. 1914
- [14] Prasad H, Meghwal D, Dayama V. "Digital financial literacy: a study of households of Udaipur". Journal of Business and Management. 2018 Dec 1;5pp. 23-32