# Improving Financial Technology Literacy for UPPKS KB Layang-Layang Village

Endah Dewi Purnamasari<sup>1)</sup>, Tien Yustini<sup>2)</sup>, <sup>1,2)</sup>Lecturer, Faculty of Economics, Universitas Indo Global Mandiri, Palembang, Indonesia

Abstract:- This study examines the perceptions, attitudes, and behavior of Kampung KB Layang-Layang regarding the increase in financial literacy before and after financial education. This data was collected from 12 respondents who attended financial education and filled out a questionnaire. The analysis process used paired t-test. The results showed that the people's perceptions, attitudes, and behavior in Kampung KB Layang-Layang increased significantly after the implementation of financial education. This study can benefit universities, government, and non-governmental bodies for policy-making and financial decisions to use fintech in their current and future business activities.

**Keywords:**- Financial Technology, Fintech, UPPKS, Enterprises, Increased Understanding.

### I. INTRODUCTION

According to the Central Statistics Agency of South Sumatra Province (2020), In March 2020, the number of poor people in South Sumatra has increased by 0.10%, consisting of 1,081 thousand people if it is 12.66% of the total population, compared to the number of poor people in South Sumatra in September 2019 as many as 1,067 thousand people or 12.56%. Economic development is one way to improve the standard of living and welfare of the people using existing resources, starting with the smallest scope, namely the family (Susianti, 2017). The National Population and Family Planning Agency (BKKBN) organizes a Prosperous Family Income Improvement Business (UPPKS) program as a family economic empowerment program. The government provides additional capital in the form of loans through UPPKS to increase community equality. One of the activities to improve family welfare in the Kampung KB Layang-Layang area consists of various businesses, including kite making, souvenirs, and culinary efforts carried out by UPPKS members.

FinTech companies are emerging and gaining a good market share in the financial services sector (Rupeika-Apoga & Thalassinos, 2020). FinTech is a combination of technology and financial services. Fintech is changing the traditional business model to being moderate, where initially transactions were carried out face-to-face, now can be done with communication tools such as cell phones (Leong, 2018). Through the internet or mobile banking, customers can make online financial transactions anywhere (Bakar & Rosbi, 2018). Fintech appears along with changes in people's lifestyles that are currently inseparable from the

internet. Based on data from the APJII (Indonesian Internet Service Providers Association) survey data in Indonesia, internet users reached 196.7 million people by the second quarter of 2020 (Rizkinaswara, 2019). Ordinary people may feel worried about the existence of FinTech, which can help merchants of products or services in their transactions by reducing their operational costs. Still, this FinTech itself has a legal basis regarding the implementation of technology in Indonesia, namely Bank Indonesia Regulation No. 19/12 / 2017 concerning Financial Technology Implementation. Payments still dominate fintech in Indonesia by 43%, lending or loans by 17%, and the rest are aggregators. Several studies stated that the study results indicated that the current level of awareness of most respondents still lacked towards fintech, especially Peer-to-Peer lending and crowdfunding as alternative financing instruments, and most of them had a slightly positive response or perception of the development of FinTech. These results indicate a need and opportunity to raise awareness among Small and Medium Enterprises and startups by government-related agencies authorized (Ghazali & Yasuoka, 2018). This is also supported by research results which state that awareness about FinTech has an urgent demand for both academics and professionals (Gai, Qiu, & Sun, 2018).

The world is entering a new revolution, namely 4.0. In particular, the term Industrial Revolution 4.0 is the change in production conditions and employees' role brought about by digital transformation in all sectors of the economy (Schröder, 2019). The Fourth Industrial Revolution will lead to full automation and digitization processes and the use of electronics information technology and manufacturing and services in the personal environment (Piccarozzi et al., 2018). Likewise, Industry 4.0 refers to the concept that technology has permeated all areas of society, production, finance, services, transportation, communication Cividino (in Mehdiabadi et al., 2020). Activities that are usually carried out can spend a lot of time now with the new revolution (4.0), making work effective and efficient (Ilman et al., 2019). According to Robbins (in Irene & Ellitan, n.d.), managers' effort to manage change effectively. An understanding of motivation, leadership, group, conflict, and communication is needed. FinTech can show rapid development in various sectors, from payment startups, lending, personal finance, retail investment, crowdfunding, remittance, financial research, and others (Darma et al., 2020).

A common problem in pre-prosperous communities is financial problems, identical to the amount of income that is only sufficient or even insufficient to meet their daily needs (Syaifullah & Lestari, 2018). The rapid development of FinTech offers a lot of products that can be used to facilitate the payment process and increase funds. One of them is peer-to-peer lending, and now it can be another alternative for loan seekers. Peer-to-peer lending is a financing business targeting the lower middle market sector (Rizal et al., n.d.). The development of FinTech in Indonesia is very rapid, but there are still many people and small business actors who do not fully understand technical information about finance and banking. The limited ability of rural communities and business actors, especially in applying fintech, has hampered their distribution due to the lack of capable and skilled workers (Ragimun & Yosepha, 2018). FinTech is an innovative step from the financial sector that is integrated with technology to produce facilities without intermediaries, changing its method of providing services and products (Darma et al., 2020).

FinTech activities in financial services can be classified into 5 (five) categories, namely as follows (FSB, 2017):

- > Payment, clearing, and settlement
- > Deposits, loans, and capital increases
- > Insurance
- > Investment Management
- ➤ Market support

This study examines the perceptions, attitudes, and behavior of Kampung KB Layang-Layang regarding the increase in financial literacy before and after financial education.

### II. LITERATUR REVIEW

# A. Fintech

Fintech is a new financial industry that applies technology to increase financial activity (Schueffel, 2018). Its presence (Fintech) disrupts all lines in the industry, technology, and banking to the world of Education (Burhanuddin & Abdi, 2019). The survey on the use of the Fintech Corner (2020) also states that based on OJK's records, 111 small and medium enterprises managed to raise funds through Fintech as of September 2020. Fintech with financial services such as crowdfunding, mobile payments, and money transfer services has caused a revolution in the startup business (Rizal et al., n.d.).

Indonesia's fintech model based on (Nizar, 2017):

### > Crowdfunding

Commonly referred to as fundraising. The process of collecting money is carried out by 3 parties, including project owners, supporters (those who provide financial support), and platform providers. Media conducted through online platforms.

# ➤ Peer to Peer Lending (P2PL)

It is the same as Crowdfunding, but in this case, it is debt-based loans that bring together borrowers and lenders through an existing platform in the P2PL company that was previously matched.

# Balance Sheet Consumer Lending

A platform that provides loans directly to prospective borrowers.

## Debentures (Debt Based Security)

Guaranteed debt-based securities such as in terms of property business development.

Fintech can benefit households by giving them realtime control over Brainard's finances (dalam Agarwal & Chua, 2020). According to the Chairman of the OJK Board of Commissioners, Wimboh Santoso in OJK Regulation Number 13 / Pojk.02/2018 concerning Digital Financial Innovation, given the rapid advancement of digital financial technology that needs to be managed to provide maximum benefits for the benefit of society (Suharyati & Sofyan, 2018). Small business traders often lack the knowledge, skills, abilities, and resources to manage finances in a sophisticated way and conduct systematic fundraising (Ghazali & Yasuoka, 2018). However, fintech can provide benefits that product/service traders will feel, namely simplifying the transaction chain, reducing operating costs and capital costs. Whereas for a country with fintech, it can encourage the transmission of economic policy, increase the velocity of money circulation to increase the people's economy, and fintech also continues to push the National Strategy for Financial Inclusion (BI, 2020). Several studies stated that the study results indicated that the current level of awareness of most respondents still lacked towards fintech, especially Peer-to-Peer lending and crowdfunding as alternative financing instruments, and most of them had a slightly positive response or perception towards the development of FinTech. These results indicate a need and opportunity to raise awareness among Small and Medium Enterprises and start-ups by government-related agencies authorized (Ghazali & Yasuoka, 2018). Financial Technology refers to using technology to provide financial solutions (Arner et al., 2015).

### III. METHODOLOGY

### A. Design

The data collection technique uses the survey method by distributing pre-test and post-test questionnaires. This service uses a questionnaire consisting of 11 questions as measurement data used to see how much difference is thereafter education or understanding of Financial Technology (FinTech). This study uses primary data collection methods obtained directly from the source. Conducted on 12 samples in Kampung KB Layang-Layang, given the conditions impacting Covid-19 not to cause crowds or gatherings.

# > Perception

Perception of financial knowledge as a whole. In this context, this dedication poses the question, "I understand well about financial technology (Fintech), I know for sure the products of fintech, I find it easier to transact with the existence of fintech, and I am interested in the existence of fintech as an innovation from the financial industry."

The alternative / response to this service answer proposes 5 levels of answers consisting of: Strongly Disagree = 1, Disagree = 2, Don't Know = 3, Agree = 4, and Strongly Agree = 5.

### ➤ Attitude

To measure the inner attitude towards fintech, this service presents the question, "I feel it is easier to access financial products with the presence of fintech, I find it easier to transact with the presence of fintech, and I am interested in using fintech products because it is more practical.

The alternative / response to this service answer proposes 5 levels of answers consisting of: Strongly Disagree = 1, Disagree = 2, Don't Know = 3, Agree = 4, and Strongly Agree = 5.

### ➤ Behavior Againts Fintech

This study asks for fintech behavior for the participants. The questions to investigate this consist of I think that I will try to use fintech products as a means of payment when making transactions, I plan to use fintech products as a means of payment when making transactions, and I prefer to use fintech products rather than having to go to the bank, atm or payment counter.

The alternative / response to this service answer proposes 5 levels of answers consisting of: Strongly Disagree = 1, Disagree = 2, Don't Know = 3, Agree = 4, and Strongly Agree = 5.

# > Additional Questions

In the questionnaire after the intervention, this service poses 1 additional question that may be to inform future studies for both government research and other researchers "I hope and will continue to use the fintech product that I do as a means of payment will continue in the future."

The alternative / response to this service answer proposes 5 levels of answers consisting of: Strongly Disagree = 1, Disagree = 2, Don't Know = 3, Agree = 4, and Strongly Agree = 5.

# B. Participants

The participants of this service are people who live in Kampung KB Layang-Layang located in Lorong Sei Tawar I, Kelurahan 29 Ilir Palembang, South Sumatra, Indonesia. The community service team will visit Kampung KB Layang-Layang and distribute questionnaires in hard print.

## C. Intervention

The researchers visited Kampung KB Layang-Layang and asked the Kampung KB Layang-Layang chairman to ask for about 30 minutes to educate the local community. After allowing the researchers to start the process by distributing questionnaires, the researchers then educated the people of the Kampung KB Layang-Layang located in the village post to increase their understanding of fintech. The formal delivery style uses Indonesian and the tools used are laptops, projector screens, and microphones. The content of the material delivery was about Fintech related to the questions in the questionnaire. The researchers also presented relevant images to depict Fintech in simplifying the payment system along with the text on the slides.

### IV. RESULTS

# A. Descriptive Data

The 12 respondents who conducted the pre-test and post-test showed that the male and female people have the same percentage. Individual characteristics based on the average monthly income range show <Rp. 4,000,000 and monthly expenses <from Rp. 2,000,000. Individual characteristics in the use of banks have the same percentage. Still, in the section on the use of financial products, the answer is "other," which allows the respondents not to use FinTech in their business activities.

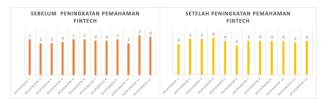


Fig 1:- Graph before and after an increase in understanding of fintech

Source: processed data

The respondents' answers to 11 questions before the increase in understanding of Fintech were 26.33, with the highest value of respondent 11 being 30, and the lowest value of respondent 2, respondent 3, and respondent 10, which were both 24. In comparison, the average value was average after an increase in understanding of Fintech of 43.83, with the highest value coming from the 4th respondent of 48 and the lowest value coming from the 6th respondent of 38.

## B. Statistical Test Results

# **Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pre	,198	12	,200°	,912	12	,230
post	,273	12	,014	,898	12	,151

<sup>\*.</sup> This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 1:- Normality Test Output Source: processed data

In the normality test results, the significant value used is Shapiro-Wilk, which generally uses less than 50 samples Razali and Wah (in Oktaviani & Notobroto, 2014). In this study, the sample size was 12 respondents. So the significant results from Shapiro-Wilk show the pre sig value (before there is an increase in Fintech understanding) of 0.230, which is greater than 0.05, which means that the data is normally distributed, as well as the post sig value (after an increase in Fintech understanding) of 0.151 is greater than 0, 05 which means the data is also normally distributed. So, in this case, it is possible to use the Paired Sample Test different

# **Paired Samples Statistics**

				Std.	Std. Error
		Mean	N	Deviation	Mean
Pair 1	pre	26,3333	12	1,92275	,55505
	post	43,8333	12	2,85509	,82419

Table 2:- Output Paired Samples Statistic Source: processed data

The average value was 26.33 before the financial education increase understanding of Fintech in Kampung KB Layang-Layang, but after the training, the average value was 43.83, which indicates an increase of 17.50.

# **Paired Samples Correlations**

		Correlatio		
		N	n	Sig.
Pair 1	pre & post	12	-,552	,063

Table 3:- Output Samples Correlations Source: processed data

Correlation output shows the relationship between the two data of -0.552 with a significant value of 0.063, greater than 0.05, which means that there is no relationship before and after the study.

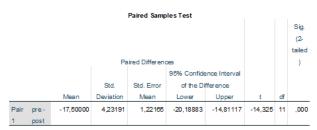


Table 4:- Output Paired Samples T-Test Source: processed data

It is known that the significant value in the paired T-Test results shows the results of 0,000 are smaller than 0.05, so there is a significant difference before training/education on fintech and after training/education on fintech is held. A significant value indicating 0.000 <from 0.05 shows that training/education can increase knowledge about Fintech. Because Fintech can benefit households by giving them real-time control over their finances Brainard (in Agarwal & Chua, 2020), fintech services will also make financial services faster and easier (Burhanuddin & Abdi, 2019).

# V. DISCUSSION

This study aims to provide additional knowledge to the people of Kampung KB Layang-Layang in Financial Technology (FinTech). In measuring the level of understanding or failure, this service measures the community's level of understanding or knowledge.

Micro, small and medium enterprises such as MSMEs and UPPKS are groups of people who must understand more about the activities and development of the fintech industry (Suryanto et al., 2020).

It can be perfected that by increasing the understanding of Fintech in Kampung KB Layang-Layang it has a good effect in increasing the UPPKS community's knowledge in Kampung KB Layang-Layang.

Another thing can also be shown from the paired t-test results, which show that the significant value shows 0.000 <0.05, which means that there is a difference before the increase in understanding of Fintech (pre-test) and after an increase in understanding of Fintech (post-test). Based on the comparison, the mean value also shows that the post-test is greater, namely 43.83, compared to the pre-test of 26.33. FinTech is an innovative step from the financial sector that is integrated with technology to produce facilities without intermediaries, changing its method of providing services and products (Darma et al., 2020). Activities that are usually carried out can spend a lot of time now with the new revolution (4.0) can make work effective and effective (Ilman et al., 2019), which can help add capital and minimize business operational processes. The existence of fintech services will make financial services faster and easier (Burhanuddin & Abdi, 2019). After participation in the intervention, the community showed higher results about Fintech. However, most respondents' awareness level is still minimal, especially in P2P lending, crowdfunding, and other FinTech services provided by non-bank financial institutions (Ghazali & Yasuoka, 2018). However, in particular, their perception that fintech will be more effective, they also consider that they will continue to use fintech products as a means of payment that will continue in the future.

Fintech has taken an important role in the financial sector because Fintech has become an important player in the sector and the added value it provides (Ali et al., 2019). This finding is in line with research (Burhanuddin & Abdi, 2019), (Suryanto et al., 2020), and (Agarwal & Chua, 2020) that Fintech is proven to have changed all aspects of finance and can streamline payments and a more efficient loan system. FinTechs are always innovating, developing flexible products and better ways to solve related problems (Darma et al., 2020).

# VI. LIMITATIONS AND FURTHER RESEARCH

This study's results may not represent the whole community of UPPKS Kampung KB Layang-Layang because the number of respondents in this survey is quite small compared to the actual number. Therefore, the authors suggest that research should be carried out on a large scale and more significantly by other researchers in the future to obtain more accurate and accurate data. FinTech is a new phenomenon in the financial ecosystem that should be explored by many researchers, especially in addressing consumer perceptions of FinTech products or services (Huei et al., 2018).

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