

Application of Financial Technology for MSMEs in Indonesia

Nuriah Indrarini*, Rudy Hartanto

Department of Electrical Engineering and Information Technology, Gadjah Mada University, Yogyakarta, Indonesia

*Corresponding author: nuriah.indrarini@mail.ugm.ac.id

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Abstract The growth of MSMEs in Indonesia in line with the economic growth of the community has always been increasing every year. The increasing number of MSMEs is a challenge among business people. Capital constraints, online trading transactions, bookkeeping, and product marketing between regions make MSMEs look towards Fintech as a support for their business. However, there are not many MSMEs that use Fintech optimally due to several factors, they are not familiar with the Fintech service system, the security of the Fintech system used, the amount of capital loan interest at Fintech lending. This study analyzes the use of Fintech for MSMEs and the opinions of MSME actors about Fintech in Indonesia. This research was conducted by analyzing the needs of MSMEs and filling out questionnaires involving 30 respondents. Based on the research, a positive result was found that 56.7% agreed on the Fintech usage variable and 63.3% agreed on the Fintech benefit variable. The use of Fintech by MSMEs in Indonesia received a positive response to the use of Fintech payment while the use of Fintech lending was a consideration for respondents to use.

Keywords: *fintech, fintech for MSMEs*

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1. Introduction

The development of Financial Technology (Fintech) has changed the flow of business, especially in the field of financial services. The Fintech business is a promising industry that is attracting attention in the financial sector. Fintech is an innovation among financial companies and technology providers, who try to utilize digital technology for financial services [1]. The development of Fintech encourages software developers to develop various financial service innovations that make it easier for users. By the end of 2019, Fintech lending was increasingly popular among the people, which then many Fintech loans emerged [2]. Data from the Indonesian Fintech Association and the Financial Services Authority (OJK) in 2019 the number of Fintech payment players is still popular with a portion of 42.22%, then following 17.78% fintech lending, and the rest is filled by crowdfunding, financial planning and so on [3].

Data from the Ministry of Cooperatives and Small and Medium Enterprises has a very high development of MSMEs in Indonesia, until 2018 there were 64,194 million business units. In 2019, there were already more than 3 million business people who used online services to market their business [4]. Of the many MSMEs in Indonesia, only 30% receive access to finance, consisting of 76.1% from banks and 23.9% from non-banks. So that the remaining 70% do not have access to finance [5]. The

large number of MSME actors who have not yet gained access to additional capital is due to the large number of requirements that cannot be met. The procedure for submitting capital to a bank often takes a long time and the process is not easy with the many requirements that must be met. If this problem continues, there will be many MSMEs that will have difficulty in developing their business and may even go bankrupt due to the lack of venture capital.

Fintech services such as payments, financial planning to venture capital loans have a lot of potential to help the development of MSMEs. Until 2019 Fintech payments and Fintech lending are considered the most popular types of fintech activities in Indonesia. From the data on the number of MSMEs and the potential of Fintech to assist the development of MSMEs in Indonesia, this study will discuss the extent of the use of Fintech for MSMEs in Indonesia.

2. Literature Review

2.1. Fintech

Fintech emerged among financial companies and technology providers, Fintech sought to utilize advanced technology to decipher financial services and to utilize economies of scale by targeting high-value consumers [1]. The Fintech company offers trust, transparency, and technology. Financial technology includes a new wave of

companies that are changing the way people pay, send money, borrow, lend, and invest [6].

Based on Fintech's evolutionary analysis [7], it is possible to develop a comprehensive typology of the Fintech industry, which consists of five main areas, namely: (1) finance and investment, (2) operations and risk management, (3) payments and infrastructure, (4) data security and monetization, and (5) customer interface.

Whereas according to Bank Indonesia regulations Fintech is categorized into four categories as follows [8]: (a) payment system, (b) market support, (c) investment management and risk management, (d) loans, financing, and providing capital, and (e) other financial services.

2.1.1. Payment System

Payment, settlement, and clearing categories are intended to facilitate the payment process at online transactions. This product includes payment by e-wallet and e-money. According to data from Bank Indonesia (BI), the value of digital payment transactions or electronic money always increases every year, even in 2018 it has quadrupled, reaching Rp 47.19 trillion from Rp 12.37 trillion in the previous year [9].

2.1.2. Market Support

This market support is in the form of a market aggregator portal that has the function to collect and gather various financial service choice information to be presented to users. By accessing and comparing information through this portal, the advantages and disadvantages of each product can be learned, so that and choose the most suitable product.

Providers of comparative financial products or e-aggregator services in Indonesia are few compared to other types of fintech. According to data from the Financial Services Authority (OJK), of 229 registered Fintech products, only 9 percent have a business model as an aggregator of financial products [10].

2.1.3. Investment Management and Risk Management

Investment and risk management are financial planners in digital form. Products produced from this category will help to find out the financial condition and do financial planning easily and quickly.

2.1.4. Loans, Financing, and Capital Supply

Public attention, investors, and current regulations mostly focus on alternative financing mechanisms, specifically crowdfunding and Peer-to-Peer (P2P) Lending. Crowdfunding and Peer-to-Peer (P2P) Lending are both access to capital, the difference is how to get it. Crowdfunding is obtained by campaigning for ideas and business models offered. Whereas P2P Lending is made with a pending agreement related to the amount of funds to be borrowed from investors and payment obligations.

Data from the OJK as of 20 January 2020, has noted that the accumulation of national loans through Fintech lending has reached Rp 88.37 trillion [11]. The number of borrowers' accounts is 20.49 million with details of the accumulated number of recorded accounts as in Table 1 below:

Table 1. Characteristics of Fintech Lending Users in Indonesia

Users	Borrower's account accumulation.		Lender's account accumulation.	
	Entity	Percent (%)	Entity	Percent (%)
Total	20.497.167		616.000	
Individual	20.474.620	99,89%	614.768	99,80%
Business entity	2.050	0,01%	1.232	0,20%

2.2. Characteristics of MSMEs in Indonesia

Micro, Small, and Medium Enterprises aim to grow and develop their businesses in the context of building a national economy based on a just economic democracy. The MSME criteria are as follows [12]:

- Micro Business: has a maximum asset of Rp. 50 million or have a maximum turnover of Rp. 300 million.
- Small Business: has assets > Rp. 50 million - Rp. 500 million or turnover > Rp. 300 million - Rp. 2.5 billion.
- Medium Business: has assets > Rp. 500 million - Rp. 10 billion or turnover > Rp. 2.5 billion - Rp. 50 billion.

Data from the Ministry of Cooperatives and Small and Medium Enterprises [4] the development of MSMEs in Indonesia is very high until 2018 there were 64,194 million business operators, there was an increase of 1,271 million from 2017 which reached 62,922 million MSMEs. The number continues to increase from 2010 to more than 1 million per year. The development of MSMEs in Indonesia can be seen from the data in Table 2 [4]:

Table 2. Growth of MSME 2017 - 2018 in Indonesia

No	Indicator	2017 (unit)	2018 (unit)	Development (unit)
1	MSMEs	62.922.617	64.194.056	1.271.439
	Micro business	62.106.900	63.350.222	1.243.322
	Small business	757.090	783.132	26.042
	Medium Business	58.627	60.702	2.075
2	Big business	5.460	5.550	90
	Number of Business Units	62.928.077	64.199.606	1.271.529

The characteristics of MSME in Indonesia are as follows [13]:

- The types of goods in business products cannot be changed at any time.
- The location of the place of business can move at any time.
- For micro-businesses, it has not yet implemented financial administration, and many even combine personal finance with business finance. For small and medium businesses, generally have implemented financial administration, so that family finance is separate from business finance.
- Human Resources (HR) in average micro-businesses still do not have a quality entrepreneurial spirit.
- For micro and small businesses, some have limited access to banking in terms of capital.

Some of the obstacles that often arise in MSMEs are as follows [13] :

- a. Internal
 1. Around 60% - 70% of MSMEs do not yet have access to bank financing. Geographical access that is difficult to reach, MSMEs are still managed manually, and traditionally, especially financial management, there are still many that combine personal finance with business finance.
 2. Lack of knowledge about the latest technology and how to control product quality.
 3. Lack of knowledge in entrepreneurship.
 4. In general, still an individual legal entity.
 5. Do not have a good financial administration and management system.
- b. External
 1. Handling legal aspects of business entities and incomplete licensing procedures.
 2. Limited business infrastructure, especially those related to technology tools. Most of them still use simple technology.
 3. Limitations in getting good quality raw materials.

3. Research Methods

In this study, we need to know the existing Fintech categories and to know the characteristics of MSMEs that can use Fintech services. The data obtained from the collection of literature in the form of characteristics and problems of MSMEs and Fintech category data in Indonesia.

In addition to gathering research literature, this study was also carried out by gathering information from respondents using a questionnaire to MSMEs. Sampling for the questionnaire will be carried out using the Stratified Sampling method. Stratified Sampling is obtained by dividing the population into groups or strata according to the characteristics of the population. Then from these groups, samples should be taken randomly [14]. Figure 1 shows the stages carried out in this study:

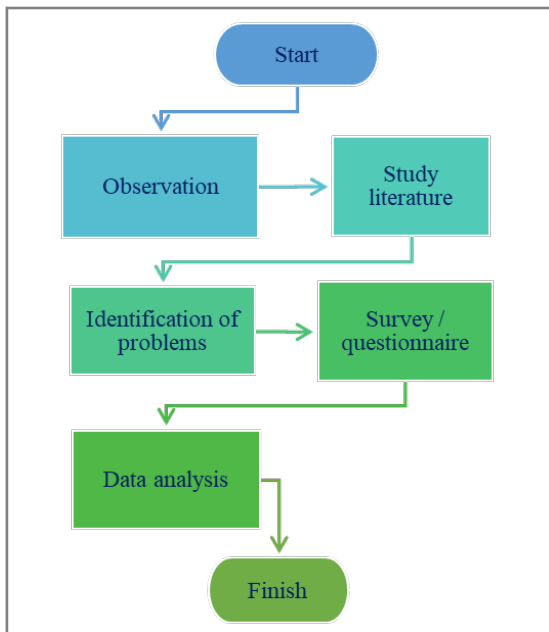


Figure 1. Research stages

Data on the number of respondents who obtained as many as 30 respondents from various business sectors. Respondents will be given 25 questionnaire statements. The questionnaire consisted of 3 statements regarding the type of business and Fintech that were of interest and 25 statements with a measurement scale with a score of 1-5 regarding the use of Fintech and the benefits obtained.

4. Discussion and Result

The development of Fintech in Indonesia has experienced a very positive increase that makes people start choosing to use Fintech in every financial transaction, including the MSMEs. The various types of Fintech that have developed in Indonesia show that there are two categories of Fintech that are popular among the people. Fintech payment and Fintech lending are the top categories that are widely used in Indonesia.

The following is a diagram of the use of fintech from 30 respondents:

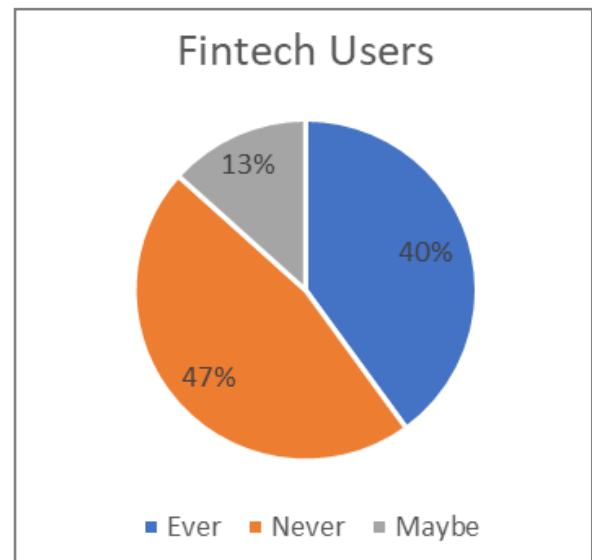


Figure 2. Diagram Fintech User

The survey results of the 30 respondents depicted in Figure 2 can be interpreted that 12 respondents were having used fintech services, 14 respondents had never used fintech services, and 4 respondents were hesitant. These results indicate that many respondents use Fintech in their daily lives, so the use of Fintech in MSMEs is a market opportunity for Fintech. The use of Fintech in the MSME sector is expected to spur community economic growth. The data can be interpreted that the MSMEs / business world must consider the use of fintech to support businesses and facilitate serving their customers. Respondents who expressed doubts might have used the Fintech system but were not sure whether it included Fintech or not. Trends in the use of Fintech will continue to increase if we look at data from respondents who have never used Fintech but agree that Fintech can help transactions of goods/services MSMEs provide better services, namely, 10 respondents disagree, 17 respondents agree and 3 respondents strongly agree.

The following is a diagram of popular fintech results from 30 respondents:

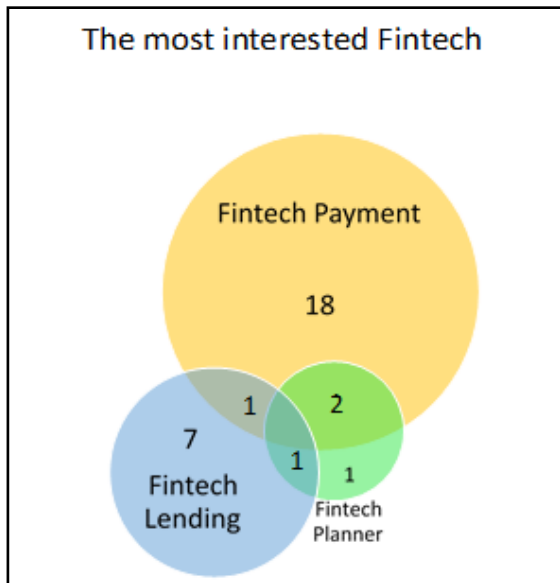


Figure 3. Diagram of the most interested Fintech from respondent

Figure 3 is the result of a survey of the most popular Fintech categories, which is the payment system or Fintech payment, which consists of 10 respondents who have used fintech, 7 respondents who have never used fintech but are interested in using it, and 4 respondents are hesitant to use fintech. Capital lending is of interest to 7 respondents, 2 respondents have used fintech and the remaining 6 have never used fintech. Then there are 1 financial planning category respondents have used fintech and 3 respondents have never used fintech but were interested to use.

Survey data from 30 respondents, the most interesting type of Fintech is fintech payment. Fintech payment is used by many people starting from the general public and the business world / MSMEs. Fintech planner is less desirable because it is less popular or not widely known by the public. The data types of fintech that are of interest show that respondents have a maximum interest of 2 types of fintech, which means that public needs/respondents are still not many or respondents do not know Fintech well because there are no respondents who fill out other types of Fintech besides the three types of Fintech.

The next statement is 2 variables, namely: Use of Fintech and Benefits of Using Fintech.

Table 3. The results of data processing on the fintech usage variable

	Frequency	Percent	Valid Percent	Cumulative Percent
Not agree	4	13,33	13,33	13,33
Agree	17	56,67	56,67	70,00
Strongly agree	9	30,00	30,00	100,00
Total	30	100,00	100,00	

Table 3 shows the Fintech Usage variable getting positive results is 56.7% agree with the use of Fintech for MSMEs. From the statements submitted, getting the highest positive response on the use of electronic money respondents agreed that the use of electronic money and electronic wallets can help support business development.

Data on the benefits of using fintech shows that most respondents agree that fintech supports their MSME businesses. The use of fintech appropriately increases MSME service to the service users/goods offered while simultaneously facilitating payment transactions.

Table 4. The results of data processing on the benefits of using fintech variables

	Frequency	Percent	Valid Percent	Cumulative Percent
Not agree	2	6,67	6,67	6,67
Agree	19	63,33	63,33	70,00
Strongly agree	9	30,00	30,00	100,00
Total	30	100,00	100,00	

Then in Table 4, the Fintech Benefit variable also got a positive result of 63.3% agreeing with the benefits of using Fintech for MSMEs. Respondents agreed on the benefits of Fintech to speed up the transaction process and simplify long-distance transactions, reduce operational costs, and help bookkeeping with the details of transaction data.

Respondents like using Fintech because speeding up transactions is proven by customers not needing to use cash to pay or even being able to pay for a product between regions.

5. Conclusion

This study discusses the use of Fintech in Indonesia. From the results of the analysis of this study, the authors found that the use of Fintech in Indonesia received a positive response. The use of Fintech payment is still the most popular among other Fintech categories. The number of users is based on the ease of use and the trust factor of the system. Interest in the use of Fintech lending in this study also received a positive response. It's just that the lack of confidence in the system and the amount of interest on loans is a separate consideration for users.

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