

FINTECH ADOPTION FOR MSME SUSTAINABILITY

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ABSTRACT

During the COVID-19 pandemic, SMEs in Indonesia faced serious challenges due to temporary or permanent business closures as a result of the SMEs policy and the resulting economic crisis. Decreased sales and difficulties in securing funding have been the main problems faced by SMEs. To overcome these challenges, the use of Financial Technology (Fintech) is emerging as a promising solution. Fintech Lending Service provides an opportunity for MSMEs to obtain much-needed funding loans, while Fintech Digital Payment System provides an alternative transaction method that is more efficient. The study purposes is to aiming to examine the relationship between the adoption of Fintech Lending Service and Fintech Digital Payment System with MSME performance. This study uses the Diffusion of Innovation theory approach and PLS-SEM data analysis method, the source of data is from questionnaire and collected 204 data from the population. The results of the study are expected to provide valuable insights into how financial technology can support the viability of SMEs amid economic uncertainty. The novelty of this research is combining the separate fintech digital payment and lending service research into one research.

Keywords: *Fintech, Lending Service, Digital Payment System, SME Perform*

1. INTRODUCTION

During 2020 until 2023 COVID-19 occurred in Indonesia and made transition to economy of Indonesia from conventional payment to digital payment. This transition made many businesses bankrupt or temporarily closed for while since Indonesian Government authorizes a PPKM (Pemberlakuan Pembatasan Kegiatan Masyarakat) policy. This pandemic made a survival for any business to compete and become larger in any aspect. But there are many causes that pandemic inflict for business include for MSMEs in Indonesia. 50 percent of MSMEs in Indonesia confirmed closed in early of pandemics (Santia, 2022). To solve the bankruptcy problems for MSMEs in Indonesia the governments has given the aid and fund to help MSME for grow their business because MSMEs is the support system for Indonesian economics and reduce the poverty rate also create an employment for who seek the job (Iskandar, 2022), to handle this economics problems the MSMEs must digitalize their business with the cooperation to Fintech (Financial Technology) companies for help them by online training , online literacy and cooperate with many party (Alvin & Arifin, 2023).

The inovation for solve these challenges for MSMEs is Fintech (Financial Technology). Fintech could help funding many MSMEs for handle their operation while their cash bleaked and also help customer to do transaction (Gupta & Xia, 2018). To do the transaction between the parties, the parties must have internet connection to able do that (Maiti & Ghosh, 2023) .To solve difficulty of MSMEs partner for sustainability and customer for do the transaction during COVID-19 Pandemic some fintech companies release their digital payment and lending service for MSMEs, fintech lending service is advantageous for funding some MSMEs until growth and digital payment can facilitate transaction between merchant (MSMEs) and customer (Ahmad et al., 2022). According to Diffusions of Innovations (DOI)

theory fintech lending service helping to fund the MSMEs financial section and fintech digital payment can increase the transaction of payment.

The study aims to examine the fintech lending service and fintech digital payment on MSMEs performance using Diffusion of Innovation theory and the object of this research is the merchant who use both fintech lending service and fintech digital payment to strengthen the MSMEs performance.

Theory of Diffusion of Innovation

Diffusion of Innovation theory was developed by Everett M Rogers in 1971. This theory begins with the assumption that how fast the communication and idea of innovation diffuse with population and society. Diffusion of Innovation has 4 main element which are 1) innovation, 2) communication channel, 3) time span and the last was 4) social system according to (Rogers et al., 2014).

Financial Technology

Financial technology is a financial based start up which provide a financial service with the latest technology and facilitate the access to finance and provide the specialised service for client and innovate the new idea and competition in finance sector (Barroso & Laborda, 2022; Y. Wang et al., 2021).

Fintech lending service

According to (Au et al., 2020; Huang, 2018) Fintech lending service is defined as online platform that facilitate between lender and borrower for helping the borrower funding of their business operations. Financial lending service need good internet connection to do and the loan is smaller than bank for loan the money, also have an efficient service than conventional bank for borrower and lender according to (J. Wang et al., 2015). In the previous research that (Agus Zainul Arifin, 2020; Lee & Shin, 2018) found was the advantage of fintech lending service is ease to propose the loan and low interest rate for MSMEs and it's can solve the MSMEs problem for financing their business because the biggest problem for MSMEs is their financial section.

Fintech digital payment

Fintech digital payment is defined as online platform that used the smartphone for pay the transaction with their bank account or electronic wallet account for finish their transaction (Al-Okaily et al., 2020). With the arrival of fintech digital payment customer and merchant can do their transaction easily so can save their time to process their transaction, so they can use for anytime and their popularity can offer widely between bank and customer (Königstorfer & Thalmann, 2020).

MSMEs Performance

MSMEs performance defined as MSMEs ability to utilize the available resources wisely in order to be superior than their rival (Gold & Md. Taib, 2020). According to (Dessler, 2012) also MSMEs performance is working result of MSMEs which has already fulfilled the standard of MSMEs with their result. MSMEs performance according (Forth & Bryson, 2019) to have 3 category include : 1) Probability of their business which achieve their target with the total of population, 2) MSMEs growth rate which can be see by increase of workers and sales rate, 3) Productivity rate that seen by total production.

The research model of this study as presented in Figure 1 as follow:

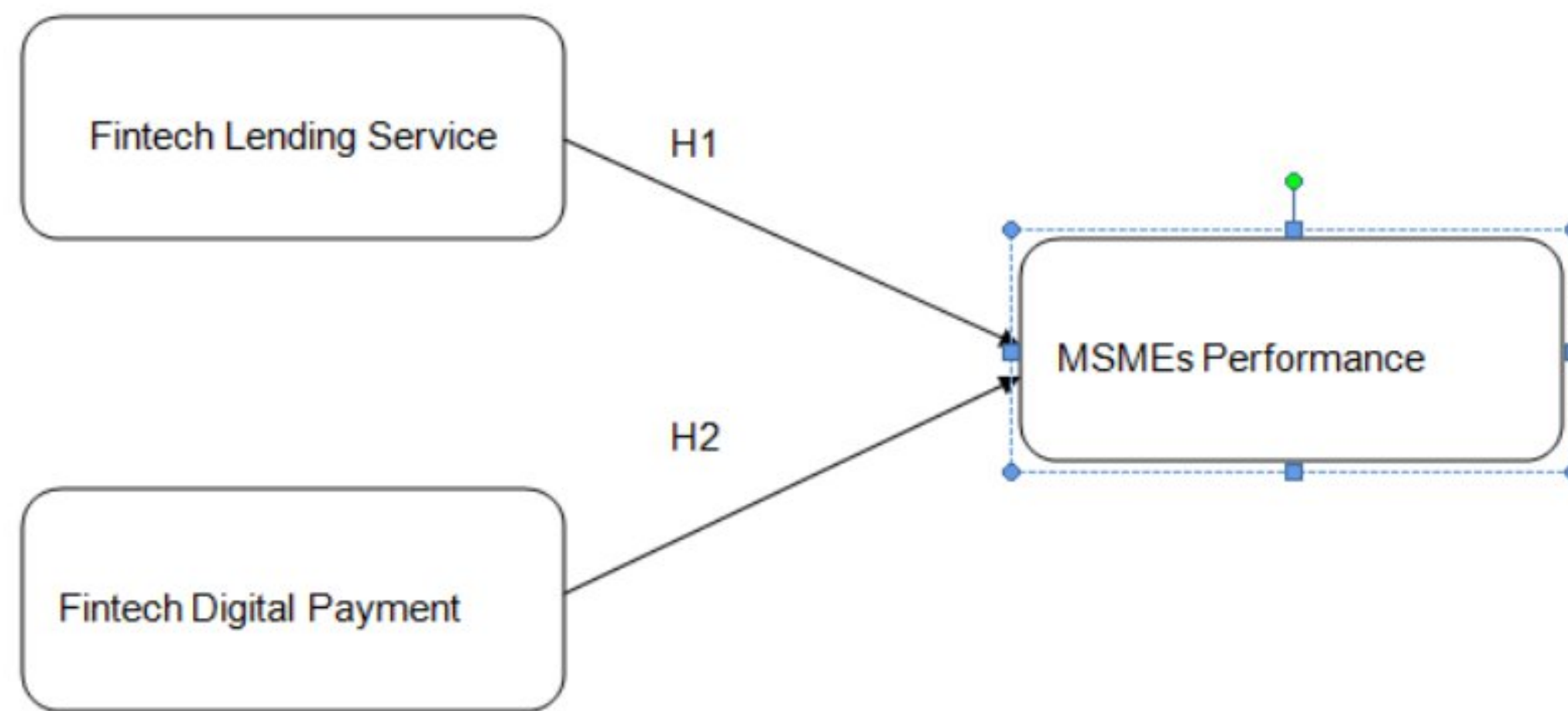


Figure 1. Research Model

The data source is primary data, the sampling method of data collection used non-probability sampling and distributed as many as 204 questionnaires with the likert measurement scale which scale from 1-10 from the google form and analyzed by Smart-PLS.

2. RESEARCH METHOD

Sample and Data Collection

In this study the sample is obtained from MSMEs owners that already adopted the fintech lending service and fintech digital payment. All data is obtained by google form. The required criteria to be filled as follows : 1) MSMEs owners, 2) The MSMEs is in Jabodetabek (Jakarta, Bogor, Depok, Tangerang and Bekasi) region, 3) already / adopting the fintech lending service and 4) already / adopting the fintech digital payment. And number of samples is 204 person. The figure 1 shows majority of MSMEs owner based on gender is men (49%) with followed by women (47%) the rest is choose to not answer (4%)

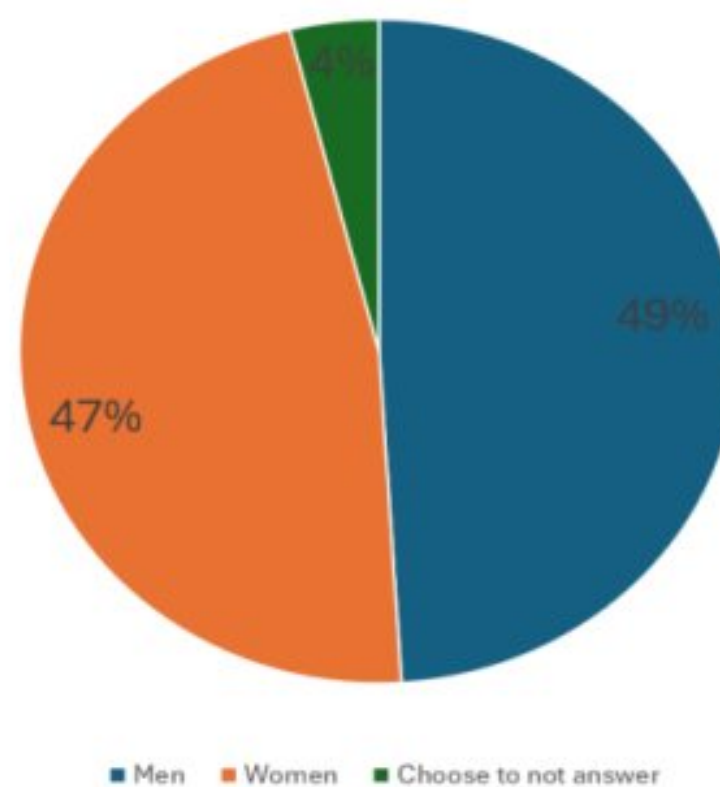


Figure 2. Percentage of MSMEs Owners based on genders

The figure 2 shows the majority of MSMEs owners based on their education, the majority was from university student (48%) followed by senior high school (41%) and diploma (7%) and the rest was junior high school (2%) and primary schools (2%).

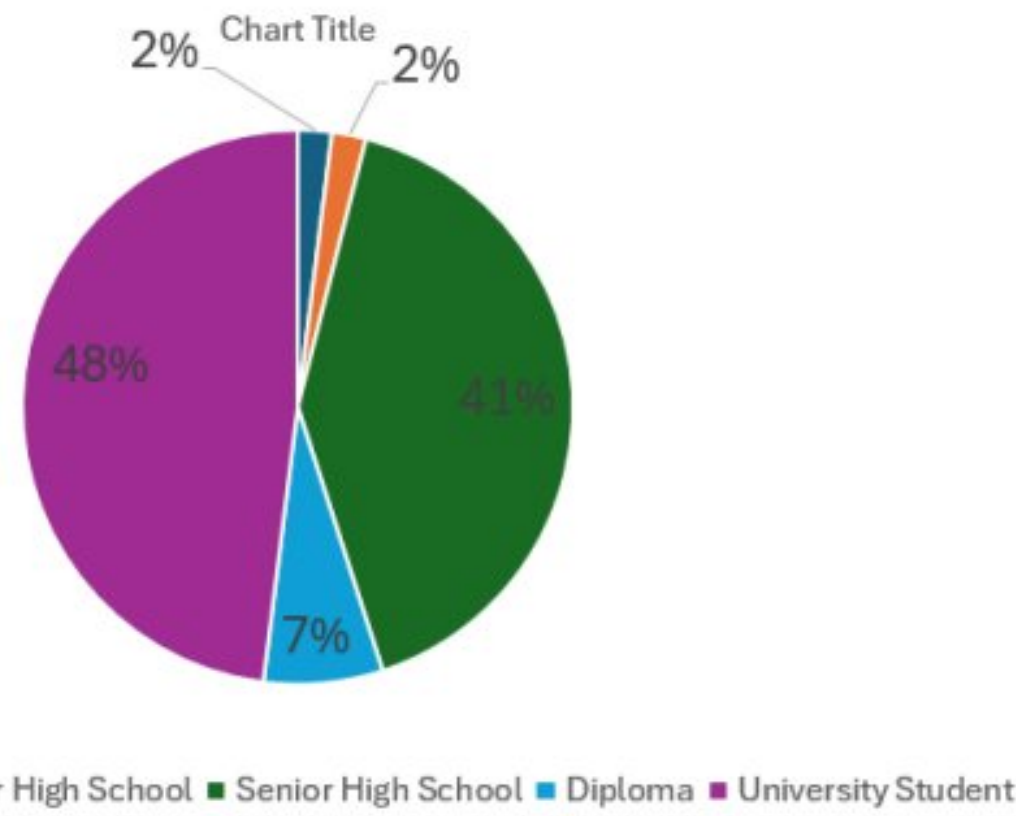


Figure 3. Percentage of MSMEs Owners based on education

The figure 3 show the net income from MSMEs owners, the majority (47%) was between 6%-10% , the second (24%) was between 0%-5% the third (22%) is 11%-20% and the rest (7%) is more than 20% their profit.

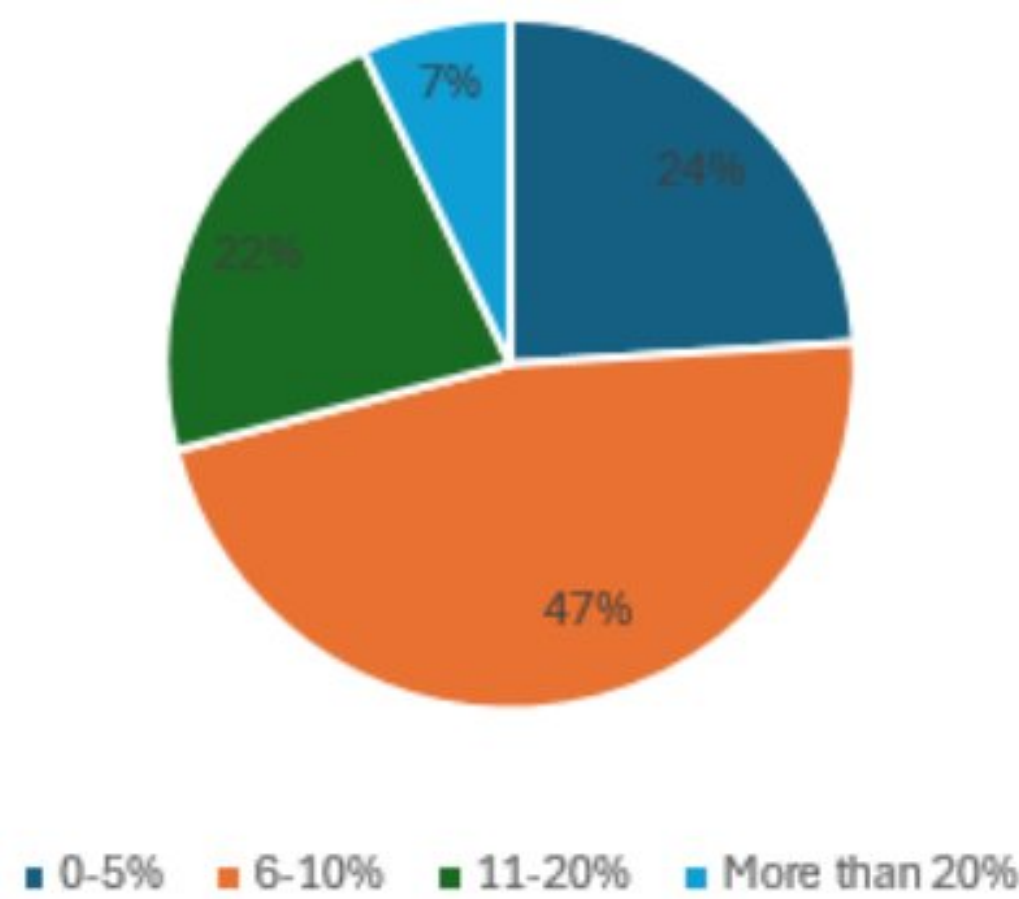


Figure 4. Percentage of Net profit of MSMEs owner

The figure 4 shows the online platform of fintech lending service, it shows that Kredivo hold the largest fintech lending service platform for MSMEs with the 54% of the owner funding of their business.

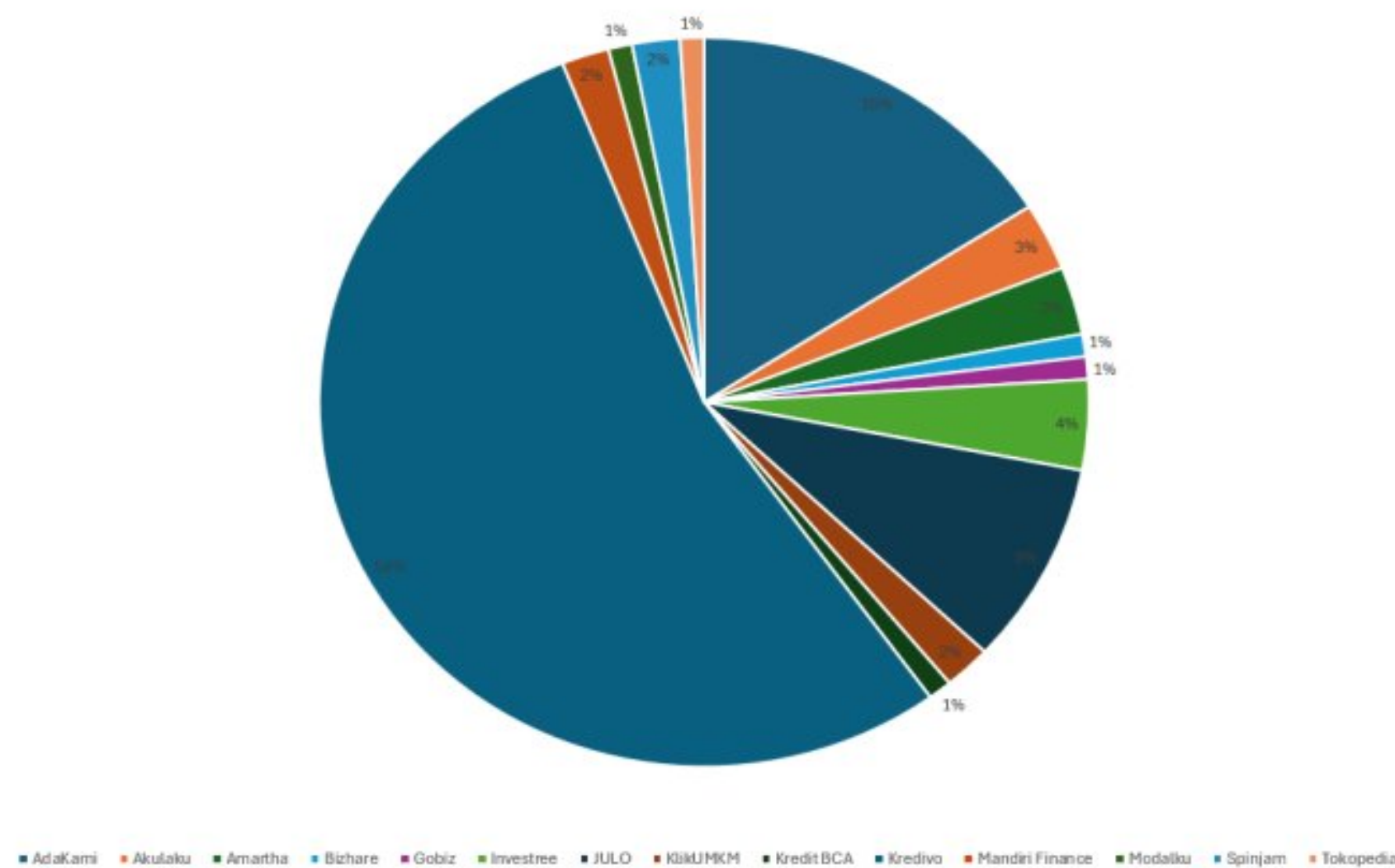


Figure 5. Percentage of Fintech lending service that use by MSMEs owner's

The figure 5 show the percentage of many fintech digital payment for transaction, the most used was m-banking.

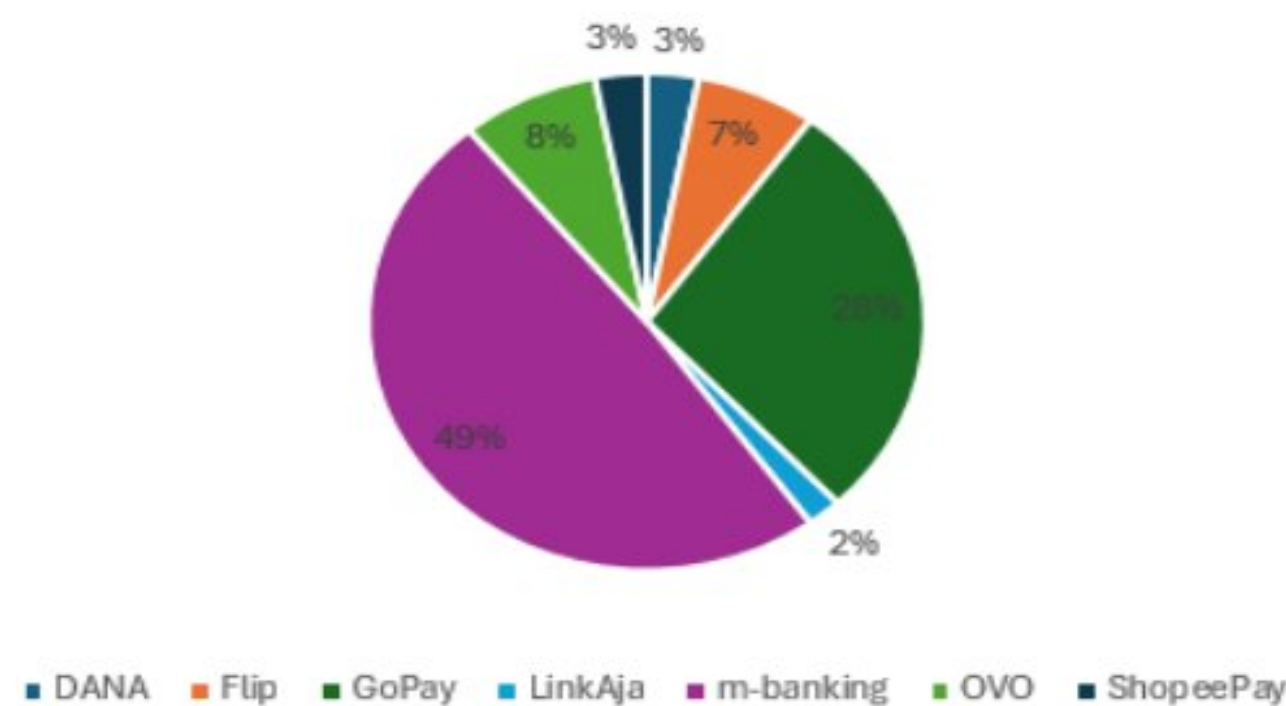


Figure 6. Percentage of Fintech digital payment that used for transaction

The survey consisted of 20 indicators for 3 variables which has fintech lending service, fintech digital payment and MSMEs performance. The indicator was developed from : (Abdullah & Bin Mansor, 2018; Al-Okaily et al., 2020; Rita et al., 2021; Sunardi et al., 2021; Tang et al., 2021). All indicators are categorized in 7 latent variables for fintech lending service, 7 latent variables for fintech digital payment and 6 for MSMEs performance. Devised from past research the hypothesis consist:

- H1: Fintech lending service is positively significant on MSMEs performance.
- H2: Fintech digital payment is positively significant on MSMEs performance.

And the 2 hypothesis was examined by SMART-PLS with SEM (Structural Equation Modelling).

3. RESULTS AND DISCUSSIONS

Table 1 Fornell Lacker Criterion

<i>Fornell-Larcker Criterion</i>			
	FL	FP	KU
FL	0,828		
FP	0,593	0,869	
KU	0,539	0,615	0,858

Table 2 Convergent and Validity

	Cronbach's Alpha	Composite Reliability (rho c)	Average Variance Extracted (AVE)
FL	0,907	0,929	0,686
FP	0,935	0,949	0,755
KU	0,928	0,943	0,735

The reliability test carried with 3 methods consist cronbach's alpha, composite reliability and average variance extracted , composite reliability result is good when it's above 0.7, AVE good when $AVE > 0.5$ and cronbach's alpha good when the result greater than 0.6 according to (Hair et al., 2019).

Based on table 1, each variable fullfilled the standard of which has the highest correlation between them, and table 2 AVE already fullfilled because the standard is more than 0.5 to

become valid and cronbach alpha's is fullfilled because more than 0.7. and in figure 4 all already fullfilled by AVE and cronbach's Alpha.

Goodness of fit is a test that evaluate the data which fit the expected theoretical distribution. This test measurement scale was carried by SRMR (Standarized Root Mean Square Residual) and NFI (Normal Fit index). The result of this test is valued from 0 to 1, if fit to 1 it's better the model fit and SRMR values range from 0 to 1 with the suitable value less than 0.05 but it can acceptable as high greater than 0.05 according to (Hair et al., 2019). The test result on Table 3 of NFI is 0.840 and SRMR is 0.061 which acceptable and suitable to model fit.

Table 3. Goodness of Fit (GOF) result

	Model Fit	
	Saturated Model	Estimated Model
SRMR	0,061	0,061
NFI	0,840	0,840

R square result is the test that which good the model explained by independent variable, there are 3 criteria for the R square which are 1) substantial (0.75), 2) moderate (0.5), and 3) weak (0.25). If the model fit to 1 so the model is perfectly explained by the independent variable (Hair et al., 2019). The result of this model based on Table 4 is 0.42 which 58% explained by other factor.

Table 4 R square result

	R-Square	R-Square Adjusted
KU	0,425	0,420

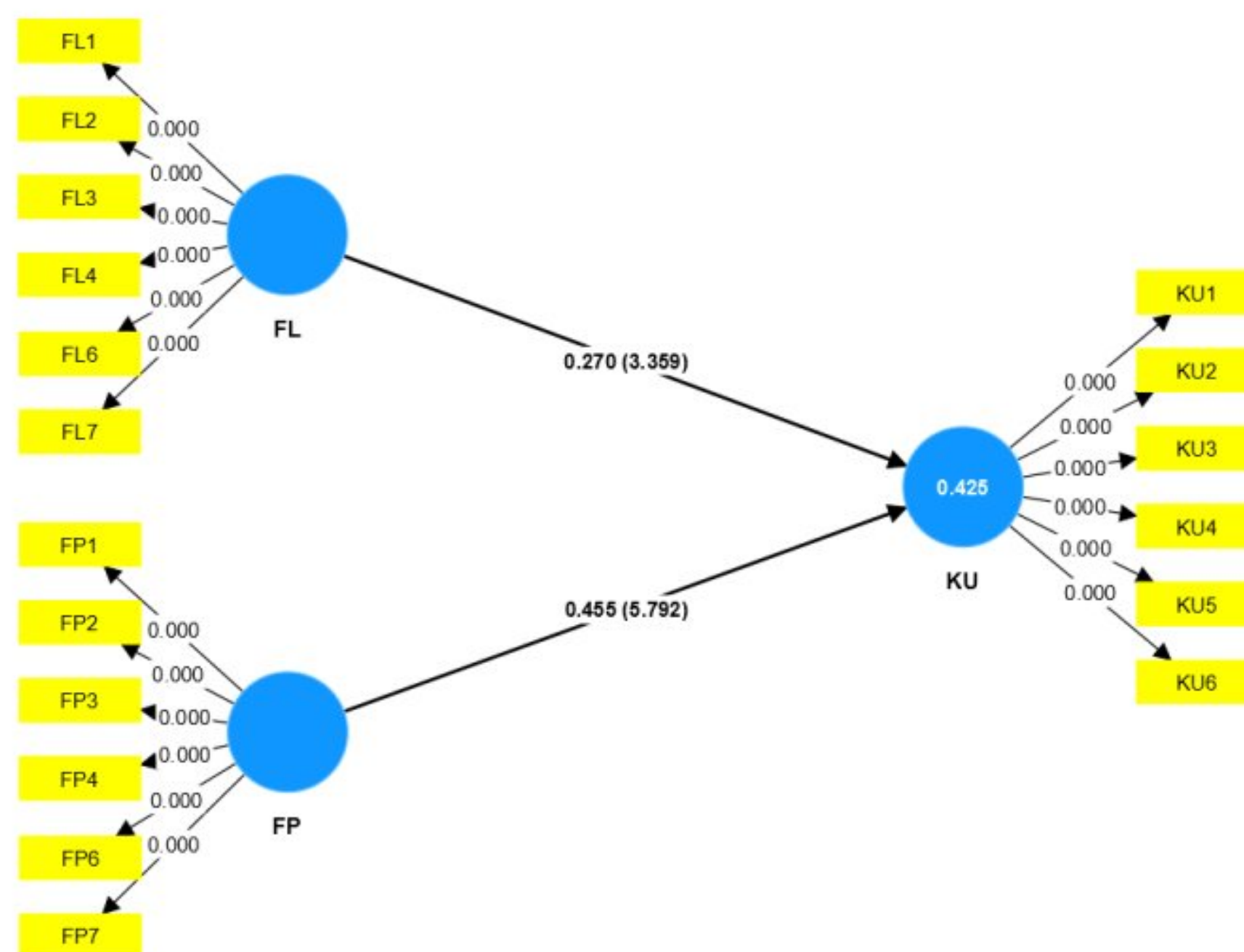


Figure 4. Outer Loading Factors

Table 5. Bootstrapping Results

	Original Sample (O)	Sample Mean (M)	T Statistics (O/STDEV)	P Values
FL → KU	0,270	0,274	3,359	0,001
FP → KU	0,455	0,456	5,792	0,000

Based on hypothesis result in table 34 the fintech lending service is positively significant influence the MSMEs performance because p values is below 0.05 (0.001) and T Statistics is greater than 1.96 therefore accepting Ha1. Fintech digital payment is positively significant influence on MSMEs performance because p values is below 0.05 (0.00) and T Statistics is greater than 1.96 so accepting Ha2.

Fintech lending service is positively significant influencing the MSMEs performance because it can ease the funding for the business operations so it same like (Au et al., 2020; Huang, 2018) research that found online platform of fintech lending service is ease to use. The result of the study is same like (Aulyarizki Miahendita, 2020; Rita et al., 2021). So, the business must adopt the funding of fintech lending service for their operational.

Fintech digital payment is positively significant influencing the MSMEs performance because it can facilitate the transaction between parties to become easy and save times, and this study is in line with (Daud et al., 2022; Kilay et al., 2022; Purba et al., 2021) that fintech digital payment is positively significant to MSMEs performance. So, the MSMEs must adopt the fintech digital payment.

4. CONCLUSIONS AND SUGGESTIONS

The result of this study conclude that:

- H1: There is an influence between fintech digital payment on MSMEs performance.
- H2: There is an influence between fintech digital service on MSMEs performance.

This study provides an advice for the merchant for reporting their usage of fintech digital payment and fintech lending payment. Because the data of usage of two variables is useful for upcoming research for fintech usage.

The research limitations is the R Square is low (0.420) which must add the new variables in this fintech study, also the research must be increase to all of province in Indonesia. So we suggest that the new variables must be added for the further study for add the fintech research and MSMEs performance in Indonesia

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