

# The Effect of Financial Inclusion, Financial Literacy On Sharia Fintech Acceptance in SMEs Using the Technology Acceptance Model (TAM) in Medan City

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**Abstract.** This paper aims to describe the effect of financial literacy and financial inclusion on Financial Technology (FinTech) sharia for SMEs in Indonesia with technology acceptance model (TAM). This study uses quantitative methods with analysis tools SEM PLS. The population in this study were SMEs in Medan City with data collection technique by conducting surveys by distributing questionnaires, literature studies, and FGD with Medan City SMEs observers. The results of the study show that there is a positive influence between Islamic financial literacy and financial inclusion on financial technology for SMEs in Medan City. Findings of the study reveal that Islamic FinTech's acceptance is determined by perceived ease of use and perceived usefulness as proxy. Financial Literacy influences the use of Sharia Fintech among MSMEs in Medan City and Financial Inclusion influences the use of Sharia Fintech among SMEs in Medan City. For further researchers, it is hoped that they can add variables or factors that affect financial literacy and Islamic financial inclusion, as well as what financial products they have owned and used.

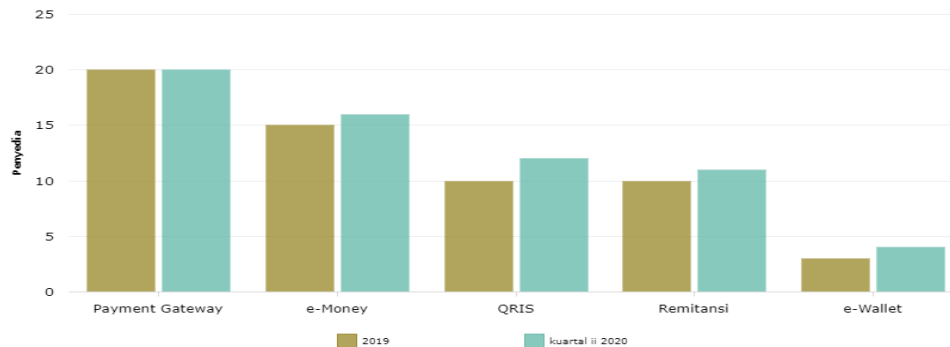
**Keywords:** Shariah FinTech, Financial Inclusion, Financial Literacy and SMEs.

## 1 Introduction

Fintech moment This become Wrong One application technology information in field finance with many features that can be used for e-money, loans, crowdfunding, virtual accounts and other online financial transactions. Currently, the use of fintech applications is widely adopted by related MSME actors with digital payments such as OVO, GOPAY, DANA, QRIS etc. Access application fintech This very easy for public At the moment with only use cell phone.

Data The Medan City Cooperatives and SMEs Service said the number of MSMEs in this area totaling 1,603 units, of which 1,480 micro businesses, 112 small businesses, and intermediate 11 units. Quote Fintech in ASEAN 2021 report via Katadata [1], in 2018 the number Fintech companies increased by 586 companies, however sadly reduce to 411 companies in 2019. Then in 2021 only increased by 107 companies. In the quarter second 2020, the Indonesian

Fintech Association said amount provider service payment digital wallet experience increase as in the image below this.



**Fig 1.** number of digital payment providers by type

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Development of Conventional Fintech This is also followed by the emergence of sharia Fintech which is service or product financial use technology on a schematic basis sharia [2]. The emergence of sharia Fintech in Indonesia is response to development conventional Fintech companies that use instrument flower in operations [3] . Sharia Fintech services in Indonesia are regulated in the fatwa of the National Sharia Council- Indonesian Ulama Council (DSN-MUI) number 117/DSN-MUI/II/2018 concerning Service Financing Based Technology Information based on Sharia Principles .

Sharia fintech promote responsible finances \_ in a way ethical and present opportunity For leading and influencing all form finance globally [2]. The growth is also showing positive number \_ from time to time . Reported from Katadata [1] , referring to the Global Fintech Islamic Report 2021, sharia Fintech services in Indonesia are in the order of fifth . In the report Accordingly , the sharia Fintech market in Indonesia reached IDR 41.7 trillion or US\$ 2.9 billion . The Indonesian Sharia Fintech Association (AFSI) noted moment This number of sharia Fintech there are 17 Fintechs that have licensed operational , consisting from peer-to-peer lending, innovation digital finance , and securities crowdfunding. Amount the Still Enough A little considering Sharia Fintech Still including new to Indonesia.

The growth of sharia Fintech in Indonesia has huge potential and big opportunities , considering this country have resident Muslim largest in the world. Lots of it race young people start aware to transaction Sharia also becomes promising opportunity for the Fintech market in Indonesia. Besides own enough big opportunities, but Sharia Fintech is also facing problems and challenges in its development among others , namely Still lack of instrument

policies governing work processes , availability \_source Power human , risk high security and yet reach to consumer class bottom [2].

sharia financial technology services which are currently being widely used by the public, especially MSMEs. The formulation of the problem in this study is whether there is an influence of financial inclusion and Sharia financial literacy on the use of Sharia financial technology, both in terms of payments and financing and funding for MSMEs.

## 2 Method

Financial Technology or "Fintech" is the use of technology to make give sulosi Memories. Definition Another thing about Fintech is a term that refers to companies that offer modern technology to financial sector. According to Bank Indonesia circular No.18/22/DKSP concerning The Implementation of Digital Financial Services (LDK) explains that activities Digital financial services are the use of mobile or digital-based technology based web in activity service system payment And finance Which done with Work The same with party third in financial framework inclusive.

The purpose of inclusion finance is For give access finance to all group social. Inclusion finance has proven become element important in eradicate poverty through inclusivity growth economy. Financial benefits other technologies are rotation growth economy . With own access easy and fast finance can push rotation economy become more fast . With That's it , perpetrators businesses that require capital can get loan with fast with low interest .

According to the World Bank (2016) inclusion finance defined as access to products and services service useful and affordable finance in fulfil need public nor his business in matter This transactions , payments , savings , credit and insurance used in a way responsible responsible and sustainable . Inclusion finance the community in question inclusion finance is involvement public in transaction economy, start from sell buy, pay, arrive save borrow. Convenience fintech technology has bridge various transaction economy that , so inclusion finances are getting better increase

With the existence of fintech, society Can can fulfil need his life with easy and fast . makes it easier We all in do transaction financing with use smartphones just . Fintech supports financial inclusion programs where two thirds of [4]. Indonesia's population do not yet have access to financial institutions and the majority of these two thirds are MSMEs. This lack of access is because MSMEs are not yet able to access banking services and the presence of fintech can bridge the needs of MSMEs that do not yet have this capability.

### Financial Literacy

Financial literacy is knowledge, skills and beliefs that influence personal actions and attitudes in improving the quality of conclusion making and financial management to achieve peace, OJK (2016) [5]. According to Widyati [6] financial literacy occurs when someone has skills or abilities that enable that person to achieve their goals by utilizing existing resources. Meanwhile, according to Gunawan [7] financial literacy is the ability to consider and make decisions related to the use of money, financial literacy has a direct effect on a person's welfare. According to [8], financial literacy is understanding and knowledge based on financial ideas and effects, along with skills, encouragement and confidence in order to implement the

understanding and knowledge gained to create the right decisions, increasing the level of prosperity, personal and public finances and participate in the economic sector. Without having adequate financial literacy, individuals cannot choose savings or investment products that are suitable for themselves and are potentially exposed to the risk of fraud .

### Sharia Financial Technology

Along with the rapid growth of the financial technology market, this fact gives rise to great potential for digital financial services or sharia financial technology (fintech) in Indonesia. Sharia fintech in Indonesia is regulated and refers to the Fatwa of the National Sharia Council of the Indonesian Ulema Council (DSN MUI) Number 117/2018 concerning Information Technology-Based Financing Services Based on Sharia Principles [9]. Based on the fatwa, sharia fintech is the provision of financial services based on sharia principles that bring together or connect financing providers with financing recipients in order to carry out financing contracts through an electronic system using the internet network.

In its development, sharia fintech is supported by the Indonesian Sharia Fintech Association (AFSI). AFSI was founded as a congregation of startups, institutions, academics, communities and sharia experts engaged in technology-based sharia financial services. AFSI has an important role to advance the potential of sharia fintech in Indonesia. This is demonstrated by the establishment of the AFSI Institute which has several programs, such as sharia business consulting, research and studies on Islamic economics, muamalah fiqh workshops and training, and AFSI Goes To Campus [10]. Sharia fintech that has been established in Indonesia includes investment, syarQ, start zakat, paytren, and others.

The agreed contracts are also not the same as each other, namely based on the allocation of funds from the loan applicant. The difference between sharia and conventional fintech in reducing risk can be clearly seen. Namely if it is in fintech The conventional method is to fatten the flowers as a form of caution. So the absence of interest will be a special attraction for sharia fintech. Of course, with the hope that the Indonesian people will be open to reading about Sharia financial opportunities and literacy.

Based on data from the Financial Services Authority (OJK), in 2019 [11], the Sharia Financial literacy index was only 8.11%. Which means that only around 8 people out of 100 people understand Sharia Finance. This figure is far from the percentage of National Financial literacy in that year, namely 29.66%. Meanwhile, the goal of the Government's National Financial Inclusion Strategy (SNKI) is that 75% of Indonesia's population will have access to sharia financial products by 2019. Based on the prospects and interest in sharia fintech, it has shown that sharia fintech has a bright future. This is based on Indonesia's population, which is the largest Muslim majority.

So apart from being technologically literate, it is hoped that the Indonesian population as well as MSME actors must be aware of sharia principles related to harmony and the conditions for the validity of a contract. Then they will be able to take full advantage of the opportunities for sharia fintech development . By having a clear agreement, sharia fintech financing can also help people obtain financing without violating sharia principles.

However, currently sharia fintech still faces various challenges, one of which is low literacy among the public regarding the existence of technology-based sharia financial services. Therefore, it is very necessary to increase cooperation from various parties to support education and socialization of sharia fintech in Indonesia.

## 2.4. Technology Acceptance Model (TAM)

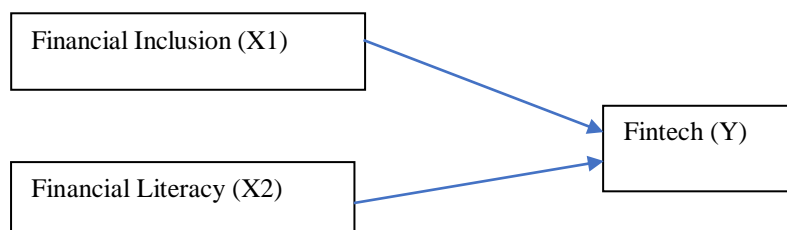
One theory that can explain individual acceptance of use technology is Technology Acceptance Model (TAM). Introduced by [12], Davis used TAM to explain behavior use in something technology. Objective TAM is For explain factor- determinants of acceptance of a technology, which then explains behavior user against user. Various End User Computing Technologies (Computing User End).

There is three matter Which underlying theory TAM, matter the is:

- 1.Utility Preparation (perceived usefulness)
- 2.Convenience preparation (perceived ease of use)
- 3.Attitude Reception to use technology (attitude toward using a technology)

## 2.5.Hypothesis Development

Based on theory Which Already displayed in sub chapter previously, so framework theory study this is:



**Fig.2.** Hypothesis Development

**As for hypothesis on study is:**

- H1: Financial Literacy influences the use of Sharia Fintech among MSMEs in Medan City .
- H2: Financial Inclusion influences the use of Sharia Fintech among MSMEs in Medan City

## 3. Research Results and Discussions

This research uses quantitative research techniques. The quantitative approach is research approach that uses data in numerical form. This study analyzes The influence of Financial Literacy and Financial Inclusion on the use of Sharia F intech among MSME players . So in this research the data obtained from MSMEs that use Sharia Fintech.

The data collection method used in this research is with distribute questionnaire sheets to respondents. Respondents answered the questions with choose one of answer choices Which available in survey. This research make questionnaire containing closed questions. Variable measurement uses an interval scale, that is measurement variable with score categorical And ordinal. In study This, questionnaire measured using the disagree scale . The scale used for measurement is scale 1-4 from strongly disagree to strongly agree. When measuring

respondent responses, Questionnaire completion was measured using a Likert scale . 1 point for “absolutely not agree”, 2 points For "No agree", 3 points For " neutral ", And 4 points For "agree" as well as 5 “ very agree ”.

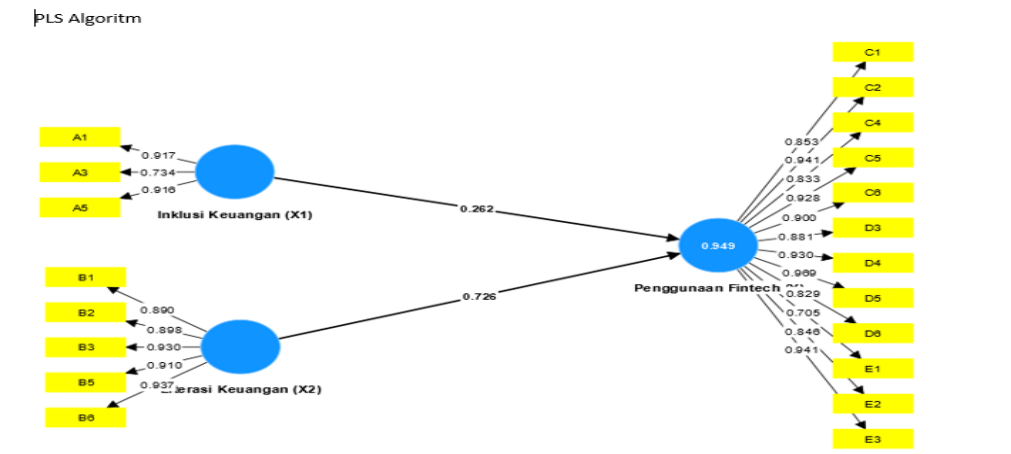
**Table 1.** Instrument Research and Research Models

No.	Variable	Indicator
1	Fintech	1. Perception Utility 2. Perception Convenience 3. Perception Reception
2	Literacy Finance	1. Financial Knowledge 2. Financial Behavior 3. Financial Attitudes
3	Inclusion Finance	1. Product Holding 2. Product Awareness 3. Product Choice

To investigate the influence of financial literacy and Inclusion Finance towards Sharia Fintech , researchers used a path analysis tool which is a development technique of multiple regression which is used to test the amount of contribution shown by the path coefficient on each path diagram of the causal relationship between variables using Smart PLS Ver. analysis. 4 .

#### 4 Results

This research uses Smart PLS 4.0 analysis . The theoretical model that has been depicted in the previous path diagram will be analyzed based on the data that has been obtained. Based on the t-statistics value of a causal relationship from the processing results, it is as follows.



## Reabilitas dan Validitas Konstruk

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Inklusi Keuangan (X1)	0.823	0.867	0.894	0.740
Literasi Keuangan (X2)	0.950	0.952	0.962	0.834
Penggunaan Fintech (Y)	0.973	0.977	0.977	0.779

Validity Test Results Validity testing was carried out with 50 respondents. In this test, the critical correlation coefficient is obtained from the r distribution table using a significance level of 5%, so  $r\text{-table} = 0.195$ . The significance test is carried out by comparing the calculated r value with the r table value. If the r-count is greater than the r-table value, then the statement is said to be valid.

Construct Reliability and Validity Variable Reliability AVE Usage Fintech 0. 779, Financial Literacy 0.8 34 whereas Financial Inclusion 0. 740. Composite Reliability and Crombach's Alpha Reliability variables can be assessed from the Crombach's Alpha value, Composite Reliability value and Average Variance Extracted (AVE) value of each construct. A construct is said to have high reliability if the Crombach's alpha value exceeds 0.7, the composite reliability value exceeds 0.70 and the AVE is above 0.50 (Hair et al., 2014).

Based on the table above, it shows that the reliability test is declared valid. A variable is said to be reliable or reliable if the answers to questions are always consistent. Results of Literacy reliability Finance 0.952 , whereas for Financial Inclusion and 0.86 7 whereas For for Fintech Use it was 0.977 and was declared reliable or met the requirements

## Analysis of Variant (R2) or Determination Test

### R Square

	R-square	R-square adjusted
Penggunaan Fintech (Y)	0.949	0.947

Variant Analysis (R2) or Determination Test, namely to determine the magnitude of the influence of the independent variable on the dependent variable, the value of the coefficient of determination can be shown in the R Square and Adjusted R Square Tables. is 0.9 49 and 0.947 . Based on the Adjusted r-square value in Table the shows that Literacy Finance and Inclusion Finance influence Sharia Fintech usage was 94.7%, while another 5.3% was influenced by other variables outside those examined in this research.

## Significance Test

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
Inklusi Keuangan (X1) → Penggunaan Fintech (Y)	0.262	0.263	0.124	2.116	0.035
Literasi Keuangan (X2) → Penggunaan Fintech (Y)	0.726	0.726	0.124	5.846	0.000

The results of the model suitability test, calculation of R Square, f square and Q square values show that the PLS model that has been built is suitable for use to test hypotheses in research. With a significance level of 0.05, if the P value < 0.05 and t count > 1.96, then Hypothesis accepted . \_ P-value for Inclusion Finance is 0.035 which shows more small of 0.05 then Hypothesis first received . For Literacy P- value Finance is 0.000 which indicates value below 0.05 then \_ hypothesis both accepted .

From the results of the significance test, it can also be seen the direction of the relationship between the influence of exogenous and endogenous variables. The direction of this relationship can be known from the original value of each sample each influence relationship. If the direction of the influence relationship is positive then the influence of the exogenous variable on the endogenous variable is positive/in the same direction, whereas if the original sample has a negative sign then the direction of the relationship influence of the exogenous variable on the endogenous variable is opposite (Hair et al., 2014).

## **5. Conclusion**

The results of this research show that the financial literacy variable has a positive and significant effect on the Usage variable Sharia Fintech . The results of this research show that the higher the financial literacy, the better the use of Sharia Fintech . The Financial Inclusion variable has a positive and significant effect on the Sharia Fintech variable . The results of this research show that the growth of inclusion is getting better Finance so the more also good in using Sharia fintech . Limitations of this research is very sample \_ a little , because public MSME owners still seldom use and transaction with Sharia banking . So that must be refined again because there are too few respondents. For That government of course must give strong support \_ in give knowledge about Sharia Finance along with purpose and benefits.



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