



Public Perception of Financial Use Technology (Case Study of MSMEs in Medan City)

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Abstract. This study intends to detect the effect of perceived benefits and perceived convenience on the financial technology of MSMEs in the Medan Amplas, Medan Denai and Medan Area sub-districts. The population in this study is MSME consumers in the Medan Amplas, Medan Denai and Medan Area sub-districts, which are estimated to be more than 1000 people. The sample is 100 people. The data analysis technique used multiple regression analysis, partial test, simultaneous test and determination test, previously carried out validity and reliability tests and classical assumption tests. The results of the study partially proved that perceived benefits and perceptions of convenience had an effect on the financial technology of SMEs in Medan Amplas District, Medan Denai and Medan Area. Simultaneously perceived benefits and perceived convenience of financial technology.

Keywords: *Perception of Benefits, Perception of Ease and Financial Technology*

A. Introduction

Financial technology is a technology that utilizes internet networks starting from 1966 with the aim of developing business globally. Based on (Financial Services Authority Regulation (OJK), 2018) No. 13/POJK.02/2018, financial technology already has a legal basis, which has been published by (POJK) Financial Services Authority Regulation number 13/POJK.02/2018 regarding Digital financial renewal in the field of Financial services regarding the rules that have become the basis for controlling and regulations in the field of financial technology (FinTech). The regulation was announced with a view to managing technology finance in order to realize digital financial change that is persistent, trusted, prioritizes user security and has well-managed threats.

Asset management, fundraising (*Crowd Funding*), *peer to peer* (P2P) *Lending*, *payment gateway*, stocks, insurance, and money is a fact of the rapid advancement of financial technology. FinTech plays a role in people's lives, where FinTech has the effect of making people's transaction habits more effective and effective which at first was a little difficult because they had to transact first to a bank or go to an ATM to transfer some money to another intended party. There are several services financial technology as payments, borrowing, financing, financial planning, investment, and including services that become solutions in capital, namely capital provider services. The existence of Fintech will change the financial industry in the digital era.

The use of financial technology types of payments is increasingly being applied, especially in payment transactions such as food and beverages, transportation *on line*,

electricity bills, credit, health insurance and so on. Financial technology can be used if there is public perception, namely in the form of perceptions of the benefits of use and perceptions of ease of use in the use of fintech (Santoso & Zusroni, 2020). Public perception is the opinion of individuals who interact with each other on an event object which is then concluded and interpreted. Public perception in this study is limited only to the perception of the benefits of use and the perception of ease of use.

This research was conducted by taking the research object of MSMEs in the city of Medan, especially in the Districts of Medan Amplas, Medan Denai and Medan Area. The existence of financial technology facilitates community transaction activities for MSMEs in the city of Medan. With Fintech, people no longer need to spend paper money to pay for food, transportation, or minimarket/supermarket purchases. The results of observations regarding financial technology in the community are known that there are still many people who have not used financial technology services due to a lack of understanding and lack of community experience with the use and benefits of financial technology. In addition, some people also think that transacting using financial technology is more difficult than transacting directly.

B. Background Theory

Public Perception

According to (King, 2018: 225), perception is a brain process in managing and interpreting sensory information and giving meaning. According to (Slameto, 2017: 102) states that perception is a system related to receiving messages or information into the human brain. This response prioritizes the system for receiving information into the human brain.

Perception and Technology Acceptance Model (TAM)

Technology Acceptance Model Theory (TAM) is very influential and is commonly used to describe individual acceptance of the use of information technology systems. This theory was first introduced by Davis in 1986. This theory was developed from Theory of Reasoned Action (TRA) by Ajzen and Fishbein in 1980 (Jogiyanto, 2017:111). The TRA model can be applied because the decision made by individuals to accept an information system technology is a conscious action that can be explained and predicted by behavioral interests. In 1986, Davis added two constructs to the TRA model, namely perceived benefits and perceived ease of use called the Technology Acceptance Model (TAM). TAM argues that individual acceptance of information technology systems is determined by these two constructs.

Perceived benefits is defined as the extent to which a person believes that using a technology will improve his or her job performance. Perceived benefits has indicators that can be used as a measure to measure behavioral intentions in using an information system. There are many indicators of perceived benefits which has been found according to the experts. However, this study does not use measurement indicators according to many experts. (Chuang, 2016:1-15) identified four indicators of perceived benefits (*perceived usefulness*), namely:

- 1) Perception of Efficiency

This dimension relates to personal belief that the use of a technology will lead to personal benefits for those who use it.

2) Perception of Effectiveness

This dimension relates to the personal belief that the use of a technology will help the person who uses it because it is not limited by space and time.

3) Perception of benefits in Improving Performance.

This dimension relates to the personal belief that the use of a technology will improve the performance of the individual.

4) Perception of benefits

In Answering Information Needs This dimension relates to the individual's belief that the use of a technology will assist individuals in obtaining the required information needs.

Perceived ease of use is defined as the degree to which a person believes that using a technology will be free of effort. Perceived Ease of Use has indicators that can be used as a measure to measure behavioral intentions in using an information system. (Chuang & Min, 2016:1-15) identified four indicators of perceived ease of use, that is:

1) Perception Flexibility

This dimension relates to a person's belief that the use of an information technology system can be easily used and understood.

2) Perception of Ease of Interaction.

This dimension relates to a person's belief in the use of an information technology system that can be easily used and understood.

3) Perception of Ease of Use

This dimension relates to a person's belief that the use of an information technology system can be easily used and understood.

4) Perception of Ease of Learning

This dimension relates to one's belief that the use of an information technology system can be easily learned and understood.

Technology Finance

Rahma, (2018:64), explains FinTech is not a service offered by the bank but the latest business model is very helpful for users. Financial technology provides services such as business finance, you don't have to have an account like a normal bank. Meanwhile, according to (Darmika, 2021), financial technology (FinTech) is a combination of technology and economics that can facilitate financial affairs in modern times by *on line* and its development is very rapid because it is considered more efficient, fast and practical.

Financial technology has advantages and disadvantages that can be used as a guide by users who will use technology financial services. The following are the advantages of financial technology according to the Financial Services Authority in (Ansori, 2019:37):

1. Serving the Indonesian people who cannot be served by the traditional financial industry due to strict banking regulations and the limitations of the traditional banking industry in serving the community in certain areas.

2. Become an alternative to funding other than traditional financial industry services where the community needs a more democratic and transparent financing alternative.

While the disadvantages of Financial Technology are:

1. Financial Technology is a party that does not have a license to transfer funds and is less established in running its business with large capital, when compared to banks.
2. There are some Financial Technology companies that do not yet have a physical office, and lack of experience in carrying out procedures related to the security system and product integrity.

According to (Sabila, 2021:26), the Financial Technology indicators are: Fast, Efficient and Easy to Access

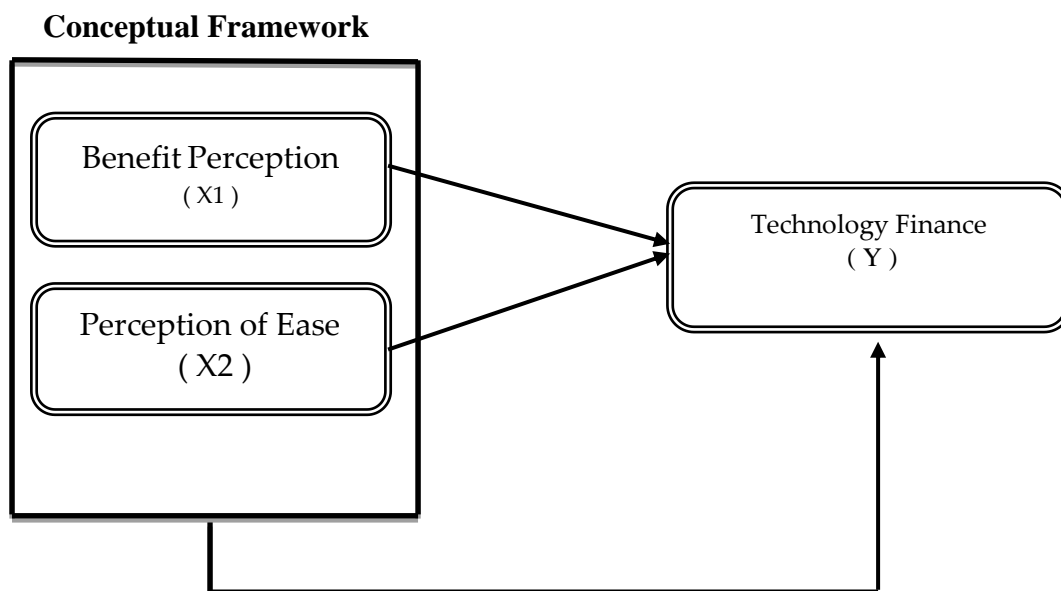


Figure 1 Conceptual Framework

C. Research Methods

This type of research is a type of quantitative descriptive research. The nature of this research is descriptive explanatory. In research explanatory the researcher tries to explain or prove the relationship or influence between variables. The population of this research are: UMKM consumers in Medan Amplas Subdistrict, Medan Denai and Medan Area which the number is estimated to be more than 1000 people. Sampling technique using simple random sampling. The population of this study is estimated to be more than 1000 people, so the sample is set at 100 people, namely: 1000 people x 10%. Data collection related to the problems studied by the researchers was carried out by: distributing questionnaires, interviews, literature studies, and documentation studies. Validity and reliability tests were conducted to test whether the list of questions was appropriate to be used as a research instrument. The data analysis technique used is classical assumption test (normality, multicollinearity and heteroscedasticity test), multiple linear regression analysis, F-t test and coefficient of determination test.

D. Results and Discussion

Classic Assumption Testing

Normality Test Results

There are two ways to detect whether the residuals are normally distributed or not, namely:

1) Using Graph Analysis

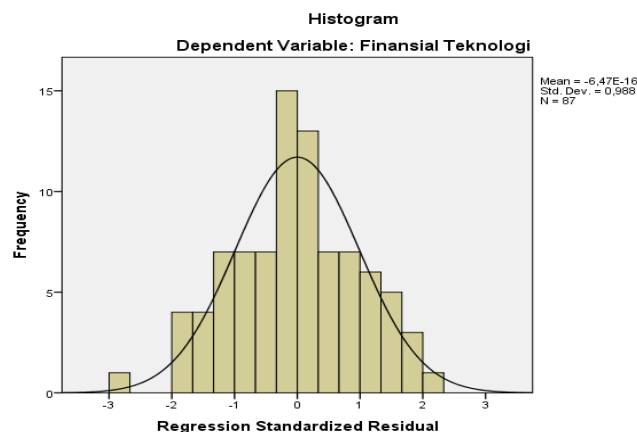


Figure 2. Histogram Graph

Source: data processed from research results, 2022

Figure 2 above, it can be seen that the data is normally distributed, which is known from the shape of the curve with a balanced slope from the left and right sides, or not skewed to the left or right.

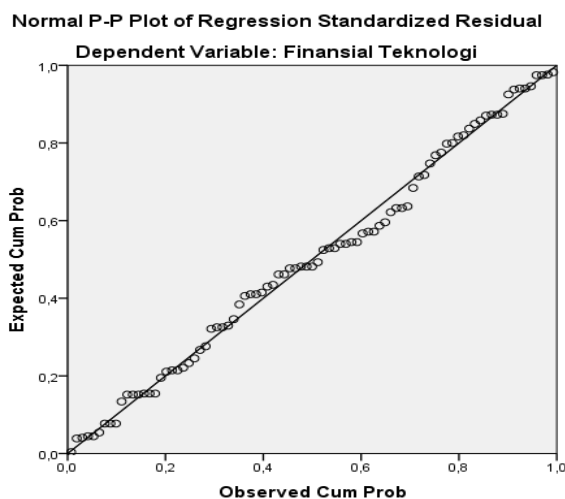


Figure 3. P-P Plot Graph

Source: data processed from research results, 2022

Figure 3 shows that the dots spread around the diagonal line and follow the diagonal line. So from the picture it can be concluded that the residuals in the regression model are normally distributed.

2) Using Statistical Analysis

The test was carried out using the method *One-Sample Kolmogorov Smirnov* (1-Sample-KS). The results of the normality test with the method *Kolmogorov Smirnov* can be seen in the following table:

Table 1. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		87
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	1,44597957
	Most Extreme Differences	
	Absolute	,063
	Positive	,063
	Negative	-,049
Test Statistic		,063
Asymp. Sig. (2-tailed)		,200 ^{c,d}

Source: data processed from research results, 2022

The table above shows that the data is normally distributed with a significant value of $0.200 > 0.05$.

2 Multicollinearity Test Results

The following are the results of the multicollinearity test:

Table 2. Multicollinearity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics	
	B	Std. Error	Beta	Tolerance	VIF
1 (Constant)	-,611	1,386			
Benefit Perception	1,174	,099	,735	,737	1,357
Perception of Ease	,405	,112	,225	,737	1,357

Source: data processed from research results, 2022

Based on Table 2 above, the value of *tolerance* for the variables of Perceived Benefits and Perceptions of Ease of $0.737 > 0.01$ and the VIF value of the variables Perceived Benefits and Perceptions of Ease of $1.357 < 10$ so it can be concluded that all independent variables are free from multicollinearity.

3 Heteroscedasticity Test Results

The following are the results of the heteroscedasticity test with a graph: *scatterplot*

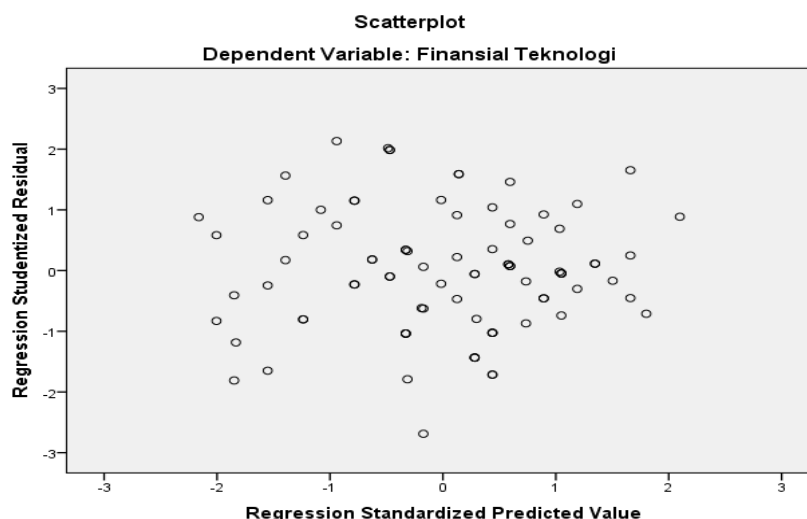


Figure 4. Graph of Heteroscedasticity Test Results

Source: data processed from research results, 2022

Chart scatterplot shows that the graph scatterplot indicates that the data is spread over and below the number 0 on the Y axis and there is no clear pattern in the distribution of the data. This means that there is no heteroscedasticity in the regression equation model, so the regression model is feasible to use to predict financial technology based on the variables that influence it, namely perceived benefits and perceived convenience. In addition to using graphs, heteroscedasticity test can also be done using The Glejser test. The Glejser test done by regressing the independent variable with the absolute value of the residual. If the value is significant between the independent variables.

Table 4. Glejser Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	2,406	,833		2,888	,005
Benefit Perception	-,129	,060	-,268	-2,169	,073
Perception of Ease	,034	,067	,063	,512	,610

a. Dependent Variable: ABS_RES

Source: data processed from research results, 2022

Table 4 explains that the test results Glejser was found that the significance level of the benefit perception variable was $0.073 > 0.05$, and the convenience perception variable was $0.610 > 0.05$, which means that there was no heteroscedasticity.

Data Analysis Results

1 Multiple Linear Regression Analysis

Table 5. Results of Multiple Linear Regression Analysis Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-,611	1,386		-,441	,660
Benefit Perception	1,174	,099	,735	11,846	,000
Perception of Ease	,405	,112	,225	3,631	,000

a. Dependent Variable: Technology Finance

Source: data processed from research results, 2022

Based on Table 5 above, the Multiple Linear Regression Equations in this study are:

$$\text{Technology Finance} = -0.611 + 1.174 X_1 + 0.405 X_2$$

2 Partial Test (t Test)

Partial test results can be seen in the following table:

Table 6. Partial Test Results (t Test)

Model	T	Sig.
1 (Constant)	-,441	,660
Benefit Perception	11,846	,000
Perception of Ease	3,631	,000

Source: data processed from research results, 2022

Based on table 6 above, it can be explained:

1. Perception of Benefits (X_1)

From the results of the partial test calculation of Benefit Perception, the value of t is obtained $t_{count} > t_{table}$ ($11.846 > 1.989$) with a significance level of $0.000 < 0.05$. It is concluded that the perception of benefits has a significant positive impact on financial technology, thus the proposed hypothesis, namely perceived benefits has an effect on financial technology, is rejected (H_1 received).

2. Perception of Ease (X_2)

From the calculation results of the Perception of Ease of Partial test, the value of t is obtained $t_{count} > t_{table}$ ($3.631 > 1.899$) with a significance level of $0.000 < 0.05$. It can be concluded that the Perception of Ease has a significant positive impact on Financial Technology, so that the proposed hypothesis, namely Perception of Ease has an effect on Financial Technology is accepted (H_2 received).

3 Simultaneous Test (F Test)

Simultaneous test results can be seen in the following table:

Table 7 Simultaneous Test Results (Test F)
ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	574,140	2	287,070	134,105	,000 ^b
Residual	179,814	84	2,141		
Total	753,954	86			

Table 7 shows the value of $F_{count} > F_{table}$ ($134.105 > 3.105$), meaning that the variables of Perception of Benefits and Perception of Ease have a significant effect on Financial Technology (H_3 received).

4. Coefficient of Determination (*Adjusted R Square*)

The results of the coefficient of determination test (R^2) can be seen in the table below:

Table 8. Determinant Coefficient Test Results (R^2)
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,873 ^a	,762	,756	1,46309

Based on the table above, the value of *Adjusted R Square* of 0.756 which means the ability of the Perceived Benefits and Perceived Ease variables to explain the Financial Technology variable is 0.756 or 75.6%, the remaining 24.4% is explained by variables not examined in this study such as trust, risk perception and others.

Discussion

1 The Effect of Perceived Benefits on Financial Technology

Based on the results of the research that has been carried out, it is found that the Perception of Benefits has a positive and convincing effect on Financial Technology. This can be seen in the results of the partial test which obtained the $t_{count} > t_{table}$ OR ($11,846 > 1,989$). In addition, it can be seen that the significant value is $0.000 < 0.05$ so that it is partially proven that $11.846 > 1.989$ has an effect on Financial Technology.

The results of this study are in line with Davis' theory *et alin* Sijabat (2020: 48) states that the perception of usefulness is defined as a measure where the use of a technology is believed to bring benefits to the people who use it. A person will adopt a

technology if the person believes that technology can provide benefits to him.

Based on the description above, it is concluded that the perception of benefits has an effect on financial technology. The use of financial technology has a positive impact on consumers of cafes around Medan Amplas, Medan Denai and Medan Area. Perceived benefits become a decision-making factor in the use of financial technology. With transactions that use financial technology, it will provide benefits to users in the form of efficiency and effectiveness in ordering culinary from cafes around Medan Amplas, Medan Denai and Medan Area.

2. The Influence of Perception of Ease of Financial Technology

The results of the research that has been carried out show that the perception of convenience has a positive and convincing effect on Financial Technology. This can be seen in the results of the partial test which obtained the $t_{\text{value}} > t_{\text{table}}$ ($3.631 > 1.989$). In addition, it can be seen at the significant value of $0.000 < 0.05$ so that it is partially proven that the Perception of Ease has a positive and convincing effect on Financial Technology. The product of this study is in line with the theory of Nurdin (2020: 202) which states that every technology is created to facilitate the activities of each individual, the easier the technology, the more individuals are interested in using it.

Based on the description above, it is concluded that the perception of convenience has a positive and significant effect on Financial Technology. If the user feels or believes that financial technology is easy to use then he will use it. On the other hand, if users find it difficult to use financial technology, they will not use it.

3. The Influence of Perceived Benefits and Perceived Ease of Financial Technology

Based on the results of the research that has been done, the results show that simultaneously Perceived Benefits and Perceptions of Ease have a positive and convincing effect on Financial Technology. This can be seen in the results of the simultaneous test which obtained the $F_{\text{value}} > F_{\text{table}}$ or $134.105 > 3.105$ with a significance value of $0.000 < 0.05$ so that it is proven simultaneously that Perceived Benefits and Perceptions of Ease have a positive and convincing effect on Financial Technology. The result of the assessment of the coefficient of determination obtained is 0.756, which means that the ability of the Perception of Benefits and Perception of Ease to explain Financial Technology is 0.756 or 75.6%, the remaining 24.4% is explained by variables not examined in this study such as trust, risk perception and others. -other.

Based on the description above, it is concluded that Perceived Benefits and Perceived Ease have an effect on Financial Technology. The impact that arises with the existence of financial technology is that consumers and business actors understand financial services in the world *on line*, can use technology-based financial services without having to travel the distance and time to get financial services.

E. Conclusions And Recommendations

Based on the results of data analysis and discussion that has been stated above, it can be concluded that Benefit Perception has an effect on Financial Technology. Perceptions of the benefits of using financial technology that consumers get are easy to make purchases, services are not limited by time and place, improve the performance of business actors, make it easier for consumers to get information about the products being sold. Perception of Convenience has an effect on Technology Finance. Thus the proposed hypothesis is accepted, meaning that the Perception of Ease has an effect on consumers who use Financial Technology. The convenience obtained from the use of financial technology is easy to understand, easy to interact in transaction activities, and easy to use. Perceived Benefits and Perceived Ease have an effect on Financial Technology. *on line*, can use technology-based financial services without having to travel the distance and time to get financial services.

Based on some of the conclusions that have been stated above, the suggestions that can be given are: for MSME actors it is advisable to adapt and take advantage of the following: technological advances, especially regarding financial technology so that sales are increasingly volume, consumers are advised to know more about financial technology, especially the benefits and disadvantages of using financial technology. Before going further into financial technology, consumers are advised to understand or explore cyberspace and seek more accurate information about financial services on line. Financial technology developers are advised to introduce technology financial products to various media, ease of use, benefits of use, so that consumers are interested in conducting transactions using financial technology.

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