

The Influence of Trust, Usability, and Perceived Ease of Use of Financial Technology on Student Behavior Intention of Economic Faculty, UISU Medan

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Abstract:

The problem formulations of study is: How is the influence of Trust, Usability and Perception of Ease Financial Technology Usages on Student Behavior Intention of Economic Faculty, UISU Medan. The purpose of this study is to analyze the influence of Trust, Usability and Perception of Ease Financial Technology Usages on Student Behavior Intention of Economic Faculty, UISU Medan. The population in this study was 332 students of semester 5 (five). The sample in this study were 77 students of semester 5 (five). By using descriptive data analysis techniques and multiple linear regression analysis, then: The Trust Variables partially have a positive influence on Student Behavior Intention of Economic Faculty, UISU Medan. The Usability variable partially has a positive influence on Student Behavior Intention of Economic Faculty, UISU Medan. The Perceived Ease of Use variable partially has an influence on Student Behavior Intention of Economic Faculty, UISU Medan. The variables of Trust, Usability and Perceived Ease of Use simultaneously had a positive influence on Student Behavior Intention of Economic Faculty, UISU Medan. The value of Determination in this study was 0.522. This shows that 52.2% of Behavioral Intentions variables can be explained by the variables of Trust, Usability and Perceived Ease of Use, the remaining 47.8% is influenced by other factors not done in the study.

Keywords:

trust; usability; perceived ease of use; behavior intention

I. Introduction

Financial Technology (Fintech) deals with companies that use modern innovative technology to shape financial service provision. Fintech is seen as a new market that integrates finance and technology and replaces traditional financial structures with new technology-based processes (Arner, et.al., 2015). The fintech company is a company that offers technology for banking, corporate finance, capital markets, financial data analysis, payments, and personal financial management (Skan, et.al., 2014).

Bank Indonesia Regulation on the implementation of financial technology, Bank Indonesia regulates the registration requirements at Bank Indonesia for organizers conducting payment system activities. The registration obligation is excluded for payment system service providers that have obtained licenses from Bank Indonesia and for providers of financial technology that are under the authority of other authorities.

Leoang et al. (2017) the type of use of Fintech is only student loan services, research findings, Fintech companies in China succeed in their business because they offer loans among students. Students borrow because of difficulties in borrowing at the bank. Many students borrow because of the need to buy mobile phones and laptops Abrahaoetal research results (2016), the use of electronic payment technology using UTAUT, from 605 respondents

Britain International of Humanties and Social Sciences (BIoHS) Journal **ISSN:** 2685-3868(Online), 2685-1989(Print) Vol. 2, No. 1, February 2020, Page: 359-366

that the use of mobile payments in Brazil is affected by performance expectation, effort expectation, social influence, and perceived risk.

II. Review of Literature

Financial Technology (Fintech) is a technology-based service that is currently a trend in the world, both in the form of convenient devices and business (Amalis, Christi & Barberis, 2016). America and China are the largest countries in Fintech investment. Fintech which is popular in payment transactions are (1) Shopping Vouchers; (2) Points, (3) Deposits, (4) E-Currency or electronic currency and; (5) Transfers.

Bank Indonesia and the Financial Services Authority strongly support technologybased financial services. OJK Regulation Number 77 / POJK.01 / 2016 concerning Information Technology Based Money Lending and Borrowing Services, this regulation regulates the financial services industry that uses Fintech in Indonesia. The term Fintech is more famously used by non-bank startups that provide technology-based financial services.

Azkan, Bindusara & Hackney (2009) E-Payment Systems as infrastructure in the network and payment methods as a means to exchange monetary values through internet services. Developed countries payment by e-payment becomes common, reflecting the maturity of e-commerce (Effah, 2016). Banking in Indonesia launched e-money transactions from Bank Mandiri, Flazz from BCA Bank, and Tap Cash from Bank BNI. Electronic companies also issue t-cash from Telkomsel, Dompetku from Indosat, and XL Cash from XL Axiata telecommunications services, Go-Pay from PT Gojak Indonesia.

2.1 Trust (X₁)

According to Gefen et al (2003) Trust is a major aspect of electronic transactions, because human needs to understand the social environment are very complicated, because one's nature is not always rational or predictable. The research of Chuang et al (2016) modified the Technology Acceptance Model (TAM) by using trust or trust variables in the context of using Fintech. The trust variable is measured by three instruments developed by Chuang et al (2016), namely (1) confidence in service; (2) perception of service quality; and (3) perceived service security

2.2 Usability (X₂)

Davis (1989), perceived usefulness is an individual's level of trust in their productivity and performance. If someone feels that the system is useful, then he will use it. Vice versa, if someone believes that something is not useful, then he will not use it. Cuang et al (2016) Indicators of perceived usefulness, namely (1) perceived efficiency; (2) perception of influenceiveness; (3) perceived usefulness in improving performance; and (4) perceived usefulness in information needs.

2.3 Perceived Ease of Use (X₃)

According to Davis (1989) perceptions of the ease of use of technology as an individual's belief in the use of a technological system and assume that, the use of technology does not require any effort (free effort) and is easy to understand. Davis (1989) research results, that the perception of ease of use, can explain the reasons for users to use the system and explain the new system can be accepted by users Chuang et al (2016), indicators of perceived ease of use, namely (1) perception of flexibility; (2) perception of ease of interaction; (3) perceived ease of use; and (4) perceived ease of learning separately. Perception contains a

very broad understanding, concerning internal and external. Various experts have provided various definitions of perception, although in principle they contain the same meaning (Ismail, et al., (2020).

2.4 Behavior Intention (Y)

Chau & Hu (2001), describe the behavioral tendency to use financial information technology services in financial systems that produce information technology service products. Behavioral intention is measured by one instrument, namely service user intention

III. Research Method

This research is a quantitative study, where the population is students of Economic Faculty of UISU semester 5 (five), amounting to 332 students. Sampling technique using Simple Random Sampling, carried out randomly. Sampling was conducted on the population using the Slovin formula (Greener, 2008), then obtained a sample of 77 students.

Data analysis uses multiple linear regression, where

 $X_1 = Trust$

 $X_2 = Usability$

 X_3 = Perception of Ease of Use

Y = Intention to Behave

IV. Discussion

4.1 Data Quality Test

a. Data Validity Test

Validity test is done to find out whether the measuring instrument that has been compiled can be used to measure what is being measured precisely. The validity of an instrument illustrates the level of ability of a measuring instrument used to express something that is the main target of measurement. If the instrument is able to measure the measured variable, it is called valid, and vice versa if it is unable to measure the measured variable, it will be called invalid. Testing the validity of the instrument using the Correlate Bivariate Analyst to find the correlation coefficient of Pearson Product Moment with SPSS. Then compared with the r table value for $\alpha=0.05$ with degrees of freedom (dk = n-2) so that r table is obtained. For statement items with correlation coefficient (r count)> r table, the statement items are declared valid.

Because the number of respondents used for the validity test is 77 people, the r table value can be determined from: dk = n-2 = 77-2 = 75

The value of r table with dk = 75 is 0.272. So, if r count> 0.272 then the question item is declared valid.

Table 1. Variable Validity Test Results (X1)

Question Number	$\mathbf{r}_{\mathrm{count}}$	r _{table}	Information
1	0,591	0,272	Valid
2	0,654	0,272	Valid
3	0,542	0,272	Valid
4	0,681	0,272	Valid
5	0,448	0,272	Valid

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6	0,569	0,272	Valid
7	0,581	0,272	Valid
8	0,403	0,272	Valid
9	0,635	0,272	Valid
10	0,534	0,272	Valid

Source: Data processed-2019

Table 2. Variable Validity Test Results (X2)

Question Number	r _{count}	$\mathbf{r}_{\mathrm{table}}$	Information
1	0,394	0,272	Valid
2	0,583	0,272	Valid
3	0,541	0,272	Valid
4	0,674	0,272	Valid
5	0,615	0,272	Valid
6	0,623	0,272	Valid
7	0,649	0,272	Valid
8	0,593	0,272	Valid
9	0,742	0,272	Valid
10	0,604	0,272	Valid

Source: Data processed-2019

Table 3. Variable Validity Test Results (X3)

Question Number	$\mathbf{r}_{\mathrm{count}}$	$\mathbf{r}_{\mathrm{table}}$	Information
1	0,618	0,272	Valid
2	0,514	0,272	Valid
3	0,625	0,272	Valid
4	0,596	0,272	Valid
5	0,586	0,272	Valid
6	0,465	0,272	Valid
7	0,586	0,272	Valid
8	0,569	0,272	Valid
9	0,486	0,272	Valid
10	0,578	0,272	Valid

Source: Data processed-2019

Table 4. Variable Validity Test Results (Y)

	Tuble II Variable	1	\ /
Question Number	$\mathbf{r}_{\mathrm{count}}$	$\mathbf{r}_{\mathrm{table}}$	Information
1	0,618	0,272	Valid
2	0,514	0,272	Valid
3	0,625	0,272	Valid
4	0,596	0,272	Valid
5	0,586	0,272	Valid
6	0,465	0,272	Valid
7	0,586	0,272	Valid
8	0,569	0,272	Valid
9	0,486	0,272	Valid
10	0,578	0,272	Valid

Source: Data processed-2019

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Based on tables 1 to 4 all statements in each variable have a corrected item correlation value (r count) greater than r table.

b. Data Reliability Test

Instrument reliability illustrates the stability of the measuring instrument used. A measuring instrument is said to have high reliability or can be trusted, if the measuring instrument is stable so that it is dependable and can be used to predict (predictability).

In this study, the reliability test uses the Cronbach Alpha method. Reliability is measured by testing the level of consistency of the measurement results when repeated measurements are made. Reliable or not a data can be seen from the alpha coefficients produced, data approaching 1 (one) can be said to have high reliability. Cronbach Alpha coefficient values close to 1 indicate that the results obtained are more consistent so it is said to have high reliability. A data is said to be accurate if the minimum Cronbach alpha coefficient value is 0.60. The reliability test in this study used the SPSS program version 25.0.

Table 5. Reliability Test Results

Variables	Cronbach's Alpha	N of Items	Reliability Status
X_1	0,748	10	Reliable
X_2	0,805	10	Reliable
X_3	0,733	10	Reliable
Y	0,904	10	Reliable

Source: Data processed-2019

Based on table 5.11 above, it can be seen that the Cronbach alpha value of all variables ranges from 0 to 1 and is more likely to approach number 1, so that all items in the measurement instrument can be categorized as very reliable.

c. Multicollinearity Test

Multicollinearity testing is done to see whether the regression model found a correlation between independent variables. If there is a correlation, then there is a problem called multicollinearity. How to detect it is by looking at the value of Variance Inflation Factor (VIF). According to Santoso (2004: 203), in general, if VIF is greater than 5, then the independent variable has a multicollinearity problem with other independent variables. In the SPSS output section Coefficient, all VIF numbers are below 5, this shows there is no multicollinearity, as can be seen in the table below.

Table 6. Multicollinearity Test **Coefficients**^a

	Coefficients					
	Model	Collinearity Statistics				
	Model	Tolerance	VIF			
	(Constant)					
1	Trust (X1)	.402	2.490			
1	Usability (X2)	.485	2.061			
	Perception of Ease Usage (X3)	.757	1.321			

Source: Out Put SPSS Processed Data-2019

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4.2 Discussion

a. Hypothesis Test

In evaluating this data the writers will test the hypothesis, either partially or simultaneously. Furthermore, to facilitate the evaluation of this data, the authors look for the values needed by using computer software, namely SPSS V.25.00 for windows with the results of the data as follows:

Table 7. Results of the regression test for regression influences

Mo	odel	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	-4.492	5.588		804	.424
	Trust	.586	.173	.432	3.383	.001
1	Usability	.331	.151	.254	2.189	.032
	Perception of Ease Usage	.169	.098	.160	1.718	.090

Source: Out Put SPSS Processed Data-2019

Based on Table 7 above can be made a regression equation as follows:

$$Y = -4,492 + 0,586X1 + 0,331X2 + 0,169X3 + \varepsilon$$

The equation above explained that the coefficient X_1 (Trust) has a positive value of 0.586, this shows that the trust variable has a positive influence on Behavioral Intentions. Based on the above equation that the coefficient X_2 (Usability) also has a positive value of 0.331. This shows that the Usability variable has a positive influence on Behavior Intentions.

Based on the equation above that the coefficient X_3 (Perceived Ease of Use) also has a positive value of 0.169. This shows that the variable Ease of Use has a positive influence on Behavior Intention.

b. Simultaneous Tests (Test F)

Table 8. Simultaneous Statistical Test Results

	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	582.813	3	194,271	26.558	.000 ^b
1	Residual	533.992	73	7.315		
	Total	1116.805	76			

Source: Out Put SPSS Processed Data-2019

In Table 8 above it can be seen that the F count value is 26,558 and the significance value is 0,000. The known F value with a 95% confidence level (α : 0.05) is. Therefore the value of F count> F table (26.558> 3.110) then Ho is rejected and accepts Ha the hypothesis in this study that is that Trust, Usability and Perceived Ease of Use simultaneously have a positive and significant influence on Student Behavior Intention of Economic Faculty of UISU Medan.

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c. Partial Tests (t Test)

1. The Influence of Trust in Behavioral Intentions

Table 9. Partial Test Results of Variable X1 against Y

Model		dardized ficients	Standardized Coefficients	Т	Sig.
	В	Std. Error	Beta		
Trust	.586	.173	.432	3.383	.001

Source: Out Put SPSS Data Processed-2017

To find out partially the influence of Trust on Behavior Intention can be seen in Table 9 above. Based on the table, the t count value is 3,383 and the significance value is 0.032. While the value of t table at 95% confidence level (α: 0.05) is 1,990 Therefore t count> t table (3,383> 1,990) then Ho is rejected and accepts Ha the hypothesis in this study that the variable Trust is partially positive and significant influence on Students Behavior intention of Economic Faculty UISU Medan.

2. The Influence of Usefulness on Behavioral Intentions

Table 10. Partial Test Results of Variable X₂ against Y

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
Usability	.331	.151	.254	2.189	.032

Source: Out Put SPSS Data Processed-2017

To find out partially the influence of Use on Behavior Intention can be seen in Table 10 above. Based on the table, the value of t count is 2,189 and the significance value is 0,032. While the value of t table at the 95% confidence level (α : 0.05) is 1,990. Therefore, the value of t count> t table (2.189> 1.990) then Ha is rejected and accepts the hypothesis Ho in this study that the variable usability partially has a positive influence on the Student Behavior Intention of Economic Faculty UISU Medan.

3. The Influence of Perceived Ease of Use on Behavior Intentions

Table 11. Partial Test Results of Variable X3 against Y

Model			Standardized	t	Sig.
	Coefficients		Coefficients		
	В	Std. Error	Beta		
Perception of Ease Usage	.169	.098	.160	1.718	.090

Source: Out Put SPSS Processed Data-2019

To find out partially the influence of Perceived ease of use on Behavior Intention can be seen in table 12 above. Based on the table, the t count value is 1,718 and the significance value is 0.090. While the value of t table at the 95% confidence level (α : 0.05) is 1,990. Therefore t count <t table (1.718 <1.990) then Ha is rejected and accepts the hypothesis Ho in this study that the variable of Ease of Use partially has a significant positive influence on the Student Behavior Intention of the Economic Faculty of UISU Medan.

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d. Determination Coefficient Test (R2)

The determinant test is to find out how much influence the independent variable has on the dependent variable. To see the results of the determinant test it can be seen the value of R Square or the coefficient of determination and can be seen below.

Table 12. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722ª	.522	.502	2.704

Source: Out Put SPSS Processed Data-2019

The value of R Square in the table above is 0.522. This shows that 52.2% of Behavioral Intentions variables can be explained by the variable Trust, Usability and Perceived ease of use while the remaining 47.8% was not researched.

V. Conclusion

The results of the conclusions prove that Trust, usability and perceived ease of use have a positive influence on Student Behavior Intention of Economic Faculty of UISU Medan. It suggests for students should use Financial Technological Products, which are issued by banks in accordance with Bank Indonesia License.

References

- Amalia, F., Chishti, S., & Barberis, J. (2016).Book Review: THE FINTECH BOOK: The Financial Technology HandBook Entrepreneurs and Visionaries, 31 (3), 345-348
- Abrahao, R. de S, Moriguchi, S.N, & Andrade, D.F (2016). Intention of Adoption Of Mobile Payment: An Analysis The Light Of The United Theory Of Acceptance And use Of Technology (UTAUT). RAI Revista De Administração e Inovação, 13 (3),221-230
- Chau dan Hu. 2001. Information Technology Acceptance by Individual Profesionals : A Model Comparison Approach. Decision Science, Vol 32
- Chuang, Lui, dan Kao. 2016. The Adoptiono Fintech Service: TAM Perspective. International Journal Of Management And Administrative Science, Vol 3. ISSN: 2225-7225
- Davis, Fred. 1989. Perceived Usefulness, Perceived Ease Of Use, And User Acceptance Of Information Technology. MIS Quartely; Vol 13
- Effah, J. (2016). Institutional Influence On E-Payment Entrepreneurship A Developing Contry: Enablers and Constraint. Information Technology For Development, 22 (2), 205-219
- Gefen, Karahanna dan Straub. 2003. Trusted And TAM in Online Shopping: An Integrated Model. MIS Quartely. Vol. 27
- Ismail, et, al. (2020). The Community Perceptions of Poverty in Gampong Ayon, Seulimeum Sub-district, Aceh Besar Regency. (Research Results on March 2017). Budapest International Research and Critics Institute (BIRCI-Journal): 3(1), 270-275
- Skan, Lumb, Masood, dan Conway. 2014. The Boom in Global Fintech Invesment. United Kingdom. Accenture
- Santoso, Budi. 2012. Pengaruh Perceived Usefulness, Perceived Ease of Use, dan Perceived Enjoyment Terhadap Penerimaan Teknologi Informasi. Jurnal Studi Akuntansi Indonesia
- Ozkan, S., Bindusara, G.,&Hackney, R. (2009). Towards Successful e-payment systems: an empirical identification and analysis of critical factors. In European and Mediterranean Conference on Information Systems (EMCIS 2009) (pp. 1–17).