THE EFFECT OF FINANCIAL TECHNOLOGY USE AND FINANCIAL LITERACY TOWARDS FINANCIAL INCLUSION IN MANADO (CASE STUDY: FEB STUDENTS IN SAM RATULANGI UNIVERSITY MANADO)

PENGARUH PENGGUNAAN TEKNOLOGI KEUANGAN DAN LITERASI KEUANGAN TERHADAP INKLUSI KEUANGAN DI MANADO (STUDI KASUS: MAHASISWA FEB UNIVERSITAS SAMRATULANGI)

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Abstract: Financial Technology is an important factors in ease to use financial service. In using financial technology, people can save their time and effort to obtain the required use of financial products. As well as financial literacy, financial literacy helps to improve the quality of financial service and contribute to the economic growth and development of a country. Individual needs and financial product, people must have financial literacy to manage their personal finance well. The aim of this research is to find out the influence of financial technology use and financial literacy to FEB Unsrat student' financial inclusion. This is a quantitative research and using Multiple Linear Regression as method to analyze the data. The sample size is 100 respondents of FEB students. This research showed that financial technology use and financial literacy simultaneously influence financial inclusion while partially, financial technology use does not have a significant influence to financial inclusion and financial literacy have a significant influence to financial inclusion.

Keyword: *financial technology use, financial literacy, financial inclusion*

Abstrak: *Teknologi keuangan merupakan hal yang sangat penting dalam penggunaan jasa keuangan. Saat menggunakan teknologi keuangan, individu dapat menghemat waktu untuk dapat menggunakan produk keuangan. Sama seperti literasi keuangan juga dapat meningkatkan kualitas penggunaan jasa keuangan dan berkontribusi untuk pertumbuhan dan perkembangan ekonomi dalam suatu Negara. Dengan berkembangnya ekonomi, setiap individu harus terliterasi keuangan untuk mengatur keuangan dengan baik. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh penggunaan teknologi keuangan dan literasi keuangan terhadap inklusi keuangan mahasiswa FEB Unsrat. Penelitian ini mengguakan metode kuantitatif dan metode Regresi Linear Berganda sebagai alat untuk menganalisis data. Besar sampel adalah 100 responden yang adalah mahasiswa FEB. Hasil penelitian ini menunjukan bahwa penggunaan teknologi berpengaruh secara simultan terhadap inklusi keuangan, secara parsial, penggunaan teknologi keuangan dan literasi keuangan tidak berpengaruh secara signifikan terhadap inklusi keuangan.*

Kata Kunci: *penggunaan teknologi keuangan, literasi keuangan, inklusi keuangan*

RESEARCH BACKGROUND

In the current global economic era, individuals must be able to manage careful financial. Because according to financial management it will forming decisions on the use or allocation of funds owned. In Indonesia itself, financial inclusion has been very focused on improved, using the support of continuous financial technology developments penetrated all circles today. Inclusive financial activities are one of the most important agendas in the international world, especially in Indonesia. With the program (National Strategy for Financial Inclusion) SNKI is expected by the whole community especially students can easily access service institution services finance according to your needs.

Financial inclusion index in North Sulawesi is 68.4% and the national average is 67.8%. This means that the figures did not reach the average value expected by the government (OJK). Even though there has been an increase in the last three years, the level of financial inclusion is still very far from the level of financial literacy. This means that people who only use financial products and services are more likely than those who understand and know the existing procedures and regulations. Individuals must have the knowledge and skills to manage their personal finances effectively for their welfare. Financial literacy among students in Indonesia, which only covers 23.4 percent, shows that the use of financial products by students is not balanced with knowledge and understanding in the use of these products, this shows that the level of student literacy in Indonesia is very low. An understanding of Financial Literacy is mandatory for every individual to manage all financial needs which will be useful and which will prosper in the future. People who have financial literacy can make effective use of financial products and services so that individuals will not be easily deceived by people who sell financial products that are not suitable for the portion and needs of the individual (Margaretha, 2017).

The development of information technology in Indonesia is very fast, especially in the use of the internet. The internet penetration rate increased by 64% in early January according to We Are Social, which is a platform that provides data in understanding the internet and social media and e-commerce behavior every year, so that digital and internet-based financial services will be very easily accessible to people in various circles and living area. The existence of financial technology aims to make it easier for people to access financial products, simplify transactions and also increase financial inclusion.

SNLKI on 2016 showed that financial literacy in North Sulawesi is 28.7% which is below the national average 29.7%, while financial inclusion index in North Sulawesi is 68.4% and the national average is 67.8%. This means that the figures did not reach the average value expected by the government (OJK). Based on the background described, the researcher intends to analyze how financial literacy affects inclusion student finance and whether the existence of financial technology will be affect student financial inclusion.

Research Objectives

The research objectives are:

1. To find out the influence of financial technology use and financial literacy towards financial inclusion.
2. To find out the influence of financial technology use towards financial inclusion.
3. To find out the influence of financial literacy towards financial inclusion.
4. To find out the influence of financial technology use and financial literacy towards financial inclusion.

THEORETICAL REVIEW

Financial Technology

According to the National Digital Research Center (NDRC), financial technology is a term used to describe innovations in financial or financial services. Its purpose is to help maximize the use of technology to modify, sharpen or accelerate various aspects of financial services. Financial technology is defined as merging all technical departments used in the financial sector to provide services to its users in the form of buying and selling activities and commercial activities (Ion MICU and Alexandra, 2016).

According to Davis (1989) TAM is an information systems theory designed to explain how users understand and use an information technology (Silva, 2006). TAM defines some factors that influence the acceptance of use of technology, namely:

a) Perceived Usefulness

Perceived usefulness is a level where someone believes that users of a particular system will be able increase the work performance of the person. Based on this definition it can be interpreted that the benefits of using ICT can improve performance, the work performance of the people who use it.

b) Perceived of Ease of Use

Davis (1989) defines ease of use as the degree to which a person believes that the use of the system certain can reduce a person's effort in doing something.

Financial Literacy

According to OECD (2018), financial literacy is about the knowledge and understanding of financial concepts and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial context, to improve the financial well-being of individual and society, and to enable participation in economic life. Financial literacy is defined as a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decision and ultimately achieve individual financial wellbeing (Atkinson & Messy, 2012).

Financial Inclusion

World Bank (2016) defines financial inclusion as access to financial products and services that are useful and affordable in meeting the needs of the community and their businesses, in this case transactions, payments, savings, credit, and insurance which are used responsibly and sustainably. OJK (2016) defines financial inclusion as the availability of access to various financial institutions, products and services according to the needs and abilities of the community in order to improve people's welfare

Previous Studies

Durai (2017) stated that digital finance (internet banking, mobile banking, mobile wallets (apps), credit card and debit card has a significant impact on financial inclusion.

Bire (2019) described the impact of financial literacy towards financial inclusion that mediated by financial training, it focused on Micro, Small, and Medium Enterprises (MSMES) in Kupang, Indonesia. This research showed that financial literacy has a direct and significant impact on financial inclusion.

Nyoman (2020) determined the effect of financial literacy on financial inclusion, financial literacy on financial technology and financial technology on financial inclusion at UMKM in Bandar Lampung. The results of this study have the implication that with good financial literacy, it is expected that UMKM will be able to make the right management and financial decisions to improve business performance and sustainability.

Conceptual Framework

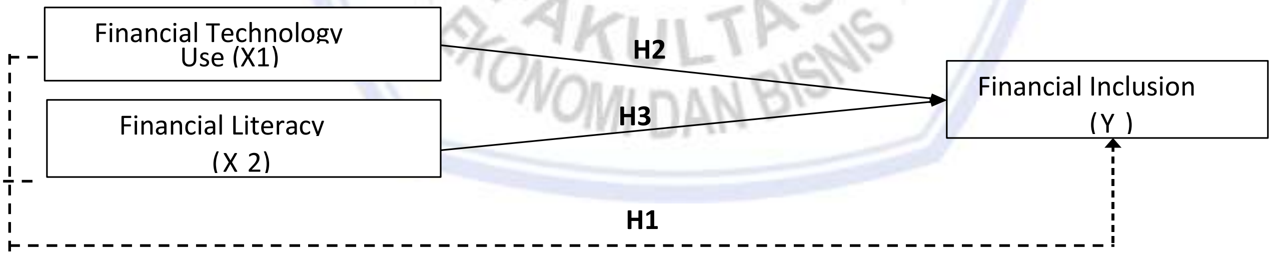

Figure 1. Conceptual Framework

Source: Articles and Journal, 2021

Research Hypothesis

H1: Financial Technology Use and Financial Literacy simultaneously affect the Financial Inclusion.
H2: Financial Technology Use partially affect the Financial Inclusion.
H3: Financial Literacy partially affect the Financial Inclusion.

RESEARCH METHOD

Research Approach

This type of research used in this research is quantitative research method based on the philosophy of positivism, used to research a particular population or sample, sampling techniques are generally carried out randomly, data collection uses research instruments, data analysis is quantitative / statistical in order to test the hypothesis has been determined.

Population, Sample Size, and Sampling Techniques

The population of this study refers to students of The Faculty of Economics and Business at Sam Ratulangi University Manado, totaling 4372 active undergraduate students (Unsrat Dashboard, 2021). Researchers will look for 100 respondents as samples in this study so that the results can be valid. Non Probability Sampling is a sampling technique that does not provide equal opportunities or opportunities for every element or member of the population to be selected as samples.

Data Collection Method

The data collection methods used in this research is questionnaires and literature studies. The statement in the questionnaire will be designed using Likert Scale. Each respondents will have 1 questionnaire for each person, and in that questionnaire researcher will give some statement to be answered.

Operational Definition of Research Variables

Table 1. Variable Definition

Variable	Definition	Indicators
Financial Technology Use (X1)	Innovations in financial services to maximize the use of technology in order to improve various aspects of financial services.	- Perceived of usefulness - Perceived ease of use
Financial Literacy (X2)	A condition when a person have knowledge and understand about financial concepts and skills	- Basic financial knowledge - Credits/borrowing - Investment - Awareness in financial decision - Attitude in financial decision
Financial Inclusion (Y)	A condition when a person get access to financial products and services to improve the welfare	- Saving products - Payment products - Insurance - Product choice - Alternatives formal financial services

Source: Author's Note, 2021

Validity and Reliability

Validity reveals accuracy in a study. In a quantitative research paradigm the validity test is a test used to demonstrate the extent to which a measuring instrument used in a study measures what is to be measured. Reliability in relation to the consistency of precision and thoroughness. Data that is said to be reliable when the data is consistent and demonstrates the accuracy.

Multiple Linear Regression

Multiple linear analysis is used for know how much influence the independent variables (financial literacy and financial technology) on the dependent variable (financial inclusion).

RESULT AND DISCUSSION

Result

Validity and Reliability

The validity test of financial technology use (X1), financial literacy (X2), and financial inclusion (Y) are all valid. The variable is reliable because the value of Cronbach's Alpha are bigger than 0.6.

Multiple Linear Regression

Table 2. Case Processing Summary

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	3.827	2.027		1.888	.062		
	Financial Technology Use	.343	.196	.146	1.749	.083	.829	1.206
	Financial Literacy	.672	.095	.588	7.036	.000	.829	1.206

a. Dependent Variable: Financial Inclusion

Source: Data Processed, 2021

The result from this table above can be shown through the regression equation as follows:

$$Y = \mathbf{3.827 + 0.\ 343\ X_1 + 0.\ 672X_2 + e}$$

The interpretation of the equation is:

1. The constant shows value of 3.827 means in this condition, all the independent variables should not below or equals to zero.
2. Regression coefficient of Financial Technology Use (X1) is 0.343 means that if there is one unit increase in Financial Technology Use (X1), then the Financial Inclusion (Y) is increasing by 0.343 assuming the other variables are constant (ceteris paribus).
3. Regression coefficient of Financial Literacy (X2) is 0.672 means that if there is one unit increase in Financial Literacy (X2), then the Financial Inclusion (Y) is increasing by 0.672 assuming the other variables are constant (ceteris paribus).

Classical Assumption Test

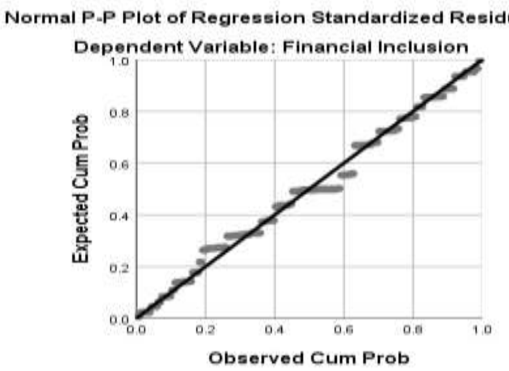

Figure 1. Normality Test

Source: Data Processed, 2021

Figure 1 shows the result of Normal Probability Plot of this research. This figure shows that the dots spread near the line and follow the diagonal line of Normal P-Plot. It means that the distribution of this data in this research is normally distributed.

Table 3. Multicollinearity Test

Model	**Collinearity Statistics Tolerance**	**VIF**	**Status**
Financial Technology Use	0.829	1.206	No Multicollinearity
Financial Literacy	0.829	1.206	No Multicollinearity

Source: Data Processed, 2021

Table 3 shows the result of Multicollinearity test using Variance Inflation Factor (VIF). The tolerance of two independents variable that are Financial Technology Use (X1) and Financial Literacy (X2) are same that is 0.829 and also the value of Variance Inflation Factor (VIF) is 1.206.

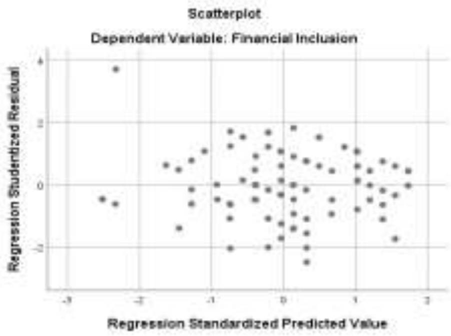

Figure 2. Heteroscedacity Test
Source: Data Processed, 2021

Figure 2 shows the result of heteroscedasticity test using scatterplot the dots in the scatterplot spread above and below 0 in Y axis and not form in a clear pattern. It means that there is no heteroscedasticity in this regression model and can be used to predict the influence between dependent variable and independent variables.

Table 4. F-Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	360.199	2	180.099	37.810	.000[b]
	Residual	462.041	97	4.763		
	Total	822.240	99			

Source: Data Processed, 2021

Based on the result, it shows that Financial Technology Use (X1) and Financial Literacy (X2) as independent variables have significant influence simultaneously on Financial Inclusion (Y) as dependent variable. The first hypothesis that states Financial Technology Use (X1) and Financial Literacy (X2) have significant influence to Financial Inclusion (Y) simultaneously accepted.

Table 5. T-Test

Variable	T_{count}	Tt_{able}	Description
Financial Technology Use (X1)	1.749	1.984	Rejected
Financial Literacy (X2)	7.036	1.984	Accepted

Source: Data Processed, 2021

Based on the table above by observing rows and columns t and sig, it can be explained as follows:

1. Financial Technology Use (X1) does not significantly influences Financial Inclusion (Y). From the table above, Tcount for each independent variable, which for Financial Technlogy Use (X1) Tcount = 1.749 and Ttable = 1.984 which Tcount < Ttable . Therefore, H0 is accepted and H1 rejected, that means Financial Technology Use (X1) has positive but not significantly influence Financial Inclusion (Y).
2. Financial Literacy (X2) has positive and significantly influences Financial Inclusion (Y). From the table above, Tcount for each independent variable, which for Financial Literacy (X2) Tcount = 7.036 and Ttable = 1.984 which Tcount > Ttable. Therefore, H2 is accepted and H0 rejected, that Financial Literacy (X2) significantly influence Financial Inclusion (Y).

In general, Financial Technology Use (X1) has a positive but not significant influences to Financial Inclusion (Y) and Financial Literacy (X2) has positive and significant influences to Financial Inclusion (Y).

Discussion

The result shows Financial Technology use and Financial Literacy as independent variables have significant effect simultaneously on Financial Inclusion (Y) as dependent variable. Based on the results of regression analysis in terms of financial literacy and financial technology, a positive and significant effect on financial inclusion for the people of North Sulawesi Simultaneously financial literacy and financial technology affect financial inclusion, having a significant effect at a significant level of 5 % the most dominant variable affects financial inclusion is financial literacy. The results of this study can explain that the higher the number of people who use digital-based financial services, it turns out that they do not support the achievement of the implementation of financial inclusion by the government. Faculty of Economic and Business students still has not using the financial technology as the simple ways for their transactions. Most of them are lack of understanding in using financial technology features. They prefer to make every transaction with cash conventionally. They feels that when they pay directly, it can be more accurate than to pay using technology. Also they prefer to save their money in their pocket that to save in a financial services online. The system arrangement of financial technology were not effective not because the benefits and the advantage that they can get, but they have to get more education about how to use Financial Technology well. As one of the drivers of financial technology innovation, CICIL optimistically supports financial literacy and inclusion in order to advance economic conditions in Indonesia, which is demonstrated through active participation in 2020. Focusing on students, CICIL believes that Indonesian students who are smart and innovative can be the generation of drivers for change in financial inclusion. Faculty of Economic and Business Sam Ratulangi University students are understand and already have knowledge about financial concepts and skill also. This research is using 7 indicators adapted from some theories in previous research such as Basic Financial Knowledge, Savings, Credits/Borrowing, Insurance, Investments, and Awareness in Financial Decision and Attitude in Financial Decision. From this research, students can answer each of questions well and calculated as highest point. In this study states that Financial Literacy has a positive and significant effect on Financial Inclusion, so that Financial Literacy has a significant influence on Financial Inclusion so that it needs to be improved by increasing understanding and skills regarding managing finances in the future, so that students can be pioneers and saviors for future economic development.

CONCLUSION AND RECOMMENDATION

Conclusions

1. Simultaneously, Financial Technology Use and Financial Literacy influence Financial Inclusion. It means this two variables can give influence to students in Faculty of Economics and Business, Sam Ratulangi University Manado together for their Financial Inclusion.
2. Students in Faculty of Economics and Business, Sam Ratulangi University Manado still cannot attached Financial Technology Use to have Financial Inclusion.
3. Students in the Faculty of Economics and Business, University of Sam Ratulangi Manado have built positive Financial Literacy to have financial inclusion.

Recommendations

1. Sam Ratulangi University, especially in Faculty of Economic and Business should consider about students' knowledge of all financial concepts, not just theory but how to use it properly in everyday life. The Faculty should make some events such as webinar education about the important things to know about finance and also the use of financial technology that can be attended by all students via online to increase the level of student knowledge.
2. Sam Ratulangi University, especially in Faculty of Economic and Business should consider about the current development that involve technology. The Faculty have to make events in order to increase Financial Technology Use to students, like webinar which presented people from Financial Technology companies as resource persons to provide material and knowledge about the importance of using Financial Technology for young people. Also, students have to find out by their-selves about how to use Financial Technology products in order to fulfil their needs and make every transaction easily.
3. Sam Ratulangi University, especially in Faculty of Economic and Business should consider about the course and other endeavors in order to increase student’ knowledge and skills. Students have to understand about all of finance concept, especially students in Faculty of Economic and Business because they have to be able have skills in order to share finance education with people around them. Because Financial Literacy has a positive effect on Financial Inclusion, it is advisable to the Financial Services Authority (OJK) to continue using the strategy that is being implemented in increasing literacy students, so that students can avoid things that will be economically detrimental in the future.

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