

Analysis of the Influence of Financial Literacy on Financial Behavior Using Financial Technology as an Intervening Factor for Mekaar PNM Customers

Melki Bobby Veronica^{1*}, Acong Dewantoro Marsono²

Institute Perbanas Jakarta

Corresponding Author: Melki Bobby Veronica

melkibobbyveronica@gmail.com

ARTICLE INFO

Keywords: Financial Literacy, Financial Behavior, Financial Technology

Received : 5 July

Revised : 19 July

Accepted: 22 August

©2023 Veronica, Marsono: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

Madani National Capital (PNM) was established as an effort taken by the government to become a financial management institution in advancing, maintaining and developing Micro, Small and Medium Enterprises (MSMEs). PNM is an institution that provides training for micro-entrepreneurs and is a strategic solution for the government to develop access to capital throughout Indonesia. PNM is expected to be able to become a financial institution that can create independent and resilient customers with one hundred percent of the shares held by the government. Financial literacy can be understood as knowledge, skills and beliefs that influence attitudes and behavior to improve the quality of decision making and financial management in an effort to achieve prosperity. Simply put, financial literacy is the ability to understand and apply effectively a wide range of financial skills, including personal finance management, budgeting and investing. A strong financial literacy foundation can support various life goals, such as saving for education and retirement, managing money productively, running a business, and being selective and using debt responsibly. People who have a high level of financial literacy, meaning they are financially literate, so they are not too vulnerable to financial fraud. Conversely, people with low financial literacy are referred to as people who are financially illiterate, so they are easily influenced and trapped in financial fraud. In conducting this research, the population was all Mekaar PNM customers in 5 Mekaar PNM units, 3 units in urban areas and 2 units in rural areas, totaling 15,549 customers

INTRODUCTION

Economic conditions in a country are influenced by various factors, one of which is the development of financial institutions (Chow et al., 2018)¹. The financial sector has contributed significantly in triggering a country's economic growth. The financial sector is the locomotive for growth in the real sector through capital accumulation and innovation in technology. More precisely, the financial sector is able to mobilize savings. This allows a household to smooth consumption capacity, increase the amount of savings, and accumulate human capital (Emara & El Said, 2021). There are four contributions of the financial sector that are good for the economy, namely reducing risk, mobilizing savings, reducing transaction and information costs, and encouraging specialization. The financial sector through this role is able to generate accumulation of capital and innovation in technology to improve the economy.

Therefore, the World Bank suggests the importance of policies that can encourage improvements in the financial sector in various countries so that they achieve financial inclusion. The higher the level of inclusion in public finances will have an influence on the way finances are managed and made decisions about finance and financial services, so that it can support an increase in the national financial sector which will lead to an increase in the economy of a country. This is in line with global goals Sustainable Development Goals (SDG's), including regarding sustainable and inclusive economic improvement, employment and decent work, poverty alleviation, and reducing social inequality.

According to Bank Indonesia Regulation Number 19/12/PBI/2017, FinTech is "The use of financial system technology that produces new products, services, technology and business models and can have an impact on monetary stability, financial system stability, efficiency, smoothness, security and payment system reliability". FinTech is the latest innovation or breakthrough that provides convenience and comfort for people in the financial sector, because people can make transactions only with smartphones and the internet. Financial Technology (FinTech) is a term used to describe companies that offer the latest technology in the field of finance. These companies have been around since 2010. FinTech companies are mostly micro, small, or medium-sized companies that don't have much equity, but have a clear idea of how to introduce new innovations to improve existing services in the financial services market (Svetlana Saksonova and Iriana Kuzmina Merlino, 2017;961).

Madani National Capital, namely government-owned SOEs that have a role in providing financing solutions to Micro, Small, Medium Enterprises and Cooperatives (MSMEs) based on business feasibility capabilities in basic economic principles. PNM Mekaar is a work program that has the goal of guiding and improving the welfare of the community in order to achieve a better standard of living. Services in management at PNM Mekaar are more specifically for women micro entrepreneurs with group-based services or joint responsibility without collateral with the intention of being able to be a solution to problems with access to finance to run their businesses, so that customers expect to be able

to develop and run their businesses and ultimately change the economy in the household.

Financial Behavior

Financial behavior (Financial behavior) is related to the purpose of using products and efforts to achieve financial goals (Soetiono and Setiawan, 2018:47). Behavioral Finance is a scientific discipline in which the interaction of various disciplines is inherent and continuously integrated so that the discussion is not carried out in isolation. It can be concluded that a science that studies how humans respond and react to existing information in an effort to make decisions that can optimize returns by taking into account the risks inherent in them (Landang et al.,2021).

According to Shefrin (2000), financial behavior is a study that studies how psychological phenomena affect financial behavior. According to Suryanto (2017), financial behavior explains how a person treats, manages and uses the financial resources he has. According to Nababan and Sadalia, (2012: 5), financial behavior relates to how a person treats, manages, and uses financial resources and tends to be effectively responsible for using the money he has.

Financial behavior (financial behavior) relates to a person's financial responsibilities related to the way finances are managed (Pulungan, 2020). Financial behavior is a person's ability to organize (planning, budgeting, checking, managing, controlling, disbursing and storage) of daily financial funds (Arianti, 2020). From here, the authors conclude that financial behavior is the attitude or behavior of individuals in managing their finances so that they are managed properly.

Factors that influence financial behavior in his journal (Alfida, 2018) are as follows:

1. Financial Knowledge

Financial knowledge or financial literacy is one's mastery over various things about the financial world, Kholilah (2013).

2. Financial Attitude

Financial attitude refers to how a person feels about personal financial problems as measured by responses or an opinion statement, Marsh in Herdjiono (2016).

3. Locus of Control

Locus of Control Is a person's perspective on an event whether he can or cannot control the events that happen to him, Rotter in Baker et al (2017; 28).

Factors that influence financial behavior in his journal (Laily, 2016) this theory shows that background such as gender, age, experience, knowledge will influence a person's belief in something which will ultimately affect that person's behavior. Gender was identified as one of the factors that influence students' financial behavior.

Financial Literacy

Knowledge of finance or financial literacy Good is a basic need for every individual. The benefit of having knowledge is that individuals have good financial planning and avoid financial problems, (Widayanti et al., 2017).

Financial difficulties are not caused by income alone (low income), financial difficulties can also arise if there are mistakes in financial management such as misuse of credit, lack of financial planning and lack of savings. So having high financial literacy is vital to get a prosperous life, (Akmal & Saputra, 2019).

More family financial difficulties are caused by family members who do not have the knowledge and expertise to manage their personal finances properly, which has an impact on their health and well-being physically or spiritually. A good level of financial literacy will provide future prosperity for individuals and families.

According to the Regulation of the Financial Services Authority (OJK) No. 76 year 2016 Financial Literacy is a series of processes or activities to increase knowledge, competence, and skills of consumers and the general public so that they are able to manage finances better. Financial literacy includes financial management, types and service industries finance, profits, costs, risks, financial products and services, financial products and services, customer rights and obligations, and trading mechanisms for financial products and services. Given the increasing number of investment products, financial knowledge is very important in the decision-making process.

Financial Technology

Information technology is now a necessity and is part of the process of activities that are inseparable in human life, the development of information technology has a significant impact on people's lives, both individuals and organizations. Information technology in the financial sector is used to help people access financial products and services. Innovation in information technology provides opportunities for us to carry out financial activities anywhere, anytime, easily and safely. Information technology innovation in the field of financial services is FinTech or Financial Technology which means innovation in providing financial services (Wiyono & Kirana, 2020). According to the Financial Services Authority (OJK) Financial Technology is an innovation in the financial services industry that utilizes the use of technology.

In presenting the understanding of Financial Technology there are several alhi who have their views contained in Rahadi's book (2020: 9), as follows:

1. Wilson (2017) found that financial technology is a company that uses technology to generate revenue through financial services for customers.
2. Financial Stability Board (FSB), (2017) FinTech is also defined as technological innovation in financial services that can produce business models, applications, processes or products with material effects related to the provision of financial services.
3. McKinsey (2016) argues that fintech or digital finance as financial services supported by digital infrastructure, including cellular phones and the internet. Term FinTech or Financial Technology is a combination of financial management using a technology system. FinTech has become a concern of the community because this service provides many service features to make it easier from a financial perspective, such as being used in cooperative financial institutions, banking and insurance. Financial

Technology or known as fintech is the replacement of cash into non-cash by using the application.

Research Hypothesis

The Effect of Financial Literacy on Financial Behavior

Financial literacy shows how individuals know the facts and understanding used to manage personal finances so that they are successful in managing finances well (Garman and Fogue, 2000). With financial literacy, individuals will have the provisions to survive in modern society (Sabri, 2011).

Financial Literacy has a positive effect on financial behavior. This is in line with research conducted by Asmer Vovrianto Situmeang (2020). The results showed that the financial behavior of students of the Faculty of Economics and Business, University of North Sumatra, was included in the good category, because there are still many students who are aware of the importance of knowledge about finance in everyday life to be able to manage finances, adjust the budget to the needs and money or income they have. Financial literacy has a significant positive effect on the financial behavior of students at the Faculty of Economics and Business, University of North Sumatra. Based on the theoretical studies and previous research, a hypothesis is proposed

H1: Financial Literacy has a significant positive effect on Financial Behavior of PNM Mekaar Customers.

The Effect of Financial Literacy on Financial Technology Financial

knowledge is an integral dimension of financial literacy. Financial literacy occurs when individuals act by knowing the facts and understanding needed to manage personal finances so they can manage finances well (Sabri, 2011).

Financial Literacy has a positive effect on Financial Technology. This is in line with research conducted by Rizki Miftahur Rohmah and Tri Gunarsih (2021). This research implies that increasing financial inclusion can be done by increasing financial literacy and using fintech. Based on theoretical studies and previous research, the hypothesis is proposed:

H2: Financial Literacy has a significant positive effect on Financial Technology To PNM Mekaar Customers.

The Influence of Financial Technology on Financial Behavior

Financial behavior is the attitude and behavior of a person in managing their finances (Hira and Mugenda, 1999). Financial satisfaction can be measured through one's perspective on satisfaction from income received, the ability to overcome financial problems, the ability to meet basic needs, the level of debt held, the amount of savings, the availability of money for future needs, and the purpose of life (Hira and Mugenda, 1998).

Financial Technology negative effect on financial behavior. This is in line with research conducted by Brigitta Azalea Pulo Tukan, Wahyudi, and Pinem (2020). The results of this study indicate that financial technology has no influence and is not significant on financial behavior. Based on theoretical studies and previous research, the hypothesis is proposed:

H3: Financial Technology negative effect on behaviour Finance for PNM Mekaar Customers.

Effect of Financial Literacy on Financial Behavior Through Financial Technology

Financial knowledge is an integral dimension of financial literacy. Financial literacy occurs when individuals act by knowing the facts and understanding needed to manage personal finances so they can manage finances well (Sabri, 2011).

Financial literacy has a positive influence on financial behavior, this is in line with previous research conducted by Hilgert et.al (2003) which states that someone who has high financial literacy tends to have a positive influence on his financial behavior. Based on theoretical studies and previous research then the hypothesis is proposed:

H4: Financial Literacy has a Significant Positive Effect on Financial Behavior Through Financial Technology to Mekaar PNM Customers

Thinking Framework

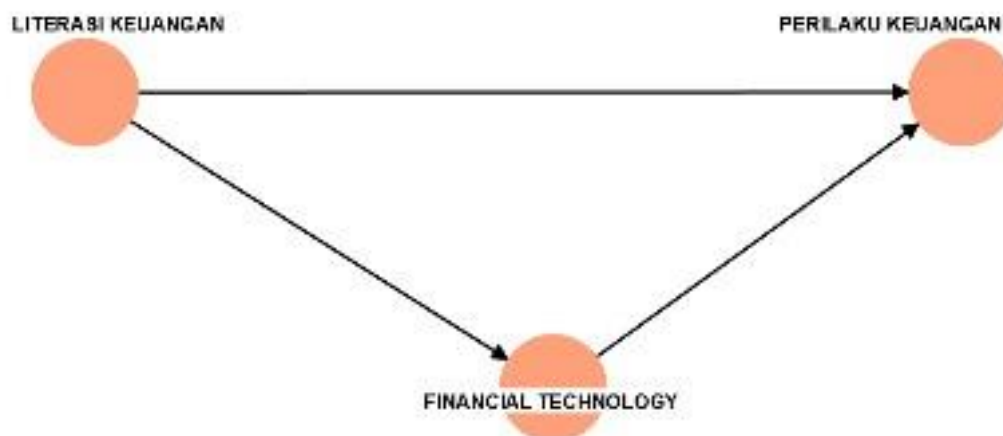


Figure 1. Thinking Framework

In order for the concept to be examined empirically, it must be operationalized by turning it into a variable. Based on the operational research concept, there are two research variables used, namely as follows:

1. Independent Variables (Independent Variable) X

According to Sugiyono (2019: 69), states that variables independent often referred to as variables stimulus, predictor, antecedent. In Indonesian it is often referred to as the independent variable. The independent variable is a variable that influences or causes changes or causes the dependent variable to arise (dependent). Independent variable (independent) in this study is Financial Literacy (1) and Financial Technology (2).

2. Dependent Variable (Dependent Variable) AND

According to Sugiyono (2019: 69), states that variables dependent as a variable output, criterion, consequence. In Indonesian it is often called the dependent variable. The dependent variable is the variable that is affected or becomes the result, because of the independent variables (independent). Dependent variable (Dependent) in this study is Behavioral Finance Nasabah PNM Mekaar.

RESEARCH RESULTS AND DISCUSSION

In the first stage in the evaluation or assessing Outer Model ie with Convergent Validity, Convergent Validity from a measurement model with reflective indicators assessed based on the correlation between the item Score/Component Score estimated using software SmartPLS 4. A separate reflective measure is said to be high if it correlates more than 0.70 with the construct being measured. In this study, the initial stage of developing a measurement scale for a loading value of 0.5 to 0.6 is still considered sufficient. According to Ghozali Latan, (2015) said that for the initial stage of assessment the reflective measure is said to be high if it correlates > 0.70 with the construct you want to measure. However, for research in the early stages of developing a measurement scale, a loading value of 0.5 to 0.6 is considered sufficient.

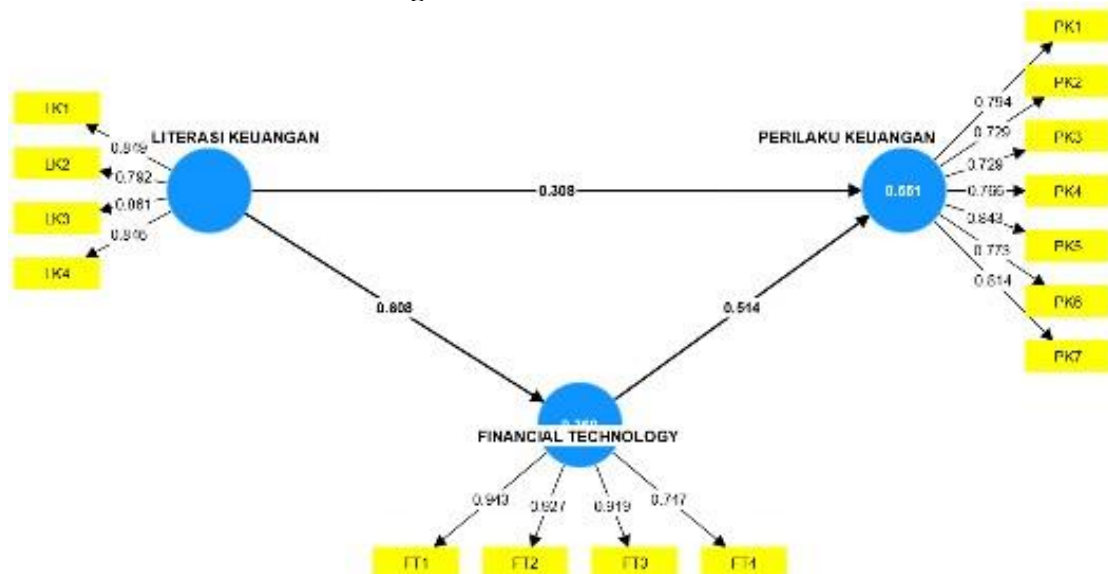


Figure 2. Outer Financial Literacy Variable Model, Financial Technology and Financial Behavior

Figure above carried out the first stage of statistical testing by testing the validity and reliability followed by testing the hypothesis using Software SmartPLS 4.0 for Windows. Based on pictures 5.2 shows the specification model between latent variables with their respective indicators with values Outer Loading.

DISCUSSION

Discriminant Validity used to ensure that each concept in each latent variable is different from other variables. models have Discriminant Validity which is good if each loading value of each indicator on a latent variable has a large value compared to the loading value on other variables. In this study, the results of calculations or testing Discriminant Validity obtained namely:

Table 1. Cross Loading Financial Literacy Variable, Financial Technology, and Financial Behavior

	Financial Technology	Financial Literacy	Financial Behavior
FT1	0.943	0.500	0.660
FT2	0.927	0.666	0.676
FT3	0.919	0.568	0.561
FT4	0.747	0.391	0.582
LK1	0.522	0.849	0.470
LK2	0.416	0.792	0.590
LK3	0.551	0.861	0.514
LK4	0.543	0.607	0.502
PK1	0.671	0.370	0.794
PK2	0.496	0.607	0.729
PK3	0.440	0.445	0.729
PK4	0.444	0.342	0.766
PK5	0.621	0.609	0.843
PK6	0.548	0.506	0.773
PK7	0.526	0.404	0.814

Based on table above, it shows that each indicators on research variables have valuecross loading the largest in the variable it forms, compared to the valuecross loading in other variables. The results obtained, it can be stated that the indicators used in this study haveDiscriminant Validity good at setting up its own variables.

Hypothesis Testing

Based on the data processing performed, the results can be used to answer the hypothesis in this study. Hypothesis testing is done by looking at the value-t-statistics and valueP-values. The hypothesis in this study can be declared accepted if the results are in accordance withRule of Thumb, Ifp-value under 0.05 agot-statistic 1.96. The following is a table of calculations fromResult For Inner Weights Presenting the value calculation from the direct linkage hypothesis as follows:

Table 2. Result for Inner Weights Hypothesis Research

	Original Sampel	Sample Mean	Standard Deviation (SDTEV)	T Statistics	P Value
Financial Technology -> Financial Behavior	0.514	0.522	0.063	8.146	0.000
Financial Literacy -> Financial Technology	0.608	0.619	0.067	9.029	0.000
Financial Literacy -> Financial Behavior	0.306	0.309	0.059	5.258	0.000

While Calculations from Result For Inner Weights Presenting the Calculation of the Value of the Indirect Linkage Hypothesis as follows:

Table 3. Result for Inner Weights Hypothesis Research

	Original Sampel	Sample Mean	Standard Deviation (SDTEV)	T Statistics	P Value
Financial Literacy -> Financial Behavior	0.312	0.323	0.049	6.305	0.000

Based on the data that has been processed using PLS, each relationship that has been hypothesized is carried out using a simulation. In this case, the bootstrap method was carried out on the sample. With bootstrap testing intended to minimize problems with abnormal data in research.

Based on the hypothesis testing that has been done, the result is that the financial literacy variable has a positive and significant effect on the financial behavior variable. Likewise with variables are variables financial technology also has a positive and significant influence on financial behavior variables. The following is an explanation of the research results:

The Effect of Financial Literacy Variables on Financial Behavior

The effect of financial literacy variables on financial behavior Based on the research results show that financial literacy has a positive and significant effect on financial behavior. This is evidenced by the path coefficient value which is positive of 0.308 and the value (T-statistic) of 5.258 > 1.96 (T-table) and the value P-Values 0,001 < 0.05. The results of the study stated that the majority customer PNM Mekaar have good general knowledge of personal finance, savings and loans, investments and insurance. So in this study it can be said that the higher the level of financial literacy customer PNM Mekaar, the better the financial behavior customer PNM Mekaar. So that it can be said that if a customer has a low level of financial literacy, then he will face problems finance in his life, because financial literacy plays an important role in improving one's behavior. Moreover, a customer whose majority is married tends to have more diverse needs and must be met with income which may be said to be limited, so that financial literacy is needed to form good financial behavior in order to avoid financial difficulties and achieve financial prosperity in life customers. Financial literacy can include some knowledge about savings, insurance, debt, investment and others that can affect one's behavior in financial matters. One can be wiser in behaving in financial matters if one can know more and more about the elements

of finance. The results of this study are supported by the research of Badrus Sholeh, (2019) and Asmer Novrianto Situmeang, (2020) stating that financial literacy has a significant positive effect on financial behavior.

Effect of Financial Literacy on Financial Technology

Effect of Financial Literacy on Financial Technology Based on the research results show that financial literacy has a positive and significant effect on financial technology. This is evidenced by the path coefficient value which is positive of 0.608 and the value (T-statistic) of $9.029 > 1.96$ (T-table) and the value P-Values $0,001 < 0.05$. The results of the study stated that the majority customer PNM Mekaar have good general knowledge of personal finance, savings and loans, investments and insurance. So in this study it can be said that the higher the level of financial literacy customer PNM Mekaar, the better the usability financial technology PNM Mekaar customers. So that it can be said that if a customer has a low level of financial literacy, he will face problems in using financial technology in his life, because financial literacy plays an important role in improving one's abilities. Moreover, a customer whose majority are married tends to have more diverse needs and must be met with income which may be said to be limited, so that financial literacy is needed to form a person's ability to use good financial technology in order to avoid financial difficulties and be able to achieve financial well-being in life customers. Financial literacy can include some knowledge about savings, insurance, debt, investment and others that can affect a person's ability to use it Financial Technology. One can become wiser in behaving in financial matters if one can know more and more about the elements in financial technology. The results of this study are supported by this which is in line with research conducted by Rizki Miftahur Rohmah and Tri Gunarsih (2021) which states that financial literacy has a significant positive effect on financial technology.

Effect of Financial Technology on Financial Behavior

Based on the research results show that financial technology positive and significant effect on financial behavior. This is evidenced by value the path coefficient is positive at 0.514 and the value (T-statistic) is $8.146 > 1.96$ (T-table) and the value P-Values $0,000 < 0.05$. The results are due to understanding and use customer financial technology PNM Mekaar is optimal, because customers PNM Mekaar always uses one of the products fintech to do his job. Presence financial technology also has positive and negative impacts. The positive impact is that it is easier for someone to access financial services and products only through smartphone/gadget owned and can optimize its use because it has a more affordable cost in providing convenience during transactions, investments, savings and loan activities and savings. Meanwhile, the negative impact is that the more convenience it provides in the field of transactions, a person will become consumptive because they don't feel like spending money physically. Financial Technology is a new innovation in financial services that adapts to technological developments (David lee, and Dinda Low, 2018: 1). Fintech is an innovation that provides convenience and comfort for people in the financial sector, because people can make transactions only with smartphones and the internet. A person's financial behavior will

definitely be affected by their presence fintech which makes it easier for the person to carry out financial transactions. The results of this study are supported by the research of Nadya Ramadhani S and Debbi Chyntia Ovami (2021) which state that financial technology has a positive and significant effect on the financial behavior of the millennial generation. And the results of this study are different from the results of research by Brigitta Azalea Pulo Tukan (2019), which states that financial technology No influence financial behavior because understanding and use are still not optimal, which can cause a person to experience bad financial behavior.

Effect of Financial Literacy Variables on Financial Behavior Through Financial Technology

Based on the research results show that financial technology positive and significant effect on financial behavior. This is evidenced by the positive path coefficient value of 0.312 and the value (T-statistic) of 6.305 > 1.96 (T-table) and the value P-Values 0,000 < 0.05. These results are due to the level of financial literacy and understanding and usage customer financial technology PNM Mekaar is optimal, because customers PNM Mekaar always uses one of the products fintech to do his job. There is a level of financial literacy and presence financial technology also has positive and negative impacts. The influence of financial literacy affects a person's ability to use and understand the concept of financial technology because good financial literacy will provide a person's basic understanding of the financial system which of course is also used as a basis for making financial technology by a developer. So that the level of financial literacy will increasingly influence a person's financial behavior even through financial technology.

CONCLUSION

This study aims to determine the effect of financial literacy and financial technology on the financial behavior of PNM Mekaar customers in the Pematangsiantar branch. Based on the analysis and discussion carried out with multiple linear regression, it can be concluded as follows:

1. The Financial Literacy variable has a positive effect significant to Financial Behavior . This shows that the better the financial literacy, the better the financial behavior. So it can be said that if a customer has a low level of financial literacy, he will face financial problems in his life.
2. Variables Financial technology positive effect significant to Financial Behavior. This means that if fintech is getting better, it will also improve financial behavior. This is due to understanding and use financial technology customer of PNM Mekaar which is maximal.
3. The Financial Literacy variable has a positive effect significant to Financial Technology. This shows that if financial literacy is better, a person's ability to use financial technology will increase. So that it can be said that if a customer has a low level of financial literacy, he will face difficulties in using fintech in his life.
4. The Financial Literacy variable has a positive effect significant through financial technology to Financial Behavior. This shows that the better the

financial literacy, the better the financial behavior. So it can be said that if a customer has a low level of financial literacy and a minimal level of financial technology ability, then he will face financial problems in his life.

SUGGESTION

Based on the research conducted, the researcher can conclude the following suggestions:

1. Researchers hope for the future customer PNM Mekaar Pematangsiantar Branch, to maintain or increase knowledge of financial literacy and financial technology order financial behavior customers get better and avoid irresponsible financial behavior.
2. For the PNM Mekaar company, it is expected to add insight regarding financial literacy to customer PNM Mekaar to avoid bad financial behavior and improve living standards customer PNM Mekaar.
3. This research was only conducted in group customer PNM Mekaar Pematangsiantar Branch, it is hoped that for future researchers who will examine financial literacy, financial technology, and financial behavior to be able to develop more existing indicators and add other variables so as to get better results.

FURTHER STUDY

This research still has limitations, so it is necessary to carry out further research related to the topic Analysis of the Influence of Financial Literacy on Financial Behavior Using Financial Technology as an Intervening Factor in order to improve this research and add insight to readers.

REFERENCES

- Abdillah, Willy & Jogiyanto. (2015). *Partial Least Square (PLS)*. Yogyakarta: Andi Offset
- Arianti, B.F. (2020). *The Influence of Income and Financial Behavior on Financial Literacy Through Investment Decisions as Intervening Variables*. *Journal of Accounting*, 10(1), 13-36.
- Alfida, K.N. (2018). *The Influence of Financial Knowledge, Financial Attitude and Locus of Control on Financial Management Behavior of Traders in Pasar Baru Gresik*. *Muhammadiyah Gresik University*, 7, 3-9.
- Akmal, H., & Saputra, Y. E. (2019). *Financial Literacy Level Analysis*. *SSRN Electronic Journal*, 5(564), 1-19.
- Arsanti, C., & Riyadi, S. 2018. *Analysis of the Influence of Financial Literacy on Student Financial Behavior (Case Study of Perbanas Institute Students, Faculty of Economics and Business)*. *E-Journal*, Vol. 3 (No. 2).
- Azuar Juliandi, Irfan, and Saprina Manurung. 2014. *Business Research Methodology: Concepts and Applications*. Medan: UMSU Press.
- Bank Indonesia. (2017). *Bank Indonesia Regulation No.19/12/PBI/2017 concerning Implementation of Financial Technology*.
- Budiono, Tania. 2014. *The Linkage of Financial Attitude, Financial Behavior & Financial Knowledge to Undergraduate Students at Atmajaya University*, Yogyakarta. Yogyakarta: Atmajaya University.

- Chancellor, Dias. 2015. Undiksha Economic Education. Department of Economic Education, Faculty of Economics and Business, Ganesha University of Education, Singaraja, Indonesia. *Undiksha Journal of Economic Education*, 5(1).
- Erlangga, M. Y., Krisnawati, A., Bisnis, P. M., & Telkom, U. (2017). Effect of Fintech Payment on Behavior. 53–62.
- Financial Stability Board (FSB, 2017a). *FinTech credit : Market structure, business models and financial stability implications*. May 2017
- Gunawan, H. (2018). The Fintech Startup Phenomenon and Its Implications. *Swara Patra*, 8(4), 44–55.
- Ghozali, Imam, Hengky Latan. 2015. *Concepts, Techniques, Applications Using Smart PLS 3.0 for Empirical Research*. BP Undip. Semarang
- Ghozali, I. (2015). *Partial Least Squares Concepts, Techniques and Applications Using the SmartPLS 3.0 Program for Empirical Research* (2nd ed.). Publishing Agency-Undip.
- Handi, Andhika Kusuma and Linda Ariany Mahastanti. (2012). Behavioral use of money: does it differ for gender and financial difficulty. Satya Wacana Christian University.
- Huston, S. J. (2010). Measuring Financial Literacy. *The Journal Of Consumer Affairs*, 44(2), 296–316.
- Henry Simamora. 2013. *Consumer Behavior Guide*, Jakarta: Gramedia.
- Kholilah Naila Al, Iramani Rr. 2013. Study of Financial Management Behavior in Surabaya Society, *Journal of Business and Banking* Volume 3, No. 1: 69 – 80.
- Laily, N. 2016. The Effect of Financial Literacy on Student Behavior in Managing Finance. *Journal of Accounting and Business Education*, 1(4).
- Latifiana, D. (2017). Study of Financial Literacy of Small and Medium Enterprises (UKM) Managers. *Study of Financial Literacy of Small and Medium Enterprises (MSMEs) Managers*, 5(1), 5.
- Lusardi, A dan O.S. Mitchell. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, 52(1), 5-44.
- Landang, R. D., Widnyana, I. W., & Sukadana, I. W. (2021). The Influence of Financial Literacy, Financial Behavior, and Income on Investment Decisions. *EMAS Journal*, 2, 51–70.
- Marsh, Brent A. 2006. *Examining the personal financial attitudes, behavior and knowledge levels of first-year and senior students at Baptist Universities in the State of Texas*. Bowling Green State University
- Margareth Farah and Pambudhi Reza Arif 2015, Level of Financial Literacy in Undergraduate Students, Faculty of Economics, *Journal of Management and Entrepreneurship*, Vo. 17 No. 1, March 2012, p. 76–86.
- McKinsey & Company. 2016. *Unlocking Indonesia's Digital Opportunity*. Oktober 2016.
- Miswan, A. (2019). The Development and Impact of Financial Technology (Fintech) on the Islamic Financial Industry in Central Java. *Islamic Forum: Journal of Islamic Studies*, 5(1), 38.

- Nababan, D., and Sadalia, I. (2012). Personal Financial Literacy Analysis and Financial Behavior of Undergraduate Students, Faculty of Economics, University of North Sumatra. *Student Scientific Journal*, 1 - 16.
- Nizar, M. A. (2017). Financial Technology (Fintech): It ' s Concept and Implementation in Indonesia. *Munich Personal RePEc Archive*, V(98486), 15.
- Orton, L. 2007. *Financial Literacy : Lesson From International Experience*, CPRN Research Report.
- Financial Services Authority. (2017). *Indonesia's National Strategy for Financial Literacy (Revisit 2017)*.
- Financial Services Authority. (2016). OJK Law. *Financial Services Authority Regulation*, 53(9), 1689-1699.
- Financial Services Authority Regulation No 76//POJK.07/2016 concerning Increasing Financial Literacy and Inclusion in the Financial Services Sector for Consumers and/or the Community.
- Palinggi, S., & Allolinggi, L. R. (2020). Descriptive Analysis of the Fintech Industry in Indonesia: Network Regulation and Security in a Digital Technology Perspective. *Economics And Business*, 6(2), 177.
- Pulungan, D.R. (2020). Analysis of students' financial behavior that is influenced by financial literacy and parental income. *Plantation Cultivation, STIPER Plantation Agribusiness*, 162-173.
- Ricciardi, V. and Simon, H. K. (2000). What is Behavior Finance?. *Business, Education and Technology Journal* Fall 2000, hlm. 1-5.
- Rahma, T. I. F. (2018). Medan City Community Perceptions of the Use of Financial Technology (FINTECH). *At-Tawassuth*, 3(1), 648.
- Rahadi, Deddy. 2020. *Financial Technology*. Palembang: PT. Filda Fikrindo.
- Sunariyah. 2014. *Introduction to Capital Market Knowledge*. Yogyakarta: (UPP) AMP YKPN.
- Sari, D.A. (2015). Finalcial Literacy and Student Financial Behavior. *Business & Management Bulletin*, 01(02), 171-189.
- Soetiono, Kusumaningtuti S, and Setiawan, C. (2018). *Indonesian Financial Literacy and Inclusion*. Rajawali Press.
- Siregar, A. E. (2016). *Financial Technology Trends in the Future of Financial Business*. Retrieved December 27, 2018.
- Siregar, D. K., & Anggraeni, D. R. (2022). The effect of financial literacy and financial behavior on student investment decisions 1.2. 2(1), 96-112.
- Soraya, E., & Lutfiati, A. (2020). Analysis of Factors Influencing Financial Literacy. *Performance*, 2(02), 111-134.