Financial Technology Application in Small and Medium Businesses

Christian Herdinata
International business management
Faculty of Management and Business, Ciputra University

Keywords: Financial Technology, Regulation, Financial Literacy, Collaboration

Abstract: Financial Technology (Fintech) has provided access to many parties who do not have a bank account to enter the formal business sector. The application of Fintech has proven to be able to open greater access to formal financial services, encourage economic growth, as well as inclusive development and maintenance. To support the application of Fintech in Indonesia, the purpose of this study is to find agreement, financial literacy, and collaboration that focuses on the application of Fintech for small and medium businesses in Indonesia. This research was conducted through quantitative research using multiple regression analysis techniques. The results of this study are that financial regulation and literacy have no significant effect on the application of fintech. However, collaboration has a significant effect on the application of fintech. Therefore, this study provides a complete and comprehensive understanding related to the application of Fintech in small and medium-sized businesses relating to regulation, financial literacy, and collaboration.

1 INTRODUCTION

Bappenas simulation results, investment financing needs for infrastructure development in 2018 around Rp 5,248 trillion. We see Fintech has a great market capability so that Fintech can improve the welfare of poor households through business financing, access to clean water and electricity, and financial management for education and health. The 2015-2019 National Medium-Term Development Plan (RPJMN), inclusive finance, is the government's effort to realize economic independence by driving the strategic sector of the domestic economy. The goal is to increase public access to formal financial services within the framework of inclusive and equitable economic development. In line with the RPJMN objectives, based on the Deloitte Consulting Survey and the Indonesian Fintech Association in 2016, three things encourage the implementation of Fintech in Indonesia, namely more explicit regulation, collaboration, and especially financial literacy. In response to this, the government will continue to encourage financial literacy and inclusion programs so that the target of the Financial Inclusion Index announced by the government through Presidential Regulation (Perpres) Number 82 of 2016 concerning the National Strategy for Financial Inclusion (SNKI) by 75 percent, can be achieved in 2019. However, data OJK shows that only about 67 percent of Indonesian adults in 2016 had access to formal financial institutions; The World Bank explained that around 49 million SME units were not yet bankable. For this reason, adaptive policies on technology and partnerships with the private sector and financial services are needed.

In the McKinsey Global Institute report, digital financial services can provide access to 1.6 billion people who do not have a bank account to enter the formal business sector. As many as 95 million new jobs could be created, and the GDP of developing countries increased by $ 3.7 trillion. Therefore, the use of Fintech is proven to be able to open greater access to formal financial services, encourage economic growth, and inclusive and sustainable development. The challenge for Indonesia is to make the process of development and public service adaptive to the development of Fintech. Therefore, the purpose of this study is to find out clear regulations, collaboration, and financial literacy in the application of Fintech optimization for MSMEs in East Java. Therefore, this study wants to find out whether regulation, financial literacy, and collaboration have a significant effect on the application of financial technology?

Herdinata, C.
Financial Technology Application in Small and Medium Businesses.
DOI: 10.5220/0009960801970200
In *Proceedings of the International Conference of Business, Economy, Entrepreneurship and Management (ICBEEM 2019)*, pages 197-200
ISBN: 978-989-758-471-8

2 LITERATURE REVIEW

2.1 Financial Technology (Fintech)

Creating development for the poor who are vulnerable and able to access financial services, this Fintech is one of the strategic solutions to realize financial inclusion. This solution is dedicated to users of financial services for payment, trading, capital market activities, and much more (Ion and Alexandra, 2016). The process of technology substitution in it is much better for encouraging long-term investment and capital placement in various productive sectors (Rong et al., 2013). However, many innovative products have subsequently failed to reach critical mass users and even do not exist anymore (Teja, 2017). Hyytinen, Pajarinen, & Rouvinen (2015) stated that companies that focus their primary attention on developing superiority products tend to fail.

Fintech is a new financial technology product that can facilitate various transactions, both payments, investments, and insurance (Teja, 2017). Natural features will produce a high level of comfort so that the successful application of Fintech can be optimized. The biggest challenge in developing financial innovation is a superior product whose function is accepted in the habit of using the user's daily payment system without changing user habits (Teja, 2017). Users do not need to go to banks anymore and spend their time on credit arrangements, currency exchange, and many more (Kalmykova and Tyabova, 2016). These tools make life easier; however, they pose a serious threat to banks; services should be created more convenient and useful to retain clients. Therefore, the bank and credit system began to change actively (Kalmykova and Tyabova, 2016). This illumination of Fintech will achieve the goal of user convenience, user comfort, and being able also to minimize the cost of money creation to various credit cards that are more familiar among users (Teja, 2017).

2.2 Regulation

The Fintech market is proliferating, followed by the emergence of new business start-ups every month, but on the other hand, there are still no clear legal regulations from the government related to the development of this financial technology. Financial technology is developing so fast that it is challenging to manage all the innovative features of legal control (Kalmykova and Tyabova, 2016). Users will empirically consider the factors that influence the expectations of both users and organizations in adopting Fintech, including customer trust, data security, the added value from fintech itself. Clear regulations will increase customer confidence, data security, and user design appearance, which influence the implementation of FinTech (Stewart and Jurjens, 2018).

2.3 Collaboration

Sterman et al., In Teja (2017), stated that the strategy of implementing Fintech, whose aim is to achieve rapid growth, could create the risk of excess industrial capacity. Thus the company needs to overcome these problems by becoming a leader in a business ecosystem through collaboration. By binding a user network and changing the user's role into a developer, the assumption is that the company will get more acceptance (Lu, C., Rong, K., You, J., & Shi, Y. (2014). Transforming users into developers can open up new opportunities (Overholm, 2014; McKelvey et al., 2015). The prospect of its application will grow faster than competitors when using collaboration between industry and the business ecosystem.

2.4 Financial Literacy

The Financial Services Authority surveyed in 2013 that the level of financial literacy of the Indonesian population was divided into four parts, well literate 21.84%, sufficient literate 75.69%, less literate 2.06%, and not literate 0.41%. (www.ojk.go.id, 2017). The survey is based on the knowledge and beliefs of Indonesians about financial services institutions, including financial service products, such as features, benefits and risks, rights, and obligations related to financial products and services, to their skills in using them. The potential impact of Fintech on the financial industry, to create stability and access to services (Philippon, 2016). Some financial sectors and startups see Fintech as a gateway to increase business opportunities. However, on the other hand, there are also security threats increasing rapidly and have become a challenge for Fintech users if users are not equipped with a good understanding of financial literacy (Stewart and Jurjens, 2018).

Therefore, in this study, a research hypothesis was formed relating to regulation, financial literacy, and collaboration, and the application of financial technology, as follows:

H1: Regulation has a significant effect on the application of financial technology

H2: Financial literacy has a significant effect on the application of financial technology

H3: Collaboration has a significant effect on the application of financial technology

3 RESEARCH METHODOLOGY

The study was conducted using quantitative. The research population is MSMEs in East Java. The sampling technique uses nonprobability sampling, which is a convenience sampling of 148 MSMEs. The source of data used in this study came from primary data through questionnaires and secondary data. The data measurements were carried out in this study using a Likert scale. Validity measurement is the accuracy or accuracy of the test in carrying out its measurement function Suryabrata (2000) in Rahayuni (2015). The statement is said to be valid if the significance value of the correlation is,00.05 or 5% (Lingga, 2012). Reliability measurements to see the questionnaire questions can consistently reflect the construct being measured. A particular item in the questionnaire must consistently produce things that are relatively similar to the whole case seen through measurements with the Cronbach's Alpha technique with reliability that can be accepted if Cronbach’s Alpha ≥ 0.6 (Priyatno, 2014: 64). The analysis technique used in this study is Multiple Linear Regression.

4 RESEARCH RESULT

The results of this research model show that the F test is significant so that it meets the goodness of fit of a model. The research sample consisted of 148 MSME businesses in the study. The following table is the results of the F test in Table 1.1

Table 1: Test Results F

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.470	3	6.157	27.323	.000b
	Residual	32.448	144	.225		
	Total	50.919	147			

a. Dependent Variable: Y_PF

b. Predictors: (Constant), X3_Kol, X2_Lit, X1_Reg

The following are the results of the t-test on testing the effect of regulations on the application of financial technology found to have no significant effect with a value of 0.147 greater than 0.05. Therefore hypothesis (H1) is rejected. Furthermore, to test the effect of financial literacy on the application of financial technology, it had no significant effect with a value of 0.170 greater than 0.05. Therefore, the H2 hypothesis is rejected. On the other hand, the effect of collaboration on the application of financial technology found a significant effect that is equal to 0,000 below 0.05. Therefore the hypothesis (H3) is accepted. T Test results can be seen in Table 1.2.

Table 2: Test Results t

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.719	.230		11.838	.000
X1_Reg	.086	.059	.139	1.457	.147
X2_Lit	.106	.077	.116	1.379	.170
X3_Kol	.268	.062	.419	4.309	.000 (*)

Information:

Dependent Variable = Y-PF

(*) = Sig. 0.05

The results showed that the effect of regulations on the application of financial technology had no significant effect. This can happen because the Fintech market is growing so fast, followed by the emergence of new business start-ups every month. However, on the other hand, there are still no clear legal regulations from the government related to the development of this financial technology. This is in line with Kalmykova and Tyabova (2016), who explain that the control of the law is difficult to follow the development of financial technology that is so fast.

The effect of financial literacy on the application of financial technology has no significant effect. This is in line with the results of the Financial Services Authority has surveyed in 2013 the level of financial literacy of the Indonesian population is divided into four parts well literate 21.84%, sufficient literate 75.69%, less literate 2.06%, and not literate 0.41 % (www.ojk.go.id, 2017). This shows that the financial literacy of the Indonesian population is still relatively low. Therefore, financial literacy is not significant to the application of financial technology because the level of financial literacy still needs to be improved.

On the other hand, the effect of collaboration on financial technology was found to be significant. This shows that collaboration influences the application of financial technology to SMEs. This shows MSMEs must own that collaboration in the application of financial technology. This is consistent with what Teja (2017) revealed that collaboration with other companies in a business ecosystem would produce competence to achieve a critical mass of minimum adopters and higher probability so that innovative financial-related products will be able to be successfully implemented.

5 CONCLUSION

This study found that financial regulation and literacy had no significant effect on the application of financial technology. On the other hand, collaboration has a significant influence on the application of financial technology. This shows that financial regulation and literacy are things that need to be improved so that the application of financial technology can be optimized. Collaboration is a thing that makes a significant contribution to the application of financial technology. Therefore, the role of government, the private sector, and society at large and consumers, in particular, becomes vital in the success of financial technology.

REFERENCES

Hyytinen, A., Pajarinen, M., & Rouvinen, P. (2015). Does innovativeness reduce startup survival rates?. Journal of Business Venturing, 30, 564-581.

Ion, Alexadra. (2016). Financial Technology (Fintech) and Its Implementation on the Romanian Non-Banking Capital Market. Practical Application of Science. Vol IV, Issue 2.

Kalmykova, Ekaterina., Anna Ryabova. (2016). FinTech Market Development Perspectives. SHS Web of Conferences. Vol 10.

Lu, C., Rong, K., You, J., & Shi, Y. (2014). Business ecosystem and stakeholders' role transformation: evidence from chinese emerging electric vehicle industry. Expert Systems with Applications, 41, 4579-4595.

McKelvey, M., Zaring, O., & Ljungberg, D. (2015). Creating innovative opportunities through research collaboration: an evolutionary framework and empirical illustration in engineering. Technovation, 39-40, 26-36.

Overholm, H. (2014). Collectively created opportunities in emerging ecosystems: the case of solar service ventures. Technovation, 39-40, 14-25.

Rong, Ke., Yongjiang Shi. (2013). Business ecosystem extension: facilitating the technology substitution. International Journal of Technology Management. Vol 63 no 3.4.

Stewart, Harrison,. Jan Jurjens. (2018). Data Security and Consumer trust in Fintech Innovation in Germany.

Teja, Adrian. (2017). Indonesian Fintech Business: New Innovations or Foster and Collaborate in Business Ecosystems?. The Asian Journal of Technology Management. Vol. 10 No. 1 pp 10-18.

Philippon, Thomas. (2016). The Fintech Opportunity. National Bureu of Economic research. http://www.nber.org/papers/w22476.

Priyatno, Duwi. (2014). SPSS 22 Pengolah Data Terpraktis. Andi. Yogyakarta.

www.ojk.go.id, (2017). https: //www.ojk.go.id/id/ data-dan-statistik/ laporan tahunan/ Pages/ Laporan - Tahunan - OJK - 2017. aspx 10 september 2019