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# The Analysis of Factors Influencing Financial Technology Usage in Higher Education

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# **History Article**

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#### Keywords

Factor; Financial Technology; Fintech

#### **Abstract**

This study aims to analyze and to shape the factors that influence the use of financial technology, especially among students, because recently the financial technology usage among students increased slightly in the previous year. This increase was influenced by several factors that have not been classified. The population consisted of 1,229 students of the Indraprasta University PGRI Jakarta, with 273 students as the sample obtained using simple random sampling. Techniques of data collection used a questionnaire with a Likert scale consisting of seven points. Techniques of data analysis used factor analysis from software Statistical Package for the Social Science version 24.0. The results of the factor analysis show that eight factors are formed from several variables, with a contribution of 65.368%. While 34,632% is explained by other not examined factors, these factors consist of security, product offered, access and profit, loyalty, information, facility, demand and quality. For future research, it needs to test and analyze factors formed to add references of science and technology, especially in the field of financial technology.

#### How to Cite

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#### INTRODUCTION

The Financial Technology (Fintech) is an online financial services revolution. In a broader sense, fintech is described as modern market that combines financial and technology for providing financial services (Arner, Barberis, & Buckley, 2015; Romanova & Kudinska, 2017). In general, fintech innovation has no much difference from other financial innovations. However, in particular, fintech enables technology to facilitate transactions for organizations (Schindler, 2017). Fintech is used by government, big companies, small and medium enterprises, entrepreneur, as well as individual for financial services interest in various parts of the world such as, Europe, America, China, Britain and other countries including Indonesia (Demertzis, Merler, & Wolff, 2017).

There are three important components in Fintech world which are financial market, management institution, also development and technical progress (Mooslechner, 2017). Financial market provides financial instrument for financial internal function, funding, and investment (Korkiakoski, 2017). Institution management is to protect consumer privacy and company from external and internal institution threat (Tsai & Peng, 2017). Fintech technical improvement and development shows performance portfolio, information system, and fintech infrastructure from launching start-up until the latest process (Korkiakoski, 2017). These components are related each other to develop financial technology services (purchasing and payment) and to maximize risk management for protecting the users (Swartz, 2017).

According to Bank of Indonesia, digital economy potential is very large and important to be developed. Fintech enforcement in Indonesia is supported by the government through Bank of Indonesia in between PBI No.19/12/PBI/2017, PBI No.18/17/PBI/2016 is about electronic money, PBI No.18/40/PBI/2016 is about transaction process enforcement, and SEBI No.18/22/DKSP is about financial di-

gital services enforcement. This activity is intended to accelerate monetary policy transmission, increase velocity of money in circulation, and economic growth. On the other side, customer or business people will receive benefit such as the expansion of product selection and information, improvement of service quality and shorten the chain of transactions, improve capital efficiency and operational resilience, and improve the information flow.

Fintech usage and development in Indonesia are already widely used by community. This matter occurs due to the products that are offered by Fintech Company to the community. Fintech products are deposits, loans, investments, insurance, and financing (K. Chen, 2018). Based on OJK (Financial Services Authority) data at 2016, fintech usage in Indonesia is consisted of 42.22 % is for payment (electricity, water, etc.), 17.78% is for loan, 12.59 % is for aggregate, 8.15% is for money management, and 11.11 % is for another interests. Therefore, a further potential analysis is needed to develop the potential that is owned by fintech for further growth (Themen, 2014).

The basic steps for growing fintech by finding significant indicators through the variables so dominant in fintech. Much research has been done by governments, companies, academics, and researchers to develop fintech literature. Like research conducted in the Netherlands (Gregor Dorfleitner, Hornuf, Schmitt, & Weber, 2016), research in China (M. A. Chen, Wu, & Yang, 2018), in Germany (Demertzis et al., 2017), in Indonesia (Hadad, 2017) and other countries. However, not many studies discuss the factors that influence fintech and make it grow rapidly in a country. In addition, the scope of research has always focused on large corporations but not individuals. Therefore, this research will study the fintech starting from small things. Sometimes small things can have a big impact, especially in the field of fintech (Themen, 2014).

In the early 2019 we conducted a simple study among students entitled "Analysis of Factors that Hinder Students from Using Fintech" (Setyastanto, Leksono, & Vhalery,

2019). We used factor formation analysis, which produced four inhibiting factors for students in using fintech. The four factors were fundamental factors fintech, individual factors, system factors, and political factors. However, there were still many weaknesses and shortcomings in this study. There were still many types of research that have not been used to find out fintech. Therefore, we would like to find out more about the factors that influence the use of fintech.

At present, fintech has known by many students from Indraprasta University PGRI Jakarta, and many of them are using it. The increased usage of fintech is influenced by several things. Various types of paradigms explain the variables that influence the use of fintech. Some of them are security, protection (user data, transactions and law), privacy, risk management, processes, authentication, access control (Gai, Qiu, & Sun, 2018), services, technological convenience (Mooslechner, 2017), age, income, tastes, capital, fund reserves (Korkiakoski, 2017), profits, economic growth, quality (Philippon, 2016), financial management, loyalty programs, education and training for investors/consumers, innovation, access to information (Demertzis et al., 2017; Grzywacz & Jagodzinska-Komar, 2018; Haddad & Hornuf, 2018) investment, credit, and offered insurance (K. Chen, 2018).

Since many variables influence the use of fintech, it makes us have not found yet specific factors that influence the use of fintech among students. Besides, the non-classification of variables that affect the use of fintech makes us want to group these variables. The grouping of these variables can be done in various ways; one of them is by forming factor analysis. Therefore, one of the objectives of this study is to form factors that influence the use of fintech among students.

Research on the factors that influence the use of fintech has been investigated by Abidin & Yaacob (2020) recently with the title "Factors Influencing the Use of Fintech among Users in Malaysia." This was a quantitative research with a total of 410 respondents and the analysis techniques used descriptive analysis, correlation analysis, and multiple regression analysis. The results show that internet accessibility, reliability, comfort and cost have a significant effect on the use of fintech. As for suggestions for future research is making improvements in the questionnaire by adding other factors, improvement of several theories in this study can also be improved by creating several new factors to get new theoretical research references or learn more about the factors that affect respondents.

Other research conducted by Amalia (2018) discusses the factors affecting individual interest in financial technology. The purpose of this study is to analyze the factors influencing consumer interest in fintech applications as a means of payment. This research was a quantitative descriptive and an inquiry to analyze users through an online questionnaire. The results of this study found that interest in using the fintech application as a payment transaction tool was influenced by Perceived Usefulness and Attitude.

Research on fintech was also carried out by Susilo, Iksan Prabowo, Taman, Pustikaningsih, & Samlawi (2019). This study compared factors that influence the use of fintech. The results show that the level of perceived benefits, perceived ease of use, and attitudes towards use are both high impact. However, there is something that cannot be explained, namely the fundamental factor that becomes their decision or judgment. Therefore, this becomes a limitation in this study.

From some of these studies, it can be concluded that the research on fintech, most researchers tested the effect of variables rather than forming factors. This point is increasingly interesting to study. Therefore, researchers

want to do a research about factor formation. Furthermore, based on the limitations and suggestions of future research, this study wants to try to examine the factors that influence the use of fintech among students which are still challenging to explain.

So the question arises, such as 'what factors underlie it?' Also, research on factor analysis can be a primary reference given the importance of current fintech. It is expected to describe what influences the use of fintech among students. Based on the statements that have been described, researchers are interested in conducting research entitled "analysis of factors influencing the use of fintech." The purpose of this study is to find out how many factors are formed from several variables.

#### **METHODS**

The study was conducted at Indraprasta University PGRI (Unindra) Jakarta. The population is 1,229 students of economic education. Determination of the sample size of the population of 5%, then obtained a sample of 273 students. Sampling using a simple random sampling technique. The research used a descriptive quantitative method. A questionnaire, for data collection, spread through physical contact, WhatsApp, and Google form (https://goo.gl/forms/iokVQImGjW4Z1TgJ3) using a Likert scale with seven points (1–7). Data analysis techniques used factor analysis to form factors that influence the use of fintech among students. The data analysis technique used software SPSS (Statistical Package for Social Science) version 24.0.

**Table 1.** Characteristics of Respondents Based on Gender

Gender	Number (Person)	Percentage (%)
Men	123	45.1
Women	150	54.9
Total	273	100

Source: Primary Processed Data (2018)

**Table 2.** Respondent Characteristics Based on Age

No.	Age	Number	Percentage
	(Year)	(Person)	(%)
1	15 – 18	92	33,7
2	19 - 22	167	61,2
3	> 23	14	5,1
Total		273	100

Source: Primary Processed Data (2018)

**Table 3.** Respondent Characteristics Based on Time of Fintech Use (per month)

No.	Time (Hours)	Number (Person)	Percentage (%)
1	< 240	28	10,3
2	241 - 360	70	25,6
_		, 0	, _
3	361 - 480	109	39,9
4	481 – 600	59	21,6
•	101 000	67	21,0
5	> 601	7	2,6
Total		273	100

Source: Primary Processed Data (2018)

#### RESULT AND DISCUSSION

Fintech factor analysis is consisted of several steps that is must be followed in order to get a maximum result. The steps are as follows: (1) KMO and Bartlett's Test, (2) antimage and communalities, (3) factors forming, (4) variables component partition into factors, (5) factor naming.

Table 4. KMO and Bartlett's Test Result

Kaiser-Meg Sampling A	,774	
Bartlett's	Approx. Chi-Square	1864,316
Test of	Df	300
Sphericity	Sig.	,000

Source: Primary Processed Data (2018)

**Table 5.** Anti-image and Communalities Result

Variable	AI	Initial	Extraction
Security	805	1,000	,705
Protection	808	1,000	,715
Private	846	1,000	,695
Risk Management	795	1,000	,678
Process	875	1,000	,577
Authentication	788	1,000	,621
Control Access	699	1,000	,747
Service	542	1,000	,768
Ease of Technology	719	1,000	,569
Age	777	1,000	,522
Income	728	1,000	,584
Taste	784	1,000	,494
Modal	846	1,000	,545
Reserve Fund	718	1,000	,678
Profit	797	1,000	,648
Economic Growth	763	1,000	,581
Quality	795	1,000	,539
Financial Management	831	1,000	,672
Loyalty Program	512	1,000	,725
Training and Education	821	1,000	,586
Innovation	723	1,000	,728
Information Access	769	1,000	,754
Investment	792	1,000	,761
Credit	735	1,000	,730
Insurance	754	1,000	,717

Source: Primary Processed Data (2018)

Table 5 (Extraction) explains about factors that are formed from variance of many

variables. The variance from security variables is 70.5 % for the factors, 71.5 % from variance of protection for the factors, 69.5 % from variance of private variables for the factors, variance from risk management variables is 67.8 % for the factors, 57.7% from variance of process variables, 62.1% from variance of authentication variables for the factors, 74.7 % from variance of control access for the factors, 76.8 % from variance of service variables for the factors.

Variance of ease of technology variable for these factors is 56.9%, 52.2% from variance of age variables for factors, 58.4 % from variance of income variables for the factors, 49.4 % from variance of taste variables for the factors, 54.5 % from variance of modal variables for the factors, 67.8 % from variance of reserve fund variables for the factors, 64.8 % from variance of profit variables for the factors, 58.1 % from variance of economic growth variables for the factors, 53.9% from variance of quality variables for the factors.

Variance of financial management variables for these factors is 67.2%, 72.5 % from variance of loyalty program variables for the factors, 58.6 % from variance of training and education variables for the factors, 72.8 % from variance of innovation variables for the factors, 75.4% from variance of information access variables for the factors, 76.1% from variance of investment variables for the factors, 7.30 % from variance of credit variables for the factors, and 71.7% from variance of insurance variables for the factors.

Table 6 (Total Variance Explained) shows there are 8 factors that are formed from 25 existing variables with each eigenvalues factor. The eigenvalue values describe the relative importance of each factor in calculating the variance of the 25 variables analyzed. The factor 1 eigenvalues is  $5.239 (5.239 / 25 \times 100\% = 20.996\%)$ , Factor 2 eigenvalues is  $2.829 (2.829 / 29 \times 100\% = 11.316\%)$ , Factor 3 eigenvalues is  $1.801 (1.801 / 29 \times 100\% = 7.204\%)$ , Factor 4 eigenvalues of  $1.509 (1.509 / 29 \times 100 = 6.036\%)$ , Factor 5 eigenvalues of  $1.413 (1.413 / 29 \times 100 = 5.652\%)$ .

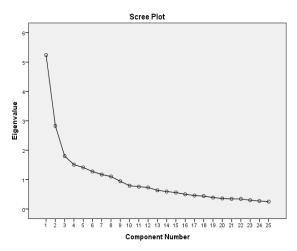
Table 6. Total Variance Explained

		Initial Eigenv	alues	Extract	ion Sums of Squ	ared Loadings
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5,239	20,957	20,957	5,239	20,957	20,957
2	2,829	11,314	32,272	2,829	11,314	32,272
3	1,801	7,203	39,475	1,801	7,203	39,475
4	1,509	6,035	45,509	1,509	6,035	45,509
5	1,413	5,654	51,163	1,413	5,654	51,163
6	1,275	5,100	56,263	1,275	5,100	56,263
7	1,172	4,689	60,951	1,172	4,689	60,951
8	1,104	4,418	65,369	1,104	4,418	65,369
9	,943	3,771	69,141			
10	,792	3,168	72,308			
11	,759	3,036	75,344			
12	,732	2,928	78,272			
13	,634	2,537	80,809			
14	,593	2,372	83,181			
15	,560	2,240	85,421			
16	,499	1,997	87,418			
17	,459	1,835	89,253			
18	,438	1,753	91,006			
19	,388	1,553	92,559			
20	,357	1,430	93,989			
21	,344	1,377	95,365			
22	,340	1,361	96,726			
23	,298	1,194	97,920			
24	,271	1,084	99,004			
25	,249	,996	100,000			

Source: Primary Processed Data (2018)

Factor 6 eigenvalues of 1.275 (1.275 / 29 X 100 = 5.1%), Factor 7 eigenvalues is 1,172 (1,172 / 29 X 100 = 4,688%), Factor 8 eigenvalues is 1,104 (1,104 / 29 X 100 = 4,416%). The total variance of the 25 variables extracted into 8 factors are: 20,956% + 11,316% + 7,204% + 6,036% + 5,652% +

5.1% + 4.688% + 4.416% = 65.368%. That is, the magnitude of the variance that can be explained by the new factors formed is 65.386% while 34.632% is explained by other factors not examined. For more details, can be seen in the diagram (scree plot) Figure 1.



**Figure 1.** Scree Plot Factors that Influence toward the Fintech Usage Source: Primary Processed Data (2018)

Table 7. Rotated Component Matrix Result

Table 7 (Rotated Component matrix) shows factor loading values from each variables. Factor loading is a correlation value between the formed factors with the variable values itself. The correlation results are grouped according to each factor. Factor 1 consists of a Security variable. Factor 2 consists of Investment and Credit variables. Factor 3 consists of variables Authentication, Access Control, Ease of Technology, Revenue, and Innovation. Factor 4 consists of Privacy, Capital, Profit, and Loyalty variables. Factor 5 consists of Fund Reserve, Economic Growth, and Information Access variables. Factor 6 consists of Protection, Age, Financial Management, Education and Training, and Insurance. Factor 7

				Comp	onent			
Variable	1	2	3	4	5	6	7	8
Security	,109	-,092	-,124	-,254	-,165	,095	-,147	-,121
Protection	,120	-,060	-,216	-,052	-,167	,210	-,053	-,033
Private	,120	-,040	-,178	,176	-,168	-,127	-,072	,135
Risk Management	,102	-,031	-,112	-,013	-,262	-,148	,014	,373
Process	,111	,021	-,152	-,021	-,075	-,210	,164	-,172
Authentication	,099	,014	,182	,038	-,220	-,287	,085	-,026
Control Access	,074	-,080	,297	-,191	-,245	-,032	-,037	-,205
Service	,031	,091	,114	,066	-,044	,107	,595	,306
Ease of Technology	,043	,164	,166	,107	-,216	-,096	,109	-,227
Age	,095	-,019	,195	-,048	-,018	,253	,119	-,116
Income	,079	-,036	,291	,056	,038	,184	,032	,228
Taste	,077	-,081	,070	,098	,131	,119	,233	-,298
Modal	,071	-,106	-,003	,243	,210	-,203	,134	,050
Reserve Fund	,065	-,197	,152	-,058	,255	,011	-,143	,105
Profit	,093	-,160	-,027	,220	,133	-,129	-,034	,154
Economic Growth	,054	-,165	-,038	-,046	,251	-,069	,167	-,290
Quality	,089	-,144	,033	-,086	-,041	,134	-,092	,271
Financial Management	,116	,029	-,173	,047	,094	,201	,079	-,293
Loyalty Program	,033	,137	-,006	,443	,009	,207	-,142	-,041

Variabel	Component							
variabei	1	2	3	4	5	6	7	8
Training and Education	,087	,162	-,176	,028	-,028	,181	,077	-,029
Innovation	,085	,085	,175	,167	,020	,139	-,446	-,049
Information Access	,102	,138	-,086	-,141	,322	-,089	,006	,153
Investation	,099	,193	,083	,011	,141	-,215	-,204	,012
Credit	,077	,168	,062	-,224	,160	-,309	-,043	-,068
Insurance	,062	,165	,001	-,279	,154	,260	,042	,216

Source: Primary Processed Data (2018)

consists of Process, Service, and Taste. Factor 8 consists of Risk and Quality Management.

After rotation is made, there are 8 factors, the next step is to give a name for each factors. This naming process depends on researcher and it can represent the variables: Factor 1 consists of a variable named Security Factor. Factor 2 consists of a variable named Investment and Credit Factors Offered Products. Factor 3 consists of the Authentication, Access Control, Ease of Technology, Revenue, and Innovation variables named Access Factors and Benefits. Factor 4 is composed of a variable Privacy, Capital, Gain, and Loyalty named Loyalty Factor.

Factor 5 is composed of a variable Reserves Fund, and Economic Growth, and Access to Information is named Factor Information. Factor 6 is composed of protection, Age, Finance, Education and Training, as well as the Insurance named Facility factor. Factor 7 consists of processes, services, and tastes named Demand factor. Factor 8 is composed of the Risk Management and Quality by name Quality Factor.

### **Security Factor**

Safety factor is the first factor that is formed from the formation of factors that influence the use of fintech. Security can be said to be the main factor. This is supported by various facts. The main reasons of security desired by investors, consumers, or the provider of fintech namely to avoid disturbances (internal and external) that could endanger the data, fi-

nance, and information users and service providers. Therefore, security is of considerable concern (Luckandi, 2018).

According to (Park & Park, 2017; Moon & Park, 2017; Milian, Spinola, & Carvalho, 2019) Security desired by users in cyberspace such as services supported in technology, information security such as privacy and confidentiality of user data, and anticipation of cyberattacks so that users feel safe, comfortable, and willing to invest. Besides, the desired level of security is avoiding fraud. So, there are system improvements in the future that increase long-term security.

#### **Offered Products Factor**

The offered product is the second factor formed by the formation of factors that influence the use of fintech. The product offered by fintech companies spurred the public to try and use it. There are a variety of offered products, such as investment and credit. Both of these can be said as financing for credit or investment to get regular benefits (Hadad, 2017). On the other hand, customers now have unprecedented access to information, where they can research and compare existing products (Buckley & Webster, 2016). Based on survey results (Buckley & Webster, 2016), as many as 15.5% of digitally active customers use more than one FinTech product. It is because FinTech's phenomenon is the delivery of financial products and services through a combination of technology platforms and innovative business models (LEE & TEO, 2015).

Buckley & Webster (2016) also suggested that in developed countries, high-level institutional quality accompanies greater access to financial products and services. Whereas in developing countries, do the opposite. It can be related to the level of public financial literacy. Financial literated people tend to make more precise and more specific plans (Triwidisari, Nurkhin, & Muhsin, 2018). It is crucial because high levels of financial literacy can also benefit quality financial products and services. After all, it allows better-informed customers to compare options and put competitive pressure on providers (Kafela, 2010). Overall, fintech products and services must aspire to improve new accessibility and ease of use.

#### **Profits and Access Factor**

Profit and Access factor is third factor that is formed from the formation of factors that influence the use of fintech. Along with the master plan concept of Indonesia Financial Services Sector (MPSJKI), Fintech can synergize with financial companies to deliver multi benefits to people (Hadad, 2017). Such as ease of access when registering until completion. Then provide some benefits to users including financial benefits and information benefits. In addition, fintech provides benefits in the financial services sector (Rizal, Maulina, & Kostini, 2018).

Gai, Qiu, & Elnagdy (2016) explain that authentication and access control use cryptographic-based approaches. In addition to data encryption to protect financial information, several new security mechanisms are also alternatives for securing financial privacy (Gai & Steenkamp, 2013; Gai & Steenkamp, 2014). Semantic access is associated with service request features identified by ontology techniques for access control configurations supported by multimedia to strengthen cybersecurity ecosystems by producing knowledge charts that show the links between cyberspace risks and their causes (Chai, Kim, & Rao, 2011; Gai, Qiu, & Sun, 2018).

# **Loyalty Factor**

Loyalty factor is fourth factor that is formed from the formation of factors that influence the use of fintech. The loyalty factor explains the loyalty of service providers to users of financial services about the programs offered. Not only programs, improved access to information and access to capital or finance provider is also provided by the company fintech so that users become more comfortable and confident in the company will fintech their real work. Loyalty can also be demonstrated by the performance of companies that continue to grow and progress rapidly (K. Chen, 2018).

The loyalty factor, from the side of students who are influenced by, was seen from the application usage. Typically, students who already have full loyalty to the fintech application will carry out transactions or other actions only on the fintech application. Loyalty can also be described when students give a "review" or feedback to the fintech.

#### **Information Factor**

Information factor is fifth factor that is formed from the formation of factors that influence the use of fintech. Information is needed by the community to conduct financial transactions. In addition, information can also be used as a reference for decision. According to it (Burhanuddin & Abdi, 2019), if the community has received a lot of information about fintech, then it can be ascertained that the public interest in using fintech is increasing rapidly. So that information factors become a support in influencing the use of fintech.

The information factor consists of fund reserves, economic growth, and access to information. Information is a factor for students because students need the information to use fintech. Students who have curiosity will find out the information needed. The process of finding information can be done anywhere, both online and offline. When they get the information, they will do or test the fintech. After they use the fintech, they will dig up more

information to get new information available in the fintech. Information about fintech usually contains personal information, financial information, investment information, financial information. This information has a very active role in improving students' analytical skills when using fintech. Unconsciously, this can create them into financial literacy (Theodora & Marti, 2016).

#### **Facility Factor**

Facility factor is sixth factor that is formed from the formation of factors that influence the use of fintech. This factor provides facilities for users. It can be in the form of capital for financial purposes or assistance and training. Fintech facilities in technology can also be limits, such as top up limits in an application (Sari & Dwilita, 2016).

National Team to Accelerate Poverty (TNP2K) has also prepared a national strategy implementation program of inclusive finance in the six pillars namely education SNKI finance, public finance facility, the mapping of financial information, policies (rules) that support, facilities intermediation and distribution channels, consumer protection (Sari & Dwilita, 2016). This shows that facilities are very important for the development of human resources for companies, investors, and consumers.

Facilities from the students' point of view are features that are available in fintech when they will use the fintech. In addition to features, facilities desired by students are ease of access, network reliability, range, and supporting facilities and infrastructure to facilitate the process of using fintech. For example, when a user wants to transfer money in a fintech application, then the application must provide facilities or features that can make the transfer. Facilities are usually in the form of supporters to support the user more comfortably when using. Facilities can increase the use of fintech (Ansori, 2019).

#### **Demand Factor**

Demand factor is seventh factor that is

formed from the formation of factors that influence the use of fintech. Consumer and investor demand can be sustained as a support for fintech companies. Why? Due to consumer demand and investors become a reference company to increase or reduce the financial stocks. This request is directly related to the bank or other financial service provider institution (Navaretti, Calzolari, & Pozzolo, 2017), therefore it needs to be considered and taken seriously by fintech provider companies.

Students, as consumers, need demand factors for their interests or needs. As consumers, they can make requests for products or services at the intended fintech. This request is inseparable from their behavior. According to Rahmawati, Badriati, & Tanjung (2018), there is a link between knowledge and understanding of consumer demand and behavior. Moreover, for producers, this is very important for the progress of fintech in the current digital era. Even the growth of fintech based on the demand of users of fintech services has increased with the market share of the Indonesian people (Alwi, 2018). Therefore, consumer demand can provide the right direction for fintech itself.

## **Quality Factor**

Quality factor is eighth factor that is formed from the formation of factors that influence the use of fintech. The quality factor is seen as a high-value art. The company can provide quality fintech products because of excellent company management. On the other hand, the quality can also be seen from the performance of the company to minimize risks. Besides, a quality fintech provider company can be developed from criticism and suggestions from its users. Therefore, the company's development is inseparable from the fintech internal and external contribution (Luckandi, 2018).

The quality influencing the fintech usage among students has several points of view. First, they examine the quality of the fintech application being used. When fintech applications have an attractive appearance, they will decide that the application is proper to be enjoyed. Second, they evaluate the quality of the choices or menus available in the fintech application—the choice of making them judge the application quality because it provides choices that they can choose. Third, application performance, including an excellent performance with no errors or crashes.

This analysis reviews what factors influence the use of fintech among students. Eight factors were formed, namely security, product, access and profit, loyalty, information, facilities, demand, and quality. Although there are eight factors, the contribution is only 65.368%. That is, there are still many other unknown factors that affect students using fintech. In general, these eight factors can already represent the factors that trigger students to use fintech. Example: students want to use the fintech application when getting security offered by the fintech platform, such as privacy, information, financial data, transaction data, and other security. When using the application, students feel safe and do not need to worry about other distractions.

Other findings were obtained during the field. Some students showed interest in using fintech because they could utilize the fintech application very well. Like, trading transactions, making investments, making loans, and even some of them can become the center of transactions. Also, there are exciting things when they use fintech. Unconsciously, they are able or efficiently operate the fintech application on their smartphone instantly. Not only that, they quickly "register" accounts or "transactions" in the fintech application that may not be controlled by everyone.

#### **CONCLUSION**

In conclusion, the fintech usage is influenced by eight factors. The safety is provided to maintain user and company data. The offered products is a financial feature that is presented to users for managing their finances. The access and benefits used to access personal data and profits to increase capital in fi-

nancial services. The loyalty is an activity that refers to performance that does not perceive negatively of something. Information is part of providing up-to-date information about fintech. The facility includes facilities and infrastructure that are provided by fintech companies for investors or their consumers. The demand is a part of the consumer or investor. The quality means to be able to compete and have a high value.

There are some limitations to this research. First, the respondents are specifically for students. It would be better if taken for respondents with a broader scope in the society. Second, there are still many unknown variables. Therefore, further information and analysis is needed. In addition, for future research, it is expected to test and analyze the factors that have been formed to increase the repertoire of science and technology, especially in the field of fintech.

#### REFERENCES

- Abidin, S. N. L. B. Z., & Yaacob, M. H. Bin. (2020). Faktor-Faktor yang Mempengaruhi Penggunaan Fintech dalam kalangan Pengguna di Malaysia, 4(March), 1–13.
- Alwi, A. B. (2018). Pembiayaan Berbasis Teknologi Informasi (Fintech) yang Berdasarkan Syariah. *Al-Qanun*, 21(2), 255–271. Retrieved from https://katadata.co.id/berita/2017/08/28/bi-
- Amalia, S. N. A. (2018). Faktor-Faktor Yang Mempengaruhi Minat Individu Terhadap Financial Technology Syariah Paytren Sebagai Salah Satu Alat Transaksi Pembayaran: PendekatanTechnology Acceptance Model dan Theory of Planned Behavior. *Iqtishaduna*, 9(1), 64–79.
- Ansori, M. (2019). Perkembangan dan Dampak Financial Technology (Fintech) terhadap Industri Keuangan Syariah di Jawa Tengah. *Wahana Islamika: Jurnal Studi Keislaman*, 5(1), 31–45.
- Arner, D., Barberis, J., & Buckley, R. (2015). The Evolution of FinTech: A New Post-Crisis Paradigm?, 0–45.

- Buckley, R. P., & Webster, S. (2016). Customer Relationship Management Capabilities: Measurement, antecedents and consequences', 2012 (50)1 Management Decision 115. *Journal of Financial Transformation*, 44(2016), 117. Retrieved from https://www.bcgperspectives.com/content/articles/financialinstitutions-
- Burhanuddin, C. I., & Abdi, M. N. (2019). Tingkat Pemahaman dan Minat Masyarakat dalam Penggunaan Fintech. *Riset & Jurnal Akuntansi*, 3(1), 21–27.
- Chai, S., Kim, M., & Rao, H. R. (2011). Firms' information security investment decisions: Stock market evidence of investors' behavior. Decision Support Systems, 50(4), 651-661.
- Chen, K. (2018). Financial Innovation and Technology Firms: A Smart New World with Machines. *International Symposia in Economic Theory and Econometrics*, 25, 279–292. https://doi.org/10.1108/S1571-038620180000025012
- Chen, M. A., Wu, Q., & Yang, B. (2019). How valuable is FinTech innovation?. *The Review of Financial Studies*, 32(5), 2062-2106.
- Demertzis, M., Merler, S., & Wolff, G. B. (2017). Capital Markets Union and the fintech opportunity Bruegel.
- Gai, K., Qiu, M., & Sun, X. (2017). A Survey on FinTech. *Journal of Network and Computer Applications*, 1–59. https://doi.org/10.1016/j.jnca.2017.10.011
- Gai, K., Qiu, M., & Sun, X. (2018). A survey on FinTech. *Journal of Network and Computer Applications*, 103, 262–273. https://doi.org/10.1016/j.jnca.2017.10.011
- Gai, K., & Steenkamp, A. L. (2014). A Feasibility Study of Platform-as-a-Service Using Cloud Computing for a Global Service Organization. *Journal of Information Systems Applied Research*, 7(3), 28–42.
- Gregor Dorfleitner, J., Hornuf, L., Schmitt, M., & Weber, M. (2016). Fin Tech-Markt in Deutschland.
- Grzywacz, J., & Jagodzinska-Komar, E. (2018). Rola Banków I Sektora Fintech W Swietle Implementacji Dyrektywy Psd2, 159–169.

- Gai, K., Qiu, M., & Elnagdy, S. A. (2016). A novel secure big data cyber incident analytics framework for cloud-based cybersecurity insurance. In 2016 IEEE 2nd International Conference on Big Data Security on Cloud (Big-DataSecurity), IEEE International Conference on High Performance and Smart Computing (HPSC), and IEEE International Conference on Intelligent Data and Security (IDS) (pp. 171-176). IEEE.
- Gai, K., & Steenkamp, A. (2013). Feasibility of a Platform-as-a-Service implementation using cloud computing for a global service organization. *In Proceedings of the Conference for Information Systems Applied Research* ISSN (Vol. 2167, p. 1508).
- Hadad, M. D. (2017). *Financial Technology (Fintech)* di Indonesia. Kuliah Umum tentang Fintech, Indonesia Banking School.
- Haddad, C., & Hornuf, L. (2019). The emergence of the global fintech market: Economic and technological determinants. *Small Business Economics*, 53(1), 81-105.
- Kefela, G. T. (2010). Promoting access to finance by empowering consumers-Financial literacy in developing countries. *Educational* research and reviews, 5(5), 205.
- Korkiakoski, E. (2017). Fintech-Yritysten Tarjoamien Vertaislainapalveluiden Käyttö Rahoituksessa Ja Sijoittamisessa.
- LEE, D. K. C., & TEO, E. G. S. (2015). Emergence of FinTech and the LASIC Principles.
- Luckandi, D. (2018). Analisis Transaksi Pembayaran Menggunakan Fintech Pada UMKM di Indonesia: Pendekatan Adaptive Structuration Theory.
- Milian, E. Z., Spinola, M. de M., & Carvalho, M. M. d. (2019). Fintechs: A literature review and research agenda. *Electronic Commerce Research and Applications*, 34(September 2018). https://doi.org/10.1016/j.elerap.2019.100833
- Moon, W. Y., & Kim, S. D. (2017). Adaptive fraud detection framework for fintech based on machine learning. *Advanced Science Letters*, 23(10), 10167-10171.
- Mooslechner, P. (2017). The FinTech Revolution: More important than the ATM?
- Navaretti, G. B., Calzolari, G., & Pozzolo, A. F.

- (2017). Fintech and banking. friends or foes? European Economy: Banks, Regulation, and the Real Sector.
- Park, J. H., & Park, J. H. (2017). Blockchain security in cloud computing: Use cases, challenges, and solutions. *Symmetry*, 9(8), 1–13. https://doi.org/10.3390/sym9080164
- Rahmawati, L., Badriati, B. El, & Tanjung, I. (2018). Analisis Permintaan dan Perilaku Konsumen Fintech Syariah Model Crowdfunding. *Profit : Jurnal Kajian Ekonomi Dan Perbankan Syariah*, 2(1), 35–49. https://doi.org/10.33650/profit.v2i1.552
- Rizal, M., Maulina, E., & Kostini, N. (2018). Fintech As One Of The Financing Solutions For SMEs. *Jurnal Pemikiran Dan Penelitian Administrasi Bisnis dan Kewirausahaan*, 3(2), 89–100.
- Romanova, I., & Kudinska, M. (2017). Banking and fintech: a challenge or opportunity? *Contemporary Studies in Economic and Financial Analysis*, 98, 21–35. https://doi.org/10.1108/S1569-375920160000098002
- Sari, P. B., & Dwilita, H. (2016). Prospects of Financial Technology (Fintech) In North Sumatra Viewed From The Side Of Financial Literacy, Financial Inclusion And Poverty. *Kajian Akuntansi*, 9–17.
- Schindler, J. (2017). FinTech and Financial Inno-

- vation: Drivers and Depth. Finance and Economics Discussion Series Divisions of Research & Statistics and Monetary Affairs Federal Reserve Board, Washington, D. C., 1–16.
- Susilo, A. Z., Iksan Prabowo, M., Taman, A., Pustikaningsih, A., & Samlawi, A. (2019). A comparative study of factors affecting user acceptance of go-pay and OVo as a feature of Fintech application. *Procedia Computer Science*, 161, 876–884. https://doi.org/10.1016/j.procs.2019.11.195
- Themen, A. (2014). Fintech Die digitale (R) evolution im Finanzsektor.
- Theodora, B. D., & Marti, S. (2016). The Effect of Family Economic Education towards Lifestyle Mediated By Financial Literacy. *Dinamika Pendidikan*, 11(1), 18–25. https://doi.org/10.15294/dp.v11i1.8697
- Triwidisari, A., Nurkhin, A., & Muhsin, M. (2018). The Relationships Between Instagram Social Media Usage, Hedonic Shopping Motives and Financial Literacy on Impulse Buying. *Dinamika Pendidikan*, 12(2), 170–181. https://doi.org/10.15294/dp.v12i2.13565
- Tsai, C., & Peng, K.-J. (2017). The FinTech Revolution and Financial Regulation: The Case of Online Supply-Chain Financing, (2015), 1–24. https://doi.org/10.1017/als.2016.65