

# Critical Success Factors for Financial Technology Startup Company

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**Abstract.** This study aims to sort out the critical success factors for financial technology company in Indonesia which consists of customer experience, technological and internet development, organizational culture, funding and government regulations. The research approach used in this study is descriptive analysis with qualitative research types. The data used is primary data by conducting interview directly with fintech company. Based on the results of the study, the most important factor chosen by informants are funding and the second is the development of technology and the internet. Following toward these two factors is customer experience factors, organizational culture and government regulations were also found in this study.

## 1. Introduction

In the past two decades, Indonesia's financial industry has shifted along with rapid growth and technological development. From traditional (bank driven) financial systems, to financial (consumer driven) technology, allowing more players to emerge in the Indonesian financial sector. The Fintech Indonesia Association (IFA), which was founded in 2015, is able to map more than 120 current fintech players).

The development of technology and the increasing use of smartphones has led to the emergence of start-up companies engaged in financial technology. The results of a survey published by the Indonesian Internet Service Providers Association (APJII) in 2016 internet users in Indonesia exceeded one hundred million users or more precisely 132.7 million users. 51.8% are male and 48.2% are female, with a regional spread of 56% of users are from the island of Java with 24 million internet users in the age range of 25-29 years.

In other data, it is stated that Indonesia is one of the 25 countries with the highest ranking internet in 2013-2018. Indonesia ranks 6th behind developed countries like America, Brazil, China, India and Japan. This shows that in terms of numbers, the use of digital technology in Indonesia is very large, even more in other countries in ASEAN, and has changed people's behavior in various aspects of life, (online e-commerce), digital social interaction, electronic books , electronic newspapers, public transportation (taxis and motorcycle taxis), support services and financial technology.

**Table 1.** List of The Top 25 Countries of Internet Users 2013-2018 (in millions of people)

No	Countries	2013	2014	2015	2016	2017	2018
1	China	620.7	643.6	669.8	700.1	736.2	777.0
2	United States	246.0	252.9	259.3	264.9	269.7	274.1
3	India	167.2	215.6	252.3	283.8	313.8	346.3
4	Brazil	99.2	107.7	113.7	119.8	123.3	125.9
5	Japan	100.0	102.1	103.6	104.5	105.0	105.4
6	Indonesia	72.8	83.7	93.4	102.8	112.6	123.0
7	Russia	77.5	82.9	87.3	91.4	94.3	96.6

8	Germany	59.5	61.6	62.2	62.5	62.7	62.7
9	Mexico	53.1	59.4	65.1	70.7	75.7	80.4
10	Nigeria	51.8	57.7	63.2	69.1	76.2	84.3
11	United Kingdom	48.8	50.1	51.3	52.4	53.4	54.3
12	France	48.8	49.7	50.5	51.2	51.9	52.5
13	Phillipines	42.3	48.0	53.7	59.1	64.5	69.3
14	Turkey	36.6	41.0	44.7	47.7	50.7	53.5
15	Vietnam	36.6	40.5	44.4	48.2	52.1	55.8
16	Rep. Korea	40.1	40.4	40.6	40.7	40.9	41.0
17	Egypt	34.1	36.0	38.3	40.9	43.9	47.4
18	Italy	34.5	35.8	36.2	37.2	37.5	37.7
19	Spain	30.5	31.6	32.3	33.0	33.5	33.9
20	Canada	27.7	28.3	28.8	29.4	29.9	30.4
21	Argentina	25.0	27.1	29.0	29.8	30.5	31.1
22	Colombia	24.2	26.5	28.6	29.4	30.5	31.3
23	Thailand	22.7	24.3	26.0	27.6	29.1	30.6
24	Poland	22.6	22.9	23.3	23.7	24.0	24.3
25	South Africa	20.1	22.7	25.0	27.2	29.2	30.9
	Total Users	2692.9	2892.7	3072.6	3246.3	3419.9	3600.2

In addition, investment in financial technology companies grown by 201% globally in 2014, compared to a 63% growth in overall venture capital investment. It is confirmed that, this sector is a hot issue. The expectation of starting a new digital in the financial industry continues to swell, with the amount of money flowing into first-round investments grown by 48%. The huge amount of investment in this new type of financial also has reached fantastic numbers. Global investment in technology finance companies tripled to \$ 12.21 billion in 2014, clearly signaling that the digital revolution had arrived in the financial services sector. It is still uncertain whether this is more of a challenge or opportunity for the old players in this industry, but established financial service players are starting to take bold steps to engage with new innovations.

Actually financial technology is not a new phenomenon, starting from 1800 telegraph type technology has emerged in the world, until the 1900s automatic teller machines, credit cards, online shopping, until the first capital market system was present in the world, even the most e-commerce world-famous was born at this time namely the Alibaba company owned by famous Chinese businessman, Jack Ma. In the 2000s the development of financial technology was increasingly more mushrooming and more sophisticated. The 2000s is a season of financial technology like Apple Pay which was established in 2014 to Samsung Pay in 2015.

Financial technology is divided into 3 groups, namely Fintech 2.0, Fintech 2.5 and the last Fintech 3.0. Fintech 2.0 includes digital banking, insurtech, fintech in capital markets, venture capital and online financing. Examples of fintech 2.0 are e-banking, e-insurance, e-stock, and e-insurance. Whereas for Fintech 3.0 are independent technology companies and startups, for example P2P lending, crowd funding and so on. If there are several companies that cover both of them, the company enters the Fintech 2.5 category.

Currently Indonesia's financial technology is growing to Fintech 3.0 where many independent technology companies (start up) enter the market, because many new players joined the Indonesian Fintech Association finally created in September 2015, the goal is to become a reliable partner to realize the fintech ecosystem Indonesia from Indonesian companies for Indonesian people.

The Indonesian government has also intensified the vision of Indonesia's digital economy. In line with the Indonesian government, the Financial Services Authority (OJK) also has prepared 3 Indonesian Financial Services Sector Master Plans namely, as contributives, optimizing the role of the financial services sector and supporting the acceleration of national economic growth. Secondly stable, maintaining financial system stability as a system of foundation for sustainable development. Thirdly, inclusive, open financial access so as to improve the welfare of the community.

The Financial Services Authority (OJK) also captures the role of fintech for Indonesia, namely to promote equal distribution of population welfare, in order to fulfill domestic financing needs which is still very large, encourage distribution of national financing which is still uneven across 17,000 islands, increase financial inclusion and encourage export capabilities of SMEs which is still low.

Based on the things described above the authors are interested in conducting research on the critical success factors for financial technology in Indonesia. The Purpose of this research is for ranking several factors based on Indonesia circumstances. For support this research we used a direct interview method to the financial technology company with expectation they can describe more about what factor which really affect in their company.

## 2. Method

The type of research is descriptive research with a case study approach according to Sekaran and Bougie. Descriptive research aims to knowing, understanding, and describing characteristics of humans, events, or the situation that is the focus of the research, added a qualitative method is a naturalistic research method with researchers as key instruments by using data theft techniques are carried out in triangulation (combined) and the results of the research give meaning depth.

### 2.1. Iteration Process

Iteration is a process or method that is used repeatedly in solving a problem. There are three steps that is used in iteration process for this research, the steps as follows :

- 1) Systematic literature study based on the journal publication and conference proceedings.
- 2) Grouping 27 critical success factors of financial technology in Indonesia obtained from the first phase iteration. These factors analyzed more deeply at paperwork, if there is a similarity of meaning then grouped into in one factor.
- 3) The third iteration is carried out ranking and grouping 27 determinants that obtained from second iteration into 5 clusters of critical success factors for financial technology development

### 2.2. Stages of Research

In this study several stages were carried out, namely as follows:

- 1) Preliminary study  
As an initial step, researchers conducted preliminary studies to find phenomenon that occur in the reality, then look for gaps that occur. The phenomenon that occurs is the development of financial technology in various parts of the world, including Indonesia. In the literature study there are many factors that can determine the success of financial technology development. Researchers grouped the factors of the development of financial technology in a company based on the 5 literature obtained in literature studies.
- 2) Social situation  
The social situation chosen by researchers is 3 Indonesian companies with different types of business. These companies are Taralite, Futuready and KUDO.
- 3) Determine the subject  
At this stage, researchers determine employees in each social situation to become informants. Informants are CEOs, CFOs, head of marketing department and head of IT department.
- 4) Interview (in-depth interview)

The next stage is to conduct interviews with subjects that have been determined in the previous stage. Researchers conducted semi-structured interviews based on indicators that have been derived from the derivative of the variable dimensions of critical success factors.

**Table 2.** Encoding in Qualitative Analysis

Criteria	SoE Score
There is no evidence that strengthens the existence of determinants in the development of financial technology in Indonesia	0
Factors are mentioned explicitly but in passing or implicitly not discussed in detail	1
Factors are explained by clear identification or more than one paragraph transcript of the interview	2
The evidence provided strengthens the determinants of the development of financial technology in Indonesia, as explained in detail and respondents emphasize these factors	3

Source : Seddon (2010)

- 5) Record the results of the interview  
The results of the interviews that have been carried out in the previous phase are changed to a format that is easier for researchers to check and analyze. Recording the results of this interview can be done by coding, description, or reflection of the description as an interpretation of the initial stages of the research results.
- 6) Data analysis  
At this stage, data analysis of the results of interviews was conducted using the Miles and Huberman (1994) model in Sekaran and Bougie (2013). Where activities in qualitative data analysis are carried out interactively and last until the data is saturated.
- 7) Formulation of research results  
In the last stage of this study, the researchers formulated in the form of a description of the results of data analysis and combined other evidence such as from the source document, photo, supporting interview which was explained with the theories used.

### 3. Results

Here are the 3 fintech companies that we selected as research subjects :

#### 3.1. Taralite

One of the most fintech business categories echoing in the digital landscape of the homeland is peer-to-peer lending, with a variety of service specifications presented, this business provides integrated solutions for borrowing funds. If you look at the current demographic, between one player and another player who is very distinguished is the target market segmentation of the several peer-to-peer lending services that are increasingly existing today there is Taralite.

Based on interview Taralite shows that customer experience will be one of the most important factors for the development of financial technology in Indonesia. Taralite also proved itself to be the best in its partnership. Taralite received the highest rating in both Tokopedia and Lazada (e-Commerce platform) as their partnership to sell products. Taralite informant said that Taralite agrees with customer experience factors, proven customer experience can make financial technology engaged in lending, if an online merchant gets a fast and precise loan experience, they will be satisfied and return to using Taralite products and advance Taralite's customer business. Taralite believes that technological developments bring people easier to use lending facilities, because they no longer have to come to the service provider office. Through taralite all the required requirements are filled out, and submitted through an online process. Taralite no longer conducts face-to-face as is usually done by

conventional lending services. Prospective borrowers who will be granted the petition will also make payments online, namely by bank transfer. Money sent by Taralite will also be submitted via bank transfer.

For the problem of data security and challenges in Indonesia, Taralite does 3 things, namely Identify, Capacity, and Character. These three things will be considered by Taralite to be willing or not to lend funds to prospective customers. Since April 2015, Taralite has built its own credit algorithm which is intended to properly assess who the prospective customers will be served or rejected, to avoid possible defaults. The algorithm data set is to consider the length of time the merchant is located on the Taralite partnership site and the market reputation obtained by the prospective customer. Taralite also has a minimum income limit for loans at Taralite

Currently the number of employees at Taralite is 50 people. Taralite also does not hold special office hours, all based on responsibility for the work of each employee. If something has to be done, Taralite employees can be in the office even at dawn, which is usually done by IT employees. The problem of pension freedom is also very felt and in accordance with existing theories, that employees can retire or find other jobs if it is not appropriate. This is in line with the theory that working in a financial technology company allows us to get the freedom of retirement. Taralite also does not include a definite working period on their employment contract. If there are employees who want to stop, Taralite recommends to inform them in advance so that the replacement work will be found by the relevant team. To complete and run a business model like the one above, Taralite gets funding from 2 important investors. SBI group from Japan and the latest is J-Trust Bank, but for the nominal, the informant from Taralite cannot say at this time. Funding is an important factor for financial technology in Indonesia and Taralite informants agree on this because according to him there is no business that can be run without adequate funding.

Taralite based on registered sign number S-622 / NB.111 / 2017 starting from July 21, 2017 has been officially registered with the Financial Services Authority in Indonesia (OJK). This shows that Taralite is a fintech company that cares and agrees that government regulations are one of the determining factors for the success of financial technology in Indonesia. The non-conformity felt by Taralite is only about the limitation of the minimum amount of money that can be left for one family, this is felt to limit Taralite's customers to buy Taralite products. In addition to these problems Taralite claimed to be able to adjust to the regulations set by the Indonesian Government.

### 3.2. *PT. Futuready Insurance Broker (FUTUREADY)*

Futuready Insurance Brokers are online retail insurance brokers registered and supervised by the Financial Services Authority (OJK) with license number No. KEP-518 / NB1 / 2015. Futuready is an insurance broker with the first digital focus in Indonesia. This allows customers to research / compare, purchase and manage insurance online. Thus all the problems and difficulties that have been experienced by customers to get insurance can be solved by the ease of getting insurance online: Anywhere and anytime. This is what distinguishes Futuready Insurance Brokers from existing financial services, namely Futuready Insurance Brokers maximizing the power of the internet.

Futuready, according to informants, made use of the situation where insurance brokers in Indonesia only focus on a large scale, according to Futuready, this is one of the opportunities that can be used considering that there is an opportunity seen by Futuready from people in Indonesia who actually want to buy insurance products but still have not found an agent that suits him. This is where Futuready then takes over by offering insurance products with just a touch of smartphone. Through its vision "Promotes financial inclusion and insurance penetration in Indonesia by providing consultation and easier access to insurance products." Futuready Insurance Broker employees run it with a suitable mission to help Indonesia understand insurance and provide easier access to better insurance products.

Like Taralite, Futuready also has pension and flexible hour freedom. Futuready also does not place employees in accordance with their disciplines but emphasizes the responsibility and passion of the employee. Therefore, Futuready's informants agreed that one of the factors that led to financial technology developing in Indonesia was the organizational culture factor. Futuready is a start up

controlled by AEGON group. Many company rules and policies are taken based on AEGON's decisions. One of them is about funding. All Futuready funding sources come from AEGON group whose Asian region is in Hong Kong. Futuready Insurance Brokers are online retail insurance brokers registered and supervised by the Financial Services Authority (OJK) with license number No. KEP-518 / NB1 / 2015. This makes Futuready a company that adheres to government regulations.

The constraints experienced by Futuready for government regulations are only a matter of regulation that requires physical servers to store data which according to regulations must feel in Indonesia. This is a bit of a pain for Futuready because there is more sophisticated technology that Futuready can use than having to place a physical server in Indonesia. However, Futuready continued to follow and comply with the regulations set by the OJK.

### 3.3. *PT. Kudo Teknologi Indonesia (KUDO)*

Founded in July 2014 by a team of experienced global technology & management consultants such as Apple & The Boston Consulting Group, Kudo develops practical solutions for the marketplace & payment ecosystem in Indonesia. Kudo makes it easy for Indonesian people to make e-commerce purchases for those who do not have access or do not want to make transactions online. Through Kudo, they can transact online in cash. In collaboration with various e-commerce companies, Kudo offers up to millions of products.

In December 2014 Kudo launched the Kudo application which was installed specifically on a 10 inch tablet with the concept of B2B cooperation. Kudobox is placed in several public places such as malls, mini markets and offices. Then in January 2015, Kudo launched the Kudo Application installed on a 7-inch tablet with an individual agency concept. Individuals registered as Kudo agents sell using the tablet.

After launching the next Kudobox 1 and Kudobox 2 in March 2016, through the mobile app, Kudo was able to increase the number of customers and Kudo Agents without any territorial restrictions. Lastly in May 2016, Kudo launched the Kudo web app. Through the Kudo web app everyone can become an agent, and sell using a laptop / PC without having to install the Kudo application. Kudo, which is a financial technology payment field, carries the principle of O2O, which is online to offline, where the intention is that online sellers can market their products to offline customers through Kudo agents. This helps those who have 3 problems to shop online, namely the lack of bank accounts, lack of credit cards and contracting a trash issue. According to the informant, therefore Kudo believes that customer experience is an important factor in the success of financial technology in Indonesia.

The technology used by agent Kudo is made in such a way that it can still be used even if it is on 2G networks and even in places where the internet infrastructure is still weak. This technology makes Kudo different and becomes one of the targets of their target customers, those who have not been technologically savvy and are in small areas in Indonesia. For this reason, Kudo informants believed that the factors of technological and internet development were factors that led to the development of financial technology in Indonesia.

Kudo believes that employees who are happy and love their work can bring the company in a better direction. Therefore, kudoplex, which is an office of kudo employees working in the village, is as comfortable as possible to make employees increase their capacity. Because Grab has been acquired, all Kudo funding is now covered by Grab. Grab Management is a unity with Kudo management. For certain funds, when the acquisition of information cannot provide an answer. Kudo is not yet registered with OJK, but until now it turns out the process is ongoing. There were several obstacles experienced by Kudo which almost covered the registration process to OJK. These factors are not from funding problems, but the informants also cannot inform the problem of what is experienced by Kudo, which is almost the registration process to OJK.

**4. Discussion**

The success of the development of financial technology in Indonesia has a critical succes factors as explained in the previous section. Table 3 presents a summary of the determinants of the development of financial technology in Indonesia

**Table 3.** Critical Succes Factors Based on Interview Conducted

No	CSF	Taralite	Futuready	Kudo
<b>Customer Experience</b>				
1	Making the Customer as the Foundation of What the Company Does	██████████		
2	Customer experience			
3	Loss of trust in traditional financial services.			██████████
<b>The Development of Internet and Technology</b>				
4	Technology is the main factor			
5	Digitalization			
6	Digital Literacy from Customer			██████████
7	<i>Big Data</i>			
8	Millennials are very familiar with the Internet			
9	Broad Spread of the Internet, Social Media and Smartphones			
10	The infrastructures of industries	██████████	██████████	
<b>Organization Culture</b>				
11	Guaranteeing Implementation Pragmatics			
12	Overcoming Relevant Disorders			
13	High performance in culture	██████████		
14	Decision based on Data	██████████	██████████	
15	Create an Ecosystem			
16	<i>Zero Waste</i>		██████████	
17	Scalability			
18	The Challenge of Status Quo			
19	Freedom of retirement	██████████		
20	Talent scouting and management			
<b>Funding</b>				
21	There is a gap in SME Funding			
22	<i>Self Directed Investor</i>			
23	New funding sources			██████████
<b>Government Regulations</b>				
24	Difference Policy Support	██████████	██████████	
25	Proportion of Appropriate Regulations			██████████
26	Satisfaction to the Government	██████████		
27	Regulatory Framework			██████████

Explanation :

██████████	Factors Found in Social Situations
██████████	Factors Found Slightly in Social Situations
██████████	Factors Not Found in Social Situations

The following are indicators that show factors classified into 3 parts as above:

1) Factors Found in Social Situations

Factors are classified as "Factors Found in Social Situations" if in the interview process, information provides documentary evidence and mentions it more than or equal to 3 lines of interview transcript.

2) Factors Found Slightly in Social Situations

Factors classified as "Factors Found Slightly in Social Situations " if in the interview process, the informant only mentions implicitly and not more than 2 lines of interview transcript

3) Factors Not Found in Social Situations

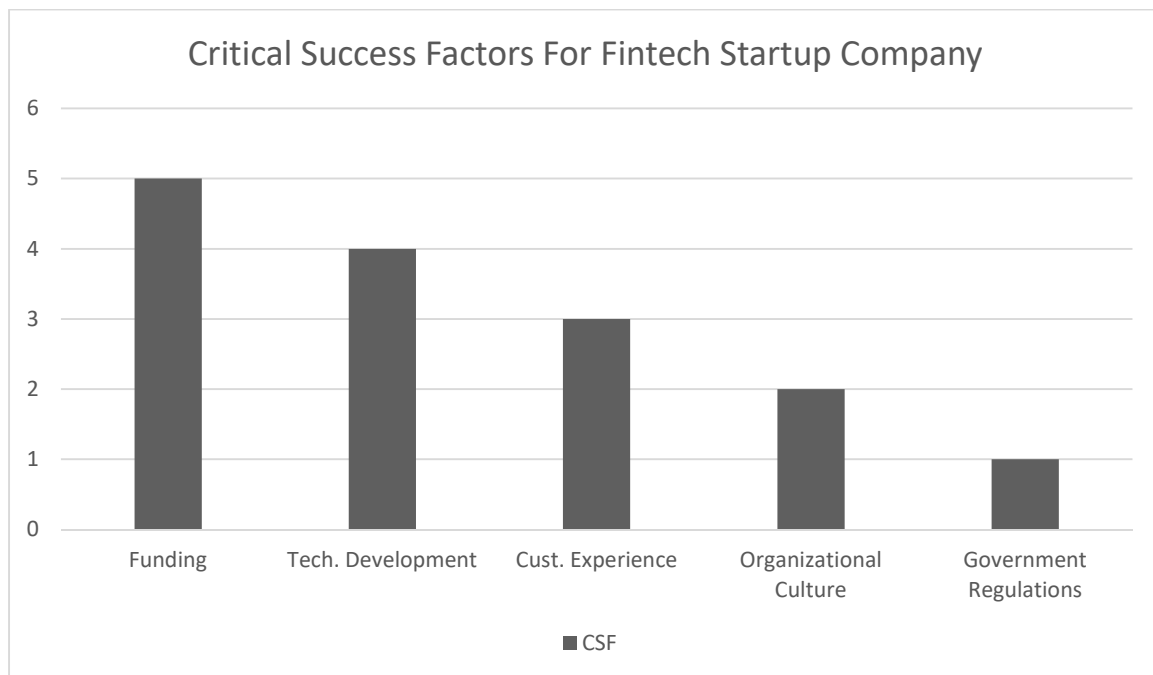
Factors are classified as "Factors Not Found in Social Situations" if in the interview process, the informant does not imply and also rejects or denies the statement given by the author.

From the results of interviews conducted on Taralite 20 indicators were found in social situations, 5 indicators were found only slightly and the remaining 2 indicators were not found in social situations. Whereas for Futuready 23 indicators were found in the social situation, 3 indicators were found only slightly and the remaining 1 indicators were not found in social situations, and for Kudo 19 indicators were found in the social situation, 6 indicators were found only slightly and the remaining 2 indicators were not found in social situations. Customer experience can make financial technology in Indonesia grow, because Taralite for instance as a financial technology engaged in lending sector believes that if a merchant gets a fast and precise lending experience, they will be satisfied and re-use Taralite products and advance Taralite's customer as a business. Customers must be a concern for all that fintech companies do, from market research to product delivery. All steps taken must be in line with the customer.

Technology development have made it easier for people to use lending facilities, because they no longer need to come to the lending office. Through technology, all required requirements are filled in, and submitted through an online process. Fintech is changing the world through agile platforms and new technologies. Companies must acquire new capabilities and technology and need to invest in promising technology. Fintech companies believe that employees who are happy and love their work can bring the company in a better direction. For example kudoplex which is a kudo employee office building is designed as comfortably as possible to make employees increase their capacity.

Funding is an important factor for financial technology in Indonesia and fintech companies are aware of this, because according to them there is no business that can be run without adequate funding. Some companies consider that government regulations have not fully supported the development of fintech. There are still some limitations in terms of capital that must be owned, loan distribution etc. But in general the government rules become a clear legal aspect.





**Figure 1.** The Most Critical Success Factors

## 5. Conclusions

According to the data that has been conveyed, customer experience, technological development, organizational culture, funding and government regulations became critical success factors for fintech company, and the most critical success factors for financial technology startup company in Indonesia are funding, technological development, customer experience and then followed by organizational culture and government regulations.

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