Technology Acceptance Model Approach to Analysing the Use of Fintech in MSME Transactions in Buleleng

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ABSTRACT

The use of technology should be a strategy for MSME to run their business. Supported by various regulations and facilities by the government and the private sector, MSME actors should be able to make the best use of technology according to their business needs. Fintech is a financial service that can help perpetrators to make payment transactions, with various promised benefits. In fact, many factors can support or hinder MSME actors from using this technology. The Technology Acceptance Model can be used to find these factors, so that a conclusion can be found that can be used by various parties involved in the use of this technology.

Keywords: Perceived ease of use, Perceived usefulness, SMEs.

1. INTRODUCTION

Micro, small and medium enterprises (MSMEs) currently have very rapid growth. They are one of the drivers of the economy in Indonesia which plays an important role in the growth and absorption of labor in Indonesia. MSMEs have a very strategic position, where this sector has the advantage that it is more resilient in dealing with economic crises, can use local resources, businesses are relatively flexible and have an important role in increasing economic strength. In addition, MSMEs have a major role and contribution to the national economy. Reported in depkop.go.id regarding the news "Kemkop” and MSMEs are targeting an increase in the contribution of MSMEs to GDP. As stated by the Minister of Cooperatives and SMEs, namely Teten Masduki that targeting by the end of 2020 the contribution of MSMEs to exports increased to 18% from the previous 14% of GDP national increase to 61% and entrepreneurship to 3.55.

Fintech stands for financial technology, a form of technology-based financial services that is developing in the world. Fintech has various forms of services such as payment fintech, information fintech, financial SaaS fintech, capital market fintech, fintech crowdfunding, Peer to Peer Lending [1]. This technology or service is a form that can be an alternative for financial institutions and their users in providing and obtaining services. Fintech can act as a service delivery to users that was previously unattainable by existing traditional institutions or services. Some forms of fintech are breakthroughs because they can change traditional financial products into many variations. For example, in savings and loan solutions, fintech SMEs can access financing facilities that were previously constrained by bureaucracy at other financial institutions, such as banks. Fintech simplifies the financing process such as being able to provide loans without collateral. Lenders can come from people who have extra money in any amount, and borrowers can come from any community and in any amount. The Fintech eliminates some of the requirements and bureaucracy that originally existed in previous institutions while still being monitored by the government.

Buleleng Regency is one of the regencies in Bali which is also a place for the development of MSMEs. The number of SMEs from year to year continues to increase. According to Komang Agus Satuhedi as Kadin of Buleleng Regency in the era of digitalization revolution 4.0, MSME actors must be able to use digitalization in business operations. If they can’t go digital, then MSMEs in Buleleng can be left behind. With such a statement, MSMEs in Buleleng...
must be tricked into going digital, which has become a necessity in today's digital era.

Food business is one business that is much in demand by the public, because in addition to generating a high income, food is also a source of basic necessities for everyone [2] Moreover, future pandemic like this, culinary business is a business that is very easy to reach. As we know the culinary business is the easiest business to vary. Therefore, the following is the development of the culinary business in Buleleng Regency:

The industrial revolution 4.0 is currently a challenge that various industrial sectors, especially MSMEs must face. With the current industrial revolution, it can change the manual work system into a technology-based work system. This makes MSME actors have to adapt to technological developments in order to survive and compete in the era of the industrial revolution 4.0. This study will analyze the use of fintech in Indonesia, especially as a payment method for MSMEs in Buleleng Regency and its surroundings with the criteria for "small" businesses in accordance with Law no. 20 of 2008, namely the criteria for businesses that have assets of Rp. 50,000,000 to Rp. 500,000,000 excluding land and buildings for business premises, and have an annual turnover of Rp. 300,000,000 to Rp. 2,500,000,000. This “small” criterion was chosen because there are many phenomena that occur, the business is still in the development stage, not too mature in having an entrepreneurial nature so that it can be seen the margin or difference between businesses that implement fintech or not. The purpose of this study is to find factors that result in not paying attention to technology-based financial services by the community, especially MSMEs [3] as well as factors that result in non-optimal use of electronic money [4]. By not paying attention to this service, it can lead to the undeveloped business of an MSME which can result in the unsuccessful acceleration of economic growth that has been planned by the government, as well as not finding the efficiency of business processes in their business.

The success of the application of information technology is very dependent on the acceptance by the user as a technology user. One known technology acceptance model is TAM (Technology Acceptance Model). Technology Acceptance Model (TAM) is a theory introduced by Davis in 1986. The TAM model is adopted from The Theory of Reasoned Action (TRA) model. In accordance with the term TAM, that "A" stands for "Acceptance" which means “acceptance”. So that TAM can be interpreted as an analytical model to determine user behavior towards technology acceptance. This theory is often used to explain individual acceptance of the use of technology systems, one of which is the use of fintech e-payments. Indonesia is a prima donna country in developing fintech. In 2016, the e-payment service “Go-Pay” owned by PT. Gojek Indonesia is the top 4 service along with other e-payment services belonging to conventional banks. The “Go-Pay” service can skyrocket into the top 4 in a short time and is not balanced when compared to the development time and capital of conventional bank services. But with the time and capital, “Go-Pay” has proven to be able to develop quickly and remains in good and stable condition, and is ready to compete with other services. Furthermore, the technology side of financial services in Indonesia is still a “green grass field” that has great opportunities to be managed and developed. As the Indonesian government continues to prepare regulations and technical elements for their implementation, this can be an opportunity for the Indonesian people to develop in various fields such as employment opportunities and innovation in various business processes. Inevitably this opportunity must be taken by Indonesia if it does not want to be left behind by neighboring countries.

Table 1. The Development of the Number of Culinary Businesses in Buleleng Regency

<table>
<thead>
<tr>
<th>Districts</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buleleng</td>
<td>69</td>
<td>47</td>
<td>71</td>
</tr>
<tr>
<td>Banjar</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Busungbiu</td>
<td>4</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>Gerogkak</td>
<td>45</td>
<td>46</td>
<td>47</td>
</tr>
<tr>
<td>Kubutambahan</td>
<td>24</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Sawan</td>
<td>28</td>
<td>27</td>
<td>31</td>
</tr>
<tr>
<td>Seririt</td>
<td>40</td>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>Sukasada</td>
<td>25</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Tejakula</td>
<td>3</td>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>

The use of UMKM in the culinary field in Buleleng Regency as the object of research because Buleleng Regency is the largest district after Denpasar. In addition, the development of culinary MSMEs in Buleleng district is starting to mushroom, where Buleleng district is known as an education city and of course the population is dominated by the millennials.
generation. Table 1 depict the development of the number of culinary businesses in Buleleng Regency

As the Indonesian government continues to prepare regulations and technical elements for their implementation, this can be an opportunity for the Indonesian people to develop in various fields such as employment opportunities and innovation in various business processes. Inevitably this opportunity must be taken by Indonesia if it does not want to be left behind by neighbouring countries. The Theory Acceptance model is a theory that uses structuration to find facts and things that are used to find out how big the level of acceptance of MSMEs in fintech is. Because the absorption of fintech, especially in the use of e-payments, is not paid much attention and is used in Indonesia, this study will conduct an analysis of the use of fintech specifically in the form of the use of e-payments by MSMEs in Buleleng with the criteria for "small" and "medium" businesses in the business sector. The formulation of the research problem is: 1. What is the perception of MSMEs in terms of the usefulness of e-payment? 2. What is the perception of MSMEs in terms of e-payment convenience? 3. What is the pattern of using e-payments in the MSME sector in Buleleng? The purpose of this study is to find factors that result in not paying attention to the technological interface of financial services by the community, especially MSMEs [3] as well as factors that result in non-optimal use of electronic money [4]. By not paying attention to this service, it can lead to the undeveloped business of an MSME which can result in the unsuccessful acceleration of economic growth that has been planned by the government, as well as not finding the efficiency of business processes in their business.

2. LITERATURE REVIEW

2.1. Payment Transactions

Transaction is an activity that causes changes to a value, which can be in the form of money or property. In addition, the transaction is a marker of the occurrence of a transfer process for a good or service that can be separated from the technological interface [5]. A transaction is successful if a value is transferred to another party with the consequence of getting another form of value. According to Williamson, a transaction on a technology cannot occur if there is no agreement between the parties concerned to use the technology (Williamson, 1985). That is, if you use technology to transact unilaterally, then the transaction is not yet valid, and can be denied by the other party concerned. In transactions, there is a transaction administration.

Transaction administration is a method of recording the transaction which is useful as evidence if a transaction has been made. Various forms of transactions have been circulating in the community, such as debt and receivable agreements, barter, credit, receipts, and the most frequent transactions are cash transactions. Payment is an agreement between two or more parties to exchange one value for another value, such as payment of goods, payment of currency exchange, payment of debt, payment of salary, etc. (“Payment-Wikipedia,” nd). A payment has a transactional activity, where both parties or more agree with each other for the value exchanged. So a payment transaction is an agreement or agreement between two or more parties to exchange a value for another value.

This payment transaction can be recorded in a payment transaction administration which is proof that a payment transaction between two or more parties has occurred. A payment transaction usually consists of the date, the parties involved, and the agreed payment amount. An administrative payment transaction is now commonly referred to as a receipt or invoice. Along with the times, various forms of payment transactions have also developed with various means or tools. Transactions can now be made with cash, electronic money, debit cards, credit cards, and other tools. This form can be varied again, such as using Cash on Delivery (COD), where the buyer will pay for the transaction when the goods arrive at the place. Another popular form is credit payment transactions, where the buyer can receive the goods in advance, then the buyer pays for the goods in installments. Variations in the current form of payment can be in the form of: 1. Shopping vouchers 2. Points 3. Deposits 4. E-Currency or electronic currency 5. Bank transfers, and so on.

2.2. Financial Technology (Fintech)

Fintech, a form of technology-based financial services that is currently a trend in the world, both in the form of equipment and business [6]. The term fintech itself is an abbreviation of financial technology. America and China became the largest countries in 2015 that provided investment through fintech, while China became the country that had the latest innovations in fintech development in their countries. This is reinforced by the existence of the Alibaba company in China which is very stable and strongly supports the development of fintech in China. In Southeast Asia, Singapore is the closest neighbouring country whose government is very concerned about Fintech. This can be seen very simply from the many technological devices used to carry out transactional activities such as in shops and public transportation in Singapore. In addition to making it easier, fintech devices also speed up transactions and reduce errors in transactions [1]. The definition of fintech extends to all technology-based financial services, no longer a private non-bank institution that does business in this area. Conventional banks can also use fintech as a tool and provide services to run their
business. So now in Indonesia, fintech has been supported by BI and OJK in its use. OJK has issued Financial Services Authority Regulation (POJK) Number 77/POJK.01/2016 concerning Information Technology-Based Lending and Borrowing Services at the end of 2016. It regulates the financial industry that sells and uses fintech in Indonesia. Currently in Indonesia; based on the type of user, separated into bank and non-bank. The term fintech itself is more popular with non-bank startups that provide technology-based financial services. In November 2016, a Fintech Office was inaugurated by the governor of Bank Indonesia. The fintech office is prepared so that it can become a forum for various problems that may arise as a result of holding fintech in Indonesia. Various efforts such as risk mitigation, assessment, and evaluation of the fintech business model are carried out as a form of support for the development of technology-based financial transactions for Indonesia.

With the various forms of government efforts above, it can be concluded that fintech is a phenomenon that is noticed by the government, and is expected to bring progress to Indonesia's economic development. There are many kinds of fintech services available in Indonesia, such as payments, investments, lending, financial planning, financial aggregators and other forms. The nature of fintech which is very dependent on this technology also affects the target of the fintech marketshare itself. To gain market share, fintech can use existing social media to promote. Fintech has various ways to spread all about fintech to potential users. This can be done by holding seminars, meetings between fintech users, and using the current mindset of millennials such as approaches to using mobile-based applications, transparency, and long-term relationships that can influence potential users. This turned out to have an effect on the approach taken to the community, and of course it affects the income from these products and services [1].

2.3. Fintech as a Means of Electronic Payment Transactions

Electronic payment transactions or commonly referred to as e-payments are mushrooming in Indonesia. The e-payment system can be defined as network infrastructure (online) and payment methods as a means to exchange value in monetary terms through internet services [7]. In developed countries, payments using e-payments are normal, reflecting the maturity of an e-commerce [8]. Fintech services as a means or tool for electronic transactions are now getting attention. Starting from the government, banks, to the private sector; competing to provide this service. From the government sector, the city of Jakarta has a "JakCard" from Bank DKI which was originally used to pay for busway transportation in Jakarta. Along with its development, other banks have also started to launch electronic transaction service products such as "e-money" from Bank Mandiri, "Flazz" from Bank Central Asia, “TapCash” from Bank Negara Indonesia. Telecommunications companies also do not want to lose in developing this product. By utilizing the existing network, they began to provide services such as “t-cash” from Telkomsel, “dompetku” from Indosat, and “XL Tunai” from telecommunication service provider XL Axiata. Other private products such as “Go-Pay” from PT. Gojek Indonesia, "Doku Wallet" from Doku and other companies. Generally, these services can expand depending on the breadth of their product network that is already available initially. So that the network can be used as a foundation to provide these transaction services.

2.4. Micro, Small, and Medium Enterprises (MSMEs)

Micro, Small and Medium Enterprises (MSMEs) are productive forms of independent business, managed by individuals or business entities, which have assets of not more than Rp. 10,000,000. 000, - (ten billion rupiah) including land and building premises and the sale proceeds is not more than Rp. 50,000,000,000,- (fifty billion rupiah) [9]. This form of business is the most popular form in Indonesia, as well as being the wheel of the Indonesian economy because 99.99% of business forms in Indonesia are MSMEs. The principle of MSMEs is the growth of independence, togetherness to work on their own initiative, for the realization of transparent, accountable and fair public policies Law No. 20 of 2008. The assets referred to in the law do not include land and buildings for business premises. While the turnover in question is the annual turnover. However, there are still many classifications of MSMEs according to other institutions, such as Bank Indonesia, the Ministry of Industry, and the Central Bureau of Statistics.

2.5. Application of Payment Transactions Using Fintech on MSMEs

The application of fintech as a means of payment transactions in MSMEs can open up opportunities for entrepreneurs to benefit from using fintech as mentioned above. These advantages are not only from the point of view of entrepreneurs, but will also benefit consumers. The most basic thing for consumers is the convenience of transacting. By using fintech, entrepreneurs can reduce the possibility of queues, transaction counting errors, and fraud in transactions. By reducing this, it can certainly increase comfort for consumers. In addition, the use of fintech can be a promotional medium for entrepreneurs from the fintech service provider. Usually, fintech service providers provide special promotions for their users.
from the consumer side) with point facilities and discounts at certain outlets. Indirectly, entrepreneurs get a promotion for their business. For example, the fintech facility provider owned by PT. Cellular Telecommunications (telkomsel), provides fintech services under the name “t-cash”. It is possible that if MSME entrepreneurs use “t-cash” payment transactions in their business, they will get advertising services through Telkomsel’s website [10]. In addition, they will be included in MSME promotional events [11].

With these various advantages, it is possible for entrepreneurs to expand their business in order to compete. Forms of payment transactions using fintech that are popular among MSME entrepreneurs are payments using payment cards such as “e-money” from Bank Mandiri, “Flazz” from Bank Central Asia, “TapCash” from Bank Negara Indonesia. Another form is electronic money in the form of deposits such as “Go-Pay” from PT. Gojek Indonesia. Furthermore, there is a form of electronic money from PT. Cellular Telecommunications (telkomsel) named “t-cash”; an electronic money that utilizes Near Field Communication (NFC) technology, which is a wireless technology to conduct transactions with the recipient to make payments. NFC can be on the user’s mobile device (consumer) or added in the form of a sticker affixed to the user’s (consumer) mobile device. The method of using payment with payment cards and NFC is almost the same, namely by bringing the card/device closer to the receiving device at the entrepreneur’s outlet to make payment transactions. In this way, the balance belonging to the consumer will automatically move to the balance belonging to the entrepreneur as a sign of a payment transaction. So with this process, the payment transaction is declared complete.

2.6. Technology Acceptance Model

Definition of Technology Acceptance Model (TAM) was first developed by [12]. TAM is structured to explain and predict individual acceptance of information technology. Information systems researchers have investigated and replicated TAM, from the results of the study stating that TAM is valid in predicting individual acceptance of various corporate information technology systems [13]. TAM is an adaptation of Theory of Reasoned Action (TRA) which establishes two beliefs, namely perceived usefulness and perceived ease of use as determinants of attitudes towards behavioral intentions and the use of information technology. In TAM the behavioral intention to use leads to the use of information technology. The Technology Acceptance Model (TAM) has previously been adopted to prove the factors that influence the acceptance and use of technology such as e-shopping [14], internet banking [15], and mobile banking [16]. So the Technology Acceptance Model (TAM) is appropriate to explain the factors that influence the use of OVO e-money by using variables from the basic concepts of TAM, namely usability and convenience.

3. METHOD

Qualitative research methodology is used so that the results of each structuration can be taken into consideration for decision making. By applying structuration theory to various fintech implementation structures in MSMEs, we get the factors that influence a fintech to succeed or fail to be implemented. This study uses a causal research design because it aims to obtain evidence of causality between research variables consisting of 

| perceived ease of use, perceived usefulness, and the use of e-payments on SMEs in Buleleng. The scope of this research is the behavior of SMEs, especially the use of e-payments. The scope of the discussion researched is the use of e-payment. The subject of the research is MSMEs in Buleleng who have internet access and who are already using e-payment. While the object in this study is the behavior of SMEs in the use of e-payment activities, namely perceived ease of use, and perceived usefulness, which are associated with the use of e-payments. The first step is to conduct an analysis of the object using TAM is to determine the object of research. This is necessary because the research subject domain and interview questions with TAM need to be adjusted first.

The variables in this study are FINTECH, in this case e-payment, perceived ease of use, and perceived usefulness. Each of which is measured using indicators (see Table 2). Perceived ease of use is measured using six indicators, namely: easy to learn, controlled, clear and easy to understand, flexible, easy to master, and easy to use. Perceived usefulness is measured using six indicators, namely: work faster, work performance, increase productivity, effectiveness, work easier, more useful. The type of data used in this study is qualitative data in the form of information or information related to the problems studied, namely the use of e-payments. The data is in the form of interviews from the behavior of MSMEs, especially on the use of e-payment activities. Meanwhile, the source of data used in this study is primary data in the form of interviews with SMEs related to the use of e-payment activities.
Table 2. Construct of the research

<table>
<thead>
<tr>
<th>No</th>
<th>Construct</th>
<th>Proposition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perceived Ease Of Use (P1)</td>
<td>1) easy to learn, 2) controlled, 3) clear and easy to understand, 4) flexible, 5) easy to master, and 6) easy to use,</td>
<td>The benefits of real features and structures that arise when using fintech, can be learned quickly,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Perceived Usefulness (P2)</td>
<td>1) work faster, 2) job performance, 3) increase productivity, 4) effectiveness, 5) easier job, and 6) beneficial.</td>
<td>The enthusiasm of officers in offering transactions using fintech in order to achieve transaction efficiency, transaction speed, increase revenue, reduce fraud, the enthusiasm of officers to use fintech to reduce conflicts during the transaction process working environment conditions that support the application of fintech.</td>
</tr>
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</table>

Table 3. The research results

<table>
<thead>
<tr>
<th>No</th>
<th>Construct</th>
<th>Proposition</th>
<th>Description</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perceived Ease Of Use (P1)</td>
<td>1) easy to learn, 2) controlled, 3) clear and easy to understand, 4) flexible, 5) easy to master, and 6) easy to use,</td>
<td>1) system is easy to use 2) all records are described in detail 3) The existing features are easy to understand 4) can be done at any time 5) improve convenience 6) Using fintech increase innovation</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td>---------</td>
</tr>
<tr>
<td>2</td>
<td>Perceived Usefulness (P2)</td>
<td>1) work faster, 2) job performance, 3) increase productivity, 4) effectiveness, 5) easier job, and 6) beneficial.</td>
<td>1) The enthusiasm of officers in offering transactions using fintech in order to achieve transaction efficiency, 2) transaction speed, increase revenue, reduce fraud 3) the enthusiasm of officers to use fintech to reduce conflicts during the transaction process 4) working environment conditions that support the application of fintech can be used as a means of promotion</td>
<td>Positive</td>
</tr>
</tbody>
</table>

The population in this study is MSMEs in Buleleng who use e-payment transactions. The data collection method used in this research is the interview method, which uses a set of questions and statements to the respondents to answer. The questions at the time of the interview contain items measuring constructs or variables in the form of a list of questions and statements used in the research model. Various factors involved as well as various roles get an evaluation of actions and real tasks to support successful implementation. The advantage of applying this theory is getting evaluations in layers; facilitate the distribution of actions and tasks and responsibilities to meet implementation needs. The method of collecting information is done by using 2 ways, namely interviews and observations. The following are the stages of this research: Determining the object of research Making propositions according to the constructs in TAM Collecting data from sources (interviews and observations) Analysis of interviews based on structuration and suitability Processing results and drawing conclusions (factors & usage patterns).

4. RESULTS & DISCUSSION

In this study Retained Earnings, SMEs do not do it over resistance to the use of fintech. With various perceptions including ease and usability (see Table 3), in using fintech, especially e-payments, because there are various consequences that must be considered after implementing this technology. The following are the results of the analysis of the application of fintech as a means of payment to MSME actors with the TAM approach, the sentiment column is the reaction column obtained which will be used to determine the supporting factors and inhibiting factors in this implementation process:
In this case, the key in implementing this technology is convenience. \textit{Fintech} is considered to be able to provide convenience to its business processes. By ignoring the consequences at first, convenience is a special thing that is considered by MSMEs as an acceleration of their business wheels. By implementing \textit{fintech}, maybe MSME actors think there is no need to add employees to the finance department because financial records have been handled by \textit{fintech}. Furthermore, with the electronic money feature that will enter the account automatically, it will certainly ease the daily task of making deposits to the bank, with various savings that can appear. After doing some deliberation, it turns out that there are consequences behind the convenience. The biggest consequence is the cost that arises from using these features. At first, maybe the figures offered were considered burdensome, there was a rejection from MSME actors, because the calculations were inadequate. It turned out that behind the refusal, there was a customer request for MSME actors to offer their products through the organizer. At the insistence and demand, MSME players finally tried to use this feature. Moreover, with the various benefits offered, \textit{fintech} is felt to be a partner for MSME actors in running their business. The convenience that was the beginning of the reason why MSMEs used \textit{fintech} turned out to be going well. Various conveniences do in fact have an impact on their business. Conveniences such as promotional features, delivery services have become everyday things that have an impact on their business. This of course will have an impact on the business, which will get an increase in its business. Another thing that impacts is the lack of cheating after using \textit{fintech}. Researchers can deduce in accordance with the discussion and analysis results that the perceived usefulness and perceived ease of use to use fintech especially e-payment benefit to the sustainability of SMEs means that higher perceived usefulness, perceived ease of use and understanding of accounting the interest in using the software-based bookkeeping mobile will also be tall.

REFERENCES


