Digital Cashless Payment Readiness Model on MSMEs Using Technological-Organization-Environment (TOE) Framework: Study on MSME Users Gopay and Ovocash

Novita Ekasari1, Rosmeli Rosmelii2, Rista Aldilla Syafri3

1Universitas Jambi, Indonesia
*Corresponding author. Email: Ekasari.novita01@gmail.com

ABSTRACT
The success of a good business is determined by a strategy that is able to compete with its competitors, one of which is by using a non-cash payment system (digital) so as to provide convenience for consumers to make payments anywhere and anytime. Non-cash payment methods have begun to be applied by businesses by starting to cooperate with the largest digital platforms in Indonesia, namely Go Pay and OVO cash. The purpose of this study is to see the readiness of micro, small and medium enterprises in using digital payment methods with a TOE (technology-organization-environment) approach and then see if they are ready to use digital payment seen from these 3 sides. This study represents samples from 5 cities in Sumatra Island namely Aceh, Medan, Jambi, Pekanbaru and Lampung. The study used a sample of respondents, who have collaborated with GoPay and OVO Cash applications totaling 175 MSMEs. This research uses PLS and Path Analysis techniques with the SPSS test tool. The results showed that MSMEs in Sumatra region can absorb the use of digital payments seen in terms of Technology with a percentage absorption of 75.8%, Organization by 41.2% and Environment by 58.2%. The conclusion of this study is that there is a readiness of businesses from 5 major cities in Sumatra to use digital payments Gopay and OVO cash that makes their business easier.

Keywords: Digital Cashless Payment, MSME, TOE Framework.

1. INTRODUCTION
Every company or business is required to create a good and integrated competitive strategy because competition is the key to the success or failure of a business, where consumer satisfaction will also depend on the business strategy used by a business. The increasing intensity of competition makes companies always pay attention to the needs and desires of consumers by providing a more satisfactory service than what their competitors already do. Companies with high quality and competitiveness that are able to have many consumers. Technological changes and the social environment that occur in society also change the lifestyle of people where information technology such as internet and e-commerce with more efficient and practical means of communication has been able to change the way consumers live including the way of shopping.

Bank Indonesia stated that in 2018 Go Pay was able to register itself as the highest mobile payment platform with a percentage of 79.3%, then OVO 58.4% [1]. In the use of transactions on MSMEs, Go Pay and OVO that have cooperated with Grabpay where GrabPay consumers now pay are replaced with OVO Cash. Therefore, this research is limited to two large vendors namely GoPay and OVO Cash. Although GoPay and OVO are easy to find in MSMEs but in their implementation some MSMEs still encounter confusion and difficulties especially for micro businesses and small businesses that still have difficulty in making Mobile Payment transactions because they have not mastered the technology or feel the need for extra time to make transactions with mobile payment. Based on preliminary surveys, most consumers prepare cash to make payments to micro-businesses such as food stalls and small exchanges.
The purpose of this research is to get an idea of the level of readiness of MSMEs in Sumatra island where the level of readiness may differ from MSMEs located in Java island which is notabene in a more modern environment. Some previous researchers have conducted studies with the same variables but with narrower research scope and fewer objects. This research was conducted with a broader scope of research namely MSMEs located in the island territory of Sumatra so that they can get an idea of the level of readiness of MSMEs in Sumatra Island where the level of readiness may differ from MSMEs located in Java island which is notabene in a more modern environment.

2. METHODS

2.1. Data Source

Based on the source, the data can be divided into two, namely Primary Data and Secondary Data:

a. Primary data is data created by researchers for the special purpose of solving the problems that are being handled. The data were collected by researcher directly from the first source or object where research is conducted.

b. Secondary data is data that has been collected for purposes other than to solve the problem at hand. This data can be found quickly. In this study, the secondary data source is literature, articles, journals and websites on the internet with regard to the research conducted.

2.2. Operationalization of Research Variables

The operational definition describes a particular method that is used by researchers to operationalize the construct, thus allowing other researchers to conduct repeatability of measurements in the same way or trying to distribute construct a better measurement. In this study, the operational definition outlined in the following table:

| Variable         | Sub variables          | Code | Indicators                                                                 | Measuring Scale |
|------------------|------------------------|------|----------------------------------------------------------------------------|-----------------|
| Technology       | Relative Advantage     | T01  | ● Advantages of using systems/applications                                 | Ordinal         |
|                  |                        |      | ● Excellence in maintenance                                                |                 |
|                  |                        | T02  | ● Excellence in time                                                         |                 |
|                  |                        | T03  | ● Excellence in Services                                                     |                 |
|                  |                        | T04  |                                                                             |                 |
| Compability      |                        | T05  | ● According to transaction needs                                            | Ordinal         |
|                  |                        |      | ● According to Life Style                                                    |                 |
|                  |                        | T06  | ● Consistent with business needs                                            |                 |
|                  |                        | T07  | ● In accordance with the values of the organization/business adopted.       |                 |
| Complexity       |                        | T09  | ● Ease of using the system                                                   |                 |
|                  |                        |      | ● App system does not confuse users                                          |                 |
|                  |                        | T10  | ● The Flow of system is easy to understand                                   |                 |
|                  |                        | T11  | ● No difficulty at all in using the system                                   |                 |
| Organization     | Organizational         | O1   | ● Application of IT in business                                             |                 |
|                  | Competency             |      | ● Organizational ability to adapt                                            |                 |
|                  |                        | O2   | ● Teamwork                                                                   |                 |
|                  |                        | O3   | ● Management efforts for organizations                                       |                 |
|                  |                        | O4   |                                                                             |                 |
| Management       | Reliable owner         | O5   | ● Reliable owner (top Management)                                           |                 |
| Support          | Good leadership        | O6   | ● Good leadership                                                            |                 |
|                  | Good business management| O7   | ● Good business management                                                   |                 |
|                  | How to troubleshoot issues in your organization | O8 | ● How to troubleshoot issues in your organization |                 |
| Training         | Training to improve user knowledge | O9 | ● Training to improve user knowledge                                         |                 |
| and Education    | Organizations initiating employee training and learning | O10 | ● Organizations initiating employee training and learning                   |                 |
|                  | Continuous understanding for users | O11 | ● Continuous understanding for users                                         |                 |
|                  | Trainings makes user more confident. | O12 | ● Trainings makes user more confident.                                       |                 |
2.3. Population and Sample

In this study, the population was a business consumer (MSME) of GoPay and OVO Cash application users spread across five major cities in Sumatra, namely Aceh, Medan, Jambi, Pekanbaru and Lampung amounting to 259,701 MSMEs. This population does not represent the number of MSMEs who already use Gopay and OVO Cash applications because the data is not available definitively, so for the population of Gopay and OVO Cash users themselves who each year increase cannot be known the exact number. Based on the information, the sampling in this study used the formula Hair that if the sample size is too large, then the method becomes so sensitive that it is difficult to get goodness of fit so it is recommended that the minimum sample size is 5-10 observations for each observed parameter. Thus, in this study jumalah parameters are as many as 35 items, so jumalah the recommended sample is 35 x 5 = 175 MSMEs. The technique of sampling is simple random sampling that is the technique to get samples directly done in the sampling unit.

2.4. Data Analysis Method

This research uses the Partial Least Square (PLS) analysis method which is a multivariate statistical technique that can handle many variable responses as well as variable explanatory at once. Partial Least Square is a technique that can handle many variables even if there is multicolinearity between these variables. To test the validity and reability of the feeding indicator is used outer model. Path analysis is used to see how the TOE Framework variable affects Adoption Intention.

3. RESULT

Respondents in this study consisted of several characteristics: characteristics of respondents based on gender, age, marital status, business domicile, business type, type of application and length of use of the application. For more details can be seen in the following tables.

Table 2. Distribution Characteristics of Respondents Table Research

| Sex       | Male  | Female | Total |   |
|-----------|-------|--------|-------|---|
|           | 79    | 97     | 176   |   |
| Age       |       |        |       |   |
| 20 – 30 years old | 112 | 112 | 63.64% |   |
| 31 – 40 years old | 50  | 50   | 28.41% |   |
| > 40 years old  | 14   | 14   | 7.95%  |   |
| Total      | 176   | 176   | 176   |   |
| Marital Status |    |       |       |   |
| Unmarried  | 87    |      | 49.43% |   |
| Married    | 89    |      | 50.57% |   |
| Total      | 176   | 176   | 176   |   |
| Business domicile |      |       |       |   |
| Aceh      | 12    |      | 6.82%  |   |
| Medan     | 17    |      | 9.66%  |   |
| Pekanbaru | 17    |      | 9.66%  |   |
| Palembang | 10    |      | 5.68%  |   |
| Jambi     | 113   |      | 64.20% |   |
| Lampung   | 7     |      | 3.98%  |   |
| Total     | 176   | 176   | 176   |   |
| Business Type |      |       |       |   |
| Culinary  | 96    |      | 54.55% |   |
| Fashion   | 29    |      | 16.48% |   |
| Medical supplies | 10    |      | 5.68%  |   |
| cosmetics | 9     |      | 5.11%  |   |
| Total     | 176   | 176   | 176   |   |
Based on the results of this study, the following are models obtained from the calculation results using SmartPLS:

The initial measurement is calculated by measuring the loading factor result, which if the score is greater than 0.6 then it is considered significant. The results of loading factor measurement can be seen as follows:

**Table 3. Outer Loading Factors**

|   | Adoption (Y) | Environment (X3) | Organization (X1) | Technology (Y) |
|---|-------------|------------------|-------------------|--------------|
| X1.1 | 0.700       |                  |                   |              |
| X1.10 | 0.788       |                  |                   |              |
| X1.11 | 0.772       |                  |                   |              |
| X1.12 | 0.795       |                  |                   |              |
| X1.3 | 0.720       |                  |                   |              |
| X1.4 | 0.800       |                  |                   |              |
| X1.5 | 0.787       |                  |                   |              |
| X1.6 | 0.729       |                  |                   |              |
| X1.7 | 0.824       |                  |                   |              |
| X1.8 | 0.804       |                  |                   |              |
Based on the table above, in performing the initial analysis data there are loading factor values on indicators X1.2, X2.10, X2.6, X2.9 and X3.1 smaller than 0.6 then all five indicators are not included in the model.

Table 4. Construct Reliability and Validity

|                  | Cronbach's Alpha | rho_A  | Composite Reliability | Average Variance Extracted (AVE) |
|------------------|------------------|--------|------------------------|---------------------------------|
| Adoption_Y       | 0.790            | 0.819  | 0.876                  | 0.702                           |
| Environment_X3   | 0.921            | 0.939  | 0.937                  | 0.657                           |
| Organization_X2  | 0.916            | 0.933  | 0.926                  | 0.512                           |
| Technology_X1    | 0.937            | 0.943  | 0.946                  | 0.592                           |

The analysis of Cronbach's alpha in the table above shows that the score is more than 0.7 where the adoption variable is 0.790, the environment is 0.921, the organization is 0.916 and the technology is 0.937. The results showed that the accuracy and reliability of all the variables in this study. Composite reliability with a score above 0.7 can then be declared to meet the reliability. Based on the table above, it is seen that each variable in this study scored for composite reliability above 0.7 where the variable adoption variable is 0.876, the environment is 0.937, the organization is 0.926 and the technology is 0.946. The results show that the variable as a whole is declared realieble. Validity measurement through Average Variance Extracted (AVE) where the score above 0.5 is declared to meet validity. Based on the table above it is seen that the overall variable score of Average Variance Extracted (AVE) is above 0.5, where the adoption variable is 0.702, the environment is 0.657, the organization is 0.512 and the technology is 0.592. The results show that the variable as a whole is declared to meet validity.

Table 5. R Square Value

|                  | R Square | R Square Adjusted |
|------------------|----------|-------------------|
| Adoption_(Y)     | 0.582    | 0.572             |

The value of R Square in the table above obtained a value of 0.582 with a criterion of 0.3 means technology, organization and environmet are able to contribute or influence 0.582 on adoption.
The results of the environmental impact test on adoption amounted to 0.582 and P value of 0.000 with a significant level of 0.05. This indicates there is a positive influence of the environment on adoption, so if the environment increases by 1 (one) then adoption will increase by 0.582. The results of the organization's influence test on adoption amounted to 0.412 and P value of 0.004 with a significant level of 0.05. This indicates that there is a positive influence on adoption, so if the environment increases by 1 (one) then adoption will increase by 0.412.

The results of the technology influence test on adoption amounted to 0.758 and P value of 0.000 with a significant level of 0.05. This indicates that there is a positive influence of technology on adoption, so if the environment increases by 1 (one) then adoption will increase by 0.758.

4. DISCUSSIONS

4.1. Technology has a positive effect on Adoption

Based on the results of the analysis seen in the structural model, it can be seen that Technology has a positive and significant effect with a qualified loading factor value of more than 0.6. It is also supported by a coefficient path result of 0.758 which means the hypothesis linking Technology Adoption has a positively significant influence. This influence is quite large when viewed from its value of 75.8% so it can be said that the readiness level of MSMEs is already good in adopting technology for their business. These results are similar to previous research that has stated that Environment has an influence on Adoption [3] [4].

4.2. Environment has a positive influence on Adoption

Based on the results of the analysis on the Structural Model, variable Environment has a positive and significant influence with a loading factor value of more than 0.6 and a magnitude of influence of 0.582 or 58.2% which means that the Environment has a strong enough influence for an organization or business to absorb the use of technology through digital payment. The higher the technology used by the competitors, the stronger the desire to adopt technology for its business, especially if supported by the convenience provided by the business partner, namely the digital payment service provider. This opinion is in line with previous research conducted by Purwantini and Hakim [5] which concluded that variable Environment has an influence on Adoption Intention.

5. CONCLUSION

1. The results of the analysis show that MSMEs are ready to use GoPay and OVO as payment methods in their Businesses influenced by variable Technology- Organization – Environment (TOE).
2. The most dominant factor influencing the intention of using Digital payment is Technology, then followed by Environment and Organization.
3. All variables (Technology-Organization-Environment) have a positive and significant relationship to Adoption Intention so it can be said that all variables affect the intention of use
(Adoption Intention) digital payment by MSMEs.

RECOMMENDATIONS

1. For the company of digital payment service providers namely GOJEK and OVO in order to be able to conduct mentoring education for MSMEs in order to be able to Go Digital because the organization factor gives the lowest influence on this research, meaning there is still a reluctance from MSMEs to literate technology due to lack of motivation.

2. For MSMEs who have implemented payment methods with GoPay and OVO in order to maintain and increase the use of technology in their business in order to have a wider market and high competitiveness so as not to lose to competitors.

3. For researchers in order to strengthen the weaknesses in this study, where the spread of questionnaires is disproportionate between regions so that it can be made in percentage so as to get a more proportionate and valid dissemination of respondents, pay attention to the editorial on the questionnaire to make it easier for respondents to understand and strengthen indicators so that no items are deleted or invalid, and expand the research area with more diverse digital payment service provider objects.

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