Factors That Influence Generation Z in Using E-Wallet During COVID-19 Pandemic

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Abstract—Generation Z is a generation that cannot be separated from gadgets. Generation Z has been a market for e-wallet producers, especially during the Covid-19 pandemic since 2019. In other words, this pandemic has changed several ways of life. For instance, the new normal affects transaction activities for Generation Z, making non-cash transactions more accessible, which encourages the use of e-wallet, especially when the promos offered are attractive. One of the e-wallets that have the most users in Indonesia is ShopeePay. This study analyzes the factors that influence generation Z in using E-Wallet during Covid-19 pandemic. This type of research is explanatory research by explaining the relationship between variables. Respondents in this study were Generation Z with an age range of 18-21 years. Questionnaires were collected using the purposive sampling method. Data analysis used Structural Equation Modeling Partial Least Square (SEM-PLS). This study found that Perceived Usefulness, Perceived Enjoyment, and Trust significantly influence Intention to use Generation Z Using E-Wallet during covid-19 pandemic, while Promotion and Perceived satisfaction were positively and significantly affected by the customers' trust.

Keywords—Intention to use, Perceived Usefulness, Perceived enjoyment, Promotion, Perceived satisfaction, Trust

I. INTRODUCTION

Generation Z is a generation that cannot be separated from gadgets. One of ShopeePay's steps to attract Generation Z is to see SnackVideo, where SnackVideo makers can withdraw the balance of money collected at ShopeePay. ShopeePay is one of the most frequently used e-wallet brands during the COVID-19 pandemic. E-wallet transactions are considered safer and more comfortable and support the Health protocols during the COVID-19 pandemic. Based on an online survey conducted by Snapchat in June - August 2020, ShopeePay is the most frequently used e-wallet brand (68%) compared to Ovo and Gopay (56%), Dana (42%), and LinkAja (19%) [1].

The use of e-wallet is considered more efficient and practical and has many advantages because many merchants offer promos. In the current new normal era, non-cash transactions are one way to prevent the spread and transmission of COVID-19 because it minimizes physical contact. ShopeePay is the e-wallet with the leading e-commerce platform in Southeast Asia.

The E-wallet can replace physical cards (atm cards) with a smartphone. Financial data is stored securely to initiate, authorize, and confirm money exchange into goods and services [2]. Based on the concept of TAM (Technology Acceptance Model), people will accept e-wallet when they see them applicable [3].

This study aims to determine the factors that influence the Intention to use ShopeePay as an e-wallet in Generation Z in the city of Samarinda during the Covid-19 pandemic. This study develops the concept of TAM (Technology Acceptance Model) (Davis, 1989) based on the model and previous research by adding several variables and testing this model on Generation Z in Samarinda.

II. LITERATURE REVIEW

2.1 Perceived Usefulness

Perceived usefulness is the most substantial variable in Intention to use the system. Users who use the P2PM-pay system feel the benefits of convenience and time-saving. The results of this study are in line with the concept of TAM (Technology Acceptance Model) [4]. Hence this study proposes the following hypothesis:

Hypothesis 1. Perceived Usefulness positively influences Intention to use ShopeePay
2.2 Perceived Enjoyment

The level of pleasure when using technology is the definition of perceived enjoyment. Feelings of fun and enjoyment are intrinsic motivations in using technology [5]. Hence this study proposes the following hypothesis:

Hypothesis 2. Perceived Enjoyment positively influences Intention to use ShopeePay

2.3 Promotion

The promotion affects an individual's confidence in utilizing fintech. This remark implies that the greater public awareness of fintech goods, the greater the customer's faith in them. [6]. Hence this study proposes the following hypothesis:

Hypothesis 3. Promotion will positively affect customers trust in ShopeePay

2.4 Perceived Satisfaction

Consumer satisfaction with financial institutions means evaluating overall accumulated experience in their interactions with financial institutions [7]. Hence the following hypothesis is proposed:

Hypothesis 4. Perceived satisfaction will positively affect consumers trust in shopeePay

2.5 Trust

Consumers who have trust will direct their perception and attitudes towards technology. Users agree that the technology is dependable, safe, and keeps its promises, which has a good effect on the Intention to use. The beneficial effect of trust on the use of mobile services can be observed in a variety of scenarios, including mobile banking. [8].

Hypothesis 5. Trust will positively influence Intention to use ShopeePay

III. RESEARCH METHOD

The technique sampling in this study is purposive sampling, where the sample in this study is generation Z with an age range between 17-23 years. Questionnaires are made through google form and distributed by WhatsApp media to several groups. The causality or influence relationship model is used in this study. Analytical techniques using SEM or structural equation modeling, which operate through the SmartPLS program, will test the hypothesis proposed in the study

3.1 Construct Measurement

Variables pertinent to the research's surroundings will be monitored and studied in this investigation. Begin, the items are validated to ensure that they accurately measure the necessary variables. All variables were measured on a 5-point Likert scale—the flowchart constructs are separated into two categories. Exogenous constructs are variables that are not predicted by the model's other variables. While endogenous constructions can be used to forecast endogenous constructs, exogenous constructs can only be used to establish causal relationships with endogenous constructs.

![Figure 1. Model's other variables](image)

The online survey is used to collect the data. The questionnaire was first tested on 50 students at Samarinda State Polytechnic with 18-23 years of experience using ShopeePay. This study collects data by distributing questionnaires to generation Z with an age range of 17-23 years through WhatsApp media to several groups. One of the guidelines for the sample size for SEM is the sample size of 5 to 10 times the number of parameters in the model or 5 to 10 times the number of manifest variables of all latent variables [9]. Based on these guidelines, the number of indicators is 23 X 5 = 115 respondents

3.3 Demographic analysis

The sample in the study were students. 26.09% of the total sample are 18 years old students, 30.43% are 19 years old students, 21.74% of the total sample are 20-year-old students, and 21.74% of the total sample are 21-year-old students.

<table>
<thead>
<tr>
<th>No</th>
<th>Age of Groups of Sample</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Group (18 years old)</td>
<td>30</td>
<td>26.09</td>
</tr>
<tr>
<td>2</td>
<td>Group 2 (19 years old)</td>
<td>35</td>
<td>30.43</td>
</tr>
<tr>
<td>3</td>
<td>Group 3 (20 years old)</td>
<td>35</td>
<td>21.74</td>
</tr>
<tr>
<td>4</td>
<td>Group 4 (21 years old)</td>
<td>35</td>
<td>21.74</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

3.4 Data Analysis

Data were collected and analyzed using SmartPLS. SmartPLS was chosen because it is considered the
most suitable for predictive applications to build a theory. [9].

The first step of the analysis is to evaluate the measurement model [9]. Cronbach's alpha value is a calculation to test Internal consistency reliability and composite reliability to test outer loadings.

The second step of the analysis is to evaluate the structural model [9]. Entering second-order constructs in SmartsPLS, then adopted indicators approach [10]. For each path in the model, the coefficient of determination (R2) was determined for all endogenous variables. A measure of the path coefficient was produced, and the significance was determined via bootstrapping. F2 is calculated to determine the effect of size, while Q2 is determined via a blindfolding process.

IV. FINDINGS AND DISCUSSION

This study makes use of SmartPLS. The testing model's measurement steps include convergent and discriminant validity tests. The results of the PLS analysis can be employed if all of the indicators in the PLS model satisfy the standards for convergent validity, composite reliability, and discriminant validity.

4.1 Convergent Validity

Convergent Validity measures the Validity of the instrument (indicator). Convergent Validity test is run by looking at the loading factor value of each indicator to the construct. The factor loading is significant if it correlates more than 0.70 with the construction to be measured, but for early-stage research, 0.50 to 0.60 is sufficient [9]. In the study, the accepted factor loading is 0.70 with the condition that the AVE of each construct is 0.5 [9].

The following is the final result of calculating the loading factor value that satisfies the 0.70 criteria.

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According to Figure 2, one indicator indicates that the loading factor value is less than 0.70, which should be removed until it satisfies the necessary standards.

![Fig. 2 Smart PLS Output](image)

Based on the SmartPLS Final Output in Figure 3 above, all research variable analysis models have met the loading factor of more than 0.70, so that they have met the requirements.

4.2 Reliability and Validity

Reliability testing is carried out to measure the research instrument's level of consistency and stability in measuring a concept or construct. Reliability test is done by testing (1) Composite Reliability. (2) Cronbach's Alpha. The built variable meets the category reliable if it has a reliability number of the tested construct > 0.70 [10] in table 2.

![Fig. 3 Smart PLS Final Output](image)

**TABLE II. COMPOSITE RELIABILITY AND CRONBACH'S ALPHA**

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Composite reliability</th>
<th>Cronbach’s Alpha</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intense to use</td>
<td>0.987</td>
<td>0.990</td>
<td>Reliable</td>
</tr>
<tr>
<td>2</td>
<td>Perceived Usefulness</td>
<td>0.924</td>
<td>0.946</td>
<td>Reliable</td>
</tr>
<tr>
<td>3</td>
<td>Perceived Enjoyment</td>
<td>0.903</td>
<td>0.932</td>
<td>Reliable</td>
</tr>
<tr>
<td>4</td>
<td>Promotion</td>
<td>0.720</td>
<td>0.842</td>
<td>Reliable</td>
</tr>
<tr>
<td>5</td>
<td>Perceived Satisfaction</td>
<td>0.969</td>
<td>0.980</td>
<td>Reliable</td>
</tr>
<tr>
<td>6</td>
<td>Trust</td>
<td>0.758</td>
<td>0.8</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

*) Valid if the value > 0.70

Convergent Validity is met if the AVE value is 0.50. Based on the data processing results, all AVE values
are above 0.50 to meet the convergent validity requirements in table 3.

### TABLE III. AVERAGE VARIANCE EXTRACTED (AVE)

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>AVE</th>
<th>Conclusions *)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intense to use</td>
<td>0.950</td>
<td>Valid</td>
</tr>
<tr>
<td>2</td>
<td>Perceived Usefulness</td>
<td>0.815</td>
<td>Valid</td>
</tr>
<tr>
<td>3</td>
<td>Perceived Enjoyment</td>
<td>0.775</td>
<td>Valid</td>
</tr>
<tr>
<td>4</td>
<td>Promotion</td>
<td>0.642</td>
<td>Valid</td>
</tr>
<tr>
<td>5</td>
<td>Perceived Satisfaction</td>
<td>0.942</td>
<td>Valid</td>
</tr>
<tr>
<td>6</td>
<td>Trust</td>
<td>0.672</td>
<td>Valid</td>
</tr>
</tbody>
</table>

*) Valid if p-value > 0.50

To measure the accuracy of the regression function to estimate the value, the Godness of Fit (GOF) test, also called the model feasibility test, is carried out. GOF was measured using Q-squared (Q2) obtained from the R-square of an endogenous latent variable (R2) with the same interpretation as regression. In this study, the R2 value obtained is as shown in table 4.

### TABLE IV. VALUE OF R2

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>R Square *)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intense to use</td>
<td>0.796</td>
</tr>
<tr>
<td>2</td>
<td>Trust</td>
<td>0.292</td>
</tr>
</tbody>
</table>

*) Nilai R-Square

#### 4.3 Hypothesis Test

After confirming that the construct measurement model is trustworthy and valid, hypotheses are tested. This study used a structural model or inner model to demonstrate a direct or indirect relationship between exogenous and endogenous latent variables. The hypothesis test is based on the significant value of the route coefficient following 500 iterations of resampling or bootstrapping. [9].

The statistical test performed is a t-test with a confidence interval of 95% or a significance level of 5%. If the t-count value is greater than the t-table value, the hypothesis is accepted. The following table summarizes the outcomes of the bootstrapping technique.

### TABLE V. HYPOTHESIS RELATIONSHIPS

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothesis relationships</th>
<th>Effect</th>
<th>Coefficient</th>
<th>p-value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>H 1</td>
<td>Perceived Usefulness → Intention to use</td>
<td>0.367</td>
<td>0.002*</td>
<td>Significant</td>
<td></td>
</tr>
<tr>
<td>H 2</td>
<td>Perceived Enjoyment → Intention to use</td>
<td>0.413</td>
<td>0.001*</td>
<td>Significant</td>
<td></td>
</tr>
<tr>
<td>H 3</td>
<td>Promotion → trust</td>
<td>0.254</td>
<td>0.007*</td>
<td>Significant</td>
<td></td>
</tr>
</tbody>
</table>

This study found that Generation Z felt the usefulness of ShopeePay, which help them as users to shop during the Covid-19 pandemic, especially with the PSBB policy from the government, so that perceived usefulness increased Intention to use ShopeePay in Generation Z. The results of this study are in line with Chen, Hsu and Lu's research. [11]. The perceived enjoyment felt by Generation Z affects the Intention to use ShopeePay because it is considered practical, especially during the Covid-19 pandemic with the various features and conveniences offered by ShopeePay and enjoys accessible communication with merchants when buying goods. The results of this study are in line with Wariyono [13]. Generation Z is a technology-savvy generation and likes to innovate with facilities and innovations from ShopeePay, providing satisfaction for its users, especially Generation Z. Their trust to use ShopeePay is in line with previous research [14]. This study found that trust significantly affects the Intention to use ShopeePay; the use of this e-wallet is considered trusted by its users and is responsible; the results of this study are in line with previous research [15].

### V. CONCLUSION

Generation Z is a generation that cannot be separated from gadgets, especially during the Covid-19 pandemic; the changing order of life has made the dependence on technology for Generation Z even greater, starting from academic activities that use technology as well for daily life. ShopeePay is very observant in looking at market segments by targeting Generation Z as consumers. Theoretically, this research contributes as the extension of TAM by adding several constructs.

The results of the empirical study found that Perceived Usefulness and perceived enjoyment affect the Intention to use Generation Z using ShopeePay as their E-wallet. This is related to their proficiency in technology, so they are looking for helpful technology and pleasure for them, especially during the covid-19 pandemic where the government asks them to stay at home. This study also finds that Promotion and Perceived satisfaction affect the trust of Generation Z, so they decide to make ShopeePay for the E-wallet that they use.
Generation Z is the generation who are technology-savvy, loves innovation, and The Covid-19 pandemic makes E-wallet the safest transaction media to avoid the spread of covid-19. Therefore, it is a challenge for ShopeePay e-wallet providers to continue innovating and maintaining customer satisfaction.

REFERENCES


