Loyalty of m-wallet user from a service-dominant logic perspective

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Abstract
This study aimed to examine the effect of customer perceived value on the loyalty of mobile wallet (m-wallet) users. Payment using mobile wallet offers several benefits for consumer in terms of functional, social, and economic value. Meanwhile, Service-Dominant Logic was used to explain consumer’s experience in utilizing mobile wallet for payment. Furthermore, a quantitative approach with questionnaire was used for data collection, and a total of 325 users participated as the respondents. A purposive sampling technique was used to determine the sample criteria i.e. active m-wallet users with a minimum usage of 1 year. The result showed that all the hypotheses are supported. This indicated that customer perceived value consist of functional, economic, and social value, which have positive and significant impact on satisfaction that leads to customer loyalty. Meanwhile, satisfaction is the most salient predictor of customer loyalty. Therefore, financial technology provider needs to pay more attention to customer perceived value, especially in terms of functional, economic and social aspect.

Keywords: Customer perceived value; functional value; economic value; social value; loyalty.

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INTRODUCTION

The development of technology-based financial applications or popularly called fintech has been massively used in Indonesia (Roy, 2019). This is part of the government policies in facilitating the national movement without cash (GNNT) towards a cashless society. Therefore, electronic money transactions have experienced a significant increased from 2014 to 2020. Based on Bank Indonesia data, the value of e-money transactions (electronic money) in 2017 increased by 60% from IDR 5.48 trillion in the previous year to IDR 8.77 trillion. In 2019, the number of non-cash transactions increased to Rp. 128 trillion
(Catrina, 2020). Therefore, the development of electronic money transactions will increase in 2020, especially during the COVID-19 pandemic, which enhances non-cash payment transactions to prevent virus transmission (Puspaningtyas & Yulianto, 2020).

Based on the results from Metra Data Innovation or MDI (2018), the number of mobile payment users are increasing every year with a variety of different platform preferences. Non-cash transactions is inseparable from the growth of startup and banking companies that offer digital payments including GoPay, OVO, LinkAja, Jenius and more. Along with the development of e-commerce, mobile wallet services have also become one of payment alternatives for online shopping, such as Shopeepay, Bukalapak Wallet, UANGKU, AndroidPay and more. In general, de Luna et al. (2018) described three digital payment platforms, which are: QR Code, NFC (Near-Field Communication), and OTP (One-Time Password). For example, GoPay and LinkAja use QR Code technology, OVO and Shopeepay use OTP (One-Time Password) and DANA uses NFC technology.

Research on digital payments is still in its early stages and there is still need for further studies. Also, the adoption of payments using mobile wallets still faces several challenges. According to Leong et al. (2020), the challenges that occur include cash payment, which is still the main preference of people in various countries, both developing and developed. According to Bagla and Sancheti (2018), cash payments are very practical because they do not require additional costs, although the main problem is physical money, which has to be stored in a wallet. Furthermore, Leong et al. (2020) explained the low adoption of m-wallets by merchants. Even though many merchants have adopted this method of payments, they need to educate their employees and prepare technological support for digital payments, such as barcode scanners or EDC (Electronic Data Capture) machines, and ensure that the technology meets merchant's needs (Singh & Sinha, 2020). Another challenge is the problem of technology infrastructure and security system that pose risks for consumers (Priyono, 2017). For example, in the case of GoPay, some customers complained that the balances does not come in after charging, balances that suddenly disappeared, blocked accounts, and more (Santhika, 2018).

In Indonesia, existing research on m-wallets are dominated by GoPay, and they examined mobile wallet adoption from multiple perspectives. Huwaydi et al. (2018) focused on the demographic and psychographic profiles of m-wallet customers. Also, research by Indra and Rofikoh (2019) highlighted the use of m-wallets in transactions as seen from perceived benefits, convenience, trust, risk, and promotional appeal (Haidari & Tileng, 2018; Iswara et al., 2020; Sari et al., 2019). Sari et al. (2019) showed that perceived convenience does not have a significant effect on increasing the interest of using m-wallets. Furthermore, Oktaviani et al. (2019) attempted to explore the post adoption of m-wallets by investigating the effect of satisfaction on customer commitment to word-of-mouth that still leaves a research gap. This is the main challenge for m-wallet adoption that promoted further research.

Research on customer value and loyalty has been widely conducted (Donio et al., 2006; Gallarza et al., 2019; Sánchez-Fernández & Iniesta-Bonillo, 2009). This customer value is a driving factor for satisfaction that is believed to increase consumer loyalty (El-Adly, 2019; Keiningham et al., 2007; Xu et al., 2015). Gallarza et al. (2019) explained the exploration of customer value in the V-S-L (Value-Satisfaction-Loyalty chain) relationship to describe the loyalty mechanism that is driven by the value of a product or service. Furthermore, Mbama
and Ezepue (2018) explained that perceived value has a significant influence in increasing satisfaction and loyalty of m-banking services. Although sometimes the relationship is not always influential, as in the study of Kim et al. (2019), which proved that customer value, especially social, cannot increase consumer loyalty.

In its development, the essence of value has changed from Good-dominant Logic to Service-dominant Logic (Grönroos & Gummerus, 2014). Therefore, companies have begun to shift their focus from creating tangible goods to a consumer-oriented process of exchanging value from producers to consumers (Ballantyne & Varey, 2008). This research is rooted in the Service-Dominant Logic perspective (Vargo & Lusch, 2007) in developing antecedents of consumer loyalty in using m-wallets. Also, Service-Dominant Logic (SDL) underlies the development of the model in this study based on several reasons. Firstly, value becomes the essence in interpreting consumer experiences when using services that are unique and phenomenological. Grönroos and Gummerus (2014) explained that value-in-use is the consumers' feeling when consuming a product or service. In fact, they have various experiences in interpreting the context of a product or service, which can be seen from different points of view. In this case, the value is interpreted and created by consumers themselves during the consumption process. Secondly, value becomes an attraction for consumers in using a product. The consumers have a variety of products that are perceived to be different according to the value believed to meet their needs. Therefore, the company has a role as the facilitator in providing products. Some of the values attached to the product and offered to consumers include aesthetic (Kumar et al., 2017), hedonic (Calvo-Porral et al., 2018), religious (Yeo et al., 2016), economic, functional and more. Thirdly, loyalty shows the quality of the relationship between consumers and service providers (Blazquez-Resino et al., 2013). Furthermore, Blazquez-Resino et al. (2013) explained loyalty from an attitudinal and behavioral point of view. Attitudinal relates to positive feelings and a strong emotional attachment to a product or service. Meanwhile, the behavioral approach focuses on the active participation of consumers in trying new things, giving positive impressions, educating and inviting others to use the products or services (Oktavi et al., 2019).

The basis of this research is to identify the effect of customer value in influencing satisfaction and loyalty. The values that are perceived in using digital wallets include social, functional, and economic value. Therefore, this study aimed to build a customer loyalty model based on the Service-Dominant Logic Theory. It is expected that this study becomes a reference for future research that examines consumer behavior and its implications for increasing consumer loyalty.

Vargo and Lusch (2004) discussed a change in the marketing paradigm emphasizing on the presence of "services" or consumer-oriented services. The fundamental change as the spirit of this theory is the essence of the relationship involving consumers in the value creation process (Grönroos & Gummerus, 2014). Therefore, consumers are considered as actors that evaluate products and services at the consumption stage. Van Winkle and Bueddefeld (2016) added that this value creation process can be active or passive, which reflects consumer participation in interpreting their experiences. In fact, it can be in the form of satisfaction and loyalty shown by consumers through their interaction with the servicescape (Rihova et al., 2018). The context is in payments using digital wallets, value creation, banking, and merchants. Also, fintech offers a different shopping experience
by using m-banking innovation (Mbama et al., 2018). Furthermore, its service providers act as service gamification, cashback and price discounts, as well as ease of transactions for various payment needs (Karjaluoto et al., 2018). However, value is only processed and understood by consumers that get a value that meet their needs after experiencing the service (Fang, 2019).

Research on SDL has been widely explored in the context of companies (Ordanini & Parasuraman, 2010; Shaw et al., 2011; Smith et al., 2014) and consumers (Ramsey White et al., 2009; Rihova et al., 2018). Also, research on consumers discussed the relationship between the experience, satisfaction, and loyalty. According to Dick and Basu (1994), loyalty is defined as the strength of the relationship that consumers have with certain entities. These entities can be in the form of brands, products or services, shops and more. According to Keiningham et al. (2007), the characteristics of consumer loyalty include trends or tendencies to repurchase the same product, frequency of periodic purchases, purchases between product lines, give positive impression about brands or services, and recommend products to others. Furthermore, loyalty creates an immunity against emerging competitors (Haryono & Octavia, 2014).

Customer value can be unidimensional or multidimensional according to the context (Gummerus & Pihlstrom, 2011). The context of understanding a value is perceived differently by consumers depending on certain situations such as time, location, other service alternatives, and other conditions. This value-in-use describes how consumers interpret their experiences in interacting with services. According to Zeithaml (1988) customer value is defined as an evaluation of product consumption based on expectations and reality. This makes consumers actively compare the benefits and risks of services. The meaning of this value is personal in accordance with the circumstances around the consumer when using the service. Also, technology adoption generally uses a system approach in interpreting consumer interactions with applications. This value is driven by various factors, both monetary and non-monetary depending on consumer characteristics (Ranaweera & Karjaluoto, 2017; Xia & Monroe, 2010).

During its development, customer value has different perspectives from a psychological, functional, social, monetary, to systems approach. Consumers have different value preferences in increasing their loyalty to a product included in the context of technology adoption. Furthermore, Xu et al. (2015) stated that utilitarian benefit, hedonic benefit, and perceived prices as well as non-monetary sacrifices affect customer satisfaction. The customer value approach in using technology can be seen from various perspectives such as in terms of application quality and reliability in meeting consumer needs. Baabdullah et al. (2019) observed from a different point of view in the use of technology, namely from performance expectancy, hedonic motivation, social influence, price value, system quality, and information quality.

The Unified Theory of Acceptance and Use of Technology (UTAUT) theory (Venkatesh et al., 2003), as well as UTAUT2 (Venkatesh et al., 2012) described technology acceptance model elaborating the context of consumer behavior in technology use. In its development, this theory offers a different concept of function value, namely the Technology Acceptance Model (TAM) from Davis (1989). According to Davis (1989), perceived usefulness is the level of technology in completing a task. This value is then adjusted to the context of consumers with the expectations of fulfilling their needs.
Therefore in UTAUT, Venkatesh et al. (2003) proposed technology usefulness as a performance expectancy that explains the level of benefits in completing certain expected activities. In general, functional value is related to utilitarian value that is defined as the benefits that consumers get when using products or services (Kim et al., 2019).

According to Islam et al. (2019), functional value is related to the congruence between the value that consumers have and the utility factor of a product or service. Research that discussed the interaction of consumers and technology generally uses function values as a determinant of technology adoption (Agrebi & Jallais, 2015; Iswara et al., 2020; Lee et al., 2015). Research by de Kerviler et al. (2016), explained that the consumers of m-wallet are driven by utilitarian values or usability compared to hedonic and social. The utility-driven value of technology has a strong impetus for satisfaction in using technology.

The development of technology adoption elaborates on the social values underlying consumer behavior. According to Yang et al. (2012), social value is the perception of consumers in identifying pressures in the social sphere when adopting a technology. Consumers have social networks (family, friends, colleagues, etc.) forming subjective norms about self-image when deciding to use certain technologies. In general, social values are widely studied to explain the use of luxury or branded products (Lee et al., 2014; Prentice & Loureiro, 2018). However, social values drive consumers to form symbolic values in using technology. Kim et al. (2011) described the use of services that improve self-image to others. Also, Singh et al. (2020) explained personal innovativeness underlying why consumers want to be seen as individuals that are open to new technology, like to try it, and to become pioneers in the use (Thakur & Srivastava, 2014). de Kerviler et al. (2016) added that social value is closely related to the acceptance of people and the impression that will be built on a person.

According to Sánchez-Fernández and Iniesta-Bonillo (2009), consumers evaluate value by comparing the benefits and costs of consuming products or services. Also, quality and efficiency considerations are the essence of economic value which became a basis in the values exchange. Therefore, companies have made various efforts to attract consumer attention, such as marketing promotion campaigns and customer loyalty programs (Hwang & Choi, 2019; Ranaweera & Karjaluoto, 2017). These activities stimulate consumers to benefit economically from the company’s offerings. Ranaweera and Karjaluoto (2017) mined economic value from a price value perspective. Price value is defined as the benefit or utility of a product or service obtained because it minimizes the emergence of short-term or long-term costs. Likewise the research of Chiu et al. (2018) described monetary savings or a situation where consumers spend the least amount possible and save their money. Generally, consumers are satisfied when they succeed in obtaining greater economic benefits than the price issued. This feeling is often experienced in products offering promo prices, cashbacks, or discounts (Peng et al., 2020; Yuvita, 2019; Zephaniah et al., 2020).

Aside from a cost-benefit perspective, economic value gives more attention to monetary incentives obtained when consuming a product or service. Choi et al. (2020a) described the financial benefits obtained when consuming a product or service. As in using m-wallets, merchants and fintech service providers design promotional strategies in the
form of loyalty programs (points, cashback, promos) or gamification to increase the transactions (de Kerviler et al., 2016).

Functional value has an important role in influencing customer satisfaction. This is related to the quality of the system, service, and technology in meeting consumer needs. Yuan et al. (2020) proved the positive and significant effect of functional value felt by consumers on m-wallets that are technical in nature. The value of this function is a benefit experienced by customers from the perspective of m-wallet reliability in completing transactions, system accuracy, ease of use, and speed of making payments (Alaeddin et al., 2018; de Luna et al., 2019).

The use of m-wallets generally highlights the risks from the monetary or financial perspective, such as transaction and connection fees for application access and more (Thakur & Srivastava, 2014). However, Susanti (2019) proved the effect of economic value on customer satisfaction. The economic value is generally compared to the price benefits that is incurred or received by the customer. Some of the benefits offered by mobile wallets include the incentives provision that offer better bargaining value for customers (Liu, 2006). From the perspective of relationship marketing, providing economic benefits is a business effort in retaining customers by increasing the offers quality. Therefore, the higher the economic value, the more the customer’s satisfaction in using m-wallet (Pick & Eisend, 2013).

Social value is related to the pressure from social relationships in a group, such as family, friends, or other parties (Yang et al., 2012). Liébana-Cabanillas et al. (2018) proved a significant effect of social norms in influencing satisfaction using digital payments, but did not show effect on personal innovativeness. This difference is seen in the social benefits that are felt personally. Also, social norms see the value of the pressure exerted by certain groups that consider it important to use digital payments (Madan & Yadav, 2016). Meanwhile, the innovative spirit is a factor related to a person that considers themselves a pioneer in using new technology (Thakur & Srivastava, 2014). Therefore, social values are related to social status and pride in using a technology.

In using a product or service, satisfaction is the main driver of consumer loyalty (Donio et al., 2006). There are several studies that proved the importance of satisfaction in shaping consumer loyalty (El-Adly& Eid, 2016; Gallarza et al., 2019; Xu et al., 2015). Satisfaction is a signal of product success in meeting consumer needs. Psychologically, it is an evaluation of the expectations and realities of consumers for products or services. Therefore, high satisfaction levels promote the desire to make repeated purchases, give positive impression about the product, and recommend it to others. This creates resistance to competition (Keiningham et al., 2007).

METHOD

This is a quantitative study that aimed to test models and prove hypotheses on variables based on research and theory gap (Ferdinand, 2004). The population in this study were mobile wallet users. Furthermore, a non-probability sampling with a purposive sampling technique was used. The criteria in the sample were active m-wallet users that have used its services for at least 1 year. This study chose GoPay users as the criteria in
determining the sample because it is the highest m-wallet users and the most widely adopted in Indonesia followed by OVO, DANA, LinkAja and Jenius (Devita, 2019). Furthermore, GoPay payment network collaborates more with merchants throughout Indonesia (Setyowati, 2019). The location of this research is the greater area of Jakarta (Jakarta, Bogor, Depok, Tangerang and Bekasi) because it is a big city and is considered advanced compared to other regions. Overall, 325 people are participated as respondents.

There were five variables in this study, the exogenous variables are customer value seen from the functional, social and economic perspective, while the endogenous are satisfaction and loyalty. A total of 17 items were arranged in a questionnaire that was distributed online via google forms and offline through direct field surveys. Also, Structural Equation Model (SEM) was used with several considerations, such as its ability to simultaneously process equation systems. Therefore, data were analyzed using SEM AMOS 23.0.

RESULTS AND DISCUSSION

Results
The demographic information of respondents in this study is summarized in table 1 below. Based on gender, the majority of the respondents are 234 women (72%) and 91 men (28%). For the domicile areas, respondents in Jakarta were 144 people (44.3%), Depok (22.5%), Bekasi (14.5%), Bogor (13.5%) and Tangerang (5.2%). Another demographic characteristic is the educational level of the respondents, which is dominated by those with high school (76.6%), D1/D2/D3 (15.7%) and S1 (6.2%). Furthermore, they were predominantly aged <20 (58.2%) and 20-29 (39.7%). For income, the largest group earns Rp. 500,000 - Rp. 1,000,000 with 129 people.

| Respondent Characteristics | Total (people) | Percentage % |
|----------------------------|----------------|--------------|
| **Gender**                 |                |              |
| Female                     | 234            | 72%          |
| Male                       | 91             | 28%          |
| Total                      | 325            | 100%         |
| **Age**                    |                |              |
| <20 years                  | 189            | 58.2%        |
| 20-29 years                | 129            | 39.7%        |
| 30-39 years                | 3              | .9%          |
| 40-49 years                | 2              | .6%          |
| 50-59 years                | 2              | .6%          |
| Total                      | 325            | 100%         |
| **Status**                 |                |              |
| Single                     | 315            | 96.9%        |
| Married                    | 10             | 3.1%         |
| Total                      | 325            | 100%         |
| **Domicile**               |                |              |

Table 1.
Respondents Profile
| Respondent Characteristics | Total (people) | Percentage % |
|----------------------------|---------------|--------------|
|                            | 144           | 44.3%        |
|                            | 44            | 13.5%        |
|                            | 73            | 22.5%        |
|                            | 17            | 5.2%         |
|                            | 47            | 14.5%        |
|                            | 325           | 100%         |

**Frequency of Use**

| Frequency of Use | Total (people) | Percentage % |
|------------------|---------------|--------------|
| 2-3x in a day    | 76            | 23.4%        |
| 1x in a week     | 117           | 36%          |
| 2-3x in a month  | 112           | 34.5%        |
| 1x in a year     | 20            | 6.2%         |
|                  | 325           | 100%         |

Source: data processed (2019)

The CFA (Confirmatory Factor Analysis) was used to examine the unidimensional validity and reliability of the measurement model for constructs that cannot be directly measured. The main purpose of conducting the CFA test was to measure the conceptualized indicators and to determine their accuracy and consistency in forming the construct under study. The first analysis was conducted to confirm the exogenous constructs, which are Function, Social, and Economic Values.

Table 2 below summarized the results of measuring the validity and reliability of the construct by analyzing the value of Lambda, CR (construct reliability), and AVE (Average Variance Extracted). Based on the processing results, CR and AVE value showed satisfactory results above the cut-off value for CR> 0.7 and AVE> 0.5. Therefore, it can be concluded that the indicators in this study are valid and reliable. The highest CR is the Satisfaction variable with a value of 0.922 followed by the value of Functional (0.871), Loyalty (0.852) and Economic (0.827), respectively. Meanwhile, the highest AVE value is Satisfaction with 0.747.

| Latent Factors   | Observed Items | Estimate | Composite Reliability | AVE  |
|------------------|----------------|----------|-----------------------|------|
|                  | FV1            | .821     | .871                  | .693 |
| Functional Value |                |          |                       |      |
|                  | FV2            | .878     |                       |      |
|                  | FV3            | .796     |                       |      |
|                  | EV1            | .718     |                       |      |
| Economical Value |                |          |                       |      |
|                  | EV2            | .665     | .827                  | .615 |
|                  | EV3            | .868     |                       |      |
| Social Value     | SV1            | .756     | .797                  | .570 |
|                  | SV2            | .825     |                       |      |
|                  | SV3            | .770     |                       |      |
| Satisfaction     | SAT1           | .842     | .922                  | .747 |
|                  | SAT2           | .862     |                       |      |
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The result of examination on the main assumptions, in particular, the adequacy of the sample number and data normality, is that the sample used in this analysis were 325, therefore it has been fulfilled. Calculation of the Hoelter index was 204 respondents at the 5% level and 222 samples at 1%. Therefore, the adequacy of the sample has been fulfilled. For the skewness value of the data distribution, there is a critical ratio value of skewness that is ≥ + or - an absolute number of ±2.58 as the cut-off value. The results of the observations are as presented in the following table.

Table 3.
Results of Data Normality

| Variable | Min | Max  | Skew | c.r.  | Kurtosis | c.r.  |
|----------|-----|------|------|------|----------|------|
| Loyalty  | .894| .859 | .821 | .742 | .770     | .736 |
| SAT3     | .894| .859 | .821 | .742 | .770     | .736 |
| SAT4     | .894| .859 | .821 | .742 | .770     | .736 |
| LOY1     | .894| .859 | .821 | .742 | .770     | .736 |
| LOY2     | .894| .859 | .821 | .742 | .770     | .736 |
| LOY3     | .894| .859 | .821 | .742 | .770     | .736 |
| LOY4     | .894| .859 | .821 | .742 | .770     | .736 |

Source: data processed (2019)

From the table above, there is no skewness exceeding the cut-off value of ±2.58. Therefore, it can be concluded that there is no evidence that the data distribution is not normally distributed because the basic assumptions have been met.

**Model Suitability Testing**
The next stage was to test the suitability of the model (goodness of fit). This study was conducted by proposing four hypotheses, and SEM AMOS version 23 data processing was used for the hypothesis testing. The results are presented in Figure 2.

Based on Table 4, the following conclusions can be drawn. Firstly, the statistical index, namely the chi-square value of 218.768 is bigger than the smallest chi-square with dF 112 at 5% of 137.7 with a significance of 0.00. This value is not in accordance with the required cut-off value, therefore in statistical testing, this model is not a good fit. However, the measurement of non-statistical indices such as GFI, AGFI, CFI, TLI, and RMSEA gave good results with GFI (0.927), AGFI (0.901), TLI (0.963) and RMSEA of 0.054. Based on this measurement, it can be concluded that the model is good.

| Table 4. Model Suitability Results |
|-----------------------------------|
| Goodness of Fit       | Value      | Cut-off value | Desc. |
| Chi-square            | 218.768    | 137.7        | Rejected |
| Level of Significance | .000       | ≥.05         | Rejected |
| GFI                   | .927       | ≥.90         | Accepted |
| AGFI                  | .901       | ≥.90         | Accepted |
| TLI                   | .963       | ≥.90         | Accepted |
| CFI                   | .970       | ≥.90         | Accepted |
| RMSEA                 | .054       | .03 - .08    | Accepted |
| Hoelter 1% and 5%: Adequacy Level of Sample Statistics | 222 and 204 | ≥200 | Accepted |

A regression relationship occurs significantly when the Critical Ratio (or t-value) of the tested regression value is ≥2.0 (exactly 1.96), which is the significance of H0 rejection and the acceptance of Ha statistically. Therefore, the hypothesis proposed by the researcher can either be accepted or rejected. The test results are as presented in the following table.

| Table 5. Hypothesis Test Results |
|----------------------------------|
| Hypothesis | Description | Std. Estimate | Estimate | C.R. | P | Desc. |
| H1         | Functional Value on Satisfaction | .077 | .365 | 4.708 | *** | Supported |
| H2         | Economic Value on Satisfaction | .083 | .261 | 3.145 | .002 | Supported |
| H3         | Social Value on Satisfaction | .064 | .275 | 4.325 | *** | Supported |
| H4         | Satisfaction on Loyalty | .057 | .945 | 14.740 | *** | Supported |

Source: Output Result of AMOS 23.0
Since all the tested regression relationships showed a critical ratio (or t-value) of ≥2.0 (1.96 to be exact), all hypotheses can be stated as accepted with good significance probability. Based on the hypothesis testing above, there is a positive and significant influence between the functional value on satisfaction with $\beta = 0.077; p < 0.001$ and a CR value of 4.708 ≥ 1.967. Therefore, it can be concluded that H1 is accepted. Economic Value showed $\beta = 0.083; p = 0.002; CR = 3.145$ which indicated support for H2. Furthermore, Social Value has a positive and significant effect on satisfaction which is shown with the value of $\beta = 0.064; p < 0.001; CR = 4.325$, therefore H3 is accepted. The last hypothesis is the effect of satisfaction on loyalty with value of $\beta = 0.057; p < 0.001; CR = 14.740$, meaning that H4 is accepted.

Based on the results of the processing above, all hypotheses in this study are well accepted. Therefore, this study empirically proved that loyalty is strongly influenced by satisfaction that is driven by customer value. This is in line with research conducted by (Baabdullah et al., 2019; Karjaluoto et al., 2019; Liébana-Cabanillas et al. (2014); (Yuan et al., 2020) that customer value is an important antecedent in influencing loyalty.

In this study, three customer values were discussed, which are functional, social, and economic. Functional value is the most studied because it relates to the perceived usefulness of a technology in helping consumers complete their work. Also, GoPay as an alternative to digital payments helps consumers to effectively and efficiently manage payments. In practice, consumers use GoPay to make various transactions either through offline merchants or online shopping. The functional value is closely related to the quality of the system and features offered by mobile payments (Yuan et al., 2020).

Based on the Dominant Logic Service (Vargo & Lusch, 2017), consumers are proactive value-creators in the process of using products or services. The recommendation of star ratings at the end of using an application is a form of consumers’ active participation in evaluation. Also, GoPay offers various facilities in making payment transactions through the GoJek application including making bill payments (electricity, insurance, telephone credit, school) and online shopping either through the application or integrated with other e-commerce. Therefore, functional value can be said to be a fundamental antecedent in creating customer satisfaction and loyalty.

In this study, social values have a significant effect on customer satisfaction. The Customer Value Theory (CVT) has an external focus, which are the existence of social status and self-esteem in influencing consumer satisfaction (Holbrook, 1999). Verkijika (2020) identified social values in the form of pride in consumer’s ability to use mobile payments or called self-efficacy. There are many reasons for the social value perspective of using m-wallets as a payment medium. Furthermore, consumers like to be considered smart or as a pioneer in using technology.

Digital payments using m-wallets offer modernism in accordance with the development of the technological era (Ozturk et al., 2016). Therefore, the social environment also greatly affects customer satisfaction. The more people switch to using m-wallets in making payment transactions, the more they will feel that they are also part of the modern social system (Karjaluoto et al., 2019). In this case, social norms are one of the drivers of customer loyalty. The support of a business ecosystem that is connected to the internet or the Internet of Things (IoT) makes society more dynamic and realizes the importance of adopting new payment technologies.
This study supported the research of Baabdullah et al. (2019); Chen and Wang (2016) which determined the importance of economic value for consumers. Economic value is related to psychological benefits due to financial incentives. Therefore, the use of payments using m-wallets needs to be cost-effective, such as low management costs and profitable economic benefits (Iman, 2018). In practice, m-wallets circulating in Indonesia use promotions in the form of incentives such as discounts, cashback, and points as a form of the loyalty program. This is a business strategy to increase sales, which indirectly encourages the acceleration of digital wallet adoption in the society. People are required to be more adaptable to the new payment system because of the economic incentives encouragement. Therefore, consumer preference for using m-wallets is an indication that customers are loyal (Choi et al., 2020b).

CONCLUSION

This study confirmed the GoPay user loyalty model as an alternative to digital payments in Indonesia. Based on the Customer Value Theory, GoPay's consistency as an m-wallet application over the past two years proved that customer value plays an important role in influencing their loyalty. This is a new milestone in m-wallet research in Indonesia. Firstly, GoPay as a pioneer has proven to effectively meet customer needs for three main things, which are functional, social, and economic values. Secondly, GoPay is a reference for other m-wallets to provide product services that have different characteristics compared to other digital wallets. Thirdly, developing m-wallet applications can focus on fulfilling customer value from a functional, economic, and social perspective.

This study provided managerial implications for PT. Gojek and other companies related to the use of m-wallets in payment transactions (fintech vendors, online/offline merchants/retail stores, and banks). Firstly, companies need to further expand cooperation with various types of businesses to take advantage of payment facilities using m-wallets. Secondly, companies need to further improve the quality of the application system because additional services require qualified information technology support. Thirdly, economic benefits also provide great appeal for consumer loyalty, therefore companies need to design rewards and increase loyalty programs that give incentives for consumers.

There are several limitations to this study, and the first are those related to the distribution of the sample category. This study is dominated by youth market, which affect the generalization of the results and conclusions obtained. Secondly, this study focused on examining three aspects of customer value (function, economy, and social) which are based on business phenomena encountered in the field. Therefore, further research can ground Gamification Theory or gamification by exploring other values such as the value of customer competitiveness in using loyalty programs in digital payments (Hwang & Choi, 2020).
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