

PAPER • OPEN ACCESS

## The Effect of Satisfaction and Loyalty Towards Digital Payment System Users Among Generation Z in Yogyakarta Special Region.

To cite this article: Diah Pradiatiningtyas *et al* 2020 *J. Phys.: Conf. Ser.* **1641** 012110

View the [article online](#) for updates and enhancements.



**IOP | ebooks™**

Bringing together innovative digital publishing with leading authors from the global scientific community.

Start exploring the collection—download the first chapter of every title for free.

# The Effect of Satisfaction and Loyalty Towards Digital Payment System Users Among Generation Z in Yogyakarta Special Region.

Diah Pradiatiningtyas<sup>1\*</sup>, Chriswardana Bayu Dewa<sup>2</sup>, Lina Ayu Safitri<sup>3</sup>, and Sri Kiswati<sup>4</sup>

<sup>1234</sup>Program Studi Sistem Informasi, Universitas Bina Sarana Informatika

E-mail: diah.ddt@bsi.ac.id

**Abstract.** Two of the most popular digital wallet application companies in Indonesia are Go-Pay 80% and OVO 60%. To be able to survive in the midst of the intense competition in digital wallet applications, application companies must innovate marketing strategies that focus on consumers. Due to the use of digital wallets among the very large generation Z and increasingly intense competition in the business of digital payment applications, the authors examine the effect of user satisfaction and loyalty towards digital payments among generation Z (case study on Go-Pay and OVO users in Yogyakarta). This research objective is to analyze the satisfaction and loyalty of digital payment system users among generation Z in Yogyakarta Special Region, so that the researchers can find out the influencing variable to empower the development of digital payment especially Ovo and Go Pay. The research methodology considered as descriptive research, in which the data collecting technique utilized Likert scale questionnaire and employed purposive sampling for selecting the sample. The data analysis applied multiple regressions. The result of the multiple regression testing shows that satisfaction and loyalty affect the Z-generation respondents using the digital payment with the indicators that the digital payment sounds more easy, cashless, and more benefit. Moreover, the usage of digital payment is easy to track small expenses.

## 1. Introduction

The development of payment instruments in Indonesia is currently developing very rapidly. Beginning with a means of payment with a barter system between goods, until now a payment with a digital system. In its development, the barter system is continuously updated with certain units that have a value of payment, or known as money. Money up to now is still the main payment instrument that applies in the community. Payment instruments continue to grow rapidly as technology develops, so that cash-based payment instruments turn into electronic-based non-cash payment instruments (Bank Indonesia, 2016). According to the Ydp (2020), the growth of e-money was 173 percent year-on-year at last January 2020. So, it is growing in dominance.

According to data from Bank Indonesia in May 2019, revealed that there are two of the most popular digital wallet application companies in Indonesia namely Go-Pay (80%) and OVO (60%), followed by Tcash (55%), Dana (34.2%) and Paytren (19.3%). Based on these data Go-Pay is rated as the most widely used electronic money. Based on a survey conducted by



YouGov Indonesia of 1,531 respondents, 80% chose Go-Pay as a non-cash payment instrument then followed by OVO, T-Cash, Funds and Paytren.

Application companies must innovate marketing strategies that focus on consumers to be able to compete in the development of digital wallet application. A study conducted by Oktaviani, et al (2019) revealed that consumer satisfaction is an important factor in marketing digital products, because it can shape consumer loyalty. Tjiptono, et al (2015) revealed that customer satisfaction is an indicator that determines the success of a company. Fulfillment of customer satisfaction becomes a tool in realizing company goals, such as increasing sales, increasing profits, expanding market share, and so forth. A study conducted by Mar'ati and Sudarwanto (2016) revealed that service quality and price significantly influence customer satisfaction.

Consumers' satisfaction will lead to customer loyalty so that consumers purchases repeatedly in the future. Loyalty is a condition where customers have a commitment to a brand and intend to continue purchases in the future (Dewa, 2018). This is in line with previous research conducted by Moven and Minor in Putro et al (2014) stating that loyalty is a situation where consumers have a positive attitude and behavior towards a brand, have a commitment and have the intention to continue to make purchases in the future.

A research conducted by the next cashless society in Indonesia revealed that 25% percent of respondents who belong to millennial generation use digital payments because they provide a pleasant user experience for customers and 26% are more comfortable, safe and trustworthy (Nisaputra, 2019). Bank Indonesia revealed that during 2019 the number of cashless transactions reached 4.7 million with a transaction volume of Rp 128 trillion. Millennial generation in Indonesia currently rely more on online shopping, buying food in restaurants, paying for transportation services, watching movies and various other digital payment services.

A study conducted by the next cashless society (Nisaputra, 2019) revealed that people, especially generation Z, had one type of digital wallet of 21%, two types of 28% and three types and more than 47%. OVO and Gopay become the most widely used digital wallet. This study reveals that there are several segments of consumer character in using digital wallets, namely reassure (not afraid), encouraging (enjoying and enriching life) and inspire (regard as new things that follow developments).

In the reassurance segment, 26% of respondents felt confident, safe and comfortable using digital payments and 19% felt more efficient and easier in controlling their expenses. In the encouraging segment, there are 25% of respondents use digital payments because they get a pleasant experience and enjoy it. In addition, 9% of digital payments are used to improve relationships with others. In the inspire segment, there are 11% of respondents who are new users of digital payments with the aim of making a profit. 10% of the respondents are users who expect a digital wallet product that is better and easier to use.

According to the research conducted by Dhanya (2019), The physical factor of the payment mode explains why transparency and the separation of the payment experience affect our emotional state, not necessarily in the experience of pain but the experience of a number of emotion also depends on the context. Research conducted by J.P. Morgan (2019), said about Top e-commerce merchant segments by Indonesian customer. The top of sales segment are Travel (58,9%) and the bottom of sales are food, health and beauty (6,8%).

This research is carried out to analyze the satisfaction and loyalty of digital payment system users among generation Z in Yogyakarta Special Region, so that the researchers can find out the influencing variable to empower the development of digital payment especially Ovo and Go Pay. Subsequently, it can enhance the competitiveness and initiate strategies so as they can stay in the Indonesian Digital Payments System. Thereby, it remarkably supports the safety of online transaction.

The problem that is formulated in this research is what are the effects of the satisfaction and loyalty towards the using of digital payment OVO and Go Pay conducted by z-generation in

Yogyakarta. Yogyakarta is selected because the number Z-generation in this city are students or young worker.

## 2. Methodology

### 2.1. Research Method

This research is a descriptive study, where data collection techniques use a Likert scale questionnaire and use purposive sampling to select samples. Data analysis applies multiple regression using SPSS which starts by testing the validity and reliability of the research variables.

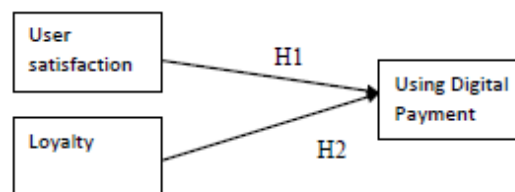
### 2.2. Operational Variables

Zikmund (2010) stated that variable is something that varies or changes from one sample to other samples. In this research, there are two variables namely Y variable and X variable, with the condition that:

- (1) Y variable is the dependent variable. In this research, the variabel Y is digital payment application used by generation Z.
- (2) X variable is the independent variable. in this study, the variable X is user satisfaction (X1) and loyalty (X2). User satisfaction is the level of consumer feelings after comparing between what he receives and his expectations and loyalty is user loyalty to a product, both certain goods and services.

### 2.3. Theoretical Framework and Hypothesis

The conceptual framework in this research is illustrated as follows:



**Figure 1.** Research Theoretical Framework

The hypotheses of this research:

- (1) H1: User satisfaction give impacts towards the using of digital payment conducted by Z-generation
- (2) H2: Loyalty affects the using of digital payment conducted by Z-generation

## 3. Result and Discussion

### 3.1. Description of the Respondents

By conducting a purposive sampling towards 100 respondents, the researchers administered Likert scale questionnaire so that they obtained 100 data with the response rate 100%. In this research, there are 63% of female respondents and 37% of male respondents. It is presented that female respondents are more interested in using digital payment compared to the male ones.

The next analysis explains the description of the respondents based on their age as it is presented as follow: The most apparent age of the respondents is ranging from 20 to 25 years old that is in the percentage of 45% and the period of 25 to 30 years old at the rate of 55%.

Those ages belong to the category of college students and workers, also some respondents are in the limit of Y generation, that is means more mature to make purchase decision.

The next analysis explains the description of the respondent based on their occupation. it is presented 15% of respondents are student, 32% are employee, 31% are entrepreneur and 22% are any kind of job. So the most respondents are employee and entrepreneur. This shows that the respondents are mostly people who have income and are willing to use digital payment.

Meanwhile, in the next analysis will be illustrated the description of the respondents based on the digital payment with brand that they often use, it could be a single using or both using. this research found, 20% of respondents are use OVO, 19% of respondents are use GoPay and 61% of respondents are use both OVO and GoPay for digital payment.

### 3.2. The Validity Testing Result of the Indicator Variable

The researchers used SPSS to test the validity. This validity testing has a purpose of finding out the worthiness of the points of questions, statements, and indicators in describing specific variable. Validity can also be defined as a form of effort to measure how far the items are able to measure what is really about to be measured in accordance with a predetermined concept. The criteria are valid in the CFA analysis or can be said to be valid if the loading factor  $> 0.30$ . This was also expressed by Hair (2010).

The result of validity calculation is shown in Table 1, with 100 respondents or sample the factor loading all of the variable of this research  $> 0,55$ , so the variables or construct in this research was valid. The results of validity testing found that 2 questions on the loyalty variable were invalid and 1 question on the digital payment variable was invalid, so it could not be used in hypothesis testing. From user satisfaction variabel, all of construct was valid and could be use in hypotesis testing. The construct and factor loading are as follows : US1 (0.76), US2 (0.81), US3 (0.81), US4 (0.79), US5 (0.71), and US6 (0.81). From loyalty variable, the question could be used in hypothesis testing are four question. The construct and factor loading are as follows : LO1 (0.78), LO2 (0.79), LO3 (0.71), and LO4 (0.82). From digital payment variable, the question could be use ini hypothesis testing are five question. The construct and factor loading are as follows : DP1 (0.76), DP2 (0.70), DP3 (0.76), DP4 (0.75) and DP5 (0.88).

### 3.3. Results of the Reliability

Reliability is the dependability that manifests the stability and consistency of the respondents in answering the points of questions or indicators. Henceforth, it can explain the construct of the research. As it is cited in Sujarweni (2015) Alpha  $> 0.60$  is considered reliable.

In this testing, cronbach's alpha shows 0.815 for user satisfaction, 0,673 for loyalty and 0,815 for digital payment, so that it is classified as reliable.

### 3.4. Results of the Linier Regression

Regression has an objective to test the impact of one variable to others (Sujarweni, 2015). This research employs multiple linear regression tests since the dependent variables are more than one.

**Table 1.** Model Summary.

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate	Durbin-Watson
1	0.536	0.287	0.273	1.677	2.265

- (1) Predictors: (Constant), LO (X2), US (X1)  
 (2) Dependent Variable : DP (Y)

**Table 2.** ANOVA.

Model	Sum of squares	df	Mean square	F	Sig.
Regression	109.947	2	54.973	19.547	.000 <sup>b</sup>
Residual	272.803	97	2.812		
Total	382.750	99			

- (1) Predictors: (Constant), LO (X2), US (X1)  
 (2) Dependent Variable : DP (Y)

According to the table 2, the significant value is 0.000 that means the regression is worthy to be conducted; hence, the researchers can continue the study to the next stage.

**Table 3.** Coefficients.

Model	Standardized Coefficients (Beta)	t	Sig.
US(X1)	0.376	3.825	0.000
LO(X2)	0.240	2.446	0.016

To examine the impacts through stimulant or the collective dependent variables towards the independent variable; thus, the decision uses significance  $< 0.05$  so that the hypothesis can be accepted. The results in Table 3 presents the user satisfaction (US) that shows the importance 0.000 meaning that  $< 0.05$ . It gives a result that Hypothesis I (H1) is accepted, while Loyalty (LO) explains the significance 0.016 meaning that  $< 0.05$ . Accordingly, Hypothesis 2 (H2) is also accepted. After all, the findings indicate that satisfaction and loyalty effect the using digital payment among Z generation.

As it has been predicted in the beginning, the description of the respondents in this research reveals that Z-generation intensely uses digital payment such as OVO or Go Pay in their everyday life, and the female ones have a tendency to use the digital payment more frequent compared to the male ones. The range of age of Y-generation who uses e-commerce is 25 to 30 years old. That age is categorized as the productive age and technologically literate. Moreover, the Z-generation of that age is also very fond of using technology and very active in that activity.

Furthermore, the research results find out the brand of digital payment that is commonly used by Z-generation are both OVO and Go Pay.

The result of the multiple regression testing shows that satisfaction and loyalty affect the Z-generation respondents using the digital payment with the indicators that the digital payment sounds more easy, cashless, and more benefit. Moreover, the usage of digital payment is easy to track small expenses.

Because Z-generation has some characteristics of being excited and interested in hedonism lifestyle, this research concludes that the using digital payment gives more attraction than conventional payment. The developers and the digital payment creators which are originated from Indonesia targeting the Z-generation as their market consumers.

#### 4. Conclusion

In a nutshell, the researchers conclude that satisfaction and loyalty give impact to the respondents in using digital payment. With the purpose to generate the perception of using digital payment, the digital payment companies should take Z-generation as their target. It is due to the characteristics of Z-generation with their hedonism lifestyle that put a priority on the easiness and more benefit on product as their indicators in using the digital payment services.

#### References

- [1] Bank Indonesia 2016. Peraturan Bank Indonesia Nomor 18 Tahun 2016 Tentang Penyelenggaraan Pemrosesan Transaksi Pembayaran.
- [2] Danya, B.K. 2019 *Consumer Perception of Digital Payment Mode* (IJRAR) Vol 6 pp 176-183
- [3] Dewa, Chriswardana Bayu 2018 *Pengaruh Kualitas Restoran Terhadap Kepuasan Pelanggan Cengkir Heritage Resto and Coffe* (Jurnal Khasanah Ilmu) Vol 10 pp 21-25
- [4] Fingky Verawati Fajrin and Samputna Wibawa 2016 *Effect of Event Marketing on Brand Image at PT Pikiran Rakyat Bandung* (Journal e-Proceedings of Applied Science) Vol 4 pp 357-369
- [5] Hair, Jr et al 2010 *Multivariate Data Analysis* Vol 7 (United States: Pearson)
- [6] Tjiptono, Fandy 2015 *Strategi Pemasaran* (Yogyakarta: Andi)
- [7] Kotler and Keller 2009 *Marketing Management* vol 1 (Jakarta: Erlangga)
- [8] Morgan, J.P 2019 . e-Commerce Payment Trends: Indonesia [www.jpmmorgan.com](http://www.jpmmorgan.com)
- [9] Mar'ati, N. C., and Sudarwanto, T. 2016 *Pengaruh Kualitas Layanan dan Harga terhadap Kepuasan Pelanggan Jasa Transportasi Ojek Online (Studi pada Konsumen Go-jek di Surabaya)* (Jurnal Pendidikan Tata Niaga) pp 1-12
- [10] Nana Sabarna and Kasman Rukun 2019 *Web-based E-Commerce system design at Indah Surya Furniture* (Journal of Voteknika) Vol 7 pp 1–10
- [11] Nisaputra, Rezkianna 2020. OVO dan Gopay Paling Sering Digunakan Untuk Transaksi Digital [www.infobanknews.com](http://www.infobanknews.com)
- [12] Novi Tri Hariyanti and Alexsander Wirapraja 2018 *The Influence of Influencer Marketing as a Modern Era Digital Marketing Strategy* (Journal of Executive) Vol 1 pp 133–146
- [13] Oktaviani, Naulia, Widji Astuti and Achmad Firdiansjah 2019 *Pengaruh Kepuasan Konsumen Terhadap Pembentukan Komitmen Pelanggan dan E-WOM Pada Pengguna Aplikasi e-money OVO* (Journal Manajemen dan Pemasaran Jasa) Vol 12 pp 93–112
- [14] Putro, Shandy .W., Hatane, Samuel., Karina, Ritzky dan Brahmana 2014 *Pengaruh Kualitas Layanan dan Kualitas Produk Terhadap Kepuasan Pelanggan dan Loyalitas Konsumen Restoran Happy Garden Surabaya* (Jurnal Manajemen Pemasaran) Vol 2 pp 1–9
- [15] Sujarweni, Wiratna 2015 *SPSS Untuk Penelitian* (Yogyakarta: Pustaka Baru Press)
- [16] Suwarman, Ujang 2011 *Consumer Behavior: Theory and Its Application in Marketing* (Jakarta: Ghalia Indonesia Publisher)
- [17] Ydp 2020. E-Money Transactions in Indonesia Skyrocket 173% in January [www.Thejakartapost.com](http://www.Thejakartapost.com)
- [18] Zikmund, William G., et al 2010 *Business Research Methods 8th edition* (South Western, USA: Cengage Learning)