

# Determinant Factors of Consumer Preferences on Electronic Wallet Users in Bandung

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## Abstract

In this modern era, the use of digital wallets has become a trend in people's lifestyles in the transaction. In Indonesia, there are 38 digital wallets with official licenses, one of which is OVO. In its development, OVO is considered to have a very rapid growth to successfully occupy the position of the two most popular e-wallets in Indonesia. Because of this, this research was conducted to determine consumer preferences in using OVO in Bandung.

In this study, the method used is a quantitative method with descriptive analysis and factor analysis as data processing assisted with SPSS. The sampling technique used is a nonprobability sampling technique with a purposive sampling type. The respondents surveyed in this study were 100 people who reside in Bandung and use OVO for transactions.

The results showed that eleven initial factors became consumers' preferences in using OVO in Bandung. Based on the results of data processing with descriptive analysis, consumer preference variables are included in the high category, with a score of 81.85%. Based on factor analysis, the factor formed is one factor, namely competitive advantage, with the dominant factor being security, which has the most considerable correlation of 0.929 or 92, 9%.

## Keywords

Consumer Preferences, E-wallet, Factor Analysis, Marketing.

## 1. Introduction

Organization must response to how the environment changes, furthermore the leader must maintain their organization to every change inside their organization and adjusting to the transform itself (Fakhri et al., 2020). Technology is change rapidly in the current digital era. All aspects have begun to change from what was once traditional and now has shifted towards digital needs. People are obtaining various digital benefits by accessing different things through smartphones and the internet network. Within the financial sector, there are several innovations, one of which is in technology-based financial services with a modern concept known as financial technology or fintech. Financial technology is a term used to refer an innovation in the field of financial services. The impact of fintech is the development of electronic payment systems or e-payments, where the value of money is stored in electronic media based on chips or servers. Several electronic media that support the use of e-payments in the community are chip-based e-money and server-based e-wallets. The E-wallet itself is application-based electronic money, where the use of e-wallet has a broader and more dominant term for daily non-cash transactions by the public, starting from offline shopping needs at retail and online outlets. Online transactions are increasing goes along with e-wallet growth (Pradana & Novitasari, 2017). In Indonesia, there are many digital-based financial services. In major cities, this service is commonly used by many people for practical reasons. There is no need to prepare cash when making transactions. In Indonesia, according to data from Bank Indonesia, there are 38 digital wallets or e-wallets with official licenses.

However, of the 38 e-wallets, there are only ten e-wallet platforms that are popular in Indonesia. Majorly speaking, local developer e-wallet applications still dominate cashless payment methods in the country. The top five locally-owned e-wallet applications with most users are still Go-Pay, OVO, Dana, LinkAja, and Jenius. Competition between e-wallets is indeed very tight. However, Go-Pay still dominates the e-wallet market in Indonesia, where the position remains stable in the first place. However, there are lots of newcomers, such as OVO and Dana. Dana is arguably quite aggressive because, at the time of Q4 2018, Dana was immediately ranked second as the most popular e-wallets in Indonesia. Dana has done to strengthen its position by collaborating with other e-commerce, which is something that is

already performed by OVO and Tokopedia. This situation made Dana's position as second highest e-payment user replaced by OVO in Q2 2019 until now.

OVO can gain a second place because of their partnership with Grab. The cooperation with online transportation such as Grab can increase the OVO usage as a payment choice, and also OVO can be used for all Grab features. OVO also collaborates with one of the largest e-commerce in Indonesia, with the highest number of users, which is Tokopedia. This condition can expand the reach of non-cash payments through OVO. Besides from that, to support the development of OVO, there is also an investment made by the Lippo Group, which is necessary because OVO will become a digital wallet that is accepted throughout the shopping center, hospitals, and educational facilities belong to the Lippo Group. To maintain its position, OVO continues to expand its network and integrate into various industries that are often used by the community, from Micro Small Medium Enterprises (MSMEs) to Major Shopping Center. OVO also does not hesitate to "burn money" to increase its users. Initial research results from Snapcart, which is an application-based research institute conducted in Indonesia using 1,800 respondents, found that 58% of respondents used OVO as their favorite digital payment application with the following proportions of usage: 71% for online transportation transactions, 71% for online food delivery, 70% for e-commerce transactions, 67% for bill payments, and 63% for retail transactions. Based on the results of this research, it becomes more settled that the collaboration between OVO and Grab and Tokopedia has a significant impact. This research also showed that OVO payments are mostly used for online transportation transactions, online food delivery, and e-commerce transactions. With combining marketing mix there are chances to increase purchase intention (Kartawinata et al., 2020) and then to increase purchase decision. Hidayat (2017) says that nowadays, purchasing decisions are also supported by online stores and other e-commerce platforms, the contribution of online environment stores mostly affecting purchasing decisions among consumers. According to Morgan Stanley, which is one of the leading investment banks in the United States, also illustrate how the growth of the OVO business also increasing merchants sales who collaborate with OVO. The escalation of OVO users, donating a significant amount to build a supported environment for MSMEs and other merchants who collaborate with OVO. Electronic payment usage is becoming a vital strategy for designing a competitive promotion and also to build a supportive environment among MSMEs business (Setyorini & Hendriyanto, 2017).

The expansion made by OVO within the community is undoubtedly interesting for further research because it relates to consumer behavior and purchase decisions involve a product with several choices of e-wallets available. To decide what kind of product that suitable for, a customer will make this choice through several stages to finally yield an opinion toward a product that meets its needs, and it is how a consumer's preference is formed. The circumstances of a person choosing OVO are based on several factors, mostly why a consumer preferring a product than any others. When e-wallet combines with online purchasing, Dewi (2019) says that when a customer has an intention to purchase an item using an e-commerce platform, they also consider what kind of electronic payments are used by e-commerce.

This consumer preference research uses factor analysis as a method to identify how many factors that can be used to explain several variables in consumer preferences (Gilang et al. 2019). Moreover, in this study, the factors are analyzed based on several dimensions, such as: easy to make an account, more innovative products than traditional banks, a greater level of trust, efficiency, security, benefit, promotion, connectivity, product quality, product features, product style, and design. Eventually, several factors will form as consumer preferences in using OVO.

## 2. Theories

### Marketing.

Lamb et al. (2012) state that marketing is a process of planning and implementing the concepts of pricing, promotion, and distribution of products, services, and ideas aimed at creating satisfaction among companies and their consumers.

Kotler and Keller (2016) say that consumer behavior is the study of how individuals, groups, and organizations choose, buy, use, and dispose of (if used) goods, services, ideas, or experiences to satisfy their needs and wants.

The decision-making process for a new product or technology has several stages before deciding to buy, such as:

1. Awareness is the stage where consumers begin to become aware of a new product, but have very little information about the product.
2. Interest is the stage of searching for information about the latest product
3. Evaluation is the stage where consumers begin to think about trying the product
4. Trial is a stage where consumers try the product on a small scale to increase the predictive value it has. This stage is also an additional evaluation to provide confidence for the adopters that the new technology/product is following their needs and desires.
5. Adoption is the stage where consumers decide to use the new product in its entirety and regular use.

### Financial Technology.

Financial technology is a term used to refer to innovation in the field of financial services, where the term comes from the words 'financial' and 'technology' which refer to financial innovations with a touch of modern technology (Pradana et al. 2019)

Some of the Financial Technology products include:

1. E-payment

Non-Cash Payment (E-payment) E-payment is defined as a payment instrument in electronic form where the value of money is stored in certain electronic media and E-payment is also often referred to as Electronic Money

2. E-Money

According to PBI Number 11/12 / PBI / 2009 concerning Electronic Money (electronic money), e-money has the meaning of "a means of payment that fulfills the elements, namely issued based on the value of money deposited in advance by the holder to the issuer; the amount of money is stored electronically in a medium such as a server or chip; used as a means of payment to merchants who are not the issuers of the electronic money, and the value of electronic money deposited by the holder and managed by the issuer is not a deposit as defined in the law governing banking

3. E-Wallet

E-wallet refers to an application-based (server-based) electronic payment system and the internet that stores financial information and personal identities. This payment system allows customers to pay for goods and services online, including transferring funds to others using integrated hardware and software systems.

Consumer Preference

According to Kotler & Keller (2016), preference is: The target audience may like the product but do not choose another. Then the communicator must try to build consumer preferences by comparing quality, value, performance, and other features such as those of competitors.

Sub variables are factors that users consider in choosing OVO as an electronic transaction tool. The research uses several sub-variables from theories that describing consumer preference.

There are seven factors or sub-variables from Wewege (2016), which is easy to make an account, more attractive rates/fees, access to different products and services, better online experience and functionally, better quality of services, more innovative products than traditional banks, the greater level of trust.

There are five factors from Pradana (2019), including efficiency, safety, benefit, promotion, connectivity.

There are three factors from Kotler & Armstrong (2014), such as product quality, product features, product style, and design. Of the total 15 factors, only 11 factors are used because of several equations. The following 11 factors are used in this study: easy to make an account, more innovative products than traditional banks, a greater level of trust, efficiency, safety, benefit, promotion, connectivity, product quality, product features, product style, and design.

**3. Methodology**

This research uses a quantitative method with descriptive analysis and factor analysis wherein data processing assisted by the SPSS program. The sampling technique is a non-probability sampling specified to purposive sampling. To determine the number of samples, the researcher uses the Bernoulli formula with an error rate of 10%, and the data collection technique is gathered by literature study and distributing questionnaires to 100 respondents in Bandung, specifically customers that use OVO as an instrument for their transaction (Gilang et al., 2019).

The framework of this research will be shown in figure 1. It describes factors that will be used in this research:

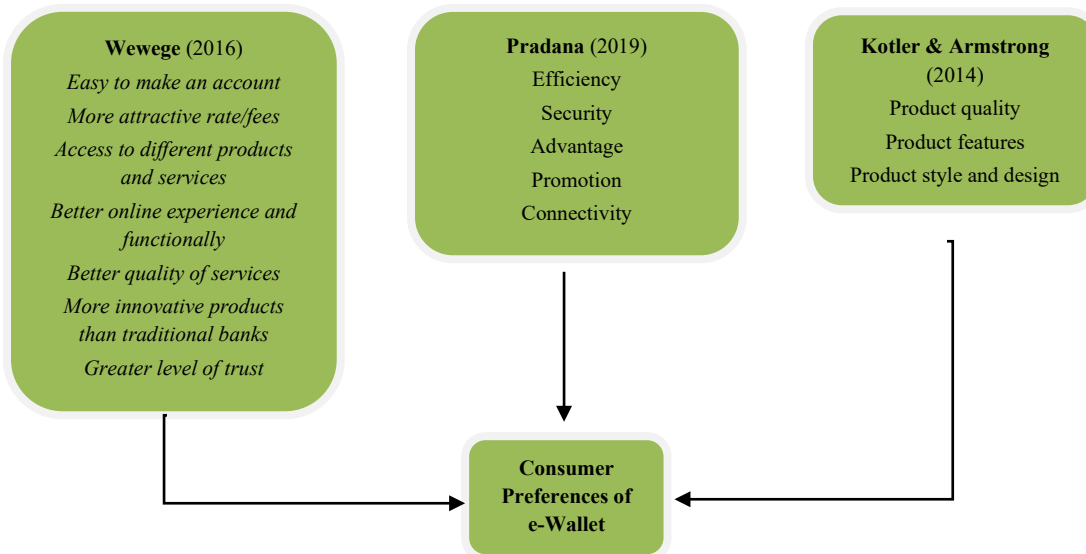


Figure 1. Research Framework

#### 4. Result and Discussion

The validity test of the 37 questionnaire statement items distributed to 100 respondents has a correlation value (r count) above 0.195 so that all statements can be said to be valid and fit for use in factor analysis. Reliability test, the Cronbach's Alpha value in this study was 0.978, so it can be concluded that all the questionnaires in this study were reliable or consistent because the Cronbach's alpha value was  $> 0.7$ .

Descriptive analysis of the 37 questionnaire items submitted, the total average response of respondents was 81.58%, so it is included in the high category. It can be said that whole sub-variables that exist show how consumer preferences in using OVO in Bandung.

Factor analysis

##### 1. KMO dan Bartlett's Test

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.926
Bartlett's Test of Sphericity	Approx. Chi-Square	3313.949
	df	666
	Sig.	.000

##### 2. Anti Image Matrices

Table 2. MSA Value

No Item	Attribute	Value MSA
1	Easy to make an account	0,970
2	More innovative products than traditional banks	0,959
3	The greater level of trust	0,938
4	Efficiency	0,958
5	Security	0,949
6	Benefit	0,936
7	Promotion	0,962
8	Connectivity	0,950
9	Product Quality	0,953
10	Product Feature	0,953
11	Design and product style	0,944

MSA value on all attributes has been  $> 0.5$ , so the value of each existing attribute can be predicted and analyzed further.

##### 3. Communalities

Based on table 3, it can be seen that the initial value of all indicators is 1. This is means that 100% of these variables can form a factor. Meanwhile, the extraction value is the percentage of the variance of a variable, which can be explained by the factors that will be created. For example, the easy extraction value variable shows a figure of 0.624 or 62.4%, which means that the variant of the easy variable can be explained by the factors that will be formed.

Table 3. Communalities Value

Communalities		
	Initial	Extraction
easy	1.000	.624
more	1.000	.710
greater	1.000	.778
efisiensi	1.000	.808
keamanan	1.000	.863
keuntungan	1.000	.668
promosi	1.000	.770
konektivitas	1.000	.814
kegunaan	1.000	.744
fitur	1.000	.602
gaya	1.000	.768

#### 4. Total Variance Explained

Table 4. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.120	73.818	73.818	8.120	73.818	73.818
2	.564	5.124	78.942			
3	.455	4.135	83.077			
4	.378	3.439	86.516			
5	.343	3.117	89.632			
6	.248	2.250	91.883			
7	.234	2.124	94.006			
8	.230	2.094	96.100			
9	.177	1.611	97.711			
10	.143	1.301	99.012			
11	.109	.988	100.000			

Extraction Method: Principal Component Analysis.

#### 5. Component Matrix

Table 5. Component Matrix

	Component
	1
Easy	.790
More	.843
Greater	.882
Efficiency	.899
Security	.929
Benefit	.817
Promotion	.877
Connectivity	.902
Quality	.845
Feature	.776
Style	.876

#### 6. Factor Labelling

After grouping the factors, the final step in analyzing the data is by using the factor analysis method, which is naming the new factors (labeling). Based on the results of the total variance explained data processing, it is known from eleven initial factors that exist. Eventually, only one factor is formed, where the factor that is created is called the OVO consumer preference factor. This factor consists of sub-factors/ sub-variables such as easy to make an account, more innovative products than traditional banks, the greater level of trust, efficiency, security, benefit, promotion, connectivity, product quality, product features, product style, and design. Those variables are essential things that OVO must have to compete with its competitors and attract consumers to continue to use OVO as a transaction means.

### 5. Conclusion

Based on the results of data processing with descriptive analysis, consumer preference variables consisting of eleven sub-variables studied sequentially, with an average total score of the highest, namely: connectivity 85%, efficiency 83.95%, security 82.8%, promotion 82.25%, product style and design 81.95%, profit 81.9%, easy to make an account 80.6%, more innovative products than traditional banks 79.95%, product features 79.8%, greater level of trust 79.72%, and product quality 79.46%. So that overall, the 11 sub-variables are consumer preferences in using OVO because they are included in the high category with a total average of 81.58%. According to Fakhri (2019), the level of satisfaction must be maintained with carefully, because it can show the level of organization strength

Based on the results of data processing with factor analysis, a single new factor is formed called the OVO consumer preference factor, which consists of 11 successive sub-factors, namely: security, connectivity, efficiency, the greater level of trust, promotion, style and product design, product quality, more innovative products than traditional banks, profits, easy to make an account, and product features. Of the eleven OVO consumer preference sub-factors, it can be

seen that the most dominant factor is the safety factor with a correlation value of 0.929 or 92.9%. Therefore, in order to increase online purchases, the consumer can consider e-payment as a preference to choose and even influencing another consumer to choose a particular platform (Widodo et al. 2017).

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