Analysis of Factors Affecting Consumer's Decision in Choosing the Digital Fund Wallet

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Abstract:

This study aims to determine the effect of price, reference groups, and security on consumer decisions in choosing digital fund wallets on three campuses in Jakarta. This study used a sample of 100 respondents and the sampling technique used a simple random sampling technique. The data collection technique used a questionnaire of 43 question items which were assessed on a Likert scale of 1-5 and tested for validity and reliability. The analytical method used, regression analysis, correlation, the test of the coefficient of determination (R²), and t-test. Based on the regression analysis at a significant level of 5%, it shows (1) there is a positive and significant effect of price on consumer decisions in choosing a digital fund wallet, with a rₓ₁ᵧ correlation of 0.678; the coefficient of determination R²ₓ₁ᵧ of 0.460; and sig value 0.000 < 0.05; (2) there is a positive and significant influence of the reference group on consumer decisions in choosing a digital fund wallet, with a rₓ₂ᵧ correlation of 0.607; the coefficient of determination R²ₓ₂ᵧ of 0.368; and sig value 0.000 < 0.05; (3) there is a positive and significant security effect on consumer decisions in choosing a digital fund wallet, with a rₓ₃ᵧ correlation of 0.746; the coefficient of determination R²ₓ₃ᵧ of 0.556; and sig value 0.000 < 0.05.

Keywords:
price; reference group; security; customer decision

I. Introduction

The National Non-Cash Movement (GNNT) is a movement that has been planned by Bank Indonesia as a legal means of payment in order to facilitate the public, business actors and the government to conduct transactions. The background of Bank Indonesia in issuing a digital system is because the existence of GNNT can solve the problem of many cases of counterfeiting money, the amount of money in circulation and high operational costs when printing, distributing and destroying money.

Currently, Indonesia must be able to adapt to the development of revolutionary technology 4.0. This is used by producers to compete in creating various types of applications, one of which is a digital wallet that can easily access financial transaction activities as a substitute for credit cards. The development of the use of the non-cash system is currently soaring very high both among the local community and the international community. The use of digital systems will always be developed with the aim of using them to be faster, more efficient and comfortable. As a result of the advancement of this modern system, it will change the pattern of people's lives, especially Jakarta, with various kinds of transactions carried out by the community, both in the small (household) and large (industry and government) scope.
Launching from katadata.co.id that the development of electronic money transaction volume continues to increase sharply from 2017 to 2019, which is almost close to 100 trillion rupiah. Digital transactions, which continue to increase every year, state that the use of electronic money as a tool for people's daily payments is very acceptable.

![Transaction Value and Amount of Electronic Money (2010- Sep 2019)](source: www.databoks.katadata.co.id 2019, the data is processed)

The use of electronic money is the same as paper money in general. The only difference is that electronic money is not in physical form but is in the form of data stored in the form of a card which is practical to be used and carried anywhere. For example in banking, banks issue several types of e-money such as e-money cards, Indomaret cards, E-Tolls, and gaz cards (Diana, 2018). Apart from banking, non-bank institutions are also competing to launch e-money based on digital applications, including Go-jek issuing Go-pay, Telkomsel issuing LinkAja, Dompetku from Indosat, OVO, Paytren, Jenius, and many more.

Digital wallets function as technology-based wallets that are neatly stored on a smartphone and can only be opened by the account owner. One of the most popular digital wallets because of its immediate arrival and attracting a lot of attention is DANA. DANA is a startup that offers an e-money platform with a cardless credit system that was founded in 2017 by CEO Vincent Iswara as a fintech created by the nation's children which has the support of the main investor, namely PT. Elang Mahkota Teknologi Tbk (EMTEK) and Ant Financial Alipay. DANA carries the concept of an open platform payment which means that it can be used in payments for education, social services, and SMEs or merchants. Although Dana is a newcomer, DANA has collaborated with other big vendors, such as KFC, Ramayana, TIX. ID and BBM and more than 1,000 merchants both online and offline. Researchers chose research on the DANA application because it has advantages that other applications do not have. Among others are; good system security such as banking, lots of cashback offered if you become a premium member, easy transfer and free admin fees.

Several similar previous studies regarding consumer behavior in choosing DANA, (Angraeni et al., 2019), (Rahmawati, 2020), (Firmansyah, 2020), Interest in using digital wallets (Jesica, 2020), (Dirwan, 2020) (Hardi, 2021), and adoption of innovation using digital wallets.
(Badri, 2020), Reference using DANA (Safira et al., 2019). Price, references, ease of use, security and service features have a positive and significant effect on interest in using digital money.

Based on the above, the authors are interested in taking the title of this study as follows "Analysis of influencing factors consumer decisions in choosing the DANA digital wallet "With the aim to see how much influence price, reference groups and security on consumer decisions in choosing the DANA digital wallet in the Jakarta area.

II. Review of Literatures

Price is a unit of value indicated by money to get a product or basis and as a balance when someone comparing quality, while price is the initial determinant of the size of market demand. (Mamang & M.Sopiah, 2013). Price is the exchange rate of consumers in order to obtain ownership rights to a product and the benefits of using a certain service. (Sunyoto, 2015). Price is a measuring tool for a consumer and a form of sacrifice to use or benefit from a product or service in order to obtain the benefits as desired. Price is a combination of goods and services obtained by spending a certain amount of money. (Swastha Basu & Handoko, 2014)

2.1 Price Indicator

There are four indicators that can specify prices (J. Setiadi, 2013);
1. Affordability of prices
   A good company always pays attention to the needs of its target market. If the predetermined price can be reached by consumers, it means that the company has been successful in meeting the needs of its consumers according to the situation and conditions of the target market.
2. Price competitiveness
   Comparison of the price of a product is very easy to attract consumers. In this case, consumers will buy products that are more economical according to their needs.
3. Price match with quality
   Good quality for consumers is often indicated by price. If the quality is better people tend to think that the price is high, and consumers will choose good enough quality at a more standard or cheaper price
4. Price match with benefits
   If what has been spent to get benefits is considered very useful, consumers will buy again. Meanwhile, if consumers feel that the product is not useful, then the product will be a second alternative when buying.

2.2 Reference Group

Reference group is a group of people who have a role or status directly or will not influence consumer behavior. Reference group is a group of people who have special characteristics as a reference or reference by the community and become a view of the value of attitudes or behavior guidelines. (Schiffman, L.G & Kanuk, 2010) Reference groups as an individual or a group of people significantly influence a person's behavior by providing standards and values. (Sumarwan, 2011).
2.3 Reference Group Indicators

There are three kinds of influence from the reference group (Utami, 2017), including:

1. Normative influence
   Normative influence is like the influence of a reference group on a person through social rules that must be obeyed and followed.

2. Effect of value expressions
   Consumers have the view that someone who is successful is characterized by the ownership of luxury goods or limited edition goods, because many people compete in owning these luxury goods so that they are seen as successful people and their self-image can be improved.

3. Influence of information
   This reference group will influence consumer suggestions on product and brand choices, because they are considered to have a better image, knowledge and information.

2.4 Security

Online transaction security is a way to detect fraud in a system and prevent fraud, where the information itself may not be meaningful. Security in general is a safe and secure state characterized by being free from physical and psychological injuries (Kurniady & Mariah, 2016). Security is an early preventive measure and detection of disruptive attacks that are not recognized by the computer system. (Effendi, 2016)

   Cyber security specifically focuses on protecting computer systems and their components, including hardware and software, which are an important part because digital infrastructure data is stored. Digital security is a form of system in protecting digital information that is owned by individuals and groups. Digital security is likened to a form of self-defense in software or hardware because irresponsible parties will always see gaps to be exploited.

2.5 Safety Indicator

   Security indicators (Mauludiyahwati, 2017), include:

   1) Security guarantee
      With security guarantees, it is likely that other people trying to enter will fail.

   2) Data confidentiality
      Data confidentiality can be felt by DANA owners, because not everyone can use it, it’s the same as all digital servers. Server requires a pin / fingerprint before entering into it.

2.6 Consumer Decisions

Consumer decision is an act of consumers after seeing, researching and comparing a product that has the same quality. Consumer decisions are influenced by many things, but the consumers themselves will determine which choice is right to buy a product or not. Consumer decisions are individual activities in the decision-making process when they want to get or use goods and services (Swastha Basu & Handoko, 2014). The purchase decision is an alternative form of the two options by combining the knowledge that is owned and in the end choosing one of them. (Tjiptomo Fandy, 2015). Purchasing decisions are actions taken by consumers to buy products they like (Effendi, 2016)
2.7 Consumer Decision Indicators

The purchase decision is an action where the consumer has decided to buy one product among various alternative options. (Abdullah & Francis, 2016). There are six sub-consumer decisions in purchasing according to (Widokarti & Prians, 2019), namely;

1. Product choice
   Product choices for consumers must provide many benefits and be affordable at the same time.

2. Brand choice
   Consumers tend to prioritize a brand in their purchases, because it is believed that the brand indicates product quality.

3. Dealer choice
   Every consumer will have a different view in choosing where to shop. The farther and more magnificent the place to shop, the price of goods can vary. Consumer desires are close location, low prices, shopping convenience, and other facilities.

4. Purchase amount
   The amount of consumer purchases is not always the same, consumers will spend a lot of products at certain times, such as; purchasing clothes, tins of cake and diamond orders just before holidays and other holidays.

5. Purchase timing
   The choice of time for consumer purchases usually varies, such as; purchases of staple foods or purchases of vegetables every day, and purchases of laundry soap every once a month.

6. Payment method
   Payment methods are currently very influential in making decisions because ease of transactions, saving time and costs are the main factors in deciding whether to purchase a product or service.

2.8 Framework

This research framework is based on previous research and existing theories using independent variables, namely price, reference group, security and consumer decisions as the dependent variable.

![Diagram of Framework]

2.9 Hypothesis

Based on the framework above, the hypothesis in this study are: H1: Price has a positive effect on the decision Consumer

H2: Reference groups have a positive effect on consumer decisions. H3: Security has a positive effect on consumer decisions
III. Research Methods

3.1 Population
The population in this study is the DANA digital wallet user community in the DKI Jakarta area with the characteristics that have used the DANA digital wallet at least when there is a promo within 3 months.

3.2 Sample
Because the exact number of the population is not known, the determination of the number of samples is using the Lemeshow formula (Sugiyono, 2016). The result is that the minimum sample size required in this study is 96 respondents which the researcher will round to 100 respondents. The reason the researchers used the Lemeshow formula is because the target population is unknown with changing numbers.

3.3 Sampling
Using Probability Sampling (random sample) The sampling technique is Simple Random Sampling (simple random sample) because the sampling is done randomly and without looking at the social status of the respondent in other words it can be assumed that all respondents have the same opportunity. Researchers want to know the consumer's decision factors for choosing the DANA digital wallet based on experience using data applications on mobile phones, experience with friends, and experiences when promos are held.

3.4 Data Collection Technique
Through interviews that aim to obtain accurate and precise information from sources, and through questionnaires distributed to people using FUNDS in the DKI Jakarta area which will become a benchmark in consumer decisions which will be used as the basis for primary data.

3.5 Data analysis Method
Data analysis is a series of data grouping activities based on variables and types of respondents, by tabulating and presenting data for each variable under study based on the variables of all respondents, then doing calculations to answer the proposed hypothesis (Sugiyono, 2017). After the data is collected, data analysis is carried out, the data is processed and interpreted to obtain more detailed results in answering the problems that arise in the study. This study uses quantitative research. The analysis technique used is descriptive statistics, using regression analysis, correlation and coefficient of determination.

IV. Result and Discussion
To find out which questions or statements can be said to be valid or not, a validity test is needed, namely by looking at the distribution of the rtable value and then comparing it with the rcount value. With the criteria if rcount > rtable is valid, while if rcount < rtable is invalid. The rtable value is obtained from the df-2 value, the df value, the sample used is 18 respondents, so that the value to see in the table is $r_{18-2} = 16$ with a significant 5%, then the r table value is 0.468.
Table 1. Validity Test Results

<table>
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<th>No</th>
<th>r_calculate X1</th>
<th>r_count X2</th>
<th>r_count X3</th>
<th>r_count Y</th>
<th>r_table</th>
<th>Information</th>
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<tr>
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<td>0.632</td>
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<td>Valid</td>
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<td>10</td>
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<td>0.544</td>
<td>0.489</td>
<td>0.468</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Source: results of SPSS 2020 data processing

Table 2. Reliability Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach Alpha</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price (X1)</td>
<td>0.831</td>
<td>Reliable</td>
</tr>
<tr>
<td>Reference Group (X2)</td>
<td>0.860</td>
<td>Reliable</td>
</tr>
<tr>
<td>Security System (X3)</td>
<td>0.897</td>
<td>Reliable</td>
</tr>
<tr>
<td>Consumer Decisions (Y)</td>
<td>0.842</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Source: results of SPSS 2020 data processing

Based on the table above, it can be seen that the Cronbach Alpha value of the price variable = 0.831, the reference group = 0.855, the security system = 0.897 and consumer decisions = 0.853. Thus, the questionnaire on all variables is said to be reliable because it is above 0.6 and can be used as a research instrument.

4.1 Effect of Price on Consumer Decisions

Based on the results of the regression calculation, there is a Pearson correlation value of 0.693. So it can be concluded that price is positively related to consumer decisions with the degree of strong correlation. For the value of R Square (Coefficient of Determination) X1 is 0.481 or 48.1%, which means that the effect of the price variable (X1) on the consumer decision variable (Y) is 48 , 1% while the remaining 51.9% is influenced by other factors not examined. Based on the value of t count 9,526> t table 1,988 and the value of sig, for the effect of X1 on Y is equal to 0,000 <0.05, it can be concluded that H0 is rejected and Ha is accepted, which means that partially there is a significant effect on Consumer Decisions.

Price is the amount of money that a number of combinations of services and goods are available for. (Swastha Basu & Handoko, 2014). Previous research entitled "The effect of Sales Promotion, Service Quality, and Price Perception on Consumer Satisfaction of Digital Wallets (e-Wallets) with Income as Moderating (Case Study on Society in Yogyakarta City. And the results of the study indicate that there is a positive influence between sales promotion, service quality, price perception on digital wallet consumer satisfaction in the community in Yogyakarta City (Sibarani, 2020)
This shows that there is harmony between the results of previous research and this study that prices affect consumer decisions, and with prices making consumers feel happy to use the DANA application.

### 4.2 The Influence of Reference Groups on Consumer Decisions

Based on the regression calculation, the Pearson correlation $X_2$ value is 0.607. So it can be concluded that the reference group is positively related to consumer decisions with the degree of strong correlation. The value of R Square (Coefficient of Determination) $X_2$ is 0.368 or 36.8%, which means that the reference group ($X_2$) affects consumer decisions ($Y$) by 36.8% while the remaining 63.2% is influenced by other factors that are not researched or outside the discussion.

Based on the value of $t$ count 7.556 > $t$ table 1.988 and the sig value for the effect of $X_2$ on $Y$ is 0.000 < 0.05, so it can be concluded that $H_0$ is rejected and $H_a$ is accepted, which means that the Reference Group partially has a significant positive effect on Consumer Decisions. Reference group is a certain group of people in society who is used as a reference or reference by one or more members of the community in forming views about the value of an attitude or as a guide for behavior that has special characteristics. (Schiffman, L.G & Kanuk, 2010)

Previous research entitled "the influence of lifestyle factors and reference groups on purchasing decisions for premium service sports straming music applications (a case study on students of SULTAN SYARIF KASIM RIAU). This study shows that lifestyle variables and reference groups have a significant effect on purchasing decisions (Pangestu, 2020).” This shows that there is an alignment between the results of previous research with this study that the Reference Group influences consumer decisions, and the existence of a good Reference Group makes consumers feel happy to use the DANA application.

### 4.3 Effect of Security on Consumer Decisions

Based on the results of the regression calculation, there is a Pearson correlation value of 0.746. So it can be concluded that security is positively related to consumer decisions with a strong correlation degree. $X_3$, the value of R Square (coefficient of determination) is 0.556 or 55.6%, which means that the effect of security ($X_3$) on consumer decisions ($Y$) is 55.6%, while the remaining 44.4% is influenced by other factors that are not researched or are outside the discussion.

Based on the $t$ value of 11.076 > $t$ table 1.988 and the sig value, for the effect of security ($X_3$) on consumer decisions ($Y$) is 0.000 < 0.05, so it can be concluded that $H_0$ is rejected and $H_a$ is accepted, which means that there is a significant positive effect on security against consumer decisions. Security is an early preventive measure and detection of disruptive attacks that are not recognized by the computer system. (Effendi, 2016)

Previous research entitled "The Effect of Trust, Security, Service Quality and Perceived Risks of Using E-Commerce on Online Purchasing Decisions (survey on lazada consumers)” which states that security has a positive and significant relationship in influencing online purchasing decisions. (Mauludiyahwati, 2017) This shows that there is harmony between the results of previous research and this study that security affects consumer decisions online because good security makes consumers feel safe to save money and use it quickly accordingly with the time it takes.
V. Conclusion

Based on the results of research and discussion, several conclusions can be drawn as follows:

1. Price has a positive and significant effect on consumer decisions in choosing digital fund wallets in the East Jakarta and Bekasi areas. This is based on the results of a simple regression test where the price has a score of 1.019, which means that if the price variable increases by 1 point, the consumer's decision will increase by 1.019. And based on the highest answer score 413 is found in the statement "The value of the price varies depending on the benefits obtained" so the respondents strongly agree that the value of the price varies depending on the benefits obtained.

2. Reference groups have a positive and significant effect on consumer decisions in choosing digital fund wallets. This is based on the results of a simple regression test where the reference group has a score of 0.690, which means that if the Reference Group variable increases by "1" point, then the consumer's decision will increase by 0.690. Based on the highest statement score with a score of 382 from the statement "The influence of use in the surrounding environment made me choose funds", it can be concluded that the effect of use in the surrounding environment makes respondents choose DANA for transactions.

3. Security has a positive and significant effect on consumer decisions in choosing the DANA digital wallet. This is based on the results of a simple regression test where security has a score of 0.963, which means that if the security variable increases by 1 point, the security will increase by 0.963. The security questionnaire statement, the maximum from the respondent's answer is "The application of pins when the transaction has an accurate accuracy" with a score of 98%. This indicates that the respondent agrees that the application of the pin when the transaction has accurate accuracy.

References