## The Impact of Perception of Ease of Use and Security on Consumer Satisfaction and Consumer Loyalty (Empirical Study of DANA Digital Wallet Users in Semarang City)

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Abstract	This study aims to analyse the impact of perceived ease of use and security on consumer satisfaction and its impact on consumer loyalty of Dana digital wallet users in Semarang City. The data collection method used a questionnaire via google form which was distributed to 100
	respondents. Sample selection using purposive sampling criteria. Hypothesis testing was
	carried out using multiple linear regression tests and with the statistical software SPSS. The
	research population includes Dana digital wallet users who have made transactions at least
	three times. The results showed that perceived ease of use and security had a positive and
	significant impact on consumer satisfaction. The results also show a positive impact of consumer
	satisfaction on consumer loyalty. This research contributes theoretically in explaining the
	mechanism of technology adoption in digital products for shaping consumer attitudes. The
	results provide practical recommendations for digital service providers, especially the determinants of consumer satisfaction and loyalty.

Keywords

Consumer Loyalty, Consumer Satisfaction, Perceived Ease of Use, Security

### INTRODUCTION

In the economic development of the modern world, daily transactions are now carried out through digital wallets. The economy is now experiencing a change from cash transactions to non-cash transactions made through digital wallets. A digital wallet is an electronic application used to store electronic money for payment transactions (Syahidah and Aransyah, 2023). In Indonesia itself, there are also many companies that offer digital wallet service such as OVO, GoPay, Dana, LinkAja (Abdillah et al, 2021).

Dana is a digital wallet in Indonesia officially introduced on 21 March 2018 to facilitate transactions for the Indonesian people (Abdillah et al, 2021). The results of the Kadance survey in the journal Syahidah and Aransyah, (2023) show that 93% of people recognise Dana as a digital wallet. In addition, Dana is also ranked second as the most widely used digital wallet in Indonesia. Dana also announced that by 2022 there will be 120 million users. Dana has several services, namely sending money to fellow Dana users, transferring money to bank accounts, buying credit, electricity tokens, and internet data packages (Lutfie et al, 2022).

With the various services offered by Dana, it aims to make it easier for Dana users. Only with the help of a mobile device can users of the Dana application make payment and money transfer transactions. The ease that a person feels means that the person believes in using a certain system without effort and difficulty (Lestari and Iriani, 2018). In addition to convenience, Dana also guarantees security (Muhtasim et al, 2022). Electronic transactions can be tracked while cash transactions cannot be tracked, therefore, the electronic payment system makes transactions safe. The electronic transaction security implemented by Dana is the use of passwords and otp codes to ensure the security of Dana application users. If a consumer feels protected and guaranteed security, the consumer will feel satisfied with the service provided.

Consumer satisfaction plays an important role in determining current and future consumer desires (Aprillia and Rizal, 2022). Consumers who have used and felt the service can assess that the service has provided guaranteed convenience and security for the consumer himself, thus creating satisfaction and having an impact on consumer loyalty.

Previous research conducted by Wahyuningsih and Nirawati (2022) and Artina (2021) stated that perceived ease of use has a positive and significant impact on consumer satisfaction. Meanwhile, the results of research by Ajina (2023) and Prasetia (2022) state that perceived convenience has no impact on consumer satisfaction. Research on transaction security on consumer satisfaction conducted by Quan et al (2022) and Amalia and Hastriana (2022) showed that transaction security has a positive impact on consumer satisfaction while security has a positive and significant impact on consumer satisfaction. Meanwhile, the results of research by Aiina et al (2023) explain that transaction security has impact on consumer satisfaction. no According to Syah (2022) and Sertan et al (2023) concluded that consumer satisfaction has a positive impact on consumer loyalty. Satisfaction has no significant impact on consumer loyalty (Almassawa, 2018).

#### METHODS

The research method used in this research is The population in this study were users of Dana digital domper in Semarang City who had made transactions at least three times. The type of data in this study is quantitative data. The data collection method for this study uses a questionnaire via google form to 100 respondents who must be answered in the form of a questionnaire using a 1-7 bipolar adjective Likert scale. The method of determining the sample using purposive sampling used in this study and obtained as many as 100 respondents. The tools used for testing research instruments are using validity tests, reliability tests, and using multiple linear regression analysis techniques with the following research model:



#### Perceived Ease of Use

According to Davis (1989) perceived ease is a belief in a system or application that the system is easy to understand, easy to use, can be managed quickly and simply. According to Farokha and Rivai (2022) ease of use is defined when someone feels that a certain system does not require effort so that it is easily understood by the user. Perceived ease of use is a person's belief that using a service is easy to use, easy to understand and not much effort to use the system. According to Davis (1989) there are three indicators of ease of use, namely easy to understand, easy to use and does not require much effort.

#### Security

According to Chellappa (2002) security is the consumer's perception that their sensitive and financial personal data is not visible, stored and manipulated when moved and stored by unauthorised parties according to their expectations. According to Pringgadini and Basiya (2022) security is the company's ability to monitor and protect data transactions and a person's level of confidence that the technology used to transmit sensitive data such as financial and consumer information is secure. Security is a person's belief that their personal data is protected by a company. This security is in the form of encryption, proterction, verification and authentication to protect personal data and consumer transactions when using the services of a company. According to Chellappa (2002), there are four security indicators including protection, encryption, verification and authentication.

#### Consumer Satisfaction

Oliver (1999) defines consumer satisfaction is an evaluation of the product that someone has bought or used to meet their needs. Consumers become dissatisfied if a service does not match expectations, but on the other hand, if a service provided matches expectations or exceeds expectations, the consumer will feel satisfied and happy (Wulan abd Alimuddin, 2016). Consumer satisfaction is a person's feeling when happy or disappointed as a result of comparing the product received with what is expected. Consumers become dissatisfied if a service does not match expectations, but on the other hand, if the service provided exceeds expectations, the consumer will feel satisfied and happy. According to Oliver (1999) indicators of consumer satisfaction can be

measured through the degree of pleasure, satisfaction, conformity of expectations, trust and confidence and zero complaint.

### Loyalty

According to Oliver (1999) consumer loyalty is a strong commitment to buy and subscribe to a product in the future, even though environmental changes and marketing efforts can change behaviour. Wulan and Alimuddin (2016) defines that consumer loyalty is a driving attitude to purchase products or services from companies where marketing aspects are indicators in choosing products, and is accompanied by repeated purchases and has a commitment to the company that offers the product. consumer loyalty is a person's strong commitment to buy, use products from a company repeatedly, and recommend the product to others. Despite changing situations and marketing efforts that can change behaviour. According to Oliver (1999) consumer loyalty can be measured by indicators including first choice when purchasing, repeated purchases, future purchases and recommending others talk about positive things.

# RESULTS AND DISCUSSION Validity Test

Based on the results of the validity test, the KMO (Keiser Meyer-Olkin Measure of Sampling Adequancy) value of each variable is at a value of > 0.5, which means that the sample in this study is said to be sufficient so that factor analysis can be carried out. The analysis results show that the loading factor value of all indicators has a value > 0.4, which means that the indicator in this study is valid and can be used except for one indicator, namely Y2.5 with the statement "In my opinion Dana is the best among other digital wallets" is at a value <0.4, indicating that the indicator must be removed because it is invalid. Because the indicator is included in another variable, namely WOM.

It is known that the results of the validity test again show the KMO (Keiser Meyer-Olkin Measure of Sampling Adequancy) value is at a value > 0.5, which means that the sample in this study is said to be sufficient so that factor analysis can be carried out. The analysis results show that the loading factor value of each indicator is at a value > 0.4, so the indicator in this study is valid and can be used.

### **Reliability Test**

Indicators are tested for reliability to see whether the indicator is reliable as a variable measurement instrument. The reliability of the questionnaire as a proxy for several other variables can be evaluated using the reliability test. From the Cronbach's alpha reliability test, each variable tested is at a value of > 70 so the results of this research questionnaire can be considered very reliable, making it possible to carry out further analysis.

### Multiple Linear Regression Analysis

From the multiple regression analysis, the following multiple regression equation is obtained:

Y1 = 0.302X1 + 0.503X2+e1

Y2 = 0.675Y1 + e2

The results of the multiple regression equation above provide some understanding. First, the perceived ease of use regression coefficient is positive 0.302, meaning that the more positive the perceived ease of use provided, the more consumer satisfaction will increase. Second, the security regression coefficient is positive, which is 0.503, meaning that the more positive the security provided, the more consumer satisfaction will also increase. The consumer satisfaction regression coefficient is positive at 0.589, meaning that the higher the satisfaction used, the more loyalty will increase.

#### Discussion

# Perceived Ease of Use Has a Positive Effect on Consumer Satisfaction

Based on statistical tests, it is known that hypothesis 1 is not rejected or accepted, so it is proven that the perceived ease of use in this study has a significant impact on consumer satisfaction. This positive influence shows that the easier it is for someone to use a service, it will be a factor that affects consumer satisfaction. This study supports research (Artina, 2021), which states that perceived convenience has a positive and significant impact on consumer satisfaction.

The relationship between perceived ease of use and consumer satisfaction cannot be separated from the services provided by the Dana company. To realise an easy service, Dana must identify problems in an application to make it easier for consumers to use its services and achieve a high level of satisfaction. This is supported by research by Wahyuningsih and Nirawati (2022) and Amalia and Hastriana (2022) which show that perceived ease of use has a positive and significant impact on consumer satisfaction.

# Security Has a Positive Impact on Consumer satisfaction

Based on the statistical test of this study, it is known that hypothesis 2 is not rejected or accepted, so it is proven that security has a positive impact on consumer satisfaction. Security in this study has a positive impact on consumer satisfaction. Consumer security in using the application is very important to create satisfaction, so Dana must ensure the security of consumers so that consumers feel safe and create a sense of satisfaction from that consumer. This study supports the research of Quan et al (2022) which explains that security has a positive impact on consumer satisfaction and Amalia and Hastriana, (2022) explain that security has a positive impact on consumer satisfaction.

# Consumer Satisfaction Has a Positive Impact on Consumer Loyalty

Based on the statistical test of this study, it is known that hypothesis 3 is not rejected or accepted, so it is proven that consumer satisfaction has a positive impact on consumer loyalty. Consumer satisfaction in this study has a positive impact on consumer lovalty. Consumer satisfaction in using a service can create loyalty. Consumer satisfaction can create loyalty, one of which will use a service continuously. This study supports research conducted by Sertan et al (2023) which shows that consumer satisfaction has a positive impact on consumer loyalty, and Amryyanti and Cahya (2018) explain the relationship between consumer satisfaction and consumer loyalty.

### CONCLUSION

Based on the problem formulation, hypothesis design, and static analysis in this study, several things can be concluded. First, all hypotheses in this study are supported, namely that there is an impact of perceived ease of use and security on consumer satisfaction. Then, there is an impact of consumer satisfaction on consumer lovalty. Thus, it can be concluded that the objectives of this study were achieved. Second, the results of the analysis of the three hypotheses concluded that the most dominant aspect in influencing consumer satisfaction is the security variable, because the more guaranteed security someone uses the Dana digital wallet application, the more satisfied the consumer will be. Third, this study provides practical recommendations, especially to increase consumer satisfaction and consumer

loyalty in Dana's digital wallet, companies need to pay attention to ease of use and security so that users can be satisfied after using the application.

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