The influence of complaint handling, security and e-service quality on user loyalty *e-wallet* DANA among college students in Padang City

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ARTICLE INFO	ABSTRACT
	This research was conducted with the aim of analyzing and determining the influence of Complaint Handling, Security and E-Service Quality on User Loyalty among Students in Padang City. The type of research carried out is quantitative research. The population of this research is students who live in Padang City with a sample size of 150 respondents. In this research, analysis was carried out using SPSS with SPSS 27. The result of this research showed that (1) Complaint Handling had a positive and significant effect on *E-Wallet* Dana User Loyalty, (2) Security had a positive and significant effect on *E-Wallet* Dana User Loyalty, (3) E-service Quality has a negative effect on *E-Wallet* Dana User Loyalty.

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INTRODUCTION

Technological advances are currently increasingly showing very significant progress which has a very positive impact on the activities of people who need goods and services to survive. In this technological development, fintech (financial technology) has emerged which makes user activities more effective and efficient in making cash to non-cash purchase transactions. The use of this technology has become part of society in supporting the digital economy by using one of the fintechs, namely e-wallet.

E-wallet is a service provider application initiated by banks to provide efficiency and effectiveness to users in carrying out non-cash transactions. The use of e-wallets with effectiveness and efficiency means that users can make transactions safely and easily without needing to carry money in cash but have already topped up sufficient e-wallet balances (Utami, 2019).

E-wallets that are currently developing are not free from problems that arise, such as complaints handling problems that are not responded to properly by customer service, only bots receiving complaints from users, customer service not providing solutions, etc. Good complaint handling will lead to user loyalty which is caused by increasing user satisfaction and will become long-term users, however, when users are not satisfied with complaint handling, users tend to share their dissatisfaction with the handling of complaints experienced and affect the company's credibility (Ghalandari et al, 2012).

Security issues include data leaks, fraud, hacking, etc. One very important user concern is the issue of security, the level of user trust lies in the security of the system in terms of use and protection of personal information (Zeitham et al, 2000)

Apart from that, e-service quality is also a problem in e-wallet financial products, such as the number of bugs in the system, errors in required conditions, failed transactions, etc. According to Zeithaml et al. (2000 and 2002) explain that the quality of electronic services describes the extent to which a system runs effectively and efficiently in carrying out transactions.

In a survey, Boku.Inc stated that Indonesia is the third country in the world with the fastest e-wallet development. The total e-wallet users in Indonesia are 63.6 million or 25.6% of the total population and will increase to 202 million users or 76.5% market share in 2025.

Dana is a digital wallet from Indonesia that allows every user to carry out non-cash and non-card transaction activities digitally, both online and offline, quickly, practically and with guaranteed security (www.dana.id, 2023). Dana is ranked fourth in 2021 in the list of e-wallet usage in Indonesia. The funds themselves are registered and supervised by Bank Indonesia and Kominfo. Dana provides several transaction features such as BPJS payments, electricity, water, taxes, transfers between banks or between telephone numbers.

LITERATURE REVIEW

User Loyalty

According to (Subagiyo and Adlan, 2017) consumer loyalty is the willingness that arises from someone to return to using the same goods and services in the future, even when environmental factors and surrounding conditions make consumers switch to competing products. Loyalty is defined as an act of trust in a product in buying or using the same product, service or goods repeatedly (Kotlet and Keller, 2016). A consumer is someone who deliberately comes to the same place to fulfill their needs by paying for the goods and services (Nasution, 2019).

According to Salim et al (2018) there are three indicators of consumer loyalty, namely:
1. Recurring purchase, loyalty in purchasing products
2. Retention, rejection of negative effects on the company
3. Referrals, refers to how existing the company is

Complaint Handling

Consumer complaints are an expression of consumer feelings because there is something that is not acceptable about the product or service offered (Etta & Sopiah, 2013). Handling complaints appropriately and effectively will make customers satisfied and can become a loyalty factor (Noval et al., 2015). Complaint handling is a feeling of dissatisfaction felt by customers regarding the quality of the products and services offered. Complaints given by customers must be accepted as good for the company to evaluate product deficiencies by making improvements (Rambat, 2013).

Here are several indicators in carrying out complaint handling according to Al'asqolaini (2019), namely:
1) Listen appropriately and carefully and see from the customer's perspective;
2) Say thank you, including with body movements and a smile;
3) Don't get emotional when dealing with aggressive customers;
4) Direct the customer to a position that makes him feel understood and appreciated;
5) After saying thank you, accompanied by words of apology so that the customer's emotions subside a little;
6) Provide a time limit for complaint resolution;
7) Employ service staff to carry out appropriate steps in resolving complaints; And
8) Provide the latest information whenever there are developments if the complaint handling process takes time so that customers believe that complaints will continue to be processed further.

Security

Security is an important factor in information systems. Online transaction security is the steps taken to prevent fraud and can also detect it early in an information system. The information system itself does not have a physical form that will be easily obtained by other parties which will harm the user (Mutiara and Wibowo, 2019). Security can take the form of confidentiality, personal data, and guarantees provided by the company (Prasetyani and Wahyuningsih, 2019). According to Casalo et al, in Ahmad and Pambudi's (2013) research, security from a consumer's perspective is an effort to protect information or data from the threat of cyber crime such as fraud and theft.

Security is measured in three dimensions according to Damghanian et al. (2019), namely credit, reliability and privacy.

1) Credit is defined as the accuracy of the service using the correct service time;

2) Reliability is defined as the security of the balance when stored and carrying out transactions; And

3) Privacy is defined as providing confidence in information and feeling protected.

According to Sari et al. (2022) Security has several indicators in its measurement, namely:

1) Trust that information is protected;

2) There is no hesitation in providing information; And

3) Trust that the security of transactions carried out is guaranteed using electronic devices.

E-Service Quality

E-service quality is an idea that originates and is further developed from service quality or the quality of services originating from the internet network. Service quality is one of the important factors that drives a company to achieve competitive advantage (Puriwat and Tripopsakul, 2017). According to (Wu, 2014) E-Service Quality is an internet-based service that facilitates user activities effectively and efficiently. Electronic service is the development of service quality based on a comparison of two factors, namely customer perceptions of the service they feel and the service the user expects (Tjiptono and Chandra, 2005).The concept of service quality with the ESERVQAL model which consists of seven indicators according to Magdalena & Joalis (2018), namely:

1) Efficiency, providing easy access for customers to find the information they are looking for;

2) Availability, providing what consumers need;

3) Fulfillment, ability to provide information about products and ability to handle problems that occur during transactions;

4) Privacy, service providers guarantee and can be trusted in storing customer personal data which can build trust and confidence;

5) Responsiveness or response, how the organizer responds to consumers quickly and appropriately;

6) Compensation, willing to provide compensation, compensation and/or replacement to consumers when they receive unsatisfactory service; And

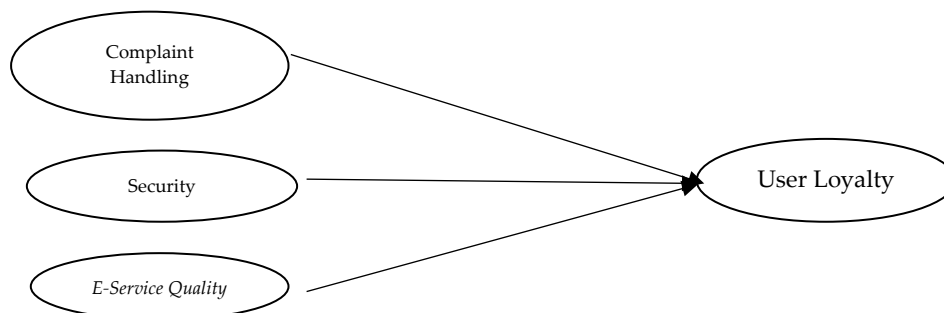7) Contact, a service for users to interact with other users.

Figure 1. Conceptual Framework

METHOD

The type of research used is quantitative. The population in this study were Dana E-Wallet users in Padang City. The sample was selected using purposive random sampling. Sugiyono (2016) states that purposive random sampling is a random and systematic sampling technique based on the order of the population members who have been selected given a serial number. The selected sample can represent the population with certain considerations or conditions aimed at making the data obtained more representative. The sample size that researchers used in this research was 150 respondents. The instrument used in conducting this research was a questionnaire. The questionnaire used was prepared using Likert. Questionnaire were distributed online and using Google Form. Used two types of tests to ensure that the instruments used in this research were accurate and reliable measuring tools, namely validity tests and reliability tests using the SPSS program. In this research there are 3 varaibles which include independent variables (X1 = complaint handling, X2 = security, X3 = e-service quality) dependent variable (Y = User Loyalty).

RESULT AND DISCUSSION

In analyzing data using SPSS version 27, several tests were carried out, such as: instrument tests (validity test and reablity test), test of classsic assumption (normality test, multicollinearity test, and heteroscedasticity test), and hypothesis testing (t test). The following test resulthave been carried out:

Table 1. Initial Outer Loading

Variable	User Loyalty (Y)	Compalint Handling (X1)	Security (X2)	E-Service Quality (X3)	Description
User Loyalty 1	0.803				Valid
User Loyalty 2	0.791				Valid
User Loyalty 3	0.834				Valid
User Loyalty 4	0.836				Valid
Complaint Handling 1		0.760			Valid
Complaint Handling 2		0.787			Valid
Complaint Handling 3		0.733			Valid
Complaint Handling 4		0.827			Valid
Complaint Handling 5		0.788			Valid
Complaint Handling 6		0.792			Valid
Complaint Handling 7		0.794			Valid

Variable	User Loyalty (Y)	Compalint Handling (X1)	Security (X2)	E-Service Quality (X3)	Description
Complaint Handling 8		0.796			Valid
Security 1			0.872		Valid
Security 2			0.872		Valid
Security 3			0.882		Valid
E-Service Quality 1				0.754	Valid
E-Service Quality 2				0.804	Valid
E-Service Quality 3				0.788	Valid
E-Service Quality 4				0.798	Valid
E-Service Quality 5				0.784	Valid
E-Service Quality 6				0.716	Valid
E-Service Quality 7				0.718	Valid

Source: Primary Data Processed, 2024

All statements contained in the Complaint Handling (X1) total 8 statements, Security (X2) total 3 Statements, E-Service Quality (X3) total 7 statements, and User Loyalty (Y) total 4 statements which are said to be valid, because they are calculated > r table (0.159). Based on table, it can be seen that the value of each item for each varaible exceeds 0.159: this means that each item is declared valid. So all the statements contained in Complaint Handling (X1), Security (X2), E-Service Quality (X3), and User Loyalty (Y) can be used in this reseach.

Table 2. Test of Reability

| Variable	R value	*Cronbach's Alpha*	Description
Complaint Handling	0,911	0.7	Reliable
Security	0,847	0.7	Reliable
E-Service Quality	0,881	0.7	Reliable
Loyalitas	0,833	0.7	Reliable

Source: Primary Data Processed, 2024

Based on table 2 the reliability test results in table, it can be seen that the R value is greater than Cronbach's Alpha, so it can be concluded that the four instruments are reliable because they meet the requirements and this research meets the reliability test.

Table 3. Test of Multicollinearity

No	Variable	Tolerance	VIF	Description
1	Complaint Handling	0.509	1.965	There is no multicollinearity
2	Security	0.497	2.011	There is no multicollinearity
3	E-Service Quality	0.410	2.44	There is no multicollinearity

Source: Primary Data Processed, 2024

Based on table 3, the calculation results show a VIF value of less than 10, namely the complaint handling variable with a value of 1,965, security with a value of 2,011, and e-service quality with a value of 2,440. So it can be concluded that the independent variables used in the regression model of this research do not have multicollinearity problems among the independent variables in the regression model.
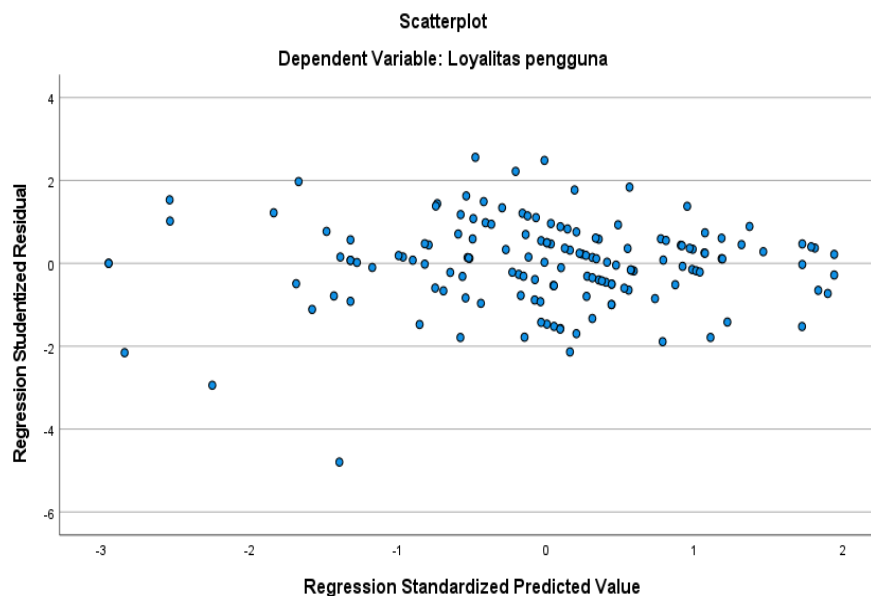
Figure 2. Scatterplot Graph

Based on figure 2 the scatterplot graph in the image, it can be seen that the points are spread randomly, spread above, below and around the number zero on the Y axis, so it can be concluded that heteroscedasticity does not occur in the regression model.

Table 4. Coefficient of Determination Analysis

R	R Square	Adjusted R Square
0.760	0.577	0.569

Source: Primary Data Processed, 2024

Based on table 4 ,the coefficient of determination (Adjusted R Square) is 0.569, which means the influence of the independent variable (X) on the dependent variable (Y) is 56.9%, the remaining 43.1% is explained by other variables not discussed in this research.

Table 5. Direct Effect		
Hypothesis	T Value	Sig
Complaint Handling (X1) -> User Loyalty (Y)	5.833	0.000
Security (X2) -> User Loyalty (Y)	3.625	0.000
E-Service Quality (X3) -> User Loyalty (Y)	1.732	0.085

Source: Primary Data Processed, 2024

Table 5 displays the result of data processing using SPSS with following conclusions:

1. **Hypothesis 1: Influence of Complaint Handling (X1) on User Loyalty (Y)**
   Based on the results of the first hypothesis test, it is known that complaint handling has a positive and significant effect on loyalty. This is because the significance value of the influence of complaint handling on loyalty is smaller than 0.05, namely 0.000 < 0.05 and the tcount value is greater than ttable, namely 5.833 > 1.976. This means that good complaint handling carried out by the Dana e-wallet in handling complaints to users will increase the loyalty of users of the e-wallet service.

2. **Hypothesis 2: Influence of Security (X2) on User Loyalty (Y)**
   Based on the results of the second hypothesis test, it is known that security has a positive and significant effect on loyalty. This is because the significance value of the influence of security on loyalty is smaller than 0.05, namely 0.000 < 0.05 and the tcount value is greater than ttable, namely 3.625 > 1.976. This means that the more guaranteed security offered to Dana e-wallet users, the greater the loyalty of users. Security is an important factor in information systems.

3. **Hypothesis 3: Influence of E-Service Quality (X3) on User Loyalty**
   Based on the results of the third hypothesis test, it is known that e-service quality does not have a significant effect on loyalty. This is because the significance value of e-service quality on loyalty is greater than 0.05, namely 0.085 > 0.05 and the tcount value is smaller than ttable, namely 1.732 < 1.976. This means that the role of e-service quality for users does not have much impact on user loyalty.

Complaint Handling has a positive and significant effect on user loyalty
The result showed that the complaint handling variable had a positive and significant effect on user loyalty. This means that good complaint handling carried out by the Dana e-wallet in handling complaints to users will increase the loyalty of users of the e-wallet service. Complaint handling is a feeling of dissatisfaction felt by customers regarding the quality of the products and services offered. Complaints given by customers must be accepted as good for the company to evaluate product deficiencies by making improvements. The results of this research are also strengthened by research (Batin, 2019) in which his research found that complaint handling had a significant positive effect on loyalty. This illustrates that the higher the quality of complaint handling services provided, the loyalty will be according to the quality of complaint handling provided.

The results of this research are in line with research by Dewi & Amsari (2023) which states that handling complaints as an independent variable has a positive and significant effect on loyalty as a dependent variable, meaning that the more complaints handling increases, the more loyalty increases.

Security has a positive and significant effect on user loyalty
The result showed that the security variable has a positive and significant effect on user loyalty. This means that the more guaranteed security offered to Dana e-wallet users, the greater the loyalty of users. Security is an important factor in information systems. Online transaction security is the steps taken to prevent fraud and can also detect it early in an information system. Companies that prioritize user security will increase the loyalty of Dana e-wallet users. Security is a major factor in using financial services which are very vulnerable to cyber crime.

This research is in line with the results of research by Handoko & Ronny (2020) which states that security has a positive and significant effect on loyalty, meaning that the security felt by users can

increase loyalty to continue using the product. The results of this research are also strengthened by research (Putri, 2021) proving that security has a significant effect on loyalty. As the quality of security provided increases, loyalty will also increase.

E-Service Quality has a negative effect on user loyalty
This means that the role of e-service quality for users does not have much impact on user loyalty. E-service quality is an internet-based service that facilitates user activities effectively and efficiently. Users don't think too much about the good quality of electronic services to make users loyal to the product.

This research is in line with research (Zarkasyi et al, 2023) which shows that e-service quality does not have a positive and significant effect on loyalty. This means that e-service quality has no influence on loyalty. This research is strengthened by research by Rahmawati et al (2023) which states that e-service quality does not have a positive influence on loyalty.

CONCLUSSION

It can be concluded that complaint handling has a positive and significant effect on loyalty. This is because the significance value of the influence of complaint handling on loyalty is smaller than 0.05, namely 0.000 < 0.05 and the tcount value is greater than ttable, namely 5.833 > 1.976. This means that good complaint handling carried out by the Dana e-wallet in handling complaints to users will increase the loyalty of users of the e-wallet service. It can also be concluded that security has a positive and significant effect on loyalty. This is because the significance value of the influence of security on loyalty is smaller than 0.05, namely 0.000 < 0.05 and the tcount value is greater than ttable, namely 3.625 > 1.976. This means that the more guaranteed security offered to Dana e-wallet users, the greater the loyalty of users. It can also be concluded that e-service quality does not have a significant effect on loyalty. This is because the significance value of e-service quality on loyalty is greater than 0.05, namely 0.085 > 0.05 and the tcount value is smaller than ttable, namely 1.732 < 1.976. This means that the role of e-service quality for users does not have much impact on user loyalty. E-service quality is an internet-based service that facilitates user activities effectively and efficiently. Users don't think too much about the good quality of electronic services to make users loyal to the product.

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