The Influence of Usability, E-Satisfaction and E-Security on E-Loyalty of WhatsApp Mobile Instant Messaging Users

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ABSTRACT

This research examines the influence of usability, e-satisfaction, and e-security on e-loyalty in the use of the mobile instant messaging application WhatsApp. The rapid growth of information and communication technology, particularly in mobile instant messaging, has transformed how society communicates, including in Indonesia. WhatsApp, as one of the most popular applications, facilitates communication and fosters user loyalty. This study employs a quantitative approach with a descriptive method, involving a sample of 100 active WhatsApp users who have used the application for at least six months. Data was collected through questionnaires and analyzed using the Partial Least Squares (PLS) method. The findings indicate that usability and e-security have a positive and significant impact on user e-loyalty. However, e-satisfaction does not show a significant effect on e-loyalty, suggesting that while users may feel satisfied, their satisfaction does not necessarily translate into increased loyalty. This research provides valuable insights into the factors influencing WhatsApp user loyalty and underscores the need to explore additional variables that may contribute to e-loyalty.

Keywords*: Usability, E-Satisfaction, E-Security, E-Loyalty*

ABSTRACT

Penelitian ini mengkaji pengaruh usability, e-satisfaction, dan e-security terhadap e-loyalty pada penggunaan mobile instant messaging WhatsApp. Pesatnya pertumbuhan teknologi informasi dan komunikasi, khususnya media komunikasi mobile instant messaging, telah mengubah cara masyarakat berkomunikasi, termasuk di Indonesia. WhatsApp sebagai salah satu aplikasi yang paling populer, memudahkan komunikasi dan mendorong loyalitas pengguna. Penelitian ini menggunakan pendekatan kuantitatif dengan metode deskriptif dan melibatkan sampel sebanyak 100 responden yang merupakan pengguna WhatsApp aktif yang telah menggunakan aplikasi ini minimal enam bulan. Data dikumpulkan melalui kuesioner dan dianalisis menggunakan metode Partial Least Square (PLS). Hasil penelitian menunjukkan bahwa usability dan e-security memiliki pengaruh positif dan signifikan terhadap e-loyalty pengguna. Namun, e-satisfaction tidak menunjukkan pengaruh yang signifikan terhadap e-

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loyalty, yang menunjukkan bahwa meskipun pengguna merasa puas, hal itu tidak secara langsung meningkatkan loyalitas mereka. Penelitian ini memberikan wawasan penting tentang faktor-faktor yang memengaruhi loyalitas pengguna WhatsApp dan menyoroti perlunya lebih banyak perhatian terhadap variabel lain yang dapat berkontribusi pada peningkatan e-loyalty.

***Kata Kunci**: Kegunaan, Kepuasan Elektronik, Keamanan Elektronik, Loyalitas Elektronik*

INTRODUCTION

The advancement of information and communication technology has made the internet an inseparable part of people's lives. The development of the internet has also impacted economic, social, and political aspects of society. This is evident from the emergence of new patterns in conveying information, where people can now access information instantly without being hindered by time and space constraints (Adila & Nasyaya, 2021). The growth of mobile instant messaging is predicted to increase every year. The rapid development of the internet has changed the way people communicate, making it faster and in real time. Mobile instant messaging is now growing rapidly in terms of the number of users, thanks to its ability to send short and fast messages between users of telecommunications services (Wellmann, 2019).

Some studies suggest that there are several reasons why people use mobile instant messaging on their phones. One of these reasons is the ability to communicate via text and voice directly. Additionally, mobile instant messaging offers convenient and easy-to-use features, allows direct sharing of images, videos, and links, and enables users to monitor their friends' activities on the timeline (Tang & Hew, 2022). Mobile instant messaging, or instant messaging, allows users to communicate with each other via the internet, either one-on-one or in groups. This, in turn, fosters consumer loyalty, encouraging continued use of mobile instant messaging. Consumer loyalty refers to a customer's commitment and attachment to a particular company or brand, demonstrated by their willingness to make repeat purchases consistently. Loyal consumers are also more likely to recommend the brand to others and are less inclined to switch to a competitor (Faliza & Sarwindah, 2024; Khan & DePaoli, 2024).

Among the many mobile instant messaging services available, WhatsApp is one of the most widely used and popular platforms. The WhatsApp instant messaging application is a well-known internet-based communication tool that is frequently used (Rahartri, 2019). In addition to being practical and widely recognized, this application is designed to enable users to share information and content according to its features. This also contributes to customer loyalty when using WhatsApp, as users may recommend a particular product or brand to others. When someone is loyal to a product or brand, they tend to share product recommendations with those in their social circle (Lubis et al., 2021; Afiftama & Nasir, 2023; Sutriani et al., 2024). This is highly beneficial because it reduces marketing costs and increases business revenue. WhatsApp itself has become a highly effective communication platform for sharing information, engaging in discussions, and interacting with others (Rahartri, 2019).

WhatsApp was the most widely used communication platform in Indonesia in 2023, with 92.1% of the population using it, up from 88.7% in the previous year. This represents an increase of approximately 3.4%, highlighting WhatsApp's dominance as a communication tool in Indonesia and its growing importance in daily interactions. This trend reflects customer loyalty to WhatsApp, as users who are satisfied with a product or service often recommend it to others, leading to an increase in its user base. When individuals are loyal to a product or brand, they are more likely to share recommendations with their close social circles. The same applies to WhatsApp, which benefits from word-of-mouth promotion, ultimately reducing marketing costs and boosting business revenue. WhatsApp has established itself as a highly effective platform for sharing information, engaging in discussions, and interacting with others. In the business world, customer loyalty is crucial, as consumers can easily switch from one platform to another. Therefore, maintaining loyalty is essential for a company's long-

term success. Consumer loyalty is a valuable asset that requires continuous effort to sustain. To achieve this, companies must invest time, energy, and resources in various strategies. As emphasized by Lubis et al. (2021), high consumer loyalty must be preserved to prevent decline. Several factors influence loyalty, including usability, e-satisfaction, and e-security.

Usability refers to the extent to which an application helps users complete a given task. The higher the level of usability, the more likely users are to continue using the application. Conversely, if usability is low, users tend to be reluctant to use the application again (Kaban et al., 2020). E-satisfaction is an important factor contributing to the formation of e-loyalty. A company can achieve customer loyalty if it successfully meets customer expectations. When customers are satisfied, they are more likely to continue using the product or service and to make repeat purchases, thus becoming loyal customers (Liani & Yusuf, 2021; Berliana & Sanaji, 2022). E-security, or security in general, is a crucial aspect of information systems (Wahyuningsih & Nirawati, 2022). System security helps prevent unauthorized or inappropriate use of data and protects against cybercriminals and hackers. If an application guarantees data security, consumer loyalty is likely to increase (Handoko & Ronny, 2021; Akob & Sukarno, 2022). Previous research on the relationship between usability and e-loyalty has shown a positive and significant influence of usability on consumer e-loyalty (MRizky, 2020). However, other studies have found different results, stating that usability has a negative and insignificant influence on consumer e-loyalty (Bintari et al., 2022). These findings indicate an imbalance or gap between usability and e-loyalty.

Previous research on e-satisfaction and its relationship with e-loyalty has shown a positive and significant influence of e-satisfaction on consumer e-loyalty (Dewi & Ramli, 2023). However, other studies have reported different findings, stating that e-satisfaction has a negative and insignificant influence on consumer e-loyalty (Sutriani et al., 2024). These conflicting results indicate an imbalance or gap in the relationship between e-satisfaction and e-loyalty. Similarly, previous research on e-security and e-loyalty has shown a positive and significant influence of e-security on consumer e-loyalty (Sri, 2024). However, other studies have found contrasting results, suggesting that e-security has a negative and insignificant effect on consumer e-loyalty (Pratama et al., 2023; Liana & Fadli, 2023; Kasmita et al., 2024). These discrepancies highlight an imbalance or gap in the relationship between e-security and e-loyalty. Given these inconsistencies in previous research, it is evident that a gap exists in the findings related to e-satisfaction, e-security, and e-loyalty. Therefore, further research is needed to examine the effects of usability, e-satisfaction, and e-security on the e-loyalty of WhatsApp mobile instant messaging users.

LITERATURE REVIEW

According to Zuliestiana & Setiawan (2022) and Almayanti & Chaerudin (2022), e-loyalty or electronic loyalty refers to the desire of users to continue visiting a particular website, to visit regularly, and to show a high level of involvement. Literally, loyalty means faithfulness, which can be interpreted as commitment. This loyalty arises naturally without coercion, but from self-awareness. Efforts made to provide satisfaction to consumers tend to influence consumer attitudes. E-loyalty indicators in the research by Waruwu & Sahir (2022) include: cognitive, which refers to a person's inclination toward a website or other service provided by a company; effective, which is the willingness to recommend a website to others, based on the level of satisfaction felt from using the site; conative, which describes the extent to which consumers are interested in returning to visit the website; and action, which reflects the highest level of loyalty, where consumers are willing to visit a website or application to make online purchases.

Usability is the experience that users have when interacting with an application or website, which allows them to use the product efficiently and quickly (Sembodo et al., 2021; Kushendriawan et al., 2021; Sabukunze & Arakaza, 2021). Usability is a critical factor for the overall success of a software system. The term "usability" refers to

approaches aimed at improving ease of use during the design process (Kaban et al., 2020). In general, usability refers to the extent to which a product can be used by specific users to achieve their goals in a more effective, efficient, and satisfying manner in the context of those users (Andiputra & Tanamal, 2020; Sutrisno & Lazuardy, 2024). According to Sri (2022), usability has several indicators, namely: learnability, which is defined as how quickly a user can master the system, as well as how easily they can perform the desired functions and achieve the desired results; efficiency, which is defined as the amount of resources used to achieve goals accurately and completely; memorability, which is defined as how users are able to retain their knowledge after a certain period, an ability that is enhanced by consistent menu placement; and satisfaction, which is defined as a state of being free from discomfort and having a positive attitude towards using a product, as well as a subjective assessment felt by the user regarding the system.

Satisfaction is the emotion customers feel when they compare the actual or perceived performance of a product or service with their expectations and experiences, whether happy or disappointed (Winowatan et al., 2021; Fahira et al., 2022; Oh et al., 2022). According to Pramuditha et al. (2021), the indicators that form consumer e-satisfaction include: confirmation of expectations, which measures the extent to which consumer expectations are met when using online services; willingness to recommend, which measures the extent to which consumers are satisfied enough to recommend the service to others; consumers' happiness with the services provided, which measures the level of happiness or satisfaction when using online services; and the feeling of pleasure in choosing a site, which indicates that users feel satisfied with their choice of a particular site over other alternatives. This reflects a higher level of satisfaction with their choice, suggesting that the site meets or even exceeds their expectations.

E-security, as proposed in the research by Farisal Abid & Purbawati (2020), can be interpreted as customers having confidence that their personal information will remain protected from access, storage, or modification by other parties during the delivery and storage process. This, in turn, strengthens their sense of security. E-security indicators in the research by Juventia et al. (2023) include: security assurance, which refers to online transaction security through encryption technology and two-factor authentication to protect data from potential security threats; data confidentiality, which involves maintaining the confidentiality of consumers' personal information from unauthorized access by implementing strong encryption technology and transparent privacy policies; online sales image, which refers to the positive image of online sales that impacts consumer confidence in the security of a particular website; and user access security, which involves using end-to-end encryption on messages to ensure that only the sender and recipient can read the message, preventing third-party access to communications.

A research hypothesis is a temporary assumption or logical statement regarding the relationship between variables in a study. One of the factors that influence e-loyalty is usability, or ease of use. The results of the study prove that usability has a positive effect on e-loyalty. This means that user e-loyalty can be formed through consistent and high-quality usability. If usability increases, user e-loyalty will also increase (MRizky, 2020). The results of other studies found that the higher the quality of usability, the higher the user's e-loyalty (Restuti & Noviasari, 2023). Usability has a positive and significant impact on consumer satisfaction simultaneously, while satisfaction itself also contributes positively and significantly to e-loyalty (Bintari et al., 2022).

H1: Usability has an effect on WhatsApp users' E-Loyalty

One of the factors that influence e-loyalty is e-satisfaction or consumer satisfaction. The results of the study prove that e-satisfaction has an influence on building e-customer loyalty. Satisfied customers have the intention to continue using and the desire to recommend a product or service to others compared to those who are not satisfied. The test results suggest that e-satisfaction has a positive and significant impact on e-loyalty,

meaning that the higher the e-satisfaction felt by the audience toward the website, the greater the level of e-loyalty that emerges (Suryadiningrat & Agustini, 2023). E-satisfaction, or customer satisfaction, is a measure of how much a customer's needs, wants, and expectations are met, which can lead to repeat purchases or continued loyalty. The results obtained indicate that e-customer satisfaction has a positive effect on e-loyalty (Dewi & Ramli, 2023).

H2: E-Satisfaction has an effect on E-Loyalty of WhatsApp users

One of the factors that influence e-loyalty is e-security or consumer security. The results of the study suggest that e-security has a positive and significant impact on e-customer loyalty. Other studies also reveal that e-security or security significantly affects consumer loyalty; the higher the level of e-security, the greater the loyalty shown by consumers (Sri, 2024). Consumer loyalty is influenced by e-security (Onsardi & Putri, 2021). E-security has a strong impact on consumer loyalty; if consumers feel safe, they are more likely to continue choosing the products or services offered, ultimately building and maintaining consumer loyalty (Lubis & Sitorus, 2023).

H3: E-Security has an effect on E-Loyalty of WhatsApp users

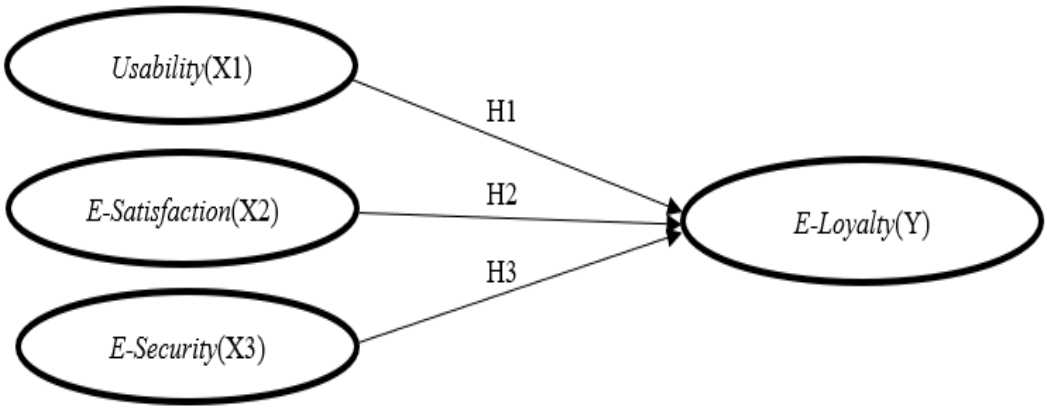

Figure 2. Conceptual Framework

METHODS

This research uses quantitative methods, which are useful for analyzing specific populations or samples through data collection and statistical analysis. The population consists of active WhatsApp users who meet criteria such as being over 15 years old and having used WhatsApp for at least six months. The sampling technique employed is non-probability sampling with a purposive sampling approach, which selects samples based on specific criteria (Sugiyono, 2017). The sample size was calculated using the Lemeshow formula due to the unknown population size (Abdullah et al., 2022). Using a 95% confidence level and a 10% margin of error, the calculated sample size was 96.04, rounded to 96 respondents. However, to meet Roscoe's recommendation of 30–500 respondents, the sample size was set at 100. This study uses quantitative data sourced from both primary and secondary data. Primary data were collected via Google Form questionnaires, while secondary data were obtained from journals, books, and other reliable sources. Measurements employed a Likert scale (1–5), where 1 indicates disagreement and 5 indicates strong agreement. Data analysis utilized PLS-SEM with Smart-PLS software. The outer model assessed validity and reliability through convergent validity, discriminant validity, and composite reliability. Indicators with loading factors above 0.7 and AVE values above 0.5 were considered valid, while composite reliability and Cronbach's Alpha exceeding 0.7 ensured consistency. The

inner model evaluated relationships between variables using R-Square, Q-Square, F-Square, and path coefficient tests. R-Square values of 0.75, 0.50, and 0.25 indicated strong, moderate, and weak explanatory power, respectively. Q-Square values above 0 indicated good predictive ability, while F-Square values showed variable influence at small (0.02), moderate (0.15), or large (0.35) levels. A path coefficient with a t-statistic above 1.96 confirmed the hypothesis significance.

RESULTS

The results of the study conducted through the distribution of questionnaires to 100 respondents, the data obtained were as follows: 15.8% of respondents were aged 15-20 years, 67.3% were aged 21-26 years, 12.9% were aged 27-32 years, and 4% were aged over 32 years. All respondents had used WhatsApp for more than 6 months. Data analysis was conducted using the PLS-SEM (Partial Least Squares Structural Equation Modeling) technique with the help of SmartPLS 3.2.8 software. This technique involves two stages of testing: the Measurement Model Test (Outer Model), which aims to ensure the accuracy of the measuring instrument, and the Structural Model Test (Inner Model), which aims to examine the relationships and influence between variables. Convergent validity aims to assess how well indicators explain latent variables (Hair et al., 2017). An outer loading value is considered good if it exceeds 0.7. However, if the value is less than 0.7, the indicator needs to be removed, and the calculation should be redone. The Average Variance Extracted (AVE) value must also exceed 0.5 to be accepted, allowing the next analysis process to be carried out (Hair et al., 2017). Discriminant validity testing can be done by considering the cross-loading value. Each variable is considered to meet the criteria if the cross-loading value is greater than 0.70 (Hair et al., 2017). Discriminant validity is considered achieved if the loading value of each indicator is higher than the loading value of other variables (Sumardi et al., 2023).

Table 1. Loading Factor and Cross Loading Value

Variable	Usability (X1)	E-Satisfaction (X2)	E-Security (X3)	E-Loyalty (Y)
X1.1	0.898	0.118	0.015	0.248
X1.2	0.901	0.125	0.017	0.305
X1.3	0.785	0.041	-0.121	0.103
X1.4	0.744	0.215	0.024	0.185
X2.1	0.072	0.821	0.490	0.520
X2.2	0.213	0.876	0.484	0.458
X2.3	0.112	0.775	0.427	0.359
X2.4	0.100	0.730	0.416	0.232
X3.1	-0.013	0.447	0.837	0.360
X3.2	0.083	0.696	0.822	0.384
X3.3	-0.021	0.441	0.865	0.521
X3.4	-0.030	0.382	0.856	0.476
Y1.1	0.320	0.444	0.432	0.824
Y1.2	0.148	0.446	0.471	0.868
Y1.3	0.223	0.459	0.439	0.849
Y1.4	0.219	0.353	0.385	0.746

The results of the analysis of the loading factor values for each indicator in the model are greater than 0.7. This indicates that each indicator can represent the measured construct well. Therefore, all indicators in the model are considered valid and suitable for further analysis. It can be observed that each latent variable indicator has a higher cross-loading value compared to the values of other latent variables. Thus, the cross-loading values for all indicators can be considered to meet the discriminant validity criteria, ensuring that each indicator accurately and precisely measures the corresponding construct.

Table 2. Average Variance Extracted (AVE) Value

	Average Variance Extracted (AVE)
Usability (X1)	0.697
E-Satisfaction (X2)	0.644
E-Security (X3)	0.714
E-Loyalty (Y)	0.678

Based on Table 2, a model is considered good if each construct has a Variance Extracted (AVE) value greater than 0.5. It can be observed that each variable has an AVE value exceeding the threshold, indicating that all constructs in this study meet the required AVE standards. These results confirm that the constructs demonstrate good convergent validity. Therefore, the model used in this study can be considered valid in terms of convergent validity.

Reliability testing ensures the accuracy, consistency, and precision of an instrument in measuring a construct. This is done by evaluating the Composite Reliability (CR) and Cronbach's Alpha values. According to Hair et al. (2017), if both values exceed 0.7, the instrument is considered reliable. This test assesses the stability and dependability of measurement results. Reliable indicators in a model produce consistent and valid data (Sumardi et al., 2023).

Table 3. Composite Reliability and Cronbach's Alpha Test Results

	Cronbach's Alpha	Composite Reliability
Usability (X1)	0.859	0.901
E-Satisfaction (X2)	0.822	0.878
E-Security (X3)	0.868	0.909
E-Loyalty (Y)	0.840	0.893

Based on Table 3, it can be observed that all Cronbach's Alpha values for the variables are greater than 0.7, indicating that the indicators within the construct have met the reliability requirements. Additionally, the Composite Reliability value is also greater than 0.7, which allows us to conclude that the measuring instrument in this study is both consistent and reliable. According to the table, all latent variables exhibit reliability values that meet the criteria for both Cronbach's Alpha and Composite Reliability. This demonstrates that all variables in this study have an adequate level of internal consistency and have satisfied the reliability test standards.

The structural model (inner model) is used to assess the relationships between variables through several tests. R-Square (R^2) measures the extent to which the independent variable explains the dependent variable, with a value of 0.75 indicating strong, 0.50 indicating moderate, and 0.25 indicating weak relationships. Q-Square (Q^2) tests the predictive power of the model, which must be greater than 0 for the model to be considered relevant. F-Square (F^2) measures the influence of the independent variable on the dependent variable, with values of 0.02 (small influence), 0.15 (moderate influence), and 0.35 (large influence). In testing the significance of the relationship between variables, the path coefficient is used with a T-statistic value ≥ 1.96 and a p-value ≤ 0.05 to ensure that the research hypothesis can be accepted and has a significant influence (Hair et al., 2017).

Table 4. R-Square (R2) Value, Q-Square Value (Q2) and F-Square (F2) Value

Analysis		E-Loyalty (Y)
R-Square (R2) Value	R Square	0.402
	R Square Adjusted	0.383
Q-Square Value (Q2)	SSO	400.000
	SSE	307.522
	Q^2 (=1-SSE/SSO)	0.231
F-Square (F2) Value	*Usability*(X1)	0.090
	E-Satisfaction(X2)	0.081
	E-Security(X3)	0.153

Based on Table 4, it can be seen that the R-squared value is 38.3%, which means that the variables studied, such as Usability, E-satisfaction, and E-security, can explain their influence on the dependent variable, E-loyalty, by 38.3%. The remaining 61.7% is influenced by other variables not discussed in this study. It can also be observed that the Q-squared value is greater than 0, specifically 0.231, indicating that this study has good predictive ability, with a predictive relevance of 23.1%. The F-squared value indicates a small influence if the value is > 0.02, a moderate influence if the value is > 0.15, and a large influence if the value is > 0.35. The influence of variables X1 and X3 on variable Y is moderate, with a value of 0.153, which is greater than 0.15.

Path coefficient testing is conducted by examining three factors: the original sample, t-statistic, and p-values. The original sample value indicates whether the relationship between variables aligns with the hypothesis, showing a positive influence if the value is positive. The t-statistic value is used to determine whether the influence between variables is statistically significant. If the t-statistic value is greater than the t-table value (i.e., > 1.96) and the p-value is < 0.05, the hypothesis is accepted, meaning that the relationship between variables is significant. However, if this is not the case, the hypothesis is rejected, and the relationship between variables is not significant (Hair et al., 2017).

Table 5. Path Coefficient Test Results

Variables	Original Sample	T-Statistics	P-Values	Results	Hypothesis
Usability(X1) -> E-Loyalty (Y)	0.236	2.204	0.028	Positive and significant impact	Accepted
E-Satisfaction(X2) -> E-Loyalty (Y)	0.272	1.829	0.068	Negative and insignificant impact	Rejected
E-Security(X3) -> E-Loyalty (Y)	0.370	2.369	0.018	Positive and significant impact	Accepted

Based on Table 5, Usability (X1) and E-Security (X3) have a positive and significant effect on E-Loyalty (Y). This is indicated by a T-Statistic value greater than 1.96 and a P-Value less than 0.05. In contrast, the E-Satisfaction variable (X2) has a negative and insignificant effect on E-Loyalty (Y). This is reflected in its T-Statistic value, which is less than 1.96, and a P-Value greater than 0.05. These results suggest that usability and security play a more crucial role in influencing customer loyalty than satisfaction.

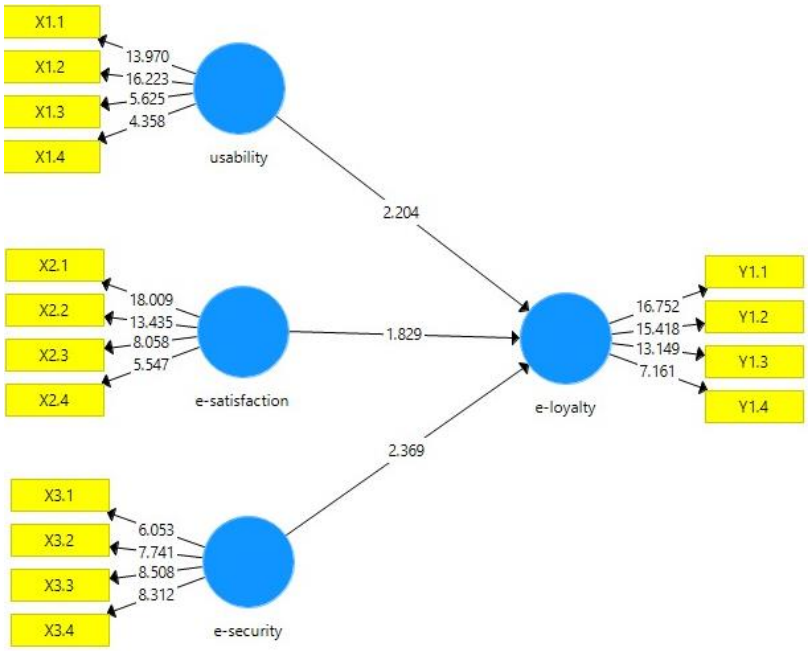

Figure 3. Bootstrapping Test Results

DISCUSSION

From the research and data processing using SmartPLS (Partial Least Squares) software version 3.2.8, which has been described previously, it is evident how much influence usability, e-loyalty, and e-security have on the e-loyalty of WhatsApp mobile instant messaging users. Based on the results of the analysis, it is proven that usability has a significant effect on the e-loyalty of WhatsApp users. Because the application is easy to use, with simple and clear features, users feel comfortable and satisfied. This makes them more likely to continue using WhatsApp and become more loyal to the application. As a popular communication application, WhatsApp has succeeded in maintaining the loyalty of its users by ensuring that all features and displays are easy to understand, allowing users to quickly meet their communication needs without feeling overwhelmed. Therefore, usability plays an important role in influencing the e-loyalty of WhatsApp users. The results of this study are consistent with the research by MRizky (2020), which states that usability has a significant effect on e-loyalty. Usability in WhatsApp plays a crucial role in maintaining user loyalty. Applications that are easy to understand and use make users comfortable, satisfied, and more likely to remain loyal to them for their daily communication needs.

The results of the analysis, it has been proven that e-satisfaction does not have a significant effect on the e-loyalty of WhatsApp users. This indicates that the level of user satisfaction with WhatsApp services does not directly affect their e-loyalty to the application. Even though users may be satisfied with the features, performance, or experience of using WhatsApp, this satisfaction does not necessarily make them loyal users. Other factors, such as ease of access, perception of data security, or other variables, may play a more decisive role in building loyalty. In other words, e-satisfaction cannot be considered a factor that directly affects the e-loyalty of WhatsApp users. The results of this study align with the research by Sutriani et al. (2024), which states that e-satisfaction does not significantly affect e-loyalty. This means that while users may be satisfied with the services provided, it is not enough to ensure their continued use of WhatsApp. Other factors determine the e-loyalty of WhatsApp users.

The analysis results, it is evident that e-security has a significant effect on the e-loyalty of WhatsApp users. When users feel safe and their personal data is well protected, they tend to be more loyal to the application. For example, security features such as message encryption and two-factor authentication give users a sense of trust that their information will not be misused. With this sense of security, users feel more comfortable continuing to use WhatsApp as their primary means of communication, which, in turn, increases their loyalty to the platform. This strong security not only maintains privacy but also fosters a more lasting relationship between users and the application. The results of this study align with the research by Sri (2024), which states that e-security has a significant effect on e-loyalty. E-security plays an important role in enhancing the e-loyalty of WhatsApp users. Security features such as message encryption and two-factor authentication make users feel safe, which leads to greater loyalty to the application. Well-maintained security creates a sense of trust, further strengthening the e-loyalty of WhatsApp users.

CONCLUSION

The results of the research that has been conducted, it can be concluded that the Usability variable (X1) has a significant effect on E-Loyalty (Y). Usability in WhatsApp plays a major role in maintaining user loyalty. Applications that are easy to understand and use make users feel comfortable, satisfied, and tend to remain loyal to using them for their daily communication needs. The E-Satisfaction variable (X2) does not have a significant effect on E-Loyalty (Y). This means that even though users are satisfied with the services provided, this is not enough to make them continue using WhatsApp; there are other factors that determine the E-Loyalty of WhatsApp users. The E-Security variable (X3) has a significant effect on E-Loyalty (Y). E-Security plays an important

role in increasing the E-Loyalty of WhatsApp users. Security features such as message encryption and two-factor authentication make users feel safe, which makes them more loyal to using the application. Maintained security creates a sense of trust, strengthening the E-Loyalty of WhatsApp users. Further research is recommended to explore other factors that influence WhatsApp user e-loyalty, beyond usability, e-satisfaction, and e-security, and to be conducted in a wider area to gain a more complete understanding of user preferences. In addition, further research can expand the variables, methods, and samples to obtain more varied and accurate results. This is expected to provide deeper insights into the influence of these factors on user loyalty and help develop more effective strategies for WhatsApp.

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