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The Effect of E-Service Quality on E-Loyalty Mediated by E-Satisfaction and E-Trust on the Transjatim-Ajaib E-Ticket Application Using the SEM-PLS Approach

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Abstract

The development of digital technology encourages transportation service providers to improve the quality of service through the implementation of an electronic system, the Transjatim-Ajaib e-ticket application. This study aims to analyze the influence of e-service quality on e-loyalty with e-satisfaction and e-trust as mediation variables. The research uses a quantitative approach with purposive sampling techniques in data collection. Data analysis was carried out using Structural Equation Modeling-Partial Least Squares (SEM-PLS) using the SmartPLS 4.0 application. The results of the study show that e-service quality has a positive and significant effect on e-loyalty, e-satisfaction, and e-trust. Furthermore, e-satisfaction and e-trust have been proven to have a positive and significant effect on e-loyalty. Indirect effect testing showed that e-trust and e-satisfaction were able to mediate the influence of e-service quality on e-loyalty significantly. However, the role of e-satisfaction mediation is relatively smaller than that of e-trust. These findings indicate that improving the quality of electronic services, especially in the aspects of ease of use, system reliability, transaction security, and information accuracy, can strengthen user trust and satisfaction thereby encouraging the formation of customer loyalty to the TransJatim-Ajaib e-ticket application.

Keywords e-service quality; e-trust; e-satisfaction; e-loyalty; Transjatim

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1. INTRODUCTION

Digital transformation has transformed various public service sectors, including the transportation sector. The use of information technology and the internet encourages transportation service providers to provide a more efficient, fast, and accessible service system through digital applications. Indonesia is one of the countries with a high level of internet penetration. Based on data from the Indonesian Internet Service Providers Association (APJII) in 2024, the number of internet users has reached 221 million people with a penetration rate of 78.19%. This condition shows that people are increasingly accustomed to using digital-based services in their daily activities, including public transportation services. The

change in public behavior is an opportunity for transportation service providers to improve the quality of electronic services (*e-service quality*) as a strategy in creating a better user experience.

The improvement of technology has not been fully followed by the increase in the use of public transportation. Transportation data in East Java Province shows that the use of private vehicles still dominates compared to public transportation. In 2023, the use of private vehicles increased by about 8.3% per year, while the growth in public transportation use reached only about 0.9%. Overall, the proportion of private vehicle use reached 73.41%, while the use of public transportation was only 26.41%, This condition shows that people still prefer private vehicles compared to public transportation (Herlynawati et al., 2024). According to the Directorate General of Land Transportation, one of the causes of low public interest in using public transportation is the quality of service that has not been able to meet user expectations so that people tend to choose modes of transportation that are considered more comfortable and efficient. This phenomenon indicates that improving service quality is a strategic factor in increasing the competitiveness of public transportation.

As an effort to improve the quality of service, the East Java Provincial Government developed the TransJatim-Ajaib application as an *electronic ticketing system* that facilitates ticket purchases, digital payments, and the provision of real-time travel information. The app has been downloaded more than 500,000 times and garnered more than 300 user reviews that were predominantly positive ratings. The high number of downloads shows that the public has a good level of acceptance of the digitization of transportation services. Nevertheless, the success of app adoption has not been fully followed by increased user loyalty. Data from the East Java Provincial Transportation Office shows that the number of TransJatim passengers has fluctuated throughout 2024. The number of passengers in the first quarter reached 1,320,427 people, then decreased to 1,084,636 people in the second quarter and again decreased to 848,846 people in the third quarter, before increasing in the fourth quarter to 1,461,901 people and reaching 1,603,500 people in the first quarter of 2025. In addition, Corridor II Surabaya–Mojokerto experienced a decrease in the number of daily passengers from around 3,000–3,100 people to 2,200–2,900 people. These fluctuations show that the high use of applications has not automatically been able to form the loyalty of public transportation users, so an evaluation of factors that affect the behavior of reusing digital services is needed.

Theoretically, the relationship between electronic service quality and customer loyalty can be explained through *Expectancy Confirmation Theory* (ECT) and *Stimulus–Organism–Response* (S-O-R). ECT explains that customer satisfaction is formed when service performance is able to meet or exceed user expectations so as to encourage the intention to use the service continuously. Meanwhile, the S-O-R theory explains that the quality of electronic services is a *stimulus* that affects the psychological condition of users in the form of satisfaction (*e-satisfaction*) and trust (*e-trust*) as *an organism*, which in turn

produces behavioral responses in the form of customer loyalty (*e-loyalty*). Thus, satisfaction and trust are not only a consequence of service quality, but also serve as a mechanism that explains how service quality is able to shape customer loyalty to application-based transportation services.

A number of previous studies have proven that *E-service quality* has a positive effect on *E-Loyalty*, either directly or through *e-satisfaction* and *E-Trust.* Research Shankar and Jebarajakirthy (2019) shows that the quality of electronic services is able to increase customer trust and loyalty in digital services. The findings are reinforced by Hari Muharam et al. (2021) which states that satisfaction and trust are the main determinants of user loyalty *Digital Platforms*. Research on the transportation sector by (Mahdyvianra et al., 2021; Saputro, 2023; Wa Ode Melly et al., 2024)) shows that *E-service quality* has a positive influence on *E-Loyalty* through upgrades *e-satisfaction* and *E-Trust*. However, the results of the study are not completely consistent, especially regarding the large role of mediation variables in explaining the formation of customer loyalty.

Based on the empirical study, there are still several research gaps. Most of the previous research was conducted in the context of *e-commerce*, *marketplaces*, *financial technology*, and *ride-hailing*, while research on bus-based public transportation is still relatively limited. The results of the study on the role of *e-satisfaction* and *e-trust* as mediation variables still show inconsistencies so that the mechanism for forming customer loyalty cannot be comprehensively explained. Previous research generally used only one theoretical foundation, while the integration of *Expectancy Confirmation Theory* (ECT) and *Stimulus–Organism–Response* (S-O-R) in explaining the relationship between e-service quality, satisfaction, trust, and loyalty in digital public transportation services is still rare. This gap shows the need for research that is able to provide a more comprehensive theoretical explanation of the process of forming customer loyalty.

Based on the empirical phenomena, theoretical foundations, and research gaps, this study aims to analyze the influence of *e-service quality* on *e-loyalty* with *e-satisfaction* and *e-trust* as mediating variables in users of the TransJatim-Ajaib application. This research is expected to make a theoretical contribution through the integration of ECT and S-O-R theories in explaining the mechanism of forming customer loyalty in digital-based public transportation. This research is expected to provide practical implications for TransJatim managers in formulating strategies to improve the quality of electronic services that are able to increase user satisfaction, trust, and loyalty in a sustainable manner.

Based on the research gap above, a framework of thought and hypothesis was prepared that described the relationship between the variables studied in this study as follows:

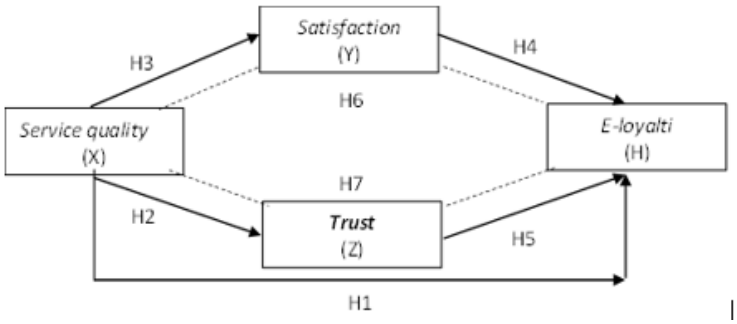

Figure 1. Research Conceptual Framework

This research model analyzes the causal relationship between *e-service quality* as an independent variable, *e-satisfaction* and *e-trust* as a mediating variable, and *e-loyalty* as a dependent variable. Testing was performed on direct (H1–H5) and indirect (H6–H7) influences. Hypotheses H6 and H7 test the role of *e-trust* and *e-satisfaction mediation* in explaining the influence of *e-service quality* on *e-loyalty*, so that it can be known whether the quality of electronic services is able to increase customer loyalty through the formation of trust and user satisfaction.

Based on the conceptual framework above, the research hypothesis is determined as follows:

H1 : *E-service quality* has a positive and significant influence on *E-Loyalty*.

H2 : *E-service quality* has a positive and significant influence on *E-Trust*.

H3 : *E-service quality* has a positive and significant influence on *e-satisfaction*

H4 : *E-Trust* has a positive and significant influence on *E-Loyalty*.

H5 : *e-satisfaction* has a positive and significant influence on *E-Loyalty*.

H6 : *E-Trust* Mediating influence *E-service quality* against *E-Loyalty*.

H7 : *e-satisfaction* Mediating influence *E-service quality* against *E-Loyalty*.

2. METHODS

This study uses a quantitative approach with a survey method to analyze the influence of *E-service quality* against *E-Loyalty* through *e-satisfaction* and *E-Trust* users of the TransJatim-Ajaib application. The research was carried out during October 2025-February 2026 in the operational areas of the TransJatim Bus which includes the cities of Surabaya, Sidoarjo Regency, Gresik, Mojokerto, and Lamongan. The research population is all users of TransJatim services. Samples are determined using the *purposive sampling*, with the criteria that respondents have downloaded the TransJatim-Ajaib application and used the TransJatim service at least twice. Based on sample size recommendations for analysis *PLS-SEM*, this research involves 445 Respondents**.**

Primary data were collected through the online distribution of questionnaires using *Google Forms* and *Offline* at the TransJatim bus stop and terminal. The research instrument was adapted from previous research and measured using a five-point Likert scale to measure four constructs, namely *e-service*

quality, e-satisfaction, e-trust, and *E-Loyalty*. Before deployment, the instrument is validated by experts and tested through *Pilot test* to ensure validity and reliability, then carried out *Data Cleaning* to incomplete or inconsistent responses.

Data analysis is carried out using *Partial Least Squares–Structural Equation Modeling* (PLS-SEM) with the help of *SmartPLS 4.0* because it is suitable for analyzing relationships between latent variables in complex models and does not require a multivariate normal distribution (Hair et al., 2021). The stages of analysis include descriptive statistics, evaluation Outer model Through testing *convergent validity*, *Discriminant validity*, and construct reliability, as well as evaluation Inner model using the R^2, f^2, Q^2, and SRMR. Hypothesis testing is carried out using the technique *Bootstrapping* using the *Path Coefficient, T-Statistics*, and *p-value* at a significance level of 5%. In addition to examining the direct influence, this study also analyzed the indirect influence through *e-satisfaction* and *E-Trust* as a mediation variable to explain the mechanism of formation *E-Loyalty* users of the TransJatim-Ajaib application.

3. FINDINGS AND DISCUSSION

3.1 Descriptive Analysis

Analysis The results of the researcher are shown with the characteristics of the respondents and the descriptive analysis in this study is as follows:

Table 1. Characteristics of Research Respondents

Characteristics	Categories	Frequency	Present (%)
Do you have a transgender-magic app?	Yes	426	96%
	No	19	4%
Have you ever used transjatim services?	Yes	445	100%
	No	0	0%
How many times do you use transtim?	< 2 times	10	2%
	2 times	74	17%
	5 times	100	22%
	10 times	42	9%
	> 10 times	219	49%
Gender	L	180	40%
	P	265	60%
Age	26 years - 30 years	144	32%
	17 years - 25 years old	202	45%
	> 30 years old	99	22%
Address	Surabaya	127	29%
	Mojokerto	169	38%
	Sidoarjo	73	16%
	Gresik	58	13%
	Other cities	18	4%
Route traveled	Sidoarjo-Surabaya-Gresik Corridor	74	17%
	Corridor ii mojokerto-surabaya	184	41%
	Corridor III Mojokerto – Gresik	95	21%

	Corridor IV Gresik – Lamongan	63	14%
	Corridor V Surabya – Bangkok	29	7%
Reasons to use transjatim	Affordable ticket prices	122	27%
	Good service	127	29%
	Availability of multiple fleets	62	14%
	All true	134	30%

Primary data sources processed by researchers (2025)

Here is a table that presents a summary of descriptive statistics for each variable:

Table 2 Statistical description of the research variables (n = 445)

Variable	Number of indicators	red	media n	STD Deviation
***E-service quality* (x)**	5,00	4,16	5,00	1,02
***E-Trust* (Y)**	5,00	4,22	5,00	0,99
***e-satisfaction* (z)**	5,00	4,10	4,00	1,04
***E-Loyalty* (H)**	5,00	4,12	4,00	0,89
Source : Primary data processed by researchers (2025)				

Based on the characteristics of the respondents, the majority are active users of the TransJatim-Ajaib application (96%) and all respondents have used the TransJatim service, with almost half of the respondents (49%) having used the service more than 10 times. This shows that respondents have sufficient experience to assess the quality of electronic services provided. The dominance of respondents aged 17-30 years (77%), female (60%), and most of them from Corridor II Mojokerto–Surabaya (41%) reflects that applications are widely used by productive age groups who are used to using digital services. In addition, the main reasons for using TransJatim are good service (29%) and a combination of affordable prices, service quality, and fleet availability (30%), which shows that service quality is an important factor in usage decisions. These findings are in line with the results of descriptive statistics that show that all research variables have a value *red* height, i.e. *E-Trust* (4,22), *E-service quality* (4,16), *E-Loyalty* (4,12), and *e-satisfaction* (4.10), with a standard deviation ranging from 0.89–1.04 which indicates that respondents' perceptions are relatively consistent. The high assessment of the *E-service quality* followed by his height *e-trust, e-satisfaction*, and *E-Loyalty*, thus providing an early indication that good quality of electronic services is able to build trust and user satisfaction which further has the potential to increase customer loyalty to the TransJatim-Ajaib application. These descriptive findings support a conceptual model of research that puts *E-service quality* as an exogenous variable, *E-Trust* and *e-satisfaction* as a mediation variable, and *E-Loyalty* as an endogenous variable that will be further tested through PLS-SEM analysis

3.2 Analysis Partial Least Square (PLS)

This analysis included tests of convergent validity (*loading factor*), reliability (*composite reliability, cronbach alpha*) and discriminant validity (*htmt fornel-lacter*)

3.2.1 Evaluation of measurement models *Outer model*

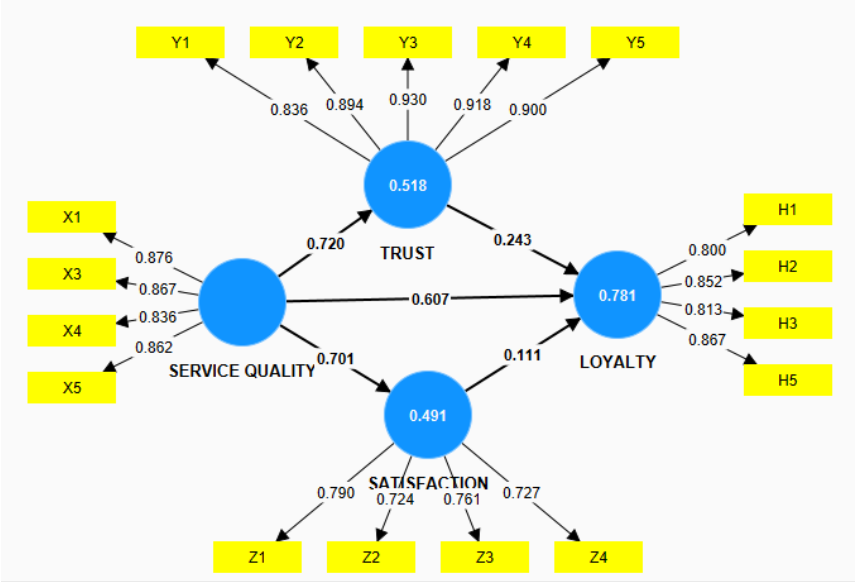

Figure 2 Outer Model Flowchart

3.2.2 Convergent validity test (Convergent validoty)

Table 3. *Convergent validity* based on *ave value*

Variable	Ave	AVE Standard	Remarks
***E-loyalty* (H)**	0.695	0.5	Valid
***E-satisfaction* (W)**	0.564	0.5	Valid
***E-service quality* (X)**	0.741	0.5	Valid
***E-trust* (Y)**	0.803	0.5	Valid

Source : Data processed by researchers 2026

3.2.3 Convergent validity based on Loading Factor

Table 4. *Convergent validity* based on *loading factor*

Variable	Indicator	Outer loadings	Remarks
***E-service quality* (x)**	X1	0,876	Valid
	X3	0,867	Valid
	X4	0,836	Valid
	X5	0,862	Valid
***E-trust* (y)**	Y1	0,836	Valid
	Y2	0,894	Valid
	Y3	0,93	Valid
	Y4	0,918	Valid
	Y5	0,9	Valid
E-satisafcation(z)	Z1	0,790	Valid

	Z2	0,724	Valid
	Z3	0,761	Valid
	Z4	0,727	Valid
***E-loyalty* (H)**	H1	0,800	Valid
	H2	0,853	Valid
	H3	0.813	Valid
	H5	0,867	Valid

Source : Data processed by researchers 2026

3.2.4 Discriminant validity Fornell-Lacter criteria

Table 5. ***Discriminan validity (fornell-lacker criterian)***

Variable	*E-loyalty* (H)	E-satisafcation(Z)	*E-service quality* (X)	*E-trust* (Y)
***E-loyalty* (h)**	0.834			
E-satisafcation(z)	0.697	0.751		
***E-service quality* (x)**	0.859	0.701	0.861	
***E-trust* (y)**	0.753	0.665	0.720	0.896

Source: Data processed by researchers 2025.

3.2.5 Composite reliability

Table 6. ***Composite reliabiliy***

	Composite reliability (rho_a)	Cronbach's alpha	Remarks
***E-loyalty* (H)**	0.859	0.853	Reliable
E-satisafcation(Z)	0.981	0.810	Reliable
***E-service quality* (X)**	0.884	0.883	Reliable
***E-trust* (Y)**	0.945	0.938	Reliable

Source : data processed by researchers 2026

3.2.6 Structural model evaluation: test (VIF)

Table 7. ***Multicollinearity* test (VIF)**

Dependent variable	Predictor variables (independent)	Vivid	Remarks
E-loyalty	Repeat usage (H1)	1.840	No multicollinearity
	User satisfaction level (H2)	2.105	
	Recommendations to others (H3)	2.187	No multicollinearity
	Switching barrier (moving barrier) (H5)	2.509	No multicollinearity
E-Service Qulaity	*Efficiency* (X1)	2.417	No multicollinearity
	Available (X2)	2.438	No multicollinearity
	Privacy (X4)	2,014	No multicollinearity
	Responsive (X5)	2.335	No multicollinearity

E-trust	System security (y1)	2.707	No multicollinearity
	Information transparency (y2)	3.720	No multicollinearity
	Reputation of application (y3)	4.636	No multicollinearity
	Contact service (y4)	4.567	No multicollinearity
	Identity and brand consistency (y5)	3.958	No multicollinearity
E-satisfaction	Overall satisfaction (z1)	1.077	No multicollinearity
	Satisfaction over expectations (z2)	4.183	No multicollinearity
	Satisfaction with features and functionality (z3)	4.450	No multicollinearity
	Emotional satisfaction (z4)	2.765	No multicollinearity
Source : data processed by researchers 2026			

The results of the convergent validity test show that the entire construct has a value *AVE* above 0.50 and *Outer Loading* ≥ 0.70, so that the indicator is able to reflect its latent construct properly and consistently. In addition, the discriminant validity test through the criteria *Fornell–Larcker* indicates root value √*AVE* In each construct it is higher than the correlation between constructs, which confirms that each latent variable has good discriminant validity. Furthermore, all constructs also meet the reliability criteria with a value of *Composite reliability* > 0.80 and *Cronbach's alpha* > 0.70, so that the research instrument is declared reliable and suitable for use in the next stage of analysis. In addition, the test results *Multicollinearity* Shows value *VIVID* All predictor variables are below 5, so there is no indication *Multicollinearity* and each independent variable has a unique contribution of information in the model.

3.3 Hypothesis Testing Results

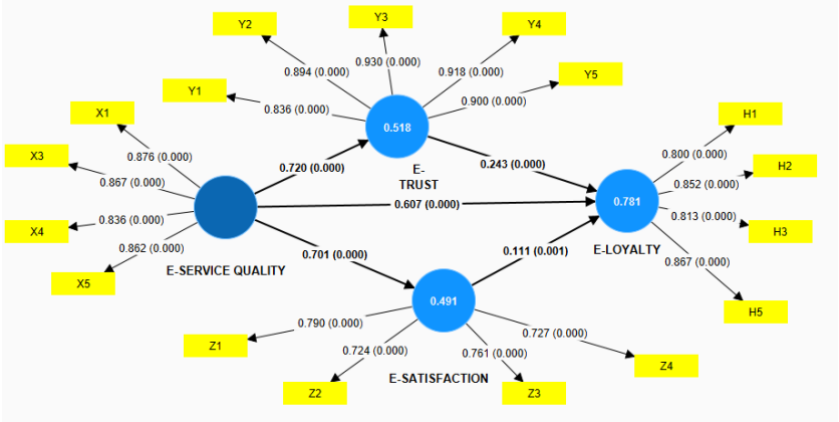

Figure 4. Results of *PLS-SEM Structural Model Analysis*

3.3.1 Direct effect test results (*dirrect effects*)

Table 7. Results of testing the direct influence hypothesis

Hypothesis	Relationships	Path coefficient (β)	T statistics	P values	Criteria
H1	Service Quality -> Loyalty	0.607	14.551	0.000	Accepted
H2	Service Quality -> Trust	0.720	24.961	0.000	Accepted
H3	Service Quality -> Satisfaction	0.701	39.196	0.000	Accepted
H4	Trust -> Loyalty	0.243	5.741	0.000	Accepted
H5	Satisfaction -> Loyalty	0.111	3.279	0.001	Accepted
Source : Data processed by researchers 2026					

3.3.2 Indirect influence test results (Indirrect effect)

Table. 8. Indirect *effect-mediation effect*

Hypothesis	Relationships	Path coefficient (β)	T statistics	P values	Vaf	Types of mediation
H6	Service Quality -> Trust -> Loyalty	0,175	5.443	0	20.3 %	Partial Mediation
H7	Service Quality -> Satisfaction -> Loyalty	0,077	3.333	0	11 %	There is Mediation

Source : data processed by researchers 2026

3.4 Evaluation of the predictive power of the model (*R-square F-Square* and *Q-square*)

The R-Squrae and Q-Square values for endogenous variables are presented as follows

3.4.1 Model R-Square (r^2)

Table 9. Model R-Square

Variable		R-Square	Remarks
***E-loyalty* (H)**		0.781	Strong
E-satisafcation(Z)		0.491	Moderate
***E-trust* (Y)**		0.518	Moderate strong

Source : data processed by researchers 2026

3.4.2 Models Q-Square (q^2)

Table 10. Q-Square value (q^2)

Dependent variable	*Q-Square* (q^2)	Remarks	Status
E-loyalty	0.535	Predictive relevance	Conform
E-satisfaction	0.181	Predictive relevance is	Conform
E-trust	0.408	Predictive relevance	Conform
E-Service quality	0.000	Variable Exoges	Independent
Source : data processed by researchers 2026			

3.4.3 Models F-Square (f^2)

Table 11. *F-Square* value (f^2)

	E-Loyalty	*E-Satisfaction*	*E-Service Quality*	*E-Trust*
E-Loyalty				
E-Satisfaction	0.025			
E-Service Quality	0.663	0.965		1.076
E-Trust	0.116			

3.4.4 Total Impact Analysis (Total effect)

Table 11. Results of the analysis of the total influence on *e-loyalty*

Relationships	Direct influence (β)	Indirect influence (β)	Total Impact (β)	Ranking order
E-service quality - > e-loyalty	0.607	0	0,607	1
E-trust -> e-loyalty	0.243	0,175	0.328	2
E-satisfaction - > e-loyalty	0.111	0,079	0,189	3
Source : data processed by researchers 2026				

3.5 Discussion

3.5.1 Research overview

The results of the descriptive analysis showed that all research variables, namely *e-service quality*, *e-trust*, *e-satisfaction*, and *e-loyalty*, is in the high category with a value *red* above 4 and standard deviation below 1. This condition indicates that respondents' perception of Transjatim-Ajaib services is relatively positive and homogeneous. *E-satisfaction* has the highest average value, while *E-Loyalty* relatively lowest, although it is still in the high category. These findings suggest that user satisfaction has not been fully optimally transformed into long-term loyalty. These results provide an early indication that the quality of electronic services has an important role in shaping the trust, satisfaction, and loyalty of digital transportation service users.

3.5.2 Discussion of Hypothesis Test Results

H1 : *E-service quality* has a positive and significant influence on *e-loyalty*

Test results show *E-service quality* have a positive and significant effect on *E-Loyalty* ($\beta = 0.607$; $p < 0.001$). These findings confirm that *E-service quality* is the main determinant in forming the loyalty of Transjatim-Ajaib application users.

The quality of the service which includes ease of use, security, system speed, and reliability of information has been proven to increase the tendency of users to reuse the service and recommend it to others. These findings also show that the direct influence of *e-service quality* on loyalty is more dominant than the indirect path through *e-trust* and *e-satisfaction.*

Theoretically, these results reinforce *Expectancy Confirmation Theory* (ECT) (Oliver, 1986), which explains that loyalty is formed when the performance of a service is able to meet or exceed the expectations of users. In this context, a user's positive experience of the app results in confirmation that encourages loyal behavior. In addition, in the framework of *Stimulus–Organism–Response* (S-O-R) (Mehrabian & Russell, 1974), e-service quality acts as a stimulus that can directly produce a response in the form of loyalty, or indirectly through the user's psychological state.

H2: *E-service quality* has a positive and significant influence on *e-trust*.

E-*service quality* have a positive and significant effect on *E-Trust* ($\beta = 0.720$; $p < 0.001$). These results show that the better the perceived quality of service, the higher the level of user trust in the application system. Trust is formed through the perception of security, system legality, and consistency of services in providing accurate information and transactions. In the context of digital transportation, trust is an important element because users interact with electronic transaction-based systems directly. Theoretically, these findings support ECT which confirms that an expectation service experience will result in a positive evaluation of trust. In addition, this research also strengthens the view that in the digital environment, service quality is the main basis for the formation of trust as a prerequisite for loyalty.

H3 : *E-service quality* has a positive and significant influence on *E-Satisfaction*

E-service quality have a positive and significant effect on *e-satisfaction* ($\beta = 0.701$; $p < 0.001$). This shows that high quality of service is able to significantly increase user satisfaction. Satisfaction is mainly formed from an efficient application user experience, ease of access to information, and convenience in the transaction process. These findings confirm that e-service quality is the main factor that determines users' affective evaluation of services. In the perspective of ECT, satisfaction arises when there is a match

between expectations and service performance. While in the S-O-R model, *E-service quality* As *stimulus* generate an internal response in the form of satisfaction before it ultimately affects user behavior.

H4: *E-trust* has a positive and significant influence on *E-loyalty*

E-trust have a positive and significant effect on *E-Loyalty* ($\beta = 0.243$; $p < 0.001$). These findings show that trust is *an* important factor in shaping the loyalty of users of digital transportation services. High trust reflects users' belief that the app is capable of providing safe, stable, and reliable services. In the context of application-based public transportation, data security aspects and system consistency are key factors in building long-term loyalty. Theoretically, these results reinforce ECT that repeated positive experiences will form beliefs that ultimately drive user loyalty.

H5: *E-satisfaction* has a positive and significant influence on *E-Trust.*

E-satisfaction have a positive and significant effect on *E-Loyalty* ($\beta = 0.111$; $p < 0.001$). Although significant, the effect is relatively small compared to other variables. These findings show that user satisfaction is not entirely the main factor in forming loyalty, but rather acts as a support mechanism. User loyalty is more influenced by a combination of service quality and trust. In ECT's perspective, satisfaction arises from the process of confirming expectations, but it is not always strong enough to maintain loyalty without the support of trust and ongoing quality of service.

3.5.3 Mediation Analysis

The results of the study show that *E-Trust* and *e-satisfaction* able to mediate influence *E-service quality* against *e-loyalty,* with the power of mediation *E-Trust* more dominant than *e-satisfaction*. This indicates that the quality of electronic services not only has a direct effect on loyalty, but also works through psychological mechanisms in the form of trust and satisfaction. However, the dominance of e-trust mediation shows that in the context of digital transportation, the security and reliability aspects of the system determine loyalty more than satisfaction alone.

3.5.4 Theoretical Implications

This research contributes to the development of *Expectancy Confirmation Theory* (ECT) and *Stimulus–Organism–Response* (S-O-R) in the context of digital transportation services.

1. *Expectancy Confirmation Theory* (ECT) not only explains the formation of satisfaction, but also shows that expectancy confirmation can simultaneously form a more dominant trust in influencing loyalty.

2. The *Stimulus–Organism–Response* (S-O-R) model in this study shows that *e-service quality* as a stimulus not only produces responses through affective pathways (*e-satisfaction),* but also through cognitive pathways (*e-trust*) that are stronger in forming loyalty.
3. This study expands the literature on *e-service quality* by showing that in the context of digital public transportation, loyalty is not only built by satisfaction, but is more determined by trust in the service system.

Overall, the results of the study show that *E-service quality* is the main factor influencing *E-Loyalty* either directly or indirectly through *E-Trust* and *e-satisfaction*. However, in the context of Transjatim-Ajaib's digital transportation services, *E-Trust* proven to have a more dominant role compared to *e-satisfaction* in forming user loyalty. Thus, increasing user loyalty depends not only on improving the quality of service, but also on strengthening the aspect of trust through the security, consistency, and reliability of the application system.

4. CONCLUSION

In the context of Transjatim's public transportation services, the sustainability of customer loyalty is highly determined by the quality of digital services. The results of the study show that e-service quality is the main determinant of e-loyalty, both directly and indirectly through the psychological mechanisms of users.

Based on the testing of 445 respondents, the following conclusions were obtained:

1. *E-service quality* has a positive and significant effect on *e-loyalty,* showing that the quality of digital services can directly shape user loyalty.
2. *E-service quality* has a positive and significant effect on *e-satisfaction and e-trust,* which indicates that service quality is the basis for the formation of affective and cognitive evaluation of users.
3. *E-satisfaction* and *e-trust* have a positive and significant effect on *e-loyalty*, but with a smaller contribution compared to the direct influence of *e-service quality.*
4. *E-trust* significantly mediates the influence of *e-service quality* on *e-loyalty*, showing that trust is a stronger mediating channel in transforming service quality into loyalty.
5. *E-satisfaction* also mediates the influence of *e-service quality* on *e-loyalty*, but with a weak mediation effect, so its role is complementary, not the main mechanism.

Overall, the results of the study confirm that the influence of *e-service quality* on *e-loyalty* is dominant and does not completely depend on mediation variables. However, the existence of *e-trust* strengthens the transformation of service quality into loyalty, while *e-satisfaction* plays a limited role as a supporting affective channel.

Thus, Transjatim-Ajaib user loyalty is more shaped by the quality of service that directly builds trust, while satisfaction serves as an additional mechanism that reinforces, not determines, the relationship.

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