

E-Trust and E-Service Quality on E-Loyalty: Role of E-Satisfaction and Customer Privacy

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Abstract

Investigate effect ET and ESQ on ELOY through ESAT and effect ESAT on ELOY moderated privacy. E-Trust, E-service quality and weak privacy of Shopee customers still need to be improved because it will affect the decline in E-loyalty, the importance of strengthening the privacy system that is difficult to hack in the Shopee application so that customer privacy is truly protected from cyber hacking. Samples of 265 Shopee customers in Central Java Indonesia, PLS-SEM used for data analyzing. Results: ET and ESQ have a positive link to ESAT; the effect of ET, ESQ and ESAT on ELOY is also positive. ET and ESQ affect ELOY through ESAT; the effect of ESAT on ELOY can be moderated by privacy. E-Satisfaction is effective as an intermediary variable for E-Trust and E-Service quality in influencing E-Loyalty of Shopee customers and privacy is effective as a moderating variable in the influence of E-Satisfaction on E-Loyalty.

Keywords: ET, ESQ, ESAT, privacy, ELOY.

Introduction

Rapidly developing technology has brought major changes in the world of electronic business, people also benefit from the presence of e-commerce either as sellers or just as consumers. Convenience, as well as savings in terms of cost and time have changed consumer behavior to prefer online shopping, this phenomenon has become part of the lifestyle of the global community that drives the growth of e-commerce in the world to become increasingly rapid (Santoso & Napitupulu, 2018).

Indonesia in 2024 in the projection of e-commerce growth is one of the countries with the largest e-commerce growth in the world 30.5% then the countries ranked below are Mexico 26.8%; Thailand 22.9%; Iran 22.1%; Malaysia 21.4% the rest in the top ten are dominated by Asian countries such as India, Vietnam, Philippines. This projection is sourced from ECDB using relevant techniques used related to market behavior (databoks.katadata.co.id).

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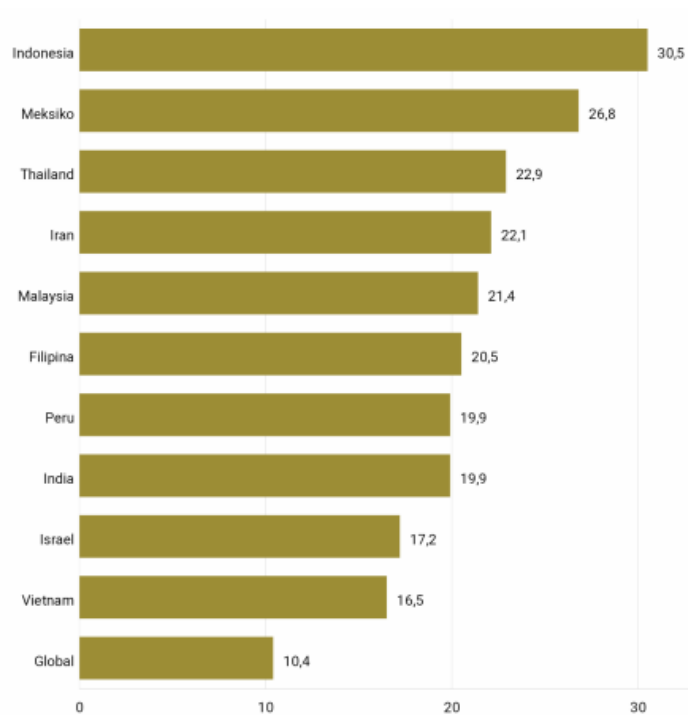
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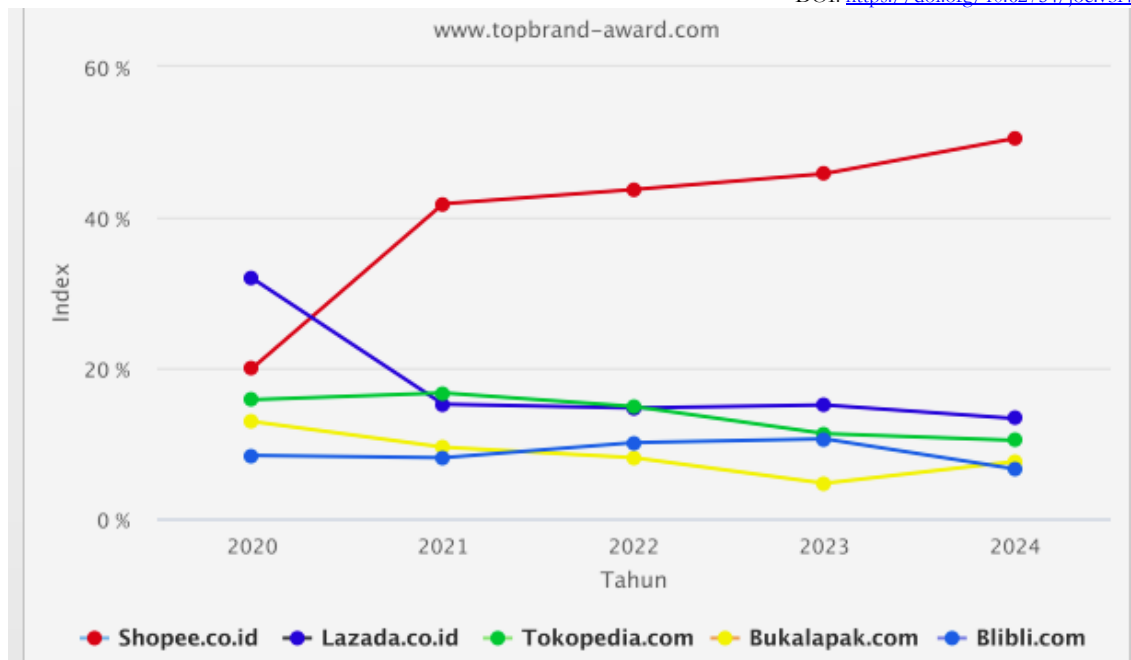
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Figure 1. Global Highest e-Commerce Growth Projections 2024

Source: databoks.katadata.co.id

The growth of e-commerce in Indonesia is marked by competition between online shopping sites such as Shopee, Lazada, Tokopedia, Bukalapak and Blibli. The Top Brand Award related to online shopping has given awards to brands with superior performance in the Indonesian market, the awards are given by referring to the Top Brand Index. Top Brand Index data for the Online Shopping Site category for the period 2021-2024, indicates that Shopee is ranked 1st, this achievement shows that Shopee is the most popular online shop site in Indonesia (www.topbrand-award.com).

Figure 2. TBI - Shopping Websites in Indonesia



Source: www.topbrand-award.com

Maulidiana & Ansari's research (2023) reported that Shopee in Indonesia in terms of popularity is ranked 1st as an online store site, but this does not rule out the possibility of customer complaints. Customer complaints such as default because customers receive goods that do not match the product photo or description, less secure product packaging, and very slow seller responsiveness. The seller should show honesty by providing correct and complete information regarding the products offered. This problem indicates that Shopee's trust and quality of service still need to be improved, because E-Trust and E-service quality will affect E-loyalty.

E-Loyalty contains the meaning of the customer's intention to revisit the website in online transactions. One factor that can affect customer E-loyalty is E-trust, namely the trust felt by customers in a marketplace, not a physical sign but from a social or moral aspect it is felt (Ashiq & Hussain, 2024). Al-Adwan & Al-Horani (2019); Alnaim et al., (2022); Ashiq & Hussain (2024); reported that high electronic loyalty is largely determined by customer trust in online transactions so that E-trust has a positive link to E-loyalty. Different findings such as Surapati et al., (2020); Nasution et al., (2022); Oktaviali et al., (2024) but failed to prove that both constructs have a significant influence.

Electronic customer loyalty from a behavioral aspect is also determined by the extent to which the quality of electronic service is able to meet customer expectations, so that E-service quality will affect E-loyalty (Kuska et al., 2024). Empirical findings prove that there is a positive link between E-service quality and E-loyalty such as Ashiq & Hussain (2024); Rintasari & Farida (2022); Ashiq & Hussain (2024); Kuska et al., (2024). These findings are not in line with research by Choi & Mai (2018); Avania & Arry (2022); Yum & Yoo (2023) because E-service quality cannot significantly affect E-loyalty.

Satisfaction is a determining factor in electronic customer loyalty, when customers feel satisfied in online transactions they will tend to show the intention to reuse the website they have visited, so that the higher the E-satisfaction will affect the high E-loyalty (Guo et al., 2023). Lopez et al., (2018) in their research succeeded in proving the existence of a positive link between e-satisfaction and E-loyalty, this finding is based on empirical evidence that electronically loyal customers have had the experience of visiting a website that makes them feel satisfied. The findings of Lopez et al., (2018); Al-Adwan & Al-Horani (2019); Alnaim et al., (2022); Guo et al., (2023); Ashiq & Hussain (2024) also prove the significant influence of these two variables.

The research gap related to the influence of E-trust and E-service quality on E-loyalty has attracted the attention of researchers exploring E-satisfaction as a mediator, for example, research findings from Ashiq & Hussain (2024). Other evidence reports a positive link between E-trust and E-Satisfaction such as research by Al-Adwan & Al-Horani (2019); Alnaim et al., (2022); Rintasari & Farida (2022) and a positive link between E-service quality and E-Satisfaction such as research by Avania & Arry (2022); Guo et al., (2023); and Oktaviali et al., (2024). From several cases related to the decline in customer E-loyalty, some reported that customer privacy has a major contribution in retaining online customers, because customer dissatisfaction due to hacker hacking is still often experienced (Mintarum, 2023). Shopee customer disappointment regarding customer privacy data was stated in Sabila & Kusumaningrum's research (2021), this concerns the security of customer data such as customer accounts that are suspected of being hacked, payment system security also often experiences obstacles due to fake accounts that disguise customer identities, slow order tracking responses, to application errors.

Privacy in the context of electronic services is a very important factor because it concerns the security of personal data and information protection for consumers such as hacking of customers' personal financial data (Mintarum, 2023). The definition of privacy by Parasuraman, Zeithaml & Malhotra (2005) focuses on websites that guarantee a sense of security and consumer information is also protected. Wahab et al., (2011) proved that there is a strong influence of mobile phone service privacy on E-loyalty, other findings such as Mintarum (2023) also stated that there is a positive link between privacy and E-Loyalty. Research by Putra & Handini (2022) found that privacy, in addition to increasing E-satisfaction, also makes a major contribution to E-loyalty.

Novelty, provides insight for companies on the importance of strengthening a privacy system that is difficult to hack so that customer privacy is truly protected from cyber hacking. The focus of this study examines the role of customer privacy moderation in strengthening the relationship between e-Satisfaction and Shopee customer E-Loyalty.

Literature Review

Theoretical Framework

E-Loyalty

Loyalty, an important consequence of a customer's satisfaction, has been defined in recent decades by various measurement methods. The general definition is that consistent customers have a strong commitment to repurchase a product or service on another occasion (Khuong & Dai, 2016). E-Loyalty contains the intention to repeat website services with a tendency to consistently stick to one service and recommendation (Choi & Mai, 2018).

Customer loyalty is useful for predicting finances and how sales levels. The definition of loyalty indicates regular repurchase, recommendation, not interested in competitor persuasion (Griffin, 2015). Other behaviors, repeat purchases, recommendations, and increased proportion of spending (Barnes, 2014). High and low E-Loyalty is measured through repeat, retention, purchase, referrals and positive reviews Kuska et al., (2024).

E-Satisfaction

Satisfaction is basically related to a person's pleasant feelings, on the other hand dissatisfaction is related to a person's feelings of disappointment and complaints. The definition of customer satisfaction is the overall attitude shown by consumers towards goods or services after they obtain and use them (Mowen & Minor, 2015). E-Satisfaction has almost the same view as satisfaction as a post-purchase evaluation, the difference is satisfaction in e-commerce (Lopez et al., 2018).

According to Lupiyoadi (2016) several indicators that must be considered by companies in determining the level of customer satisfaction are quality (product, service), price, cost, emotional. In the view of Kuska et

al., (2024), the indicators of E-satisfaction lie in the aspects: site design, convenience, serviceability, merchandising.

E-Trust

Trust by Foster et al. (2019) is key in building loyalty. E-trust is like customers generally trusting a service that meets expectations, but this is more focused on online services or digital environments (Cardoso et al., 2022). Choi & Mai (2018) more specifically distinguish, there is no physical contact in a virtual transaction but from a moral or social aspect customers feel it. Ashiq & Hussain (2024), there are several measures of E-Trust such as not deceiving consumers, honesty of information, good company reputation and integrity, and the risks that must be borne by customers.

E-Service Quality

Service quality is an action that can be offered by a service provider to meet or exceed customer expectations. The level of service quality produced by the company in this case will depend on the performance it produces. If the performance produced by the company is able to meet or exceed the desires or expectations of customers, it will create customer satisfaction (Tjiptono, 2016).

The aspect that distinguishes E-Service Quality from services in general is only that the transaction process does not require physical contact, so customers only use virtual media (Parasuraman, Zeithaml & Malhotra, 2005). This factor in the view of Alnaim et al., (2022) is emphasized on the level of quality or non-quality service in the virtual scope because customers do not feel physical interaction.

Choi & Mai (2018) developed several aspects that make an electronic service quality such as fulfillment, efficiency, contact quality, responsiveness, and compensation for customers.

Customer Privacy

This factor is seen as a determinant of loyalty that has an important effect on transactions on the website, because weak privacy results in customers leaving the service (Wahab et al., 2011). An important aspect of privacy (security) in online purchases is related to consumer data privacy, consumers do not want their personal data to be spread and used by irresponsible individuals (Mintarum, 2023).

The definition of privacy refers to the level of security of a website and consumers feel that there is information protection (Parasuraman, Zeithaml & Berry, 1998). In virtual transactions, customers tend to feel the risk that often raises concerns about confidential personal data or the misuse of customer financial data that may be hacked, companies must be able to maintain and protect consumer privacy (Putra & Handini, 2022).

Privacy in online purchases can be measured from the protection of consumer data, collection of personal consumers, data needed for application activities, the agreement with consumers regarding disseminating information the convenience given to consumers when providing information and consumer security from cyber hacking (Mintarum, 2023).

Hypothesis Development

E-Trust and E-Loyalty

Anser et al., (2021) reported that e-loyalty in online customers is greatly influenced by the trust of a platform. E-Trust has a strong relationship with E-Loyalty because customers who trust an online platform will indirectly make them more loyal to online transactions, the company will also benefit from financial performance (Ashiq & Hussain, 2024).

Previous research that proves a positive link between these two constructs such as Al-Adwan & Al-Horani (2019); Alnaim et al., (2022); Ashiq & Hussain (2024); Kuska et al., (2024). Strategic implications for companies, online customer loyalty is highly dependent on the company's efforts to build trust, both of which will determine the sustainability of e-commerce.

H₁ : E-Trust has a significant effect on customer loyalty.

E-Trust and E-Satisfaction

Satisfaction in the virtual environment is largely determined by customer trust in e-commerce services, those who are satisfied because the company pays attention to customer interests and feels confident in having good character in every transaction (Al-Adwan & Al-Horani, 2019). A website that has high trust will tend to produce a positive experience for customers, thus impacting sales and company performance (Alnaim et al., 2022).

Previous research by Al-Adwan & Al-Horani (2019); Alnaim et al., (2022); Rintasari & Farida (2022); Ashiq & Hussain (2024); Kuska et al., (2024) obtained the same findings, the existence of a positive link between E-Trust and E-Satisfaction.

H₂ : E-Trust has a significant effect on E-Satisfaction.

E-Satisfaction and E-Loyalty

Customer loyalty is a commitment to make repeat purchases or subscriptions, but the purchase is continuous in the future. Customers who feel satisfied when enjoying a company's products or services will then be willing to make repeat purchases of those products or services (Na et al., 2023). Satisfaction can reflect an individual's emotions of happiness and disappointment after the product performance received is compared to expectations. Satisfaction arises because the performance received meets expectations, and dissatisfaction if the opposite occurs. Customer satisfaction and loyalty are important and must always be realized by the company (Kotler & Keller, 2016).

E-Satisfaction and E-Loyalty both hold the key to e-commerce success, online satisfaction will provide great benefits for companies to maintain and build customer loyalty (Kuska et al., 2024). The significant relationship between these two constructs has been studied by previous research such as Lopez et al., (2018); Al-Adwan & Al-Horani (2019); Rintasari & Farida (2022); Alnaim et al., (2022); Guo et al., (2023); Ashiq & Hussain (2024).

H₃ : E-Satisfaction has a significant effect on E-Loyalty.

E-Service Quality and E-Loyalty

Olaleye et al., (2021) reported, E-Service Quality and E-Loyalty have a strong link. High E-Service Quality will result in a positive experience for customers, this will contribute greatly to online customer loyalty, they also show supportive behavior of the company to repeat purchases or visited websites and their resilience not to leave the company Alnaim et al., (2022).

Previous findings have also consistently reported a positive effect of these two constructs such as Al-Adwan & Al-Horani (2019); Rintasari & Farida (2022); Ashiq & Hussain (2024); Kuska et al., (2024).

H₄ : E- Service Quality has a significant effect on E-Loyalty.

E-Service Quality and E-Satisfaction

Customer satisfaction is an important element in marketing theory, where customer satisfaction will affect future consumer purchasing behavior and shareholder profitability value (Jan et al., 2013). With the many

variations of choices from transportation service providers, consumers are also increasingly selective in choosing services. Service quality is one measure of success in providing satisfaction guarantees for consumers (Chang et al., 2017).

In the virtual environment, E-Service Quality and E-Satisfaction also have a strong relationship, both are important indicators for business sustainability (Al-Adwan & Al-Horani, 2019). The positive link between these two constructs has been proven by research by Alnaim et al., (2022); Rintasari & Farida (2022); Ashiq & Hussain (2024); Kuska et al., (2024).

H₅: E-Service quality has a significant effect on E-Satisfaction.

E-Satisfaction, Customer Privacy and E-Loyalty

Privacy felt by online customers is very important because privacy concerns customer data information that is confidential in nature so it needs protection that guarantees a sense of security from possible hacking (Parasuraman, Zeithaml & Malhotra, 2005). Website security with E-loyalty has a strong relationship, customers who feel safe and get protection from possible virtual crimes will feel satisfied and tend to be loyal to the service so that there is an intention to use the service again (Putra & Handini, 2022).

Previous findings conducted by Wahab et al., (2011) stated that consumers do not get privacy when transacting online, in addition to reducing satisfaction, it also has an impact on their loyalty who tend to stop using the service. Thus Mintarum (2023) reported that information protection for consumers will determine privacy in online shopping. The integrity of the company in protecting consumers from possible hacking is very necessary because it not only increases satisfaction but also strengthens customer loyalty. Privacy is very important for online customers, because in a virtual environment it is very vulnerable to hacking. Increasing privacy that guarantees customer security while shopping online will encourage loyalty to become stronger.

H₆: Customer Privacy can moderate the influence of E-Satisfaction on E-Loyalty

E-Trust, E-Satisfaction and E-Loyalty

The inconsistency of research results related to the influence of E-Trust on E-Loyalty, motivates researchers to include E-Satisfaction as a mediator such as Ashiq & Hussain (2024) who prove that E-Satisfaction can mediate the influence of E-Trust on E-Loyalty of online customers in Pakistan. E-Loyalty can occur because customers have previously experienced E-Satisfaction, and E-Satisfaction can occur because it is driven by their trust in the e-commerce they visit.

The mediating role of customer satisfaction on the influence of brand trust on customer loyalty is also supported by previous research conducted by Al-Adwan & Al-Horani (2019); Alnaim et al., (2022); Rintasari & Farida (2022); Ashiq & Hussain (2024); Kuska et al., (2024) which stated that E-Trust has a significant effect on E-Satisfaction. The influence of E-Satisfaction on E-Loyalty is supported by research by Lopez et al., (2018); Al-Adwan & Al-Horani (2019); Rintasari & Farida (2022); Alnaim et al., (2022); Guo et al., (2023); Ashiq & Hussain (2024); Kuska et al., (2024).

H₇: E-Trust has an indirect effect on E-Loyalty through E-Satisfaction.

E-Service Quality, E-Satisfaction And E-Loyalty

The gap in research findings related to the effect of E-Service Quality on E-Loyalty can occur because E-Service Quality can affect E-Loyalty through E-Satisfaction first. Research conducted by Al-Adwan & Al-Horani (2019); Alnaim et al., (2022); Rintasari & Farida (2022); Ashiq & Hussain (2024); Kuska et al., (2024) states that E-Service Quality can affect E-Satisfaction and E-Satisfaction can affect E-Loyalty such as the results of research by Lopez et al., (2018); Al-Adwan & Al-Horani (2019); Rintasari & Farida (2022); Alnaim et al., (2022); Guo et al., (2023); Ashiq & Hussain (2024); Kuska et al., (2024)

H₈: E-Service Quality has an indirect effect on E-Loyalty through E-Satisfaction.

Methods, Data, and Analysis

Research uses a causal explanatory method. The population is Shopee application users in Central Java. The sample was taken purposively, the criteria for making purchases on Shopee more than twice. The number of samples meeting the criteria is 265 respondents.

Table 2. Operational Definition and Variable Measurement

Operational Definition of Variables	Indicator	Source
E-Trust is customer confidence in a marketplace that is able to fulfill all promises made by prioritizing customer interests.	ET1:The company does not deceive consumers/customers. ET2:The company has good integrity ET3:The company provides honest information. ET4:The company has a good reputation. ET5:Willing to accept risks when making transactions.	Ashiq & Hussain (2024)
E-Service quality is customer perception of the quality of online services and facilities provided by a marketplace.	ESQ1:Efficiency ESQ2:Responsiveness ESQ3>Contact ESQ4:Compensation ESQ5:Fulfillment	Choi & Mai (2018)
E-Satisfaction is the level of customer feelings after comparing the performance of services provided by the marketplace with their expectations.	ESAT1:Convenience ESAT2:Merchandising ESAT3:Site design ESAT4:Serviceability	Kuska et al., (2024)
Customer privacy is the consumer's perception of website security and the protection of consumer information.	CP1:Protection of consumer data CP2:Collection of personal consumer CP3:data needed for application activities CP4:The agreement with consumers regarding disseminating information The convenience given to consumers when providing information CP5:Consumer security from cyber hacking	Mintarum (2023)
E-Loyalty is the customer's intention to repeat purchases on a marketplace they trust.	ELOY1: Repeat purchase ELOY2: Retention ELOY3: Referrals ELOY4: Positive review	Kuska et al., (2024)

The data analyzed comes from primary data through 5 point a Likert-measurement questionnaire. SEM-PLS used as data analyzing.

Results and Discussion

*Evaluation Outer Model**Convergent Validity***Table 3. Convergent Validity Test**

	Loading factor
ET1	0.949
ET2	0.873
ET3	0.811
ET4	0.919
ET5	0.934
ESQ1	0.872
ESQ2	0.855
ESQ3	0.746
ESQ4	0.946
ESQ5	0.907
ESAT1	0.873
ESAT2	0.836
ESAT3	0.786
ESAT4	0.931
CP1	0.832
CP2	0.849
CP3	0.895
CP4	0.853
CP5	0.884
ELOY1	0.855
ELOY2	0.860
ELOY3	0.822
ELOY4	0.843

The indicators for all constructs are valid because they have an outer loading > 0.7 . These results have met the required assumptions.

Discriminant Validity

The table 4 presents the discriminant validity results.

Table 4. Average Variance Extracted Value

	Average Variance Extracted (AVE)
E-Trust	0.808
E-Service Quality	0.755
E-Satisfaction	0.736
Customer Privacy	0.745
E-Loyalty	0.714

All constructs have an AVE value > 0.5 , meaning they meet the discriminant validity requirements.

Reliability Test

The table 5 presents the reliability test results.

Table 5. Composite Reliability

	Cronbach's Alpha	Composite Reliability
E-Trust	0.939	0.954
E-Service Quality	0.917	0.939
E-Satisfaction	0.880	0.918
Customer Privacy	0.915	0.936
E-Loyalty	0.867	0.909

Cronbach alpha for all constructs > 0.6 means reliable and has met the required conditions.

Inner Model Evaluation

Goodness Of Fit

Table 6. R-Square Value

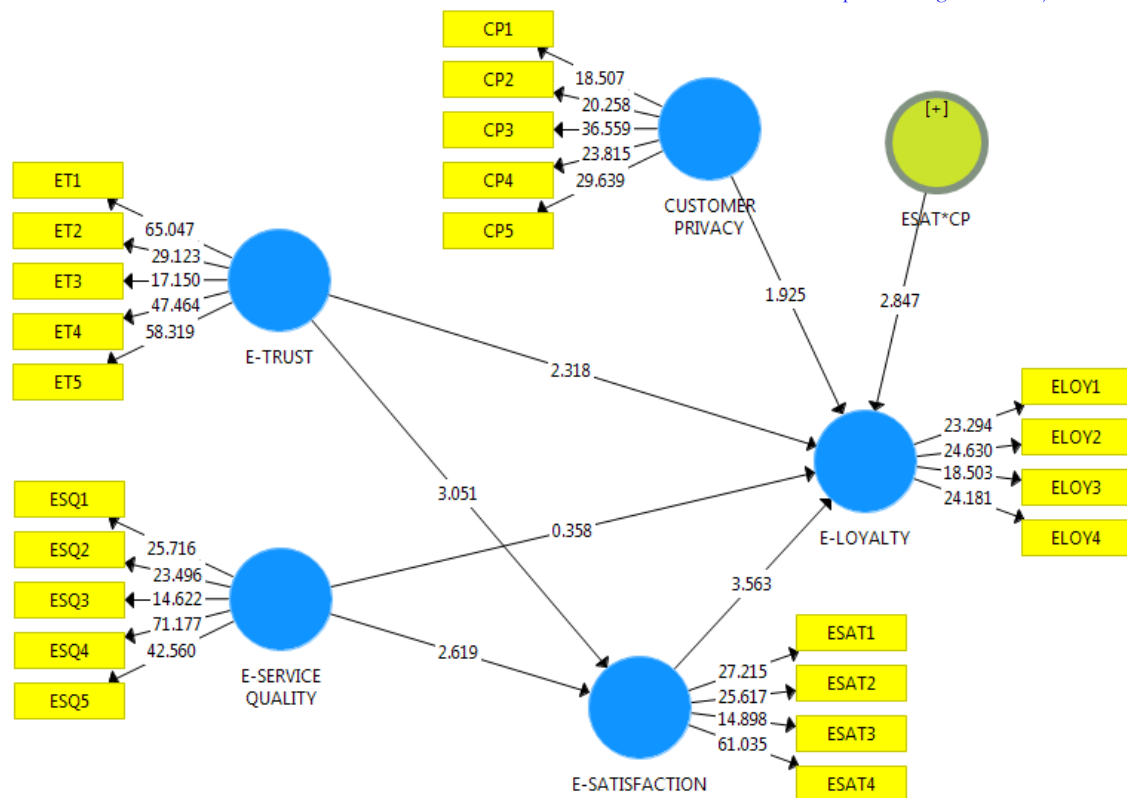
	R ²
E-Loyalty	0.668
E-Satisfaction	0.522

The R² values of model1 (E-Satisfaction) and model2 (E-Loyalty) all show a good fit.

Path Coefficient Test

Test the paths to see whether each path has a positive influence. Test the paths to see whether each path has a positive influence. All lines of research have a positive influence marked in a positive direction (β).

Figure 3. Inner Model



Hypothesis Testing

Table 7 presents hypothesis testing results

Table 7. Hypothesis Testing

	T Statistics (O/STDEV)	P Values
ET-> ELOY	2.318	0.000
ET-> ESAT	3.051	0.021
ESAT-> ELOY	3.563	0.009
ESQ-> ELOY	0.358	0.721
ESQ-> ESAT	2.619	0.002
ESAT*CP->ELOY	2.847	0.005
ET-> ESAT->ELOY	2.272	0.023
ESQ-> ESAT->ELOY	2.175	0.030

ET->ELOY p-value 0.000, so H₁ accepted means the two variables have a significant positive link. ET->ESAT p-value 0.021, so H₂ is accepted, means two variables have a significant positive link. ESAT->ELOY p-value 0.009, so H₃ is accepted, means two variables have a significant positive link. ESQ->ELOY p-value 0.721, so H₄ is rejected, meaning that two variables have not a significant link. ESQ->ESAT p-value 0.002, so H₅ is accepted, means two variables have a significant positive link. ESAT*CP->ELOY p value 0.005, so H₆ is accepted, meaning that CP can moderate the effect ESAT on ELOY. ET->ESAT->ELOY p-value 0.023, so H₇ is accepted, meaning that ET has an indirect effect on ELOY through ESAT. ESQ-> ESAT-> ELOY p-value 0.030, so H₈ is accepted, meaning that ESQ has an indirect effect on ELOY through ESAT.

Discussion

The findings of this study indicate a positive link between ET and ELOY, the implication of ET can make customers more loyal to the Shopee marketplace they trust. Customers who have confidence in a marketplace because the company is able to fulfill promises and pay attention to its customers will generate high E-trust, this will result in them being more loyal to the marketplace's products or services. This finding confirms the research of Al-Adwan & Al-Horani (2019); Alnaim et al., (2022); Ashiq & Hussain (2024); Kuska et al., (2024), ET is an important antecedent of E-Loyalty, customers who are loyal to a platform are due to high confidence in the company that pays attention to customer interests.

The relationship between ET and ESAT also indicates a significant positive link. This is because customer trust when shopping online is able to meet expectations. Several indicators of online trust such as honest information, integrity, marketplace reputation and the risks that customers must accept when making transactions can be the cause of E-Trust, so that this causes them to feel satisfied when shopping online. This finding supports the research of Al-Adwan & Al-Horani (2019); Alnaim et al., (2022); Rintasari & Farida (2022); Ashiq & Hussain (2024); Kuska et al., (2024) which proves the positive effects of both constructs.

ESAT and ELOY have a significant positive link, these two constructs have a strong relationship because satisfaction is an important causal factor that will determine the level of online loyalty. E-loyalty arises from previous experiences that customers have felt without meeting the seller face to face. Customer satisfaction that is felt can be caused by the convenience of making transactions, marketing stimuli from the service provider and attractive site design and ease of service. The implication of this finding is that customer satisfaction when making transactions in the marketplace will lead to a tendency to repeat transactions, a willingness to recommend, and speak positively about the company's services. Lopez et al., (2018); Al-Adwan & Al-Horani (2019); Rintasari & Farida (2022) also obtained consistent findings that ESAT and ELOY have a strong relationship. Other findings such as Alnaim et al., (2022); Guo et al., (2023); Ashiq & Hussain (2024); Kuska et al., (2024) successfully proved that ELOY is highly influenced by ESAT because their experience while using e-commerce services will determine online loyalty.

Testing the influence of ESQ on ELOY found insignificant findings, however, both constructs have a positive influence on online shopping behavior because virtual service quality has a major influence on the level of loyalty. Indicators that determine the level of online service quality include efficiency during access, responsiveness, quality of customer contact, compensation given to customers and fulfillment of customer expectations from the service provider. This is as reported by Alnaim et al., (2022) that virtual service quality will have a positive impact on their loyalty to the website visited. Al-Adwan & Al-Horani (2019) Rintasari & Farida (2022); Ashiq & Hussain (2024); Kuska et al., (2024) also prove the positive effects of both constructs.

This finding also obtained significant results of the influence of ESQ on ESAT, both have a positive relationship where the quality of online services received by customers affects their loyalty when transacting online. This finding confirms the research of Al-Adwan & Al-Horani (2019); Alnaim et al., (2022); Rintasari & Farida (2022); Ashiq & Hussain (2024); Kuska et al., (2024) that high ESQ will create a desire to repeat purchases so that customers tend to have higher E-loyalty on the websites they visit.

The mediating role of ESAT on the relationship between ET and ESQ on ELOY obtained significant results, this finding has important implications for companies, E-Satisfaction felt by customers can be used as a strategy to maintain E-loyalty therefore to build online loyalty must start with building trust and increasing E-Service Quality. This finding confirms the research of Ashiq & Hussain (2024) that ET can affect ELOY through ESAT. This finding is also supported by research by Al-Adwan & Al-Horani (2019); Alnaim et al., (2022); Rintasari & Farida (2022); Ashiq & Hussain (2024); Kuska et al., (2024) that ESQ affects ESAT. Furthermore, ESAT can affect ELOY as in the research of Lopez et al., (2018); Al-Adwan & Al-Horani (2019); Rintasari & Farida (2022); Alnaim et al., (2022); Guo et al., (2023); Ashiq & Hussain (2024); Kuska et al., (2024).

The moderating role of customer privacy proves that the interaction of E-Satisfaction with privacy can increase their loyalty to the Shopee marketplace. High E-Satisfaction and when privacy is getting higher tend to produce high E-Loyalty, conversely high E-Satisfaction and when privacy is getting lower tend to produce low E-Loyalty. This finding confirms the theory of Parasuraman, Zeithaml & Malhotra (2005), the security of a website and the protection of information for consumers will determine privacy in online shopping. Companies must have integrity by upholding a sense of security and protecting consumers from the possibility of cyber hacking. The impact caused if consumers do not get privacy during online transactions, apart from reducing satisfaction, also has an impact on their loyalty.

Conclusion and Suggestions

The findings conclude that ET and ESQ have a positive link to ESAT; effect of ET, ESQ and ESAT on ELOY is also positive. ET and ESQ influence ELOY through ESAT. Effect ESAT on ELOY can moderated by privacy.

Researchers strongly recommend the importance of research on strengthening security systems in online shopping because until now the issue of weak privacy has not received maximum handling from the company. Other antecedent factors of E-Loyalty still need to be studied, this is the agenda for further research to modify the model, especially by clarifying new contingency variables related to the phenomenon of cyber hacking.

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