

## **The Role of e-Trust and e-Service Quality on e-Loyalty of e-banking Consumers in Tangerang**

**Adi Widodo<sup>1</sup>, Firdaus Putra<sup>2</sup>, Sukriyah<sup>3</sup>, Multi Nadeak<sup>4</sup>, Dewiana Novitasari<sup>5</sup>**

<sup>1</sup> STIMIK Insan Pembangunan, Indonesia

<sup>2,3,5</sup> STIE Insan Pembangunan, Indonesia

<sup>4</sup> School of Teknologi Bandung, Indonesia

Email: [a\\_widodo75@yahoo.com](mailto:a_widodo75@yahoo.com)<sup>1</sup>, [firdausputraa@gmail.com](mailto:firdausputraa@gmail.com)<sup>2</sup>, [simplechissy@gmail.com](mailto:simplechissy@gmail.com)<sup>3</sup>,  
[multnadeak28@gmail.com](mailto:multnadeak28@gmail.com)<sup>4</sup>, [dhewiediosa@yahoo.co.id](mailto:dhewiediosa@yahoo.co.id)<sup>5</sup>



This is an open access article distributed under the Creative Commons Attribution License  
CC-BY-NC-4.0 ©2022 by author (<https://creativecommons.org/licenses/by-nc/4.0/>)

---

### **ABSTRACT**

The purpose of this study is to analyze the relationship of e-Trust to e-Loyalty, the relationship of e-Service Quality to e-Loyalty and the relationship of e-trust to e-Service Quality. The research method used in this research is quantitative research and explanatory survey. The data used in this study is primary data obtained by distributing online questionnaires to 566 bank customers who use the e-Banking application. The number of respondents was 566 respondents who were selected by simple random sampling of e-Banking application users in Tangerang. To analyze the data from the measurement results of the independent and dependent variables through an online questionnaire. The statistical data processing tool used in this research is SmartPLS 3.0. Based on data analysis, it can be concluded that e-Trust has a positive and significant effect on e-Loyalty, e-Service Quality has a positive and significant effect on e-Loyalty, e-Trust has a positive and significant effect on e-Service Quality.

**Keywords:** e-Trust; e-Service Quality; e-Loyalty; e-banking Consumers.

---

### **INTRODUCTION**

Currently the use of the Internet is arguably getting better, because almost everyone who uses a communication device can connect to the Internet. Automatically everyone who is connected to the Internet can make transactions online, it is only up to the individual's will and what types of online transactions are needed by the internet users. Internet. So that they can use Internet facilities to conduct online banking transactions, namely using Internet Banking services. But when using Internet Banking is it safe? Because when using the Internet, communication devices or computer devices are connected to the global network, so they are very vulnerable to Internet Banking security attacks.

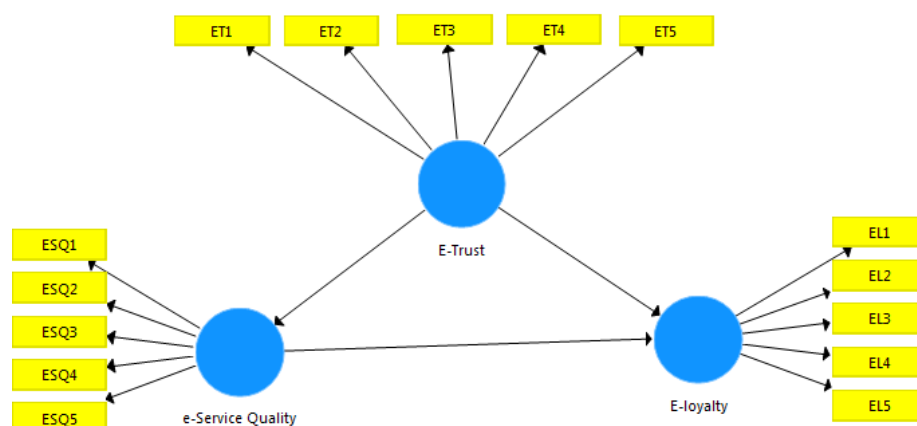
According to Al-Bourini et al. (2021) Technology is something that cannot be separated from everyday life, both at work, school and for entertainment, we use technology. Technology is developing fast, one of the interesting phenomena of technology is the emergence of the Internet. Although the Internet cannot be said to be new, its emergence has changed people's behavior and created convenience for the community, especially those related to information,

communication, and collaboration between the two. Advances in technology and the emergence of the internet today have changed consumer behavior. According to Al-Bourini et al. (2021); Ahmad et al. (2017) Technology that is developing rapidly makes changes to consumer behavior. As a result of these developments, consumer behavior has changed towards modernization by using the internet.

In economic transactions there are interactions between sellers and buyers to strengthen long-term relationships between sellers and buyers as well as in e-banking transactions, the bank tries to build and maintain long-term relationships or bonds with its customers. According to Al-Khayyal et al. (2020); Anser et al. (2021); Azemi et al. (2015) In e-banking, the existence of physical separation between banks and their customers and the absence of physical interaction between consumers and bank employees in e-banking causes a unique situation, so that trust from consumers is the most important thing for banks. The advantage of providing e-banking services for banks is that e-banking can be an inexpensive solution for infrastructure development compared to opening an ATM outlet. But e-banking also opens up opportunities for crime to occur using e-banking. The problem of security and confidentiality of personal and financial data in e-banking is often questioned by customers before they decide to use e-banking. According to Pratiwi et al. (2021); Sathiyavany et al. (2018); Salehnia et al. (2014) E-banking that is able to assure its customers of the security and confidentiality of customer data will gain the trust of customers. Given the weaknesses in e-banking, banks must develop a trusting relationship between banks and their customers, with the aim of promoting transactions using the internet and increasing consumer loyalty to the bank. According to Suariedewi et al. (2020); Sumithra et al. (2019); Tri et al. (2018) The challenge for banks is mainly to acquire loyal customers, due to many factors that influence changes in purchasing decisions. In order to make adjustments to the desires of customers who are vulnerable to change, a survey is needed to find out what attributes can make customers have a high level of loyalty whose effect will be very felt on banks that can survive in long-term competition. The increasing number of banks offering E-banking facilities has led to competitive competition between banks. This condition triggers banks to increase customer loyalty. Having loyal customers is the ultimate goal of the company, because customer loyalty can guarantee the continuity of the company in the long term. The purpose of this study is to analyze the relationship of e-Trust to e-Loyalty, the relationship of e-Service Quality to e-Loyalty and the relationship of e-trust to e-Service Quality.

## METHOD

The research method used in this research is quantitative research and explanatory survey. The data used in this study is primary data obtained by distributing online questionnaires to 566 bank customers in tangerang who use the e-Banking application. The number of respondents was 566 respondents who were selected by simple random sampling of e-Banking application users in Tangerang. To analyze the data from the measurement results of the independent and dependent variables through an online questionnaire, the author uses a numeric/multiple rating list scale. The statistical data processing tool used in this research is SmartPLS 3.0.



**Figure 1.** Research Model

Based on the description of the literature review above, this study formulates the following hypothesis:

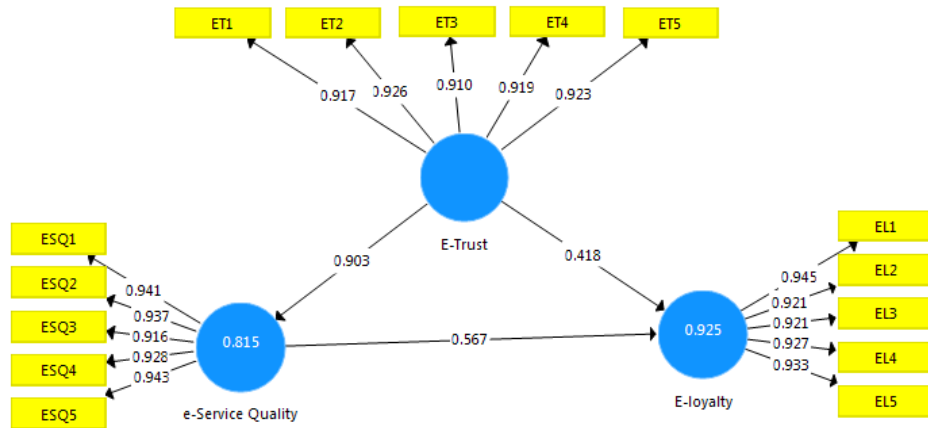
H1: e-Trust has an effect on e-Loyalty.

H2: e-Service Quality has an effect on e-Loyalty.

H3: e-Trust affects e-Service Quality

## RESULT AND DISCUSSION

The results of the PLS analysis can be used to test research hypotheses if all indicators in the PLS model have met the requirements of convergent validity, discriminant validity, and reliability testing. Convergent validity test is done by looking at the loading factor value of each indicator to the construct. In most references, a factor weight of 0.7 or more is considered to have strong enough validation to explain the latent construct (Purwanto et al, 2021). In this study, the minimum accepted loading factor is 0.7 and provided that the AVE value of each construct is  $> 0.5$  (Purwanto et al, 2020). After going through SmartPLS 3.0 processing, all indicators have a loading factor value above 0.7 and an AVE value above 0.5. The fit or valid model of this study can be seen in Figure 2. Thus, the convergent validity of this research model has met the requirements (Purwanto et al., 2019) The value of loadings, Cronbach's alpha, composite reliability, and AVE for each construct can be seen in Table 2. Construct reliability can be assessed from the value of Cronbach's alpha and composite reliability of each construct. The recommended value of composite reliability and Cronbach's alpha is more than 0.7 (Purwanto et al. 2014). The results of the reliability test in table 2 show that all constructs have composite reliability and Cronbach's alpha values greater than 0.7 ( $> 0.7$ ). In conclusion, all constructs have met the required reliability.



**Figure 2.** Valid Research Model

**Table 2**  
Items Loadings, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE)

Variables	Cronbach's Alpha	Rho_A	Composite Reliability	AVE
e-Trust	0,821	0,821	0,913	0,761
e-Loyalty	0,865	0,845	0,813	0,712
e-Service Quality	0,812	0,813	0,934	0,712

The results of the discriminant validity test in table 2 show that all constructs have the AVE square root value above the correlation value with other latent constructs . Likewise, the cross-loading value of all items from one indicator is greater than the other indicator items as mentioned in Table 2, so it can be concluded that the model has met discriminant validity Discriminant validity is carried out to ensure that each concept of each latent variable is different from other latent variables.

**Table 3**  
Nilai R Square

Variables	R Square	R Square Adjusted
e-Loyalty	0,815	0,810
e-Service Quality	0,925	0,920

The value of R square e-Loyalty is 0.815, this means that the e-trust and e-service quality variable contributes to the E-loyalty variable by 81.5% while the remaining 18.5% is influenced by other variables not discussed in this study. The R square value of e-Service Quality is 0.925, this means that e-trust variables contribute to the E-service quality variable by 92.5%% while the remaining 7.5% is influenced by other variables not discussed in this study.

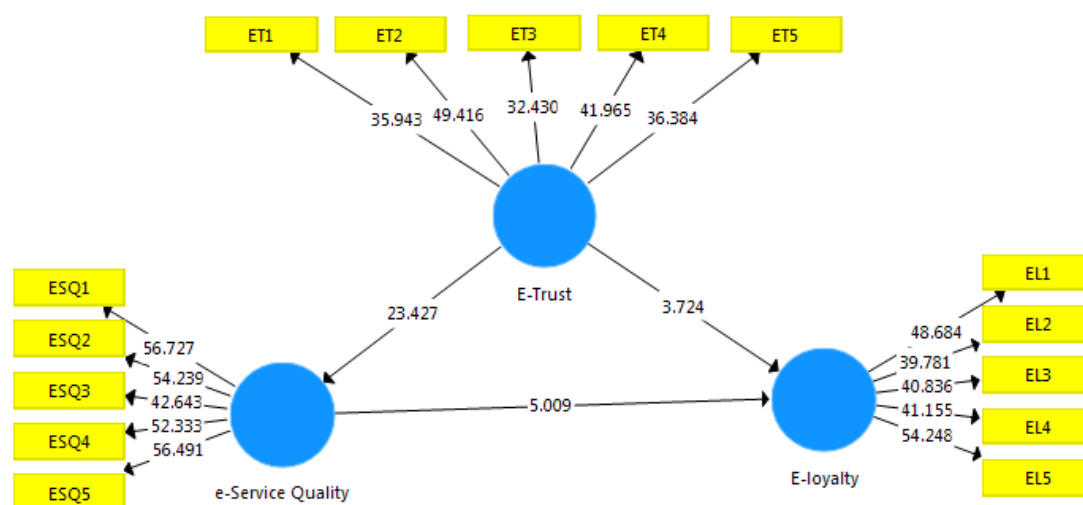


Figure 3. Hypotheses Testing

**Table 4**  
Hypotheses Testing

Hypotheses	Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation	T Statistics	P Values
H1	e-Trust -> e-Loyalty	0,453	0,543	0,023	8,152	0,000
H2	e-Loyalty.-> e-Service Quality	0,453	0,342	0,043	4,592	0,000
H3	e-Trust -> e-Service Quality	0,134	0,435	0,023	3,486	0,000

## Discussion

H1: e-Trust has an effect on e-Loyalty.

Based on the results of data analysis, the p-value value is  $0.000 < 0.050$  so it can be concluded that e-Trust has a positive and significant effect on e-Loyalty, this result is in line with the findings of Salehnia et al. (2014); Shankar et al. (2019);Suaredewi et al. (2020); Sumithra et al. (2019); Tri et al. (2018) that e-Trust has a positive and significant effect on e-Loyalty and according to Ghane et al. (2011);Ghalandari et al. (2012); Goestjahjanti et al. (2021) that e-Trust has a positive and significant effect on e-Loyalty. An increase in the e-Trust variable will encourage a positive and significant increase in the e-Loyalty variable

H2: e-Service Quality has an effect on e-Loyalty.

Based on the results of data analysis, the p-value value is  $0.000 < 0.050$  so it can be concluded that e-Service Quality has a positive and significant effect on e-Loyalty, this result is in line with the findings of Al Dmour et al. (2019); Al-Khayyal et al. (2020); Anser et al. (2021); Azemi et al. (2015) that e-Service Quality has a positive and significant effect on e-Loyalty and According to Salehnia et al. (2014); Shankar et al. (2019);Suaredewi et al. (2020); Sumithra et al. (2019); Tri et al. (2018) that e-Service Quality has a positive and significant effect on e-

Loyalty. Increasing the e-Service Quality variable will encourage a positive and significant increase in the e-Loyalty variable

### H3: e-Trust and its effect on e-Service Quality

Based on the results of data analysis, the p-value value is  $0.000 < 0.050$  so it can be concluded that e-Trust has a positive and significant effect on e-Service Quality, this result is in line with the findings of Ahmad et al. (2017); Al Dmour et al. (2019); Al-Khayyal et al. (2020); Anser et al. (2021); Azemi et al. (2015) that e-Trust has a positive and significant effect on e-Service Quality and according to Goestjahjanti et al. (2021); Haq et al. (2020); Jeyaprabha et al. (2021); Oumar et al. (2017) that e-Trust has a positive and significant effect on e-Service Quality. An increase in the e-Trust variable will encourage a positive and significant increase in the e-Service Quality variable.

## CONCLUSION

Based on data analysis, it can be concluded that e-Trust has a positive and significant effect on e-Loyalty, e-Service Quality has a positive and significant effect on e-Loyalty, e-Trust has a positive and significant effect on e-Service Quality. In the e-Trust variable, the indicator of the level of conformity regarding the security of personal data of e-Banking users gets the lowest score, it is recommended for the Bank, it is expected to maintain the confidentiality of the personal data of e-Banking users and not provide personal data of e-Banking users to other parties or companies other. In the e-Service Quality Variable, an indicator of the level of conformity regarding the speed of responding when a new problem occurs to obtain the lowest score, it is recommended for the Bank to add a feature so that e-Banking users can contact staff online or chat directly through the e-Banking application without having to contact the call center. . Given that the dimension of say positive thing (delivering positive things) with an indicator of how important it is to convey positive things to others about e-Banking, BNI Bank is recommended. improve the service quality of e-Banking users by changing the appearance and upgrading features in the e-Banking application to be more attractive and better. With the results of this study which proves that e-Trust and e-Service Quality have an effect on e-Loyalty, it is recommended for banks to improve service quality by installing an up to date network firewall for security in using e-Banking applications so that e-banking users can use e-banking applications. Banking is more secure and loyal to use e-Banking.

## REFERENCES

- Al-Bourini, F. A., Aljawarneh, N. M., Almaaitah, M. F., Altahat, S., Alomari, Z. S., & Sokiyna, M. Y. (2021). The Role of E-Word of Mouth in the Relationship between Online Destination Image, E-satisfaction, E-Trust & E-Service Quality for International Tourists Perception. *Journal of Information Technology Management, 13*(Special Issue: Big Data Analytics and Management in Internet of Things), 92-110.

- Ahmad, A., Rahman, O., & Khan, M. N. (2017). Exploring the role of website quality and hedonism in the formation of e-satisfaction and e-loyalty: Evidence from internet users in India. *Journal of Research in Interactive Marketing*.
- Al Dmour, R. H., Alnafouri, M., & Al-Alwan, A. (2019). The mediating role of E-Satisfaction on the relationship between E-Service quality and customer E-Loyalty in internet banking. *Jordan Journal of Business Administration*, 15(2), 209-226.
- Al-Khayyal, A., Alshurideh, M., Al Kurdi, B., & Aburayya, A. (2020). The Impact of Electronic Service Quality Dimensions on Customers' E-Shopping and E-Loyalty via the Impact of E-satisfaction and E-Trust: A Qualitative Approach. *International Journal of Innovation, Creativity and Change*, 14(9), 257-281.
- Anser, M. K., Tabash, M. I., Nassani, A. A., Aldakhil, A. M., & Yousaf, Z. (2021). *Toward the e-loyalty of digital library users: investigating the role of e-service quality and e-trust in digital economy*. Library Hi Tech.
- Azemi, F., & Binaku, K. (2015). E-Tailing in Kosovo: The Effect of Trust, Satisfaction, and Service Quality in Achieving Consumer E-Loyalty. *Tranzicija*, 17(36), 67-77.
- Ghane, S. O. H. E. I. L. A., Fathian, M., & Gholamian, M. R. (2011). Full relationship among e-satisfaction, e-trust, e-service quality, and e-loyalty: The case of Iran e-banking. *Journal of Theoretical and Applied Information Technology*, 33(1), 1-6.
- Ghalandari, K. (2012). The effect of e-service quality on e-trust and e-satisfaction as key factors influencing creation of e-loyalty in e-business context: The moderating role of situational factors. *Journal of Basic and Applied Scientific Research*, 2(12), 12847-12855.
- Goestjahjanti, F. S., Sadewa, T., Novitasari, D., Fahlevi, M., & Purwanto, A. (2021). The Role Of Service Quality And Customer Satisfaction On Customer Loyalty Of Mobile Banking Product: An Empirical Study Of Banks In Jakarta. *NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal| NVEO*, 13345-13360.
- Haq, I. U., & Awan, T. M. (2020). Impact of e-banking service quality on e-loyalty in pandemic times through interplay of e-satisfaction. *Vilakshan–XIMB Journal of Management*.
- Jasmani, J., & Sunarsi, D. (2020). The Influence of Product Mix, Promotion Mix and Brand Image on Consumer Purchasing Decisions of Sari Roti Products in South Tangerang. *PINISI Discretion Review*, 1(1), 165–174.
- Jasmani, J., Sutiman, S., & Sunarsi, D. (2020). Analysis of the Effect of Prices, Promotions and Products on Purchase Interest Impacts on Consumer Satisfaction of VIVO Brand Mobile Phones in South Tangerang Region. *Jurnal Ad'ministrare*, 7(1), 73–82.
- Jeyaprabha, B., & Sundar, C. (2021). The Mediating Effect of E-Satisfaction on E-Service Quality and E-Loyalty Link in Securities Brokerage Industry. *REVISTA GEINTEC-GESTAO INOVACAO E TECNOLOGIAS*, 11(2), 931-940.
- Oumar, T. K., Mang'Unyi, E. E., Govender, K. K., & Rajkaran, S. (2017). Exploring the e-CRM–e-customer-e-loyalty nexus: a Kenyan commercial bank case study. *Management & Marketing. Challenges for the Knowledge Society*, 12(4), 674-696.

- Pratiwi, L., Sunaryo, S., & Mugiono, M. (2021). The effect of e-service quality on e-loyalty mediated by e-trust and brand image variables: A study on OVO E-Wallet application users in Malang City. *International Journal of Research in Business and Social Science* (2147-4478), 10(6), 56-62.
- Purwanto, A., Asbari, M., & Santoso, T. I. (2021b). Education Management Research Data Analysis: Comparison of Results between Lisrel, Tetrad, GSCA, Amos, Smartpls, Warppls, And SPSS for Small Samples. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 6(2), 382–399. <https://e-journal.ikhac.ac.id/index.php/nidhomulhaq/article/view/1575>
- Purwanto, A., Asbari, M., Santoso, T. I., Haque, M. G., & Nurjaya. (2019). Marketing Research Quantitative Analysis for Large Sample: Comparing of Lisrel, Tetrad, GSCA, Amos, SmartPLS, WarpPLS, and SPSS. *Jurnal Ilmiah Ilmu Administrasi Publik: Jurnal Pemikiran Dan Penelitian Administrasi Publik*, 9(2), 355–372. <https://ojs.unm.ac.id/iap/article/view/22803>
- Purwanto, A., Asbari, M., Santoso, T. I., Paramarta, V., & Sunarsih, D. (2020). Social and Management Research Quantitative Analysis for Medium Sample: Comparing of Lisrel, Tetrad, GSCA, Amos, SmartPLS, WarpPLS, and SPSS. *Jurnal Ilmiah Ilmu Administrasi Publik: Jurnal Pemikiran Dan Penelitian Administrasi Publik*, 9(2), 518–532. <https://ojs.unm.ac.id/iap/article/view/22804>
- Purwanto, A., Asbari, M., Santoso, T. I., Sunarsi, D., & Ilham, D. (2021). Education Research Quantitative Analysis for Little Respondents: Comparing of Lisrel, Tetrad, GSCA, Amos, SmartPLS, WarpPLS, and SPSS. *Jurnal Studi Guru Dan Pembelajaran*, 4(2), 335–350. <https://e-journal.my.id/jsgp/article/view/1326>
- Sathiyavany, N., & Shivany, S. (2018). E-banking service qualities, e-customer satisfaction, and e-loyalty: a conceptual model. *The International Journal of Social Sciences and Humanities Invention*, 5(6), 4808-4819.
- Salehnia, M., Saki, M., Eshaghi, A., & Salehnia, N. (2014, April). A Model of E-Loyalty and Word-Of-Mouth based on e-trust in E-banking services (Case Study: Mellat Bank). In *8th International Conference on e-Commerce in Developing Countries: With Focus on e-Trust* (pp. 1-7). IEEE.
- Shankar, A., & Jebarajakirthy, C. (2019). The influence of e-banking service quality on customer loyalty: a moderated mediation approach. *International Journal of Bank Marketing*.
- Suariedewi, I. G. A. A. M., & Suprapti, N. W. S. (2020). Effect of mobile service quality to e-trust to develop esatisfaction and e-loyalty mobile banking services. *International Research Journal of Management, IT & Social Sciences*, 7(1), 185-196.
- Sumithra, K., & Sivanenthira, S. (2019). E-service quality and customer loyalty: Special reference to banking sectors in Jaffna District. *SAARJ Journal on Banking & Insurance Research*, 8(6), 16-19.

- Tri, P. T. C. I. (2018). Effect of quality of service, quality products, security and satisfaction as moderating variables to loyalty on e-banking. *Russian Journal of Agricultural and Socio-Economic Sciences*, 83(11).