

E-Service Quality and E-CRM on Mybca Customer Loyalty

Juniarti*, Susilowati Natakoesoemah

Universitas Bunda Mulia, Indonesia

Email: m83250013@student.ubm.ac.id*

Keywords:	Abstract
digital service communication; e-service quality; e-crm; e-trust; e-loyalty	The development of digital banking services requires banks to provide fast, secure, personalized, and consistent service experiences. This study aimed to analyze the effects of e-service quality and e-customer relationship management on MyBCA customers' e-loyalty through e-trust and e-satisfaction. The study employed an explanatory quantitative approach using a survey of 210 BCA customers who were domiciled in or actively used services in Tangerang, were at least 17 years old, and had used MyBCA within the previous three months. Data were analyzed using SEM-PLS through the evaluation of measurement and structural models. The results showed that all indicators met validity and reliability criteria, the model demonstrated good fit, and all direct-effect and mediation hypotheses were supported. The findings indicated that digital service quality and electronic relationship management not only directly enhanced customer loyalty but also influenced loyalty through the formation of trust and satisfaction. Theoretically, these findings strengthened the application of computer-mediated communication and the stimulus–organism–response framework in the context of digital banking service interactions. Practically, BCA should continue to improve application stability, transaction security, communication relevance, and the responsiveness of digital support services to strengthen customer loyalty.

INTRODUCTION

Digital banking transformation has changed the relationship between banks and customers from predominantly face-to-face interactions to technology-mediated interactions. In this context, mobile banking applications are not only transaction platforms but also digital service communication environments that integrate information, systems, user experiences, and customer responses. MyBCA represents one of BCA's strategic digital channels, as increasing transaction activity through the application has strengthened the role of digital services within Indonesia's banking ecosystem (Bank Central Asia, 2025; GoodStats, 2024).

These developments have shifted customer loyalty from being determined solely by banking products to being influenced by the quality of digital service experiences. Customers evaluate whether applications are easy to use, secure, informative, reliable, and responsive when addressing problems. In the electronic service literature, e-service quality has been shown to influence customer trust, satisfaction, and loyalty across various digital service contexts (Alnaim et al., 2022; Ayinaddis et al., 2023; Khan et al., 2023; Qatawneh et al., 2024).

In addition to service quality, electronic customer relationship management (e-CRM) represents an important component of relational communication in digital services. E-CRM enables organizations to provide relevant information, offer customer support, respond to complaints, and maintain continuous interactions with customers. This approach aligns with relationship marketing perspectives, which view loyalty as the outcome of consistently maintained

relationships rather than merely the result of individual transactions (Casaca, 2023; Hoang & Nguyen, 2024; Mokha & Kumar, 2022).

Theoretically, this research was positioned within the perspectives of computer-mediated communication and the stimulus–organism–response (S–O–R) framework. The computer-mediated communication perspective explains that customer interactions with banks are facilitated through technology, meaning that system quality, digital messages, and service responses influence user perceptions. Meanwhile, the S–O–R framework suggests that stimuli in the form of e-service quality and e-CRM influence internal psychological states, such as trust and satisfaction, which subsequently generate behavioral responses, including loyalty (Huang, 2023; Mahr & Huh, 2022; Yang & Sundar, 2024).

The novelty of this research lies in its integrated approach, which combines e-service quality and e-CRM as dual determinants of e-loyalty, mediated by e-trust and e-satisfaction, within the Indonesian digital banking context, specifically among MyBCA users. Although previous studies have examined these relationships separately, this research proposed a comprehensive model that captures both the technological and relational dimensions of digital banking service experiences. Furthermore, applying the S–O–R framework to digital banking services in Indonesia provides theoretical insights into technology-mediated service experiences in emerging markets (Hendriyani et al., 2026; Syamsuar & Witarasyah, 2025).

Previous studies have demonstrated significant relationships among electronic service quality, trust, satisfaction, and loyalty. However, research integrating e-service quality, e-CRM, e-trust, e-satisfaction, and e-loyalty within the MyBCA context remains limited, particularly from a digital service communication perspective. Therefore, this study aimed to analyze the effects of e-service quality and e-CRM on MyBCA customers' e-loyalty through e-trust and e-satisfaction.

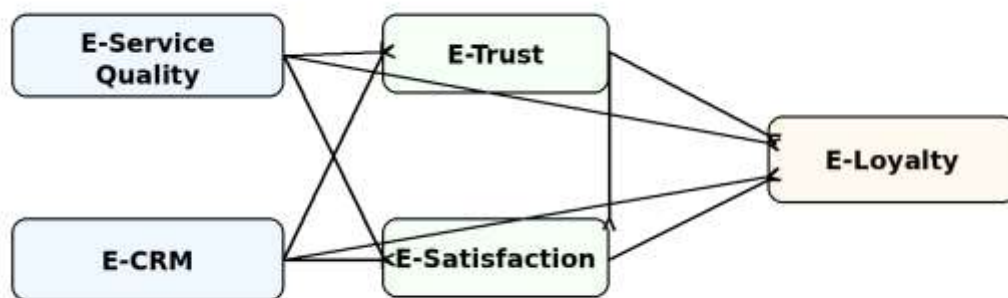


Figure 1. Research Conceptual Model

Source: Researcher's Results, 2026

METHOD

This study employed a positivistic paradigm with an explanatory quantitative approach. A cross-sectional research design was applied, with data collected during a specific period through an online questionnaire. The unit of analysis was individual BCA customers who used the MyBCA application. The quantitative approach was selected to examine the relationships among variables within the digital service communication model.

The research sample consisted of 210 respondents selected using purposive sampling. The respondent criteria included BCA customers who were domiciled in or actively used services in

Tangerang, had used MyBCA within the previous three months, were at least 17 years old, and were willing to participate in the survey. The research instrument used a five-point Likert scale to measure e-service quality, e-CRM, e-trust, e-satisfaction, and e-loyalty constructs. Data were analyzed using SEM-PLS because the model involved latent constructs, direct relationships, and mediating effects. Model evaluation was conducted based on outer loading, Cronbach's alpha, composite reliability, average variance extracted (AVE), HTMT ratio, variance inflation factor (VIF), R-square, F-square, model fit, and bootstrapping procedures (Hair & Alamer, 2022; Ringle et al., 2023).

Table 1. Respondent Characteristics

Characteristics	Categories	Frequency	Percentage
Gender	Men	96	45,71%
Gender	Women	114	54,29%
Age	17-24 years old	74	35,24%
Age	25-31 years old	52	24,76%
Age	32-38 years old	44	20,95%
Age	Over 38 years old	40	19,05%
BCA customer status	Yes	210	100,00%
Domicile/activities in Tangerang	Yes	210	100,00%
Used MyBCA in the last 3 months	Yes	210	100,00%
Long time using MyBCA	Less than 3 months	23	10,95%
Long time using MyBCA	3-6 months	30	14,29%
Long time using MyBCA	7-12 months	58	27,62%
Long time using MyBCA	More than 1 year	99	47,14%
Frequency of using MyBCA	Rare	7	3,33%
Frequency of using MyBCA	Several times a month	56	26,67%
Frequency of using MyBCA	Several times a week	80	38,10%
Frequency of using MyBCA	Every day	67	31,90%

Source: Primary data processed, 2026

RESULTS AND DISCUSSION

Respondent profile and feasibility of the measurement model

The respondents' profiles show that this research is relevant for reading MyBCA's digital service communications. All respondents were BCA customers, domiciled or active in Tangerang, used MyBCA in the last three months, and were willing to participate in the research. The composition of women is slightly more dominant than that of men, while the age group of 17-24 years is the largest group. In terms of usage behavior, respondents who used MyBCA for more than one year were the largest group, and the frequency of use was dominated by the category several times a week and every day. This pattern shows that respondents have enough experience to assess service quality, relational communication, trust, satisfaction, and digital loyalty.

The results of the evaluation of the measurement model show that the entire construct meets the validity and reliability. The *outer loading values* of all indicators are in the valid category, while Cronbach's Alpha, Composite Reliability, and AVE meet the recommended criteria. These findings suggest that the instrument is able to measure the constructed constructs consistently. In

the context of SEM-PLS, the fulfillment of validity and reliability is an important prerequisite before structural relationships are interpreted (Hair & Alamer, 2022; Ringle et al., 2023).

Table 2. Evaluation of Construct Validity and Reliability

Variable	Cronbach's Alpha	Composite Reliability	AVE	Remarks
E-CRM	0,949	0,961	0,832	Reliable and valid
E-Loyalty	0,948	0,960	0,827	Reliable and valid
E-Satisfaction	0,944	0,957	0,817	Reliable and valid
E-Service Quality	0,939	0,954	0,804	Reliable and valid
E-Trust	0,942	0,956	0,812	Reliable and valid

Source: Primary data processed, 2026

The evaluation of the structural model also shows a strong clear force. The R-square value for *e-loyalty* is in the strong category, while *e-trust* and *e-satisfaction* are in the moderate to strong category. This means that the combination of the quality of electronic services and *E-CRM* is able to explain the formation of customer trust, satisfaction, and digital loyalty substantially. The model also showed a good fit through SRMR and NFI, so the relationship structure tested could be used to explain the research phenomenon.

The Influence of e-service quality and E-CRM on e-loyalty

The test results show that *e-service quality* has an effect on *e-trust*, *e-satisfaction*, and *e-loyalty*. Conceptually, this result can be explained because customers assess the quality of digital services from the ease of transactions, system stability, data security, clarity of information, and ease of obtaining assistance. When an application is able to provide a secure, easy, and responsive service experience, customers are more likely to build confidence that the bank is reliable. This trust then strengthens satisfaction and loyalty. These findings are in line with research in the context of digital services and banking which shows that *e-service quality* is the main stimulus for the formation of customer satisfaction, trust, and loyalty (Alnaim et al., 2022; Ayinaddis et al., 2023; Khan et al., 2023; Qatawneh et al., 2024).

On the other hand, *E-CRM* has also been proven to have an effect on *e-trust*, *e-satisfaction*, and *e-loyalty*. In digital service communication, *E-CRM* demonstrates the bank's ability to build relationships through relevant information, clear communication, access to help, complaint response, and relational consistency. When customers feel that communication from MyBCA is as needed and easily accessible, the relationship between banks and customers becomes more personal. This situation strengthens trust because the bank is perceived to be present and responsive, and strengthens satisfaction because the service experience feels more in line with expectations. These findings support a study that places *E-CRM* as a mechanism for strengthening customer experience and loyalty in the digital ecosystem (Al-Bashayreh et al., 2022; Mahfuzh et al., 2025; Mokha & Kumar, 2022; Pramanik et al., 2024).

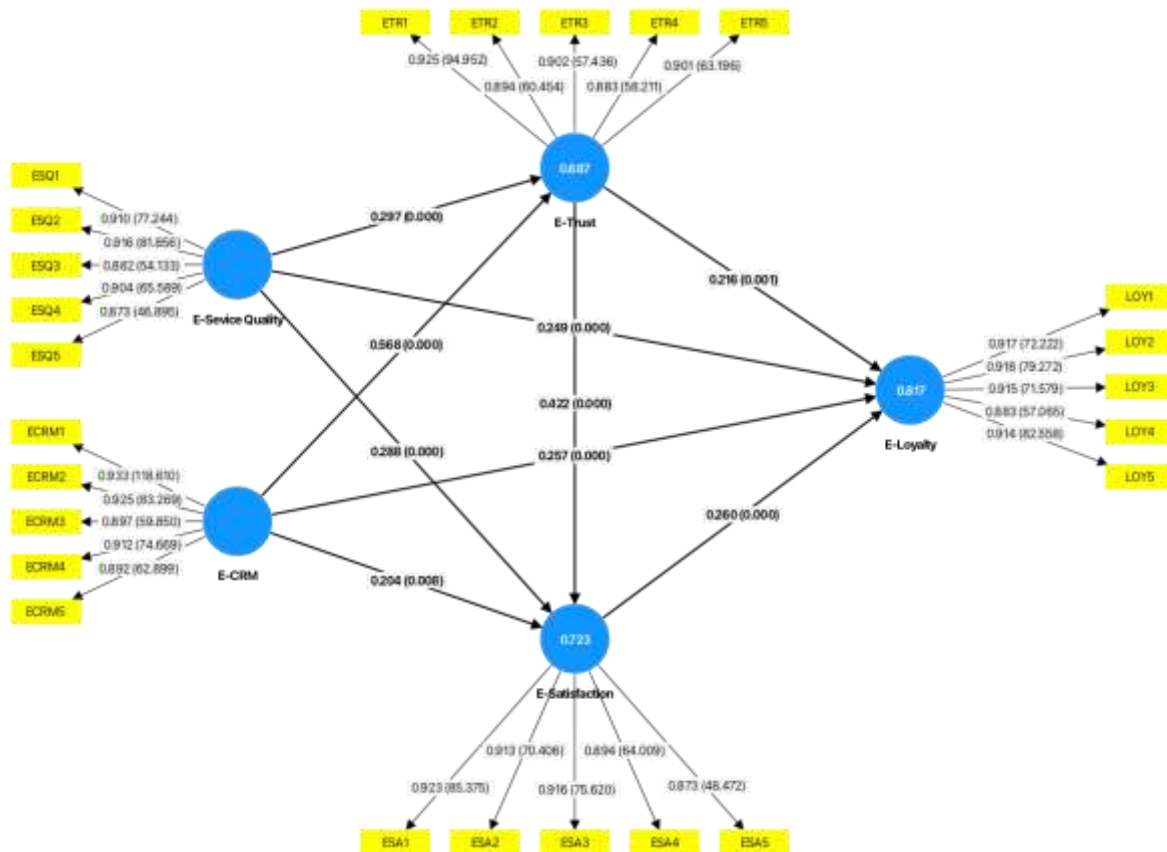


Figure 2. Research Conceptual Model
Source: Researcher's Results, 2026

Table 3. Direct Hypothesis Testing Results

Code	Relationships	Original Sample	T-Statistics	P-Values	Remarks
H1	E-Service Quality -> E-Trust	0,297	3,941	0,000	Accepted
H2	E-Service Quality -> E-Satisfaction	0,288	4,215	0,000	Accepted
H3	E-Service Quality -> E-Loyalty	0,249	3,706	0,000	Accepted
H4	E-CRM -> E-Trust	0,568	8,101	0,000	Accepted
H5	E-CRM -> E-Satisfaction	0,204	2,668	0,008	Accepted
H6	E-CRM -> E-Loyalty	0,257	3,703	0,000	Accepted
H7	E-Trust -> E-Satisfaction	0,422	6,635	0,000	Accepted
H8	E-Trust -> E-Loyalty	0,216	3,258	0,001	Accepted
H9	E-Satisfaction -> E-Loyalty	0,260	4,332	0,000	Accepted

Source: Primary data processed, 2026

The role of e-trust and e-satisfaction as mediators

Trust and satisfaction have proven to be important psychological pathways in the formation of customer digital loyalty. *E-trust* affects *e-satisfaction* and *e-loyalty*, while *e-satisfaction* affects *e-loyalty*. This result shows that MyBCA's customer loyalty does not only arise because the application has complete features, but also because customers feel that the service is trustworthy and provides a satisfactory experience. In the context of service communication, trust is formed when the message and actions of the service are consistent, while satisfaction is formed when the actual experience matches the customer's expectations. Digital banking research also confirms that

trust and satisfaction are important determinants of customer loyalty (Kim & Yum, 2024; Lolemo & Pandya, 2025; Wani et al., 2023; Yum & Yoo, 2023).

The results of the mediation show that *e-trust* and *e-satisfaction* continue the influence of *e-service quality* and *E-CRM* towards *e-loyalty*. This means that the quality of service and management of electronic relationships will be more effective in forming loyalty when they first build trust and satisfaction. The *E-CRM -> e-trust -> e-satisfaction -> e-loyalty* series shows that a personal and responsive digital relationship creates trust, then gives rise to satisfaction, and ultimately strengthens loyalty. Thus, digital loyalty cannot only be built through technology, but must also be sustained by consistent relational communication and a satisfying service experience (Hoang & Nguyen, 2024; Hollebeek et al., 2023; Kim & Yang, 2025; Mahfuzh et al., 2025).

Table 4. Mediation Test Results

Code	Indirect Relationships	Original Sample	P-Values	Remarks
H10	E-Service Quality -> E-Trust -> E-Satisfaction	0,125	0,001	Accepted
H11	E-Service Quality -> E-Satisfaction -> E-Loyalty	0,075	0,004	Accepted
H12	E-CRM -> E-Trust -> E-Loyalty	0,123	0,002	Accepted
H13	E-CRM -> E-Satisfaction -> E-Loyalty	0,053	0,018	Accepted

Source: Primary data processed, 2026

Theoretical and practical implications

Theoretically, this research strengthens the understanding that digital banking applications are a technology-mediated communication space. System quality, security, information messages, and service response are part of the communication stimulus that builds customer trust and satisfaction. These findings demonstrate the relevance of *the computer-mediated communication perspective* in explaining the experience of digital services, while expanding the *stimulus-organism-response framework* in the context of Indonesian digital banking.

Practically, BCA needs to maintain application stability, transaction security, and clarity of information as the foundation of *e-service quality*. At the same time, relational communication needs to be strengthened through personalized notifications, quick complaint responses, easy-to-find help channels, and consistent service messages. MyBCA's customer loyalty will be stronger when digital services not only function technically, but also create an experience that is trusted, satisfying, and feels close to customer needs.

CONCLUSION

This study concluded that e-service quality and e-CRM influenced MyBCA customers' e-loyalty, both directly and indirectly through e-trust and e-satisfaction. All tested hypotheses were supported, indicating that the research model explained how digital loyalty was formed through the combination of service quality, relational communication, trust, and satisfaction. These findings demonstrated that the banking application experience was not solely technical but also communicative, as customers evaluated the quality of information, responses, security, and relationships established through digital channels.

The implications of this research highlight the importance of implementing a more integrated digital service communication strategy. BCA should manage MyBCA as a relational digital channel that emphasizes security, convenience, information clarity, and responsiveness. Future research could expand the research scope to other banking applications, incorporate additional

variables such as digital engagement or brand image, and employ longitudinal designs to examine changes in customer loyalty over time.

REFERENCES

- Al-Bashayreh, M., Almajali, D., Al-Okaily, M., Masa'deh, R., & Al-Adwan, A. (2022). Evaluating electronic customer relationship management system success: Customer knowledge as a moderator. *Sustainability*, 14(19), Article 12310. <https://doi.org/10.3390/su141912310>
- Alnaim, A. F., Sobaih, A. E. E., & Elshaer, I. A. (2022). Measuring the mediating roles of e-trust and e-satisfaction in the relationship between e-service quality and e-loyalty: A structural modeling approach. *Mathematics*, 10(13), Article 2328. <https://doi.org/10.3390/math10132328>
- Ayinaddis, S. G., Taye, B. A., & Yirsaw, B. G. (2023). Examining the effect of electronic banking service quality on customer satisfaction and loyalty: An implication for technological innovation. *Journal of Innovation and Entrepreneurship*, 12, Article 22. <https://doi.org/10.1186/s13731-023-00287-y>
- Bank Central Asia. (2025, February 24). *BCA reveals 3 key drivers of myBCA transaction growth*. <https://www.bca.co.id/>
- Casaca, J. A. (2023). Relationship marketing and customer retention: A systematic literature review. *Studies in Business and Economics*, 18(3), 44–66. <https://doi.org/10.2478/sbe-2023-0044>
- GoodStats. (2024). *The most popular mobile banking in Indonesia 2024*. <https://data.goodstats.id/>
- Hair, J. F., & Alamer, A. (2022). Partial least squares structural equation modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), Article 100027. <https://doi.org/10.1016/j.rmal.2022.100027>
- Hendriyani, C., Sutarjo, S., Rahmayanti, I., & Nuryan, I. (2026). AI interactivity in e-CRM and customer adoption resilience in digital banking: The roles of cognitive trust, affective trust, and switch-point optimization efficacy. *F1000Research*, 15, 1252.
- Hoang, D. P., & Nguyen, N. H. (2024). Linking relationship marketing to customer loyalty in the e-banking context: The central role of customer satisfaction. *Gadjah Mada International Journal of Business*, 26(1), 109–140.
- Hollebeek, L. D., Islam, J. U., Rahman, Z., Babić Rosario, A., Hammedi, W., & Rather, R. A. (2023). Digital customer engagement: A systematic literature review and research agenda. *Australian Journal of Management*, 48(3), 640–668.
- Huang, Y. (2023). Using SOR framework to explore the driving factors of older adults' smartphone use behavior. *Humanities and Social Sciences Communications*, 10, Article 726.
- Khan, F. N., Arshad, M. U., & Munir, M. (2023). Impact of e-service quality on e-loyalty of online banking customers in Pakistan during the COVID-19 pandemic: Mediating role of e-satisfaction. *Future Business Journal*, 9, Article 24. <https://doi.org/10.1186/s43093-023-00201-8>
- Kim, S. H., & Yang, Y. R. (2025). The effect of digital quality on customer satisfaction and brand loyalty under environmental uncertainty: Evidence from the banking industry. *Sustainability*, 17(8), Article 3500. <https://doi.org/10.3390/su17083500>
- Kim, Y., & Yum, K. (2024). Understanding customer loyalty in banking industry: A systematic review and meta-analysis. *Heliyon*, 10(15), Article e35788. <https://doi.org/10.1016/j.heliyon.2024.e35788>

- Lolemo, T. D., & Pandya, S. (2025). Customer e-satisfaction as a mediator between e-service quality, brand image, and e-loyalty: Insights from Ethiopian digital banking technology. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(2), Article 100515.
- Mahfuzh, M., Setyono, J., & Riza, A. F. (2025). Examining the model for enhancing e-loyalty in digital banks. *Significant: Journal of Economics*, 14(1), 1–18.
- Mahr, D., & Huh, J. (2022). Technologies in service communication: Looking forward. *Journal of Service Management*, 33(4–5), 648–656. <https://doi.org/10.1108/JOSM-03-2022-0075>
- Mokha, A. K., & Kumar, P. (2022). Examining the interconnections between E-CRM, customer experience, customer satisfaction and customer loyalty: A mediation approach. *Journal of Electronic Commerce in Organizations*, 20(1), 1–21. <https://doi.org/10.4018/JECO.292474>
- Pramanik, S. A. K., Azam, M. S., & Rakib, M. R. H. K. (2024). Enhancing customer loyalty in financial service through harnessing relationship marketing: The mediating effects of brand image. *International Journal of Electronic Customer Relationship Management*, 14(2), 181–205. <https://doi.org/10.1504/IJECRM.2024.138649>
- Qatawneh, N., Al-Okaily, M., Alkhasawneh, R., Althonayan, A., & Tarawneh, A. (2024). The mediating role of e-trust and e-satisfaction in the relationship between e-service quality and e-loyalty toward e-government services. *Global Knowledge, Memory and Communication*. Advance online publication. <https://doi.org/10.1108/GKMC-07-2023-0263>
- Ringle, C. M., Sarstedt, M., Sinkovics, N., & Sinkovics, R. R. (2023). A perspective on using partial least squares structural equation modelling in data articles. *Data in Brief*, 48, Article 109074. <https://doi.org/10.1016/j.dib.2023.109074>
- Syamsuar, D., & Witarsyah, D. (2025). The role of perceived value and risk in shaping purchase intentions in live-streaming commerce: Evidence from Indonesia. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(4), 298.
- Wani, T. A., Bhatnagar, A., & Mir, A. A. (2023). The impact of e-service quality on e-loyalty and revisit intention through the mediating role of e-satisfaction and e-trust. *African Journal of Hospitality, Tourism and Leisure*, 12(2), 555–573.
- Yang, H. J., & Sundar, S. S. (2024). Machine heuristic: Concept explication and development of a measurement scale. *Journal of Computer-Mediated Communication*, 29(6), Article zmae019. <https://doi.org/10.1093/jcmc/zmae019>
- Yum, K., & Yoo, B. (2023). The impact of service quality on customer loyalty through customer satisfaction in mobile social media. *Sustainability*, 15(14), Article 11214.