

An Analysis of the Implementation of Electronic Customer Relationship Management (E-CRM) Towards Customer Loyalty

Graha Noviana^{1*}

¹ Universitas Pendidikan Indonesia

*Corresponding author. Email: ngraha@bankbjb.co.id

ABSTRACT

The presence of customers is the most important component in a business. For this reason, customer loyalty to the company must be maintained and improved so that the business can survive and grow. This research is a quantitative study that aims to look at the relationship between electronic customer relationship management (ECRM) on the loyalty. Data in this study were collected through ECRM quality measurement questionnaires and customer loyalty levels. Then, the collected data is analyzed using simple linear regression analysis. The results of this study indicate that there is a positive and significant effect between the effectiveness of the ECRM on the level of customer loyalty from these results it can be recommended that to increase customer loyalty, it is important to improve the quality and effectiveness of ECRM.

Keywords: *Customer Loyalty, Innovative technology, Customer Relationship*

1. INTRODUCTION

Customers are regarded as a critical component in the success of every company. A customer is someone who pays for a company's services or good and makes it well operate [1]. Regarding this, customers should be maintained and respected at all times because they are very valuable asset to a company [2]. By maintaining and respecting customers, the business will continue to grow as it increases the profits [3]. In other words, if an entrepreneur wants to run and develop his business, he needs to maintain customer loyalty.

The level of customer loyalty can be seen from four dimensions, which are cognitive, affective, conative, and action aspects [4]. Cognitive aspects relate to customer knowledge of the products and services offered by the company. Affective aspects refer to general evaluations of the customer's emotional ties with the company. Conative aspects are the customer's

commitment to the purchase of products, or the use of services owned or provided by the company again in the future. Whereas the aspect of action is related to the positive assessment given by the customer to the company such as recommending the company to others compared to other companies. The higher the level of customer loyalty, the more likely it is that the company to develop [5]. Therefore, customer loyalty to the company will be the key to success for the company [6].

Many studies have found that customer satisfaction has a great influence on customer loyalty. A study conducted by [7] found that customer satisfaction at reputable banks in Nigeria made customers loyal customers. There is also a research conducted by [8] who investigated that customer loyalty was greatly influenced by their satisfaction with the services provided by the company. Similar results were also found by reference [9] was stated underlining that bank customer satisfaction has a positive effect on the loyalty

of the bank's customers. So, they suggest that every bank must strive to improve the satisfaction of their customers.

Customers must be satisfied and loyal, which necessitates a variety of efforts. One thing that can be done is to improve customer communication. Communicating well verbally and nonverbally will make customers feel respected and affect their satisfaction [10]. In the present era of the industrial revolution 4.0, communication is not only done by face to face, but also through an intermediary of electronic communication tools. The Electronic Customer Relationship Management (E-CRM) system emerged. E-CRM has been implemented with the aim of establishing communication with customers. Relationship Marketing is all marketing activities aimed at the establishment, development and maintenance of interactions between various types of relationships with companies [11]. E-CRM is becoming increasingly important as the number of customers from millennials grows.

It is also an innovative technology that seeks to increase customer satisfaction, loyalty, and profitability by acquiring, developing and maintaining effective customer relationships and interactions with stakeholders [12]. E-CRM is used to manage interactions between companies and customers or prospective customers by utilizing data or track record of customer transactions at the company [13]. Since CRM aims to understand the needs and desires of consumers by placing these needs at the heart of business, E-CRM will be able to increase company profits [14,15].

Moreover, Electronic Customer Relationship Management (E-CRM) is an innovative technology that seeks to increase customer satisfaction, loyalty, and profitability by acquiring, developing, and maintaining effective customer relationships and interactions with stakeholders [12]. It manages interactions between companies and customers or prospective customers by utilizing data or track record of customer transactions at the company [13]. It further understands the needs and desires of consumers by placing these needs at the heart of the business by integrating them with organizational strategies [14]. If implemented properly, the E-CRM will be able to increase company profits [15]. In measuring the effectiveness of E-CRM there are five variables that must be assessed, namely: organizational commitment, customer experience, process based approach, and reliability, technology orientation [16]. In detail the indicators of each of these aspects can be seen in table 1.

Table 1. Variables and Indicators of E-CRME effectiveness

VARIABLES	INDICATORS
Organizational Commitment	This bank regularly uses personal information to provide specific products/ services
	Bank employees often interact with customers to assess service performance
	This bank assesses customer satisfaction regularly
	This bank carefully evaluates the changing needs of customers
Customer Experience	This bank immediately handles customer complaints
	This bank really pays attention to customer problems
	This bank effectively communicates with customers
	This bank is cooperative
Process Based Approach	This bank provides the fastest service
	This bank designs their service processes to meet customer desires
	This bank always conducts transactions correctly and quickly
	This bank provides added value information on the Products and Services offered
Reliability	This bank maintains consistent service standards
	This bank maintains consistent service standards
Technology Orientation	This bank uses the latest technology (ATM, mobile banking and internet banking) to offer quality services
	The bank makes effective use of ATMs, mobile banking and internet banking to improve customer service

1.1. Customer Loyalty

Customer loyalty describes the type of customer behavior that is focused on good experiences and values received from a brand, so that they purchase the products or services provided, although it is not the most reasonable choice for them [17].

Customer could repurchase a product or use a company's services if they are satisfied with the services offered, and a businessman will always be looking for new ways to keep their customers loyal [18].

Loyal customers are those who recommend a company to others, always buy or use services at the company, always convey positive things about the company, and position themselves as customers in the company in the future [19]. Customer loyalty will have an impact on retention, repurchase, and longterm commitment [20]. Theoretically reference [4] was stated that there are four aspects that can determine customer loyalty, namely cognitive, affective, conative, and action. However, after empirically tested by reference [21], three of them were proven to be effective in determining customer loyalty, namely affective, conative, and action. In detail, each variable and indicator of customer loyalty can be seen in the following table 2.

Table 2. Variables and Indicators of Customer Loyalty

Variable	Indicator
Affective	I become a customer of this bank because I like this bank
	I prefer to be a customer at this bank than being a customer at another bank
	I feel more comfortable with this bank than other banks
	I am more interested in the products and services at this bank compared to other banks
Conative	I will continue to be a customer of this bank in the future
	I will use other products and services offered by this Bank
Action	I would advise this Bank to anyone who asks me for consideration regarding bank products and services
	I always give positive information about this bank to others
	I made this bank the first choice in terms of banking products and services

Considering the importance of customer loyalty in banking industry through E-CRM, this study aimed to find out whether there is a relationship between the qualities of E-CRM on the loyalty of bank customer and also collaborate with the previous studies about E-CRM and customer loyalty.

2. METHODS

This ex post facto study aimed to determine the relationship between E-CRM quality and loyalty levels of bank customers. It involved 80.844 customers as a population in one branch and the samples were selected randomly. The numbers of the samples were determined by using the Slovin formula with an error level of 0.05 and a confidence level of 95 percent, so it involved 398 people as corresponding samples from walk in customer.

The data in this study were collected through two questionnaires to measure the quality of E-CRM and level of customer loyalty. E-CRM effective measurement was developed and validated by reference [16], while customer loyalty measurement was adopted and validated by reference [21]. The data gained from both types of questionnaires were tabulated and analyzed by referring to the related theories.

3. RESULT AND DISCUSSION

The results of the study revealed that the effectiveness of the E-CRM needs to be improved to increase customers' loyalty. There are several strategies to implement the E-CRM, particularly in gathering information in the form of big data that can be utilized by employers.

Moreover, there are some factors influencing the customers loyalty. These factors include giving awards

to loyal customers (discounts) and increasing their loyalty to the company [22].

To be more specific, in banking case, a study done by reference [23] found that there are some aspects affecting customers loyalty such as banks' attitude towards their customers, the levels of customers confidence, and the levels of customers commitment. Meanwhile, the study executed by reference [24] found that customer satisfaction, service quality, and trust were the main factors influencing the loyalty of bank customer. It is supported by reference [25] claiming that the loyalty of bank customers is influenced by perceived quality, satisfaction, trust, switching costs and commitment. Regarding service quality, bank reputation is also found to affect the loyalty of bank customers [26]. However, customer satisfaction is another factor confirmed to be the most determining factor in customer satisfaction [27].

Therefore, further comprehensive study needs to be investigated to see dominant factors in increasing customer loyalty. So, the company will get more information about the aspects correlating with current development of their customers' loyalty.

4. CONCLUSION

Based on the analysis, it can be seen that the path From the explanation above, it can be concluded that the quality of the E-CRM correlated to the level of customer loyalty. For this reason, it is strongly recommended for the banks to continuously improve the quality of the E-CRM to increase customers' loyalty.

However, considering the claim that E-CRM is not the only factor in increasing customer loyalty, some furthers study need to be done, particularly related to customer loyalty needs. By doing these studies, it is expected that the bank will gain a detailed information to maintain and increase the loyalty of the customers. By doing so, further development activities, programs, and services could be optimized to develop the banks.

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REFERENCES

[1] K. Ilieska, "Customer satisfaction index as a base for strategic marketing management," *Technology Education Management J.*, 2(4), 327-331, 2013.

- [2] S. Gupta and D. R. Lehmann, "Customers as assets," *J. of Interactive Marketing*, 17(1), 9-24. doi:10.1002/dir.10045, 2003.
- [3] J. Romdonny and M. L. Rosmadi, "Factors affecting customer loyalty in products," *Budapest International Research and Critics Institute-J*. 2(1), 337-343, 2018, doi:https://doi.org/10.33258/birci.v2i1.201.
- [4] H. Evanschitzky and M. Wunderlich, "An examination of moderator effects in the four-stage loyalty model," *J. of Service Research*, 8(4), 330-34, 2006, doi:10.1177/1094670506286325.
- [5] W. Kim, H. Kim and J. Hwang, "Sustainable growth for the self-employed in the retail industry based on customer equity, customer satisfaction, and loyalty," *J. of Retailing and Consumer Services*, 53, 1-10, 2020, doi:https://doi.org/10.1016/j.jretconser.2019.101963
- [6] M. Yoo and B. Bai, "Customer loyalty marketing research: a comparative approach between hospitality and business journals," *International J. of Hospitality Management*, 33, 166-177, 2013, doi:https://doi.org/10.1016/j.ijhm.2012.07.009.
- [7] B. O. Ibojo and O. M. Asabi, "Impact of customer satisfaction on customer loyalty: a case study of a reputable bank in oyo, oyo state, nigeria," *International J. of Managerial Studies and Research*, 3(2), 59-69, 2015.
- [8] D. N. Waari, "The effect of customer satisfaction on customer loyalty: the moderation roles of experiential encounter and customer patronage," *J. of Business and Management*, 20(4), 74-80, 2018, doi:10.9790/487X-2004057480
- [9] D. Chiguvi and P. T. Guruwo, "Impact of customer satisfaction on customer loyalty in the banking sector," *International J. of Scientific Engineering and Research*, 5(2), 55-63, 2017.
- [10] H. S Jung and H. H. Yoon, "The effects of nonverbal communication of employees in the family restaurant upon customers' emotional responses and customer satisfaction," *International J. of Hospitality Management*, 30(3), 542-550, 2011, doi:https://doi.org/10.1016/j.ijhm.2010.09.005
- [11] V. Gaffar, *Customer relationship management and marketing public relation*, Bandung: Alfabeta, 2007.
- [12] Y. Baashar, H. Alhussian, A. Patel, G. Alkawsi, A. I. Alzahrani, O. Alfarraj and G. Hayder, "Computer standards & interfaces," 71, 1-16, 2020, doi:https://doi.org/10.1016/j.csi.2020.103442.
- [13] Z. Soltani, B. Zareie, F. S. Milani and N. J. Navimipour, "The impact of the customer relationship management on the organization performance," *The J. of High Technology Management Research*, 29(2), 237-246, 2018, doi:https://doi.org/10.1016/j.hitech.2018.10.001.
- [14] A. Erdil and A. Öztürk, "Improvement a quality oriented model for customer relationship management: a case study for shipment industry in turkey," *Procedia - Social and Behavioral Sciences*, 229, 346-353, 2018, doi:https://doi.org/10.1016/j.sbspro.2016.07.145.
- [15] G. J. Krishna and Ravi, V, "Evolutionary computing applied to customer relationship management: a survey. engineering applications of artificial intelligence," 56, 30-59, 2016, doi:https://doi.org/10.1016/j.engappai.2016.08.012.
- [16] Padmavathy, C., Balaji, M., & Sivakumar, V. (2012). Measuring effectiveness of customer relationship management in Indian retail banks. *International J. of Bank Marketing*, 30(4), 246-266. doi:10.1108/02652321211236888
- [17] J. Kinacid, *Customer relationship management: getting it right*, London: Prentice Hall Professional, 2003.
- [18] I. D. Savila, R. N. Wathoni and , A. S. Santoso, "The role of multichannel integration, trust and offline-to-online trust and offline-to-online customer loyalty towards repurchase intention: an empirical study in online-to-offline (O2O) e-commerce," *Procedia Computer Science*, 161, 859-866, 2019, doi:https://doi.org/10.1016/j.procs.2019.11.193.
- [19] E. M. Abd-El-Salam, A. Y Shawky and T. El-Nahas, "The impact of corporate image and reputation on service quality, customer satisfaction and customer loyalty: testing the mediating role," *The Business & Management Review*, 3(2), 130-153, 2013.
- [20] M. Srivastava and A. K. Rai, "Mechanics of engendering customer loyalty: a conceptual framework," *IIMB Management Review*, 30(3), 207-218, 2018, doi:https://doi.org/10.1016/j.iimb.2018.05.002.
- [21] C. Bobalca, C. G Bradu and O. Ciobanu, "Developing a scale to measure customer loyalty," *Procedia Economics and Finance*, 3, 623-628, 2012, doi:10.1016/S2212-5671(12)00205-5
- [22] B. Koo, J. Yu and H. Han, "The role of loyalty programs in boosting hotel guest loyalty: impact of switching barriers," *Management*, 84, 1-10, 2020, doi:https://doi.org/10.1016/j.ijhm.2019.102328
- [23] A. Filip and , L.-D. Anghel, "Customer loyalty and its determinants in a banking services environment," *Amfiteatru Economic*, 11(26), 288-297, 2009.
- [24] O. K. Omoregie, J. A. Addae, S. Coffie, G. O. Ampong and K. S. Ofori, "Factors influencing consumer loyalty: evidence from the ghanaian retail banking industry," *International J. of Bank Marketing*, 37(3), 798-820, 2019, doi:10.1108/IJBM-04-2018-0099.
- [25] B. Afsar, , Z. U. Rehman, J. A. Qureshi and A. Shahjehan, "Determinants of customer loyalty in

- the banking sector: the case of pakistan,” *African J. of Business Management*, 4(6), 1040-1047, 2010.
- [26] R. Ali, G. Leifu and R. u. Rehman, “Factors influencing customer loyalty of banking industry: empirical evidence from pakistan,” *International J. of Learning & Development*, 4(2), 9-26, 2014, doi:<http://dx.doi.org/10.5296/ijld.v4i2.5029>
- [27] H. M. Rasheed, M. Sajid, N. Shahid, M. Ahmad, J. Khalid, H. M. Khizar and W. A. Khan, “Factors affecting customer loyalty in banking sector: a study on banks in bahawalpur (pakistan),” *International J. of Accounting and Financial Reporting*, 5(1), 239-254, 2015, doi:<http://dx.doi.org/10.5296/ijafr.v5i1.7726>
- [28] J. G. Brida, L. Moreno-Izquierdo and S. Zapata-Aguirre, “Customer perception of service quality: the role of information and communication technologies (icts) at airport functional areas,” *Tourism Management Perspectives*, 20, 209-216, 2016, doi:<https://doi.org/10.1016/j.tmp.2016.09.003>.
- [29] F. S. Foltean, S. M. Trif and D. L. Tuleu, “Customer relationship management capabilities and social media technology use: consequences on firm performance,” *J. of Business Research*, 104, 563-575, 2019, doi:<https://doi.org/10.1016/j.jbusres.2018.10.047>.
- [30] M. B. Ghalenoie and H. K. Sarvestani, “Evaluating human factors in customer relationship management case study: private banks of shiraz city,” *Procedia Economics and Finance*, 36, 363-373, 2016, doi:[https://doi.org/10.1016/S2212-5671\(16\)30048-X](https://doi.org/10.1016/S2212-5671(16)30048-X).
- [31] R. Howell, C. Beers and Doorn, N, Value capture and value creation: The role of information technology in business models for frugal innovations in Africa. *Technological Forecasting and Social Change*, 131, 227-239. doi:<https://doi.org/10.1016/j.techfore.2017.09.030>.
- [32] C. Matis̃ and L. Ilieș, “Customer relationship management in the insurance industry,” *Procedia Economics and Finance*, 15, 1138-1145, 2014, doi:[https://doi.org/10.1016/S2212-5671\(14\)00568-1](https://doi.org/10.1016/S2212-5671(14)00568-1).
- [33] D. Nurmawati and M. ER, “analyzing linkage between business process management (BPM) capability and information technology: a case study in garment SMEs,” *Industrial Marketing Management*, 161, 935-942, 2019, doi:<https://doi.org/10.1016/j.procs.2019.11.202>
- [34] M. W. Nyadzayo and S. Khajehzadeh, “The antecedents of customer loyalty: a moderated mediation model of customer relationship management quality and brand image,” *J. of Retailing and Consumer Services*, 30, 262-270, 2016, doi:<https://doi.org/10.1016/j.jretconser.2016.02.002>
- [35] P. Talón-Ballester, L. González-Serrano, C. Soguero-Ruiz, S. Muñoz-Romero and J. L. Rojo-Álvarez, “Using big data from customer relationship management information systems to determine the client profile in the hotel sector,” *Tourism Management*, 68, 187-197, 2018, doi:<https://doi.org/10.1016/j.tourman.2018.03.017>.
- [36] K. J. Trainor, A. Rapp, L. S. Beitelspacher and N. Schillewaert, “Integrating information technology and marketing: an examination of the drivers and outcomes of e-marketing capability,” *Industrial Marketing Management*, 40(1), 162-174, 2011, doi:<https://doi.org/10.1016/j.indmarman.2010.05.001>.
- [37] C. O. Zephaniah, I-E Ogba and E. E. Izogo. Examining the effect of customers’ perception of bank marketing communication on customer loyalty. *Scientific African*, 8, 1-8, 2020, doi:<https://doi.org/10.1016/j.sciaf.2020.e00383>.