Relationship between E-CRM, Service Quality, Customer Satisfaction, Trust, and Loyalty in banking Industry

shymaa mohamed mohamed abdeldayem
Business Information Systems Department, Faculty of Commerce and Business Administration, Helwan University, sherotmmad6@gmail.com

engy yehia
Business Information Systems Department, Faculty of Commerce and Business Administration, Helwan University, engy_yehia@commerce.helwan.edu.eg

mohamed marie
Information Systems Department, Faculty of Computers and Artificial Intelligence, Helwan University, mohamedmarie71@gmail.com

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Shymaa Mohamed Mohamed[1, a], Engy Yehia[1, b], Mohamed Marie[2, c]

[1] Business Information Systems Department, Faculty of Commerce and Business Administration, Helwan University, Cairo, Egypt,

[2] Information Systems Department, Faculty of Computers and Artificial Intelligence, Helwan University, Cairo, Egypt,

[a] Shymaa.Mohamed21@commerce.helwan.edu.eg,[b] engy_yehia@commerce.helwan.edu.eg,
[c] mohamedmarie71@gmail.com

ABSTRACT

E-CRM strives to enhance customer service, build relationships with customers, and keep key clients. E-CRM deals with technology, people, and processes and with the goal of fostering customer loyalty. This paper aims to investigate the relationship between E-CRM, service quality, customer satisfaction, trust, and loyalty in banking industry. In order to gather sufficient reviews, a literature review was carried out utilizing a number of corresponding publications that were indexed in reliable databases. A model that highlights the relation between E-CRM and customer satisfaction, service quality, trust, and loyalty is also shown in this study. The supervisors of administrative organizations can utilize this research's insights into E-CRM to build client loyalty and increase the revenue and profitability of their firm.

Keywords: Electronic customer relationship management, service quality, customer satisfaction, customer loyalty, customer trust.

1. Introduction

Customer relationship management (CRM) is defined as "a strategy that enables organizations to compile data on their existing and prospective customers, as well as their requirements and preferences, and use it to enhance implementation and retention" (Saputra, 2019). Since the 1990s, the phrase "CRM" has been in use to describe a company strategy for choosing and managing the most crucial customer communications. To effectively manage customer interactions, a firm must have a culture that supports effective marketing, sales, and post-sale services. The straightforward idea of one-to-one client connection is at the centre of the customer-centric culture. This strategy applies to every consumer from the perspective of a person who wants, purchases, and demands something. (Farhan, Abed, & Ellatif, 2018). With the aid of innovation, electronic customer relationship management (E-CRM) technology monitors consumer interactions. E-CRM results in happy customers across the entire management process. (Durai & G., 2017).

The banking industry has faced a number of problems because of the business climate's rapid developments. In order to fulfil the interests and needs of customers, the banking sector needs to up its client response times. The researchers were in favor of combining customer-based marketing strategies with digital marketing through the use of E-CRM (Al-Dmour, Algharabat, Khawaja & Al-Dmour, 2019).

E-CRM enhances a company's entire sale and purchase process by making it more efficient than its competitors in terms of its many wants and expectations, making customers pleased and devoted to the business. By using new E-CRM tools, associations not only enhance their revenue but also begin to expand. (Salehi, Kheyrmand, & Faraghian, 2015).

The E-CRM system helps customers by meeting their expectations and maximizing business gains and profits. (Bezhovsk & Hussain, 2016) discovered that E-CRM benefits banks by reducing branch effort, cutting administrative costs, increasing bank profitability, increasing cross-selling, and allowing bankers to understand client needs based on previous transactions. Regardless of their type or size, associations can gain a competitive advantage via the careful use of technology. Every company in the world today strives to succeed by utilizing the most cutting-edge technology, while also depending on CRM to determine success or failure (Md Nasruddin & Abdul Khalid, 2017) .

Customers can do this by contacting the business more effectively thanks to e-CRM, which also displays the potential of the connection as a customer for both the business and the customer. E-CRM is based on the CRM platform, which emphasizes market-specific services, multi-channel interactions, one-to-one interactions, and segmentation technologies. The E-CRM idea was developed as a result of the use of information technology (IT) in customer contacts. Clients were able to create their original products using IT tools as a result. It's important to remember that the "E" in E-CRM stands for modern technology, specifically the Internet (Taghipourian&Hatami,2019).

The importance of quality of service has grown as a result of the increased preparedness of service associations and the intensifying competition among them, where it is no longer sufficient to simply handle the biggest clients and grow their clientele without providing them with good treatment and knowledge (Alshurideh, Al-Hawary, Shlash, & Al Kurd, 2017).

Both the results of the service and how it is delivered are factors in service quality. (Jovovic, Draskovic, Delibasic, & Jovovic, 2017) and (Parasuraman, Zeithaml, & Berry, 1985) have put up the five criteria for evaluating service quality: dependability, tangibility, empathy, assurance, and responsiveness. Tangibility best describes the materialist resources, tools, and expressions of human resources (HR). Reliability is a key component of empathy,

which delivers services committed in ideal terms. Response time shows how willing the bank's employees are to help the client in a timely manner. The SERVQUAL methodology was used in various studies to evaluate service quality across a number of sectors, including the banking sector. As a way to analyze the quality of services and customer satisfaction in the banking industry, many research have added to the SERVQUAL five dimensions model (Apornak, 2017) **;** (Oskooii & Albonaiemi, 2017).

The degree to which customers are happy with a company's products, services, and expertise is known as customer satisfaction. When comparing one's expectations with the outcomes and results experienced, one can define satisfaction as a degree of pleasure or contentment. Customers are more satisfied when they acquire goods and services of exceptional quality (Al-Dmour, Algharabat, Khawaja & Al-Dmour, 2019).

Associations can now have competitive advantages in the market provided they remain devoted to them. By integrating E-CRM into their whole operation, banks swiftly increase client loyalty (Abu-Shanab & Anagreh, 2016). For the purpose of achieving quality, on-time delivery, and product delivery, loyalty has strong, economical, and handling expenses (AL-HAWARY & HUSSIEN, 2017)**;** (Alshurideh, Al-Hawary, Shlash, & Al Kurd, 2017). In today's very competitive corporate banking market, customer loyalty is crucial (Mang'unyi, Govender, & Khabala,2017).

Developing ties with customers necessitates a high amount of confidence (Mahmoud, Ebo Hinson, & Anim, 2017). Commercial trust is one of the cornerstones of solid relationships in the community. One important element in the development of online commerce is trust (Kundu & Datta, 2015)**.** Building online trust is a crucial issue for information system researchers and e-commerce system

administrators (Elbeltagi & Agag, 2016)**.** Online users can develop trust in a variety of ways, such as the website's meticulous design or the details which the service provider provides to its clients (Mou, Shin, & Cohen, 2017)**.**

This paper is structured as follow; section 2 introduces the research methodology. Section 3 provides an illustration of the literature review pertaining to the study. Section 4 presents the suggested model. Section 5 outline the research hypothesis and the correlation between E-CRM and the other variables. The conclusion of this study is presented in Section 6, which also highlights the future investigations into the suggested model.

2. Research Methodology

To accomplish the primary research goal, we first conducted a review of the literature to locate and assess prior research on E-CRM systems in the banking industry. Examining how significant variables affect the E-CRM system and the relationships that exist between E-CRM and those variables is the primary goal of the literature review. The electronic advanced search used in the literature review was carried out in 2021 using a number of scientific databases. The review was restricted to articles published between 2015 and 2021 and the search parameters were focused on E-CRM in the banking industry. Secondly, we proposed an E-CRM model to illustrate the connection between an E-CRM system and service quality, customer loyalty, customer satisfaction, and trust. At the end, we provided an illustration of the relationships between E-CRM and other elements and generated research hypotheses that will be validated in our future study.

3. Literature Review

The full text of various articles was reviewed, and after several rounds of screening, 26 papers were relevant to the review which described in this section. Each paper is summarized by research

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objective, research methodology, and the variables studied with E-CRM in banking sector. The results of the literature review are summarized in Table 1.

(Bataineh, 2015) conducted a study to investigate how Jordanian banks' usage of E-CRM tactics affects eWOM on their social networking sites (SNSs), including Twitter, Facebook, and Instagram. A sample of 507 customers participated in an advanced survey to gather data, and the results showed that human communication, perceived benefits, and electronic direct mail all had an effect on the eWOM of banks' SNSs. Additionally, it was confirmed that customer satisfaction functions as a mediating component.

(Samaan, 2015) studied the fundamental elements that influence customer satisfaction with bank services. This study used an empirical research approach with a sample of 401 respondents who were Syrian bank clients from various institutions. Customer survey questionnaires are used to gather data, and the research evaluated recent academic marketing literature in an effort to pinpoint the causes of customer satisfaction and loyalty.

(Hidayat, Akhmad, & Machmud, 2015) examined the relationship between customer loyalty and satisfaction at East Java's Islamic banks and service quality, customer trust, and customer service. Data collection methods included the use of questionnaires. The findings demonstrated that Islamic banks significantly influence consumer confidence and satisfaction with the quality of services provided. The findings also showed that client loyalty is influenced both directly and indirectly by customer satisfaction, service quality, and customer trust.

(Mahdi, 2015) identified the impact of brand experience, perceived value, and service quality on loyalty to the brand in the National Bank of Birjand. Data were gathered and evaluated from 254 National Bank clients who visited the bank in person and provided answers to prepared questionnaires. The analysis's findings indicated that brand experience marketing dimension and perceived value have a direct and indirect relationship with brand loyalty (via a mediator variable). However, a direct connection between service quality and loyalty was not found, but through mediator variables, the relationship between the two was established.

(Kaur & Kaur, 2016) analyzed the impact of E-CRM's competitive advantage on organizational profitability. According to research findings, E-CRM significantly contributes to the firm's performance financially. The competitive advantage of E-CRM, according to the authors, may have an impact on non-financial development, such as customer happiness, internal business performance improvement, and the advancement of e-services and facilities in a bank.

(Mang'unyi, Govender, & Khabala,2017) looked into how the electronic aspects of customer relationship management affected client loyalty. Data were collected using questionnaires from a sample of clients of a major corporate Kenyan bank using a cross-sectional survey approach. Results from correlation analysis and other regression studies have demonstrated that pre-service and service features significantly predict loyalty and that there is a positive relationship between E-CRM loyalty and during service, during service, and after service.

(Mousavian & Ghasbeh, 2017) looked into how customers who bought from bank websites felt about the threats. Data was gathered by the authors using questionnaires. The findings demonstrated a connection between all of the analyzed perceived risks and consumer website usage as well as the effectiveness of the relational component of E-CRM. The success of the relational feature of E-CRM was shown to be negatively correlated with customers' perceptions of risk and usage.

(OUMAR, MANG'UNYI, GOVENDER, & RAJKARAN,2017) studied the relationship between electronic banking

loyalties and electronic CRM. A questionnaire drawn from the commodities samples of clients of the largest commercial bank in Kenya was used to acquire the data. The findings demonstrated a positive relationship between e-CRM and e-customer loyalty. In the banking sector, the pre-service, during service, and post-service phases of an electronic transaction cycle all have a significant impact on e-customer loyalty.

(Chiguvi & Guruwo, 2017) examined how consumer loyalty affected customer satisfaction in Botswana's banking industry. Using an explicatory study method, a random sample of 44 respondents who visited Standard Chartered Bank were given a self-administered questionnaire. In the study, it was discovered that customer loyalty and satisfaction have positive relationships.

(RABBANI, QADRI, & ISHFAQ, 2017) analyzed the relationship between service quality, customer satisfaction, and loyalty of banks and identified the factors of consumer satisfaction in the public and private sectors of Indian banks. 568 customers of public and private sector banks in the NCR have provided responses to a pre-tested structured questionnaire. According to research, service quality, customer happiness, and rewards programs are the key elements that can boost a client's loyalty to their bank.

(Mang'unyi, Khabala, & Govender, 2018) examined the relation between customer satisfaction (CS) and customer loyalty (CL). In the area of electronic customer relationship management, the authors used client data from one of Kenya's biggest retail banks. The findings indicated that there was statistically significant interaction between the E-CRM transaction and the CS, and the CL was predicted; however, the interaction did not fully account for the substantial variations between the E-CRM features and the CS. The study found a statistically significant correlation between the E-CRM transaction features and the CS capabilities. The path

analysis showed that CS mediation had no discernible impact on the relationship between E-CRM and CL.

(ALDAIHANI & ALI, 2018) examined how electronic customer relationship management affected the level of electronic services offered by a Kuwaiti commercial bank. The descriptive-analytical approach was utilized to achieve the study's objectives, and a questionnaire with a significant data collection tool developed by top researchers and authors in the field of study was used. The findings of the evaluation of the acquired data and presumptions revealed that E-CRM has had a significant impact on the level of services offered by Kuwait's commercial banks.

(Kalu, Unachukwu, Ibiam, & Nwadighoha, 2018) investigated how electronic customer relationship management affected consumer spending. A survey design was chosen for the study, and 189 copies of a structured questionnaire were employed as the main data gathering tool and sent out to diamond bank clients in the study area. However, the study demonstrated a significant link between E-CRM and consumer behavior, it was discovered that e-dimensions CRM's of commitment and happiness have the biggest effects on client spending.

(Alnasera, Ghani, & Rahi, 2018) used the PAKSERV model to measure satisfaction and loyalty of Palestinian Islamic Banks customers. Data from 482 respondents were gathered using a survey method and a standardized questionnaire. According to statistical findings, PAKSERV model significantly impacted customer loyalty and satisfaction in Palestine's Islamic banks. The results also showed that the PAKSERV model was the best suitable scale for cultural context and had predictive potential of service quality in Palestine's banking sector.

(Al-Dmour, Algharabat, Khawaja, & Al-Dmour, 2019) built an integrated framework to investigate how E-CRM affects customer satisfaction, consumer trust, and customer retention. An

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independent survey was completed by 343 industry managers, branch assistants, and department heads in Jordanian commercial banks. The retention of customers was found to be significantly impacted by consumer trust and satisfaction, according to authors. Additionally, it has been demonstrated that customer loyalty, consumer trust, and satisfaction all have a significant impact on the company's bottom line.

(Mohammad, 2019) aimed to research how Jordanian banks' electronic customer relations management affected client loyalty. Customers who do their banking operations electronically participated in the survey. 400 surveys were gathered, along with 26 statements, by the writers. The findings of this study showed that electronic customer interactions had a beneficial effect on electronic customer loyalty in Jordanian banks.

[31] examined how computerized customer relationship management affected service characteristics and the quality of customer-bank relationships. Information was gathered by the authors using a questionnaire. The outcomes demonstrated how E-CRM affected Maskan Bank's services and quality qualities. Additionally, through customer service characteristics, the deployment of E-CRM also indirectly affects the quality and relationships.

(Rashwan, Mansi, & Hassan, 2019) assessed the connections between electronic customer loyalty, electronic banking satisfaction as a mediator variable, and e-customer relationship management. The information was gathered using a questionnaire. The study found a strong relationship between the goals of repeated e-mail transactions and the E-attributes. CRM's Additionally, there was a strong relationship between user-friendliness of website design and giving clients the opportunity to recommend the business to others.

(Taghipourian & Hatani,2019) explored how E-CRM affected the nature of the relationships. As a result, there are 388

electronic customers of private banks in Iran, according to statistical data collected between them. Observations showed that quality of correlations and the implications of customers with seven parts, including communication channels, confidence, communication quality, satisfaction, maintenance, loyalty, and the tendency to compromise, have a positive and significant impact on E-CRM.

(Singh & kasliwal, 2019) examined how consumers from various educational backgrounds regarded the level of service quality in relation to E-CRM procedures in Rajasthan's private and public sector banks. 600 people completed the structured questionnaires, and according to the study there were no significant differences between customer perceptions of the quality of the E-CRM practices provided by public and private sector banks and the level of education.

(Özkan, Süer, Keser, & Kocakoç, 2019) Analyzed the effects of customer loyalty and their relationship in the Turkish banking sector of customer satisfaction, service quality, perceived value of services, corporate image, and corporate reputation. The influences of perceived value, business image, and reputation as mediators are also investigated. A questionnaire was used to gather the information. According to the survey's findings, corporate reputation and image can be utilized as a standard marketing benchmark to assess a bank's performance. The findings showed that customers' perceptions of quality and satisfaction have an impact on loyalty through perceptions of value, reputation, and image.

(Boonlertvanich, 2019) attempted to present a model that illustrates the relationships among service quality, client satisfaction, trust, and loyalty in a sector of retail banking. A survey of 400 clients was used to collect information. Through satisfaction and trust, customer service quality has a direct and indirect impact on attitude and behavioral loyalty. If a

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customer is a major bank, service quality has less of an impact on customer loyalty.

(Kumar & Mokha, 2020) analyzed the impact of E-CRM, which measures products/services, data security/privacy, alternative payment options, online feedback, problem-solving, and FAQs, on customer loyalty in the banking sector. Information is received from 300 E-CRM users in Delhi. The findings demonstrated a strong positive association between all six E-CRM components and client loyalty. The results of this experiment will have an impact on management and academia since they will help E-CRM managers make decisions and expand their current knowledge base.

(Salameh, Hatamleh, Azim, & Kanaan, 2020) studied the impact of E-CRM on customer commitment, trust, and satisfaction in Saudi Arabia. For this study, a quantitative cross-sectional survey has been created. Customer satisfaction, customer profitability, customer trust, and customer commitment have all shown to have a significant impact on E-CRM. The important elements of a good E-CRM from the perspective of the customer were contentment, customer profitability, trust,

and commitment, according to empirical data from this poll.

(Hanif, Ahsan, Bhatti, & Loghari, 2020) investigated how E-CRM affected organizational performance. The investigation was carried out in Pakistan using random sampling. The employment of both quantitative and qualitative methods has been used in questionnaire research. The sample was made up of 220 surveys and interviews altogether. The authors showed how the electronic customer interaction has a positive effect on the needs of the company when competition increases. The findings showed that using technology as a mediator between E-CRM and organizational effectiveness leads to increased customer satisfaction.

(Kaldeen & Thowfeek, 2020) determined whether there is a relationship between e-CRM strategy, IT infrastructure, data quality, and banking culture and how well it is implemented. Data gathered through a questionnaire in addition, the leader of the eCRM project conducted eight in-depth interviews with senior managers and experts.

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Table 1: Summary of literature review

Author	Country	Objectives	Methodology	Variables
(Bataineh, 2015)	Jordan	Take a look at how E-CRM techniques are having an impact.	Questionnaire	- E-CRM - Electronic word-of-mouth - Customer satisfaction
(Samaan, 2015)	Syria	Examine the fundamental variables that determine a customer's happiness with a bank's services.	Questionnaire	- Customer expectation - Perceived Price - Customer satisfaction - Customer loyalty
(Hidayat, Akhmad, & Machmud, 2015)	Indonesia	Describe the connections between customer satisfaction and loyalty and service quality, customer trust, and consumer religious devotion.	Questionnaire	- Service Quality - Religious commitment - Customer Trust - Customer satisfaction - Customer loyalty
(Mahdi, 2015)	Iran	Determine how loyalty is affected by brand experience, service quality, and value.	Questionnaire	- Brand experience - Service quality - Brand satisfaction - Perceived value - Brand trust - Loyalty
(Kaur & Kaur, 2016)	India	Analyze the significant financial increase that E-CRM competitive advantage brings to enterprises.	Questionnaire	- E-CRM competitive advantage - E-CRM performance
(Mang'unyi, Govender, & Khabala, 2017)	Kenya	Examine the impact of E-CRM features on repeat business.	Questionnaire	- E-CRM - Customer loyalty
(Mousavian & Ghasbeh, 2017)	Iran	Look at the risks that clients who have purchased from bank websites perceive.	Questionnaire	- Customers perceived risks - E-CRM
(OUMAR, MANG'UNYI, GOVENDER, & RAJKARAN, 2017)	Kenya	Look into how electronic CRM and electronic client loyalty relate to the banking industry.	Questionnaire	- E-CRM - Customer loyalty - Customer Satisfaction
(Chiguvi & Guruwo, 2017)	Botswana	Look into how client loyalty affects satisfaction of customer in the banking industry.	Questionnaire	- Customer satisfaction - Customer loyalty
(RABBANI, QADRI, & ISHFAQ, 2017)	India	Examine the relationship between service quality, bank customer satisfaction, and loyalty. Identify the factors that influence customer satisfaction.	Questionnaire	- Service quality - Customer satisfaction - Customer loyalty

Table 1 Continued: Summary of literature review

(Mang'unyi, Khabala, & Govender, 2018)	Kenya	Examine how customer satisfaction affects the relationship between E-CRM and a customer's loyalty.	Questionnaire	- E-CRM - Customer satisfaction - Customer loyalty
(ALDAIHANI & ALI, 2018)	Kuwait	Examine how electronic customer relationship management affects the quality of electronic services.	Questionnaire	- E-CRM - Electronic service quality
(Kalu, Unachukwu, Ibiam, & Nwadighoha, 2018)	Nigeria	Analyze how electronic customer relationship management affects consumer spending.	Questionnaire	- E-CRM - Consumer behavior
(Alnasera, Ghani, & Rahi, 2018)	Palestine	Examine the PAKSERV model to see how well Islamic Banks are doing at retaining and satisfying their customers.	Questionnaire	- Service - Customer satisfaction - Customer loyalty
(Al-Dmour, Algharabat, Khawaja, & Al-Dmour, 2019)	Jordan	Investigate the effects of E-CRM success criteria on commercial banks' customer happiness, trust, and retention.	Questionnaire	- E-CRM - Customer Retention - Customer Satisfaction - Customer Trust - Business Performance
(Mohammad, 2019)	Jordan	Study how electronic customer relationship management affects bank clients' electronic loyalty.	Questionnaire	- E-CRM -Customers' Electronic loyalty
(Abdi, Hamidizadeh, & Gharache, 2019)	Iran	Examine how (e-CRM) affects the characteristics of the service and the standard of client bank relationships.	Questionnaire	- E-CRM - Service attributes - The overall quality
(Rashwan, Mansi, & Hassan, 2019)	Egypt	Examine the connections between customer satisfaction with electronic banking and (E-CRM) and customer electronic loyalty.	Questionnaire	- E-CRM - E-loyalty - E-satisfaction
(Taghipourian & Hatami, 2019)	Iran	Examine the effectiveness of the relationships and their effects in the private banks in Iran using E-CRM.	Questionnaire	- E-CRM - Relationships Quality
(Singh & kasliwal, 2019)	India	Look at how different customer education levels affect how well banks' E-CRM practices are perceived in terms of service quality.	Questionnaire	- E-CRM - Service quality

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Table 1 Continued: Summary of literature review

(Özkan, Süer, Keser, & Kocakoç, 2019)	Turkey	Examine how customer loyalty is affected by satisfaction, service quality, perceived service value, corporate image, and reputation.	Questionnaire	- Customer satisfaction - Corporate image - Service quality - Perceived value - Corporate reputation - Customer loyalty
(Boonlertvanich, 2019)	Thailand	Create a thorough model that illustrates the connections between service excellence, client loyalty, satisfaction, and trust in a sector of retail banking.	Questionnaire	- Service quality - Customer satisfaction - Trust - Loyalty
(Kumar & Mokha, 2020)	India	Look into how E-CRM affects customer loyalty in the banking sector.	Questionnaire	- E-CRM - Customer loyalty
(Salameh, Hatamleh, Azim, & Kanaan, 2020)	Saudi Arab	Examine the impact of customer satisfaction, trust and loyalty from customers, and profitability from customers on E-CRM	Questionnaire	- E-CRM - Customer Satisfaction - Customer Profitability - Trust and Commitment
(Hanif, Ahsan, Bhatti, & Loghari, 2020)	Pakistan	Look into how E-CRM affects organizational performance.	Questionnaire	- E-CRM - Technology innovation - Organizational performance - Customer Satisfaction
(Kaldeen & Thowfeek, 2020)	India	Determine whether there is a difference in the elements that affect the efficient implementation of E-CRM.	Questionnaire	- E-CRM strategy - Data quality - IT infrastructure - Banking culture - Success of E-CRM

The previous studies tried to explain the link between the E-CRM system and other factors including customer commitment, loyalty, customer expectations, service quality, perceived value, and trust. Some earlier studies were successful in addressing the elements of customer satisfaction, customer loyalty, service quality, and trust in the banking industry, but they omitted the E-CRM Factor (Hidayat, Akhmad, & Machmud, 2015; Mahdi, 2015; Boonlertvanich, 2019). Some studies looked at the E-CRM, customer satisfaction, service quality, and trust elements, but they left out the customer loyalty factor (Upadhyaya, 2020; Dehghanpouri, Soltani, & Rostamzadeh, 2020). Other studies focused on the factors of customer satisfaction, customer loyalty and service quality on banking sector but they ignored E-CRM and trust factors (YILDIZ, 2017; RABBANI, QADRI, & ISHFAQ, 2017; Alnasera, Ghani, & Rahi, 2018). In our proposed model, we will discuss the relations between E-CRM and factors of customer satisfaction, service quality, trust, and loyalty. The limitations of previous studies that aimed to introduce E-CRM are shown in Table 2.

4. The Proposed Research Model

The theoretical model serves as the foundation for all other aspects of the investigation. logically constructed, articulated, and elaborated network of relationships between the variables thought to be important to the issue. As a result, the theoretical model explains the theory behind the interactions among the study's variables and gives a description of their nature and direction. However, it can only do so if a thorough assessment of the literature is given, as the review serves as the cornerstone for the creation of an accurate theoretical model. The theoretical foundation of this study is composed of seven major elements: technology support, knowledge management, online communication, customer satisfaction, service quality, customer loyalty, and trust.

The proposed research model assumes that customer satisfaction, trust and loyalty is affected by three types of E-CRM systems dimensions: (1) technology support; (2) online communication; and (3) knowledge management.

According to the mentioned elements from previous studies, the independent variable of E-CRM is expected to have a positive and significant relationship with the degree of dependence variable of the service quality, trust, customer satisfaction, and loyalty. Therefore, the proposed research model is presented in figure 1.

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Table 2: The limitations of the earlier research in comparison to the proposed study

| Studies	Factors				
	E-CRM	Customer satisfaction	Customer loyalty	Service Quality	Trust
The proposed study	√	√	√	√	√
(Bataineh, 2015)	√	√			
(Samaan, 2015)		√	√		
(Hidayat, Akhmad, & Machmud, 2015)		√	√	√	√
(Mahdi, 2015)		√	√	√	
(Kaur & Kaur, 2016)	√				
(Mang'unyi, Govender, & Khabala, 2017)	√	√			
(Mousavian & Ghasbeh, 2017)	√				
(Pradana, Riza, Naseer, Soetarno, & Mantoro, 2017)	√	√		√	
(OUMAR, MANG'UNYI, GOVENDER, & RAJKARAN, 2017)	√	√	√		
(Chiguvi & Guruwo, 2017)		√	√		
(Mang'unyi, Khabala, & Govender, 2018)	√	√	√		
(ALDAIHANI & ALI, 2018)	√			√	
(Kalu, Unachukwu, Ibiam, & Nwadighoha, 2018)	√				
(Alnasera, Ghani, & Rahi, 2018)		√	√	√	
(Al-Dmour, Algharabat, Khawaja, & Al-Dmour, 2019)	√	√			√
(Mohammad, 2019)	√		√		
(Abdi, Hamidizadeh, & Gharache, 2019)	√			√	
(Rashwan, Mansi, & Hassan, 2019)	√	√	√		
(Taghipourian & Hatami, 2019)	√	√	√		
(Singh & kasliwal, 2019)	√			√	
(Özkan, Süer, Keser, & Kocakoç, 2019)		√	√	√	
(Boonlertvanich, 2019)		√	√	√	√
(Kumar & Mokha, 2020)	√		√		
(Salameh, Hatamleh, Azim, & Kanaan, 2020)	√	√			√
(Hanif, Ahsan, Bhatti, & Loghari, 2020)	√	√			
(kaldeen & Thowfeek, 2020)	√				
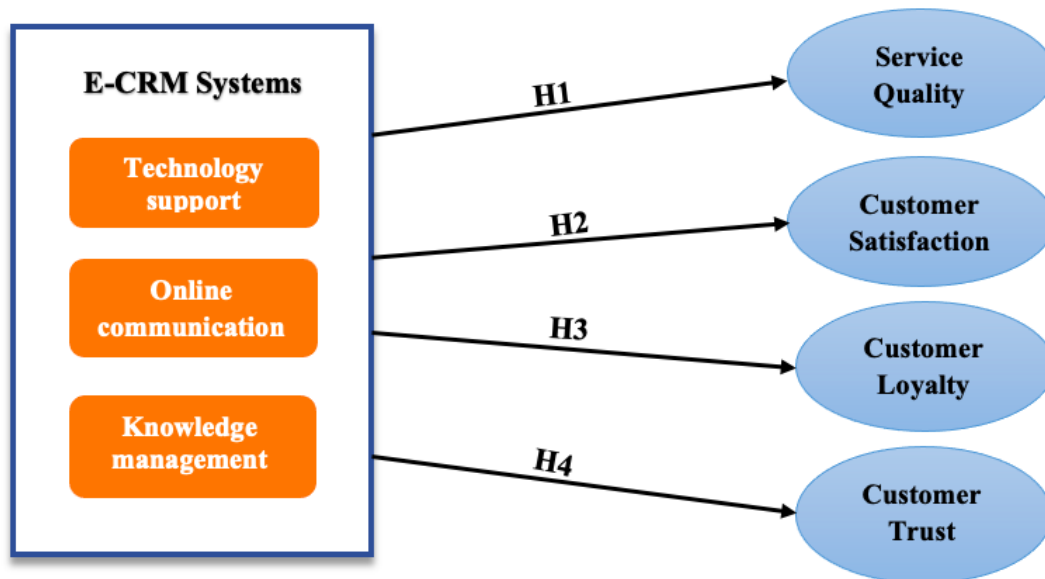
Figure 1: The proposed research model

The conceptual model of this study has been proposed to illustrate the main construct of the E-CRM and its relationship with service quality, customer trust, satisfaction, and loyalty. The operational definition of these constructs will be discussed in this section.

4.1 Technology support (Independent variable)

Technology is regarded as a crucial element in the adoption of E-CRM solutions. The three variables determining the success of adopting CRM in a changing environment are technology support, customers, and people (Abu-Shanab & Anagreh, 2016),(Khanh et al., 2021). Technology support has been of great essence in banking system (V.Mallika &R.Geethalakshmi,2021) . One of the best possibilities to reduce the likelihood that an E-CRM strategy would fail is the appropriate use and acceptance of both hardware and software in E-CRM activities (Cherapanukorn, 2017). Banks

and other financial institutions now provide a wide range of services that are advantageous to both their prospective and existing clients. The management has realized that, in order to keep its customers pleased and interested in their products, they must stay current with technology (Cavus, N. & Chingoka, D. ,2015). The banking sector has profited greatly from technology (Aswin Raj &Bala Nageshwara,2018).

4.2 Online communication (Independent variable)

A crucial component of management is communication. The effectiveness of communication determines an organization's success or failure. (Sulochana & Seeprata &Udaya ,2019). Utilizing online services and web-based communication is more crucial than ever in a variety of businesses. It has been utilized to promote improved communication that is more open, productive, and effective (Hilarius &Tunggul &Christian,2017). The notion

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of communication was discovered to have a high level of awareness in the field of social psychology; studies in this area have consistently proven how people have a significant influence on one another while evaluating options and making decisions for various issues (Bataineh, 2015). The Internet and social media have developed into a fantastic, innovative marketing platform for organizations to advertise to and interact with customers (Cherapanukorn, 2017). Since the Internet has an interactive feature that allows users to dynamically get involved in two-way conversations and to make a range of transactions within the online framework, communication is one of the most important components of an E-CRM system (Bataineh, 2015).

4.3 Knowledge management (Independent variable)

In order to swiftly respond to client needs and make decisions based on feedback, an organization must be able to collect, organize, and share real-time information about its customers, goods, and services. This is known as knowledge management. This aspect is recognized as one of the crucial pre-requisites for E-CRM success.. (Cherapanukorn, 2017). Modern institutions need knowledge management because it keeps institutional learning, growth, success, and innovation going (Lee et al., 2016). knowledge management leads to higher profitability through enhancing CRM capability (Phung & T.B, 2016). The success of e-CRM is greatly impacted by knowledge management. knowledge management is regarded as one of the crucial systems used by various business industries (Mahawrah et al., 2016). Since knowledge management entails adjustments to organizational visibility

and innovation, it has an impact on the implementation of e-CRM (Garrido-Moreno et al., 2014)(Khanh et al., 2021).

4.4 Service Quality (Dependent variable)

Service quality is defined as "the discrepancy between the customer's prior expectations for service performance and their opinions of the service received" (Ranjith ,2019). A key element in determining the competitive position and achieving excellence for the bank's customers is the quality of the banking service (Al-Hawary, 2017). Therefore, banks need to be able to offer the best customer service possible to keep their clients from switching to other banks or service providers. Customers can compare financial services and decide which ones offer the greatest customer care (Shanka,2013). Since it is difficult to define definitions and practices that are recognized as desirable by all current potential and practices consumers, it is challenging to evaluate the quality of services (Birgül,2014).

4.5 Customer Satisfaction (Dependent variable)

One of the oldest and most often used concepts in marketing literature is customer satisfaction. Consumer satisfaction is the general intent and perception of a customer because of their consumption or usage experience with a good or service (Boonlertvanich,2019). The concept of satisfaction has mostly been developed. When a person compares his expectations with the delivered goods, outputs, and perceived performance, he or she is said to be satisfied (Kotler, 2016). Customer dissatisfaction will persist if the product or service does not satisfy their needs or wants, but they will be happy and

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satisfied if the service lives up to their expectations (Drew et al., 2020). pleased consumers become the company's most important brand advocates and sales agents (Fida et al., 2020).

4.6 Customer Loyalty (Dependent variable)

Customers who are satisfied and likely to make purchases are said to have high customer loyalty. Prior academics used the terms "behavioral and attitudinal loyalty" to broadly define client loyalty (Tabrani,et al.,2018). For businesses in the banking industry to succeed and acquire a competitive edge, customer loyalty is becoming of utmost significance. Additionally, the banking industry now finds it difficult to keep consumers loyal due to improvements in services provided to them. By integrating E-CRM into their whole procedure, banks can quickly increase their customer base (Abu-Shanab & Anagreh, 2016). Customer loyalty was crucial to the survival and growth of Sharia banks since it increased service quality and product diversity (Riyadi, 2017). Customers who are loyal to a bank spread the word about it by telling their friends and family about the products and services the bank offers (Mulyono and Situmorang, 2018).

4.7 Trust (Dependent variable)

One of the most important preconditions for long-lasting and cooperative relationships is a corporate trust (Mahmoud et al., 2018). Trust is considered a crucial component. in starting and growing online interactions and transactions (Kundu and Datta, 2015). Building online trust is a crucial problem for IS academics and managers of e-commerce systems (Elbeltagi and Agag, 2016). Every commercial transaction relies heavily on trust, and no transaction can be completed without it. Online users can gain trust using a variety of methods, such as by examining the website's fine print or the information the service provider provides to its clients (Mou, Shin, & Cohen, 2017).

5. Research Hypothesis and Relationships

5.1 E-CRM and Service Quality

The standard of service quality is the additional major factor (Lien et al., 2016). Service quality is considered as a factor that influences satisfaction. One of the most crucial aspects of a business and customer relationship is the quality of the services provided (Liao et al., 2011). The client decides throughout a transaction if the company offers a quality that inspires her/him to keep doing business with them or not (Chen and Vargo, 2014). Despite the fact that prior research shown a favorable correlation between E-CRM and service quality (Harrizki et al., 2017), (Khalid and Nor,2009). The authors study discovered that the performance of E-CRM was positively impacted by the quality, usability, and convenience of use of online services and shown how the installation of E-CRM has a significant impact on the quality of banking services (Mehdi et al., 2016). Thus, the following hypothesis is formulated:

H1: E-CRM has a positive impact on Service quality

5.2 E-CRM and Customer Satisfaction

When clients' needs, wants, and expectations are satisfied, they are more likely to make further purchases or show their continuous loyalty. The performance of the agent, which is typically determined by the agent's

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quality, is the most important aspect for generating client pleasure. Customer satisfaction is greatly influenced by the quality of the services provided (Tuten, 2019). Customer satisfaction with the services provided by their service providers strengthens the link between the two parties, which eventually promotes positive word-of-mouth (Mulyono & Situmorang, 2018; Upadhyaya, 2020). According to (Oumar et al. 2017), E-CRM enhances the development of the digital platform and supports in maintaining long-term connections with clients, both of which increase customer satisfaction. Thus, effective use of E-CRM services outcomes in satisfied customers. Although earlier literature suggested a positive relationship between E-CRM and customer satisfaction (Al-Dmour et al., 2019; Ismail & Hussin 2016; Kaur, 2016; Kumar et al.,2021; Mang'unyi et al., 2018; Mulyono & Situmorang, 2018; Oumar et al., 2017; Rashwan et al., 2019; Upadhyaya, 2020). Therefore, research into the link between E-CRM and satisfaction is necessary. Thus, the following hypothesis is formulated:

H2: E-CRM has a positive impact on customer satisfaction.

5.3 E-CRM and Customer Loyalty

Every company that desires to both bring in new business and keep its current clients should consider using e-CRM (Abu-Shanab & Anagreh, 2016). It contributes to longer-term customer loyalty enhancement and improvement (Herman et al., 2020). Since E-CRM delivers individualized products and services, which attract consumers because everyone today wants their products personalized for them, proper investment in the technology will result

in customer loyalty (Sokmen & Bas, 2019). Without the backing of loyal clients, no business can endure over the long term (Kampani & Jhamb, 2020). When banks offer their clients high-quality services, their lucrative customer base grows because those consumers begin promoting those banks to their family and friends, resulting in favorable word-of-mouth (Oumar et al., 2017). As a result, loyal customers are more likely to make repeat purchases (Mang'unyi et al., 2018). The previous research showed a positive relationship between E-CRM and customer loyalty, however, a few studies suggested that there is no such relationship between E-CRM and customer loyalty (Kumar & Mokha, 2020; Mang'unyi et al., 2018; Mulyono & Situmorang, 2018; Shastri et al., 2020) (Alim and Ozuem, 2014; Ismail and Hussin, 2016). As a result, further research is required to determine how E-CRM and customer loyalty are currently related. Thus, the following hypothesis is formulated:

H3: E-CRM has a positive impact on customer loyalty.

5.4 E-CRM and Trust

One of the most important preconditions for long-lasting and cooperative relationships is a corporate trust (Kundu and Datta, 2015). In marketing, the topic of relationship marketing has been researched, namely between a client and a supplier (Tahir Jan and Abdullah, 2014). For starting and growing online interactions and transactions, trust is seen as a necessary element (Kundu and Datta, 2015). Building online trust is a crucial problem for IS academics and administrators of e-commerce systems (Elbeltagi and Agag, 2016). Customer trust is one of the best variables that affect

the success of an e-CRM, making online trust in it a crucial issue for e-commerce designers and researchers of human-computer interface. The term of trust establishes the necessity of a solid and lengthy relationship with a customer and substantially determines the customer's expected skills and conduct with the business (Greenberg, 2010). Customer trust is a separate aspect that influences how well e-CRM performs; trust is viewed as being an essential component of the development of relationships (Al Dmour et al., 2019) Therefore, research into the connection between trust and E-CRM is necessary., there is a need to study the relationship between E-CRM and trust. Thus, the following hypothesis is formulated:

H4: E-CRM has a positive impact on Trust

6. Conclusion
The E-CRM is one of the most significant information systems that enables businesses to evaluate, store, and gather customer data, as well as contact customers to provide a complete view of their consumers and provide them a competitive edge. This study explores the effects of customer satisfaction, trust, loyalty, and service quality on the performance of the E-CRM system.

A literature review was performed to explore the E-CRM relationship with several factors to ensure that the E-CRM is in terms of customer satisfaction and customer loyalty, which is the goal of E-CRM in current marketing. The results of the studies demonstrated that, as previously described in this scientific review article, E-CRM has a positive and significant influence on customer satisfaction and brand loyalty. The aspects of service quality and the function of trust as a variable that may be determined in increasing the relationships between E-CRM, customer happiness, and customer loyalty are both positively and significantly influenced by E-CRM. A research model and hypothesis were proposed to present the relationship between E-CRM dimensions and factors of customer satisfaction, loyalty, trust, and service quality. This study may be utilized by academics, researchers, and practitioners to get a wider understanding of the majority of research fields and methodologies used in E-CRM analysis.

This study may be used as a starting point for our future work to evaluate and test the research hypothesis and investigate the relationships between the variables, namely E-CRM, service quality, trust, customer satisfaction and customer loyalty by using various techniques such as factor analysis or Structural Equation Modelling.

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