



Does Implementation of Customer Relationship Management (CRM) Enhance the Customer Loyalty? An Empirical Research in Banking Sector

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Abstract

Managing mutual relationship with the customer is a decisive task in every sector. Many earlier research outcomes evidenced this as a major drawback, particularly in the banking industries, as they are not using this asset as a competitive advantage for retaining their customers. Taking this as a core issue, this study concentrates on evaluating the consequence of customer relationship management practices on customer loyalty with 779 respondents who were the clients of public and private sector banks located in India and were selected using simple random sampling technique. Various quantitative techniques were carried out and the results emphasized that the CRM has a positive influence on loyalty through customer knowledge management, customer satisfaction, and customer trust, and all were all found as significant drivers to customer's trustworthiness. This study recommends bankers to provide reliable services to their customers and make them satisfied, as it is the forerunner for creating loyalty.

Keywords: Customer relationship management, Knowledge management, Loyalty, Satisfaction, Trust.

Introduction

According to Baashar et al. (2016), customer relationship management (CRM) concept is viewed as a wide business strategy that makes use of technical knowledge for managing long-term relationship between the industry and the clients. Krishna and Murthy (2015) also highlighted that every sector now realizes that their basic core for getting success in their business is "Customer," and their behavior and preferences could be identified only through the CRM practices. However, in many areas, the implementation of the CRM got disastrous owing to the lack of user adaptation, lack of familiarity about that system, and the non-consideration of essential factors for effective usage. This problem happens in the banking sector, too.

Particularly, while analyzing the present scenario of CRM implementation in Indian banking sector, there arises a question whether the customer knowledge management has been properly utilized for CRM practices which facilitates increasing customer knowledge and thereby satisfying the customers, as the aim of every businesses is to make customers satisfied and the more they are satisfied, the more they become loyal to the business and keep coming back for

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more. Hence successful implementation requires identification of the customers by differentiation of their needs and tailoring those things through customer knowledge (Foss et al., 2008).

Moreover, banking sector is related to financial services where there is a dire need to generate trust and belief among people (Rao & Rao, 2016, as cited in Abdullah & Siddique, 2017). But many past studies (Chaudhari, 2020; Renuga & Durga, 2016; Siddiqi et al., 2018;) witnessed the unsatisfied performance of CRM, the unavailability of effective and good technology, and the need for a trustworthy way in this sector.

Customer relationship management could be examined in two different ways, namely qualitatively or quantitatively. Many research studies have been carried out on CRM and that have come with the output that CRM influences the sales and profit (Simmons, 2015; Yadav & Singh, 2014), customer behavior and retention (Gozali et al., 2019), antecedents and strength of social customer relationship acceptance (Marolt et al., 2020), as well as the relationship between e-service quality and ease of use and the customer relationship management and its performance (Wahab et al., 2010). But, there evidenced a lesser number of study in connection with the effect of CRM on faithfulness to the organization by the clients by considering factors like customer knowledge management, customer satisfaction, and customer trust. Hence, the researchers have selected this topic as the core question and coined the primary objective as discussed to tackle the problem. Accordingly, the following research questions were proposed by the researcher.

Research Question 1: Are customer knowledge management (CKM), customer trust and customer satisfaction significantly associated with customer relationship management (CRM) in the public and private sector banks of India?

Research Question 2: Is customer relationship management positively associated with customer loyalty through customer satisfaction?

Research Question 3: How effective is the implementation of CRM in the Indian banking sector?

The sequence of this study is Introduction, Literature Review, Statement of Problem, Formulation of Objectives and Hypotheses, Research Methodology, and Discussion and Conclusion.

Literature Review

This section begins with the review of works done in the area of customer relationship management. Relying on their elemental factors and based on the points in the literature, hypotheses were formulated.

Shanab and Anagreh (2015) and Saberi et al. (2017) pointed out that it was the advancement of technology that has enforced the banks to adopt the e-CRM aspects for enhancing further constructive rapport with customers and thereby earn profits along with customer satisfaction and loyalty. Rao and Patel (2018) highlighted that CRM supports the entire business process through technology so as to get in touch with the clients. Ramaj (2015) elucidated clearly that the CRM system increases the degree of satisfaction. Abbas et al. (2017) confirmed through their study that the organizations should focus on the performance parameters for building an effective CRM for having a robust affiliation with the customers, which improves the attitude towards satisfaction, retention, and growth. Hawari (2015) pointed out that it is the quality in services that plays a significant role in generating credibility for a business. Murugan and Kumar (2011) particularly pointed out that the understanding the customer needs is found very low in both public and private sector banks and in particular customer perception towards service quality is more in public sector banks than private bank and it could be improved through customer relationship management.

Hasanat et al. (2019) highlighted the major association between pricing strategy, engagement of clients, and quality assurance with the fulfillment and trustworthiness; they asserted that this could be achieved only through customer engagement process. Cvijovic et al. (2017) informed that it is the CRM that enables the customer segmentation and customizing the products based on the expectation identified through customer knowledge management process. Gayathry (2016) pointed out that the purpose of implementing CRM is not fulfilled and it required more efforts by the banks to convince the customers towards the maintenance of CRM.

Bashir (2017) explained that satisfaction mediates between relationship management and retention rate in the banking sector and that satisfaction among the customers was achieved through CRM that has recognized the expectation and needs of the people; however, the level of CRM was found to be moderate, and the effective management of CRM was said to have an impact on service quality in the banks of Jordan. Lam et al. (2013) pointed out that the awareness of the quality of the relationship between the company and the customers may be enhanced when effective e-CRM strategies are implemented through interpersonal communication, preferential treatment, reward to customers, etc. Kebede and Tegegne (2018) pointed out that every performance of the banks is rests with the innovative CRM technology. Chua and Banerjee (2013) identified customer knowledge management as an effective branding and marketing instrument for analyzing the expectation, behavior, and preferences of customers.

Paidi et al. (2018) in their study about image of the organization through the customer trust revealed that the corporate image of the organization does not affect loyalty; rather, product quality, service quality, and the trust moderately influence customer loyalty. Bhat et al. (2018) pointed out that the CKM has a tough effect on trust and confidence in the fulfillment of services, but the only way to enhance the devotion to the services in banking sector is through understanding the dynamic behavior and having the updated information of the customers which makes the sales people to be closed with the customers and helps increase the revenue growth. Munaiah and Mohan (2017) pointed out that banks always underestimate the degree of benefit through implementing the customer relationship management, and the organizations considered this just like application of a technology without realizing its importance, although they have introduced at the same time more strategies for attracting the customers. Almasi and Pirzad (2017) studied the outcome of intellectual capital and knowledge management on market competition through CRM and realized that the knowledge management process has a significant impact on CRM in such a way that the continuous flow of knowledge from both sources supports the customers in buying the product and services. Chiu et al. (2017) investigated the brand association with the brand equity and found that both brand attachment and attitude are the significant determinants of acceptance out of which acceptance has a stronger impact, and this attachment and acceptance could be achieved only through the customer knowledge management. Bompolis and Boutsouki (2014) informed that there is a strong relationship between the traditional CRM and the e-CRM and this initiate the customer willingness to do the business in the banks with the creative relationship.

Tehrani et al. (2015) highlighted that organizational innovation, CKM, and CRM as significant predictors of a client's trustworthiness and this could be yielded only through knowledge-based foundations. Trejo et al. (2016) told that Customer Knowledge Managers initially focus on the information from the customers rather than focusing on direct interaction with them, and this is a significant characteristic of CRM. Duwailah and Hashem (2019) confirmed that customer knowledge management helps every organization to enhance its profit margin through through customer relationship management Hassan et al. (2015) narrates that CRM in marketing has a significant, positive influence on clients' happiness

through knowledge management, and this satisfaction increases the repeated purchase, thereby increasing the sales and revenue of the organization. San and Hardjono (2017) explained that factors like customer orientation, CRM organization, and knowledge management are positively associated with faithfulness of the clients. Azimi and Amiri (2018) studied the satisfaction and trust and the impact of these on loyalty in mobile banking services among the faculties of Shiraz University. They confirmed that factors such as usability and customer services play a significant role in fulfilling the requirements of the consumers and yield trustworthiness to the great extent.

Statement of the Problem

In today's context, customers are selecting fiscal sectors for their deposits in order to get high returns and also for other immediate financial transactions. Despite the availability of many services in private banks with attractive schemes, they prefer the public sector banks, and the inquiry reveals that they perceive doubt of returns and future risk as associated with private sector banks (Vanitha and Velmurugan, 2015); (Bhatia et al., 2015). But a lot of earlier research results have pointed out that the service gap is found to be lower in private sector banks than public sector ones (Agrawal et al., 2016), quality of human interaction is found to be satisfied in the private banks (Nautiyal, 2014), and reliability has the most positive and significant impact on customer satisfaction (Lomendra et al., 2019). Perception of CRM through service quality varies with gender-based prospects in public and private sector banks, and private banks have more initiation in CRM implementation than public sector banks (Mishra, 2016). Despite all these positive points in the private sector banks, customers still have trust in the public sector banks for depositing their money and getting locker system for keeping their valuables. However, in case of other transactions like electronic money transfer, they prefer only the private sector banks because of experiencing quick attendance and less processing time. These customer actions clearly reflect that the implementation of the CRM in this sector is not effective and confirms the flaws in effective utilization of CRM practices.

To confirm the issue, this paper proposes a new conceptual framework in which factors such as customer knowledge management, customer satisfaction, and customer trust are added in the framework of customer relationship management for analyzing its impact on loyalty through the moderating effect of customer satisfaction. This endeavor differs in certain ways from the previous works, as it considers the banking sector as a whole entity that encompasses public and private banks in India.

Objectives of the Study

This study intends to

- find the association between the demographic variables and the factors that influence the customer relationship management and customer loyalty;
- examine the association between the factors of customer relationship management and the customer loyalty, and
- evaluate the impact of customer knowledge management, trust, and satisfaction on loyalty in banking sector of India.

Formulation of Hypotheses

Hypothesis is the concept which is essential to prove the relationship between the factors and variables considered in the objectives in every research works. In this study, the effect of

independent factors like customer knowledge management, customer satisfaction, and customer trust on the dependent variable (i.e., CRM) and the impact of the CRM on customer loyalty were considered. Based on the anticipated result, the investigator formulated the following hypotheses and analyzed the acceptance of those through the data obtained from the sample of the study.

H₁: Demographic variables have significant relationships with customer relationship management and customer loyalty.

H₂: There is a significant relationship between customer knowledge management and customer relationship management.

H₃: There is a significant relationship between customer trust and the customer relationship management.

H₄: There is a significant relationship between customer satisfaction and customer relationship management.

H₅: Customer relationship management has a positive and significant impact on customer loyalty through customer satisfaction.

Conceptual Model of the Study

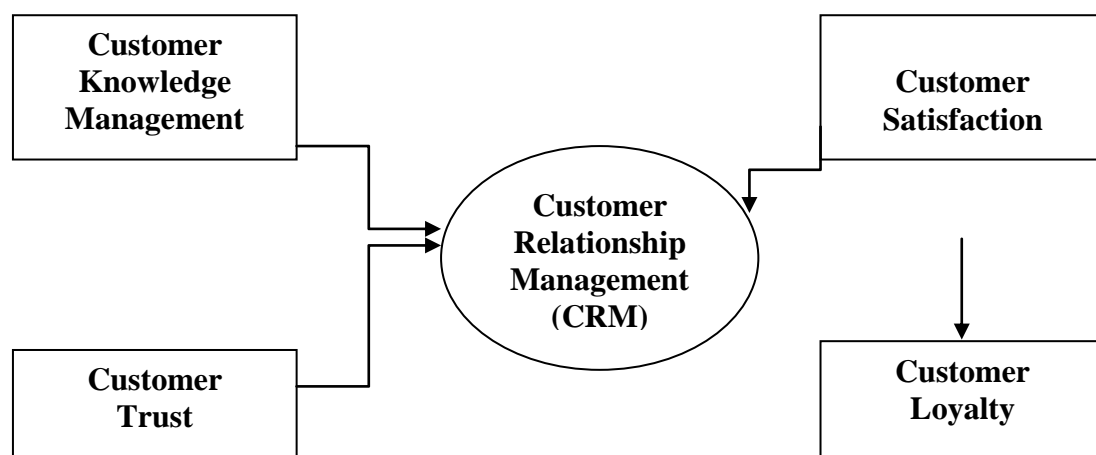


Figure 1. Schematic Diagram of Conceptual Model

Research Methodology

As this study was to use a primarily quantitative approach, a survey questionnaire was prepared based on the factors considered in the conceptual model and used simple random sampling technique for selecting the respondents from among the database received from the banks, particularly those accounts that were found in active stage. The questionnaire was based on a 5-point Likert scale, with 1 being strongly disagree and 5 being strongly agree. The content was pre-tested with 10% of the actual proposed sample size to examine the suitability of the instrument. The reliability value was found to be 0.835, which is in the acceptable range. However, certain items were removed based on the suggestion from the experts and the corrected questionnaire was distributed through e-mail and other possible means of communication to 1050 respondents who were the customers of various public and private sector banks situated in various states of India. These banks were initially clustered based on their status, and from that cluster sampling, respondents were selected through simple random sampling method. Out of 1050 questionnaire, only 779 (74.2%) were returned and were taken up for consideration. This study was conducted during the period from

September 2019 to March 2020. The statistical packages used to test the hypothesis were IBM SPSS 20 and AMOS 24, and tools such as percentage analysis, confirmatory analysis (CFA), Karl Pearson’s correlation, multiple regression analysis, f-test through analysis of variance (One Way ANOVA), and paired sample T-Test were carried out. The obtained results are discussed in the following sections.

Structural Equation Modeling

CFA is one of the foremost methodologies applied to test various hypotheses and the commonality of the factors and the variables taken up into consideration in every research. Through this methodology, the uni-dimensionality, latent factor structure, and goodness of fit index for the proposed model along with the testing of multiple hypotheses pertaining to the study could be performed (Hoyle, 2004). The various fit indices as discussed in the above research were analyzed in this study so as to confirm the fit of the model (Chau, 1997; Sun, 2005). The results show that the following values in Table 1 were obtained through SEM of AMOS pertaining to the above factor.

Table 1. Table Showing the Details of Goodness of Fit Indices for the Proposed Model of the Study

Sl. no.	Index	Value	Sl. no.	Index	Value
01.	CMIN (X ²)	686.109	10.	RMR	0.045
02.	Degree of freedom	144	11.	SRMR	0.054
03.	CMIN/degree of freedom	4.765	12.	RFI	0.884
04.	GFI	0.899	13.	PRATIO	0.842
05.	AGFI	0.866	14.	PNFI	0.766
06.	NFI	0.909	15.	PCFI	0.778
07.	IFI	0.925	16.	HOELTER(0.05)	172
08.	TLI	0.910	17.	HOELTER(0.01)	185
09.	CFI	0.924	18.	RMSEA	0.076

Source: Primary data

This analysis was carried out with the data collected through self-administered questionnaire from 779 respondents who were the customers of the public sector and private sector banks in India. The structure of the model is depicted in Figure 2 below.

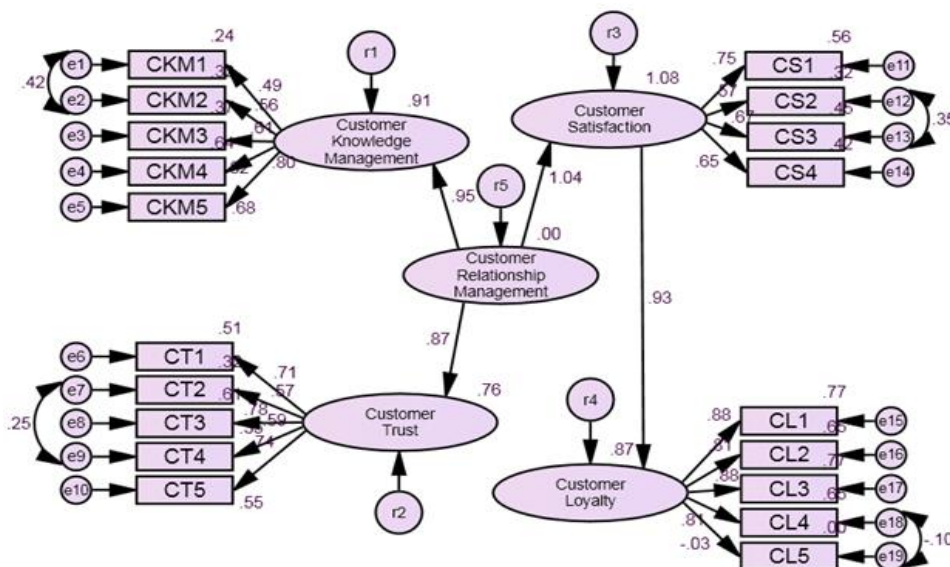


Figure 2. Model Fit Diagram for the Impact of Customer Relationship Management on Customer Loyalty in Banking Sector through Structural Equation Modeling
Source: Primary data through SEM of AMOS

From the above table, it is noticed that the Chi-Square value (X^2) is 686.109, with the value of 144 degrees of freedom (df). The CMIN/DF ratio was found to be 4.765, the SRMR value was found to be (0.054), TLI value was found to be (0.910), CFI was found to be (0.924), and RMSEA was found to be (0.076). These values were all within the recommended range of the index as pointed out by Hooper et al. (2008) and Cooley et al. (2012) and confirmed that the conceptual model considered in this research together with all factors represented an adequate goodness of fit.

The maximum likelihood estimates through regression weights were also calculated through the structured equation modeling and the revealed result is detailed in Table 2 below.

Table 2. Details of the Regression Weights of Each Variable and the Factors Taken up for Analyzing the Impact of Customer Relationship Management on the Loyalty in Banking Sector

Hypothesis	Critical path		Estimate	C.R.	Decision of the hypothesis	
H ₂	CKM	<---	CRM	0.946	32.621**	Supported
H ₃	CT	<---	CRM	0.749	19.557**	Supported
H ₄	CS	<---	CRM	1.022	22.325**	Supported
H ₅	CL	<---	CS	1.142	23.653**	Supported
	CKM5		CKM	1.000		Supported
	CKM4	<---	CKM	1.192	25.863**	Supported
	CKM3	<---	CKM	0.778	17.757**	Supported
	CKM2	<---	CKM	0.658	15.951**	Supported
	CKM1	<---	CKM	0.511	13.660**	Supported
	CS1	<---	CS	1.000		Supported
	CS2	<---	CS	0.686	15.938**	Supported
	CS3	<---	CS	0.772	19.150**	Supported
	CS4	<---	CS	0.933	18.277**	Supported
	CT5	<---	CT	1.000		Supported
	CT4	<---	CT	0.833	15.898**	Supported
	CT3	<---	CT	1.093	20.886**	Supported
	CT2	<---	CT	0.743	14.873**	Supported
	CT1	<---	CT	1.088	18.304**	Supported
	CL1	<---	CL	1.000		Supported
	CL2	<---	CL	0.882	29.162**	Supported
	CL3	<---	CL	0.978	33.858**	Supported
	CL4	<---	CL	0.832	29.087**	Supported
	CL5	<---	CL	-.031	-0.847	Not Supported

Source: Primary data

Note: CRM-customer relationship management, CKM-customer knowledge management, CS- customer satisfaction, CL –customer loyalty, CT-customer trust.

Regression Weights: (Group number 1 - Default model)

Table 2 represents the output of the SEM through path analysis and the parameter estimate calculated is found significant at $p \leq 0.05$ as the value of the critical ratio is more than 1.96 and all the paths were found significant at 1% level of significance. Hence, the hypotheses H₂, H₃, H₄ and H₅ were supported.

Demographic Profile of the Respondents

Demographic profile plays an important role in identifying the customer satisfaction, trust, and loyalty level in any sector, but it is a very important indicator in the financial institutions. In this study, which is mainly based on the customer loyalty in banking sectors, various

demographic variables were framed for getting the opinion of the respondents in connection with the objectives. The revealed results are detailed in the following Table 3 below.

Table 3. Details of the Respondents' Demographics

Sl. No.	Demographic variable	Total number of respondents (n)	Percentage (%)	
01.	Age	Less than 20 years	144	18.5
		21-40 Years	496	63.6
		41-50 Years	101	13.0
		Above 50 Years	38	4.9
02.	Gender	Male	413	53.0
		Female	366	47.0
		Transgender	0	0
03.	Marital status	Married	570	73.2
		Unmarried	209	26.8
04.	Educational qualification	Illiterate	24	3.1
		SSLC	268	34.4
		HSC	199	25.5
		Under graduate	127	16.3
		Post graduate	131	16.8
		Others	30	3.9
05.	Occupation	Public sector	232	29.8
		Private sector	255	32.7
		Business	78	10.0
		Agriculture	99	12.7
		Pensioner	68	8.7
06.	Monthly income	Others	47	6.1
		Less than Rs.20000/-	123	15.8
		Rs.20001/= to	496	63.6
		Rs.35000/=	143	18.4
		Rs.35001/= to	17	2.2
		Rs.50000/=	17	2.2
		> Rs.50000/=	17	2.2
07.	Status of the residential area	Urban	255	32.7
		Rural	450	57.8
		Semi urban	74	9.5
08.	Type of family	Nuclear	269	34.5
		Joint	510	65.5
09.	Number of dependent members	Up to 2	96	12.3
		3-4	435	55.8
		Above 4	248	31.8
09.	Nature of the bank	Public sector	496	63.7
		Private sector	283	36.3
		Savings bank	300	38.5
10.	Type of Bank account	RD account	420	53.9
		Current account	29	3.7
		Fixed deposit	18	2.3
		Loan account	12	1.5
11.	Experience with the bank	< 1 year	288	37.0
		2-5 years	285	36.5
		5-10 years	151	19.4
		> 10 years	55	7.1
12.	Frequency of visiting the bank	Daily	163	20.9
		Once in a week	121	15.5
		Fortnightly	123	15.8
		Monthly	261	33.5
13.	Idea about implementation of CRM in the bank	Rarely	111	14.2
		Yes	531	68.2
		No	248	31.8

Source: Primary data

From the above table, it is noticed that the maximum number of customers were between 21- 40 years (496 respondents, which made up 63.6 percent of the participants). Regarding gender, 53 percent were Male, while 73.2 of the total population were married. With regard to educational degree, 34.4% of the respondents had only the SSLC qualification, while 32.7 percent of them were working in the private sector, followed by 29.8 % of the respondents who had jobs at the public sector. Within the sample, 496 respondents (63.6 percent) had a salary of between Rs. 2000 to 3500. Most of the customers resided in rural areas and lived jointly with 3-4 dependent members. 63.7 percent of the total population of this study had their accounts in the public sector banks. The majority of respondents had opened the account in the bank within one year. Within the sample, 261 respondents (33.5%) visited the bank once in a month, while 15.8 percent visited it once in fifteen days for their transactions. Regarding the idea of implementation of customer relationship management (CRM) in their banks, 531 respondents (68.2%) were satisfied with the CRM implementation.

Relationships Between the Factors That Influence Customer Relationship Management and Customer Trust and Loyalty Through Karl Pearson's Correlation

To analyze the interrelationships between various factors that influence the customer relationship management, customer trust, and customer loyalty, Pearson correlation analysis was conducted and the result is presented in Table 4 below.

Table 4. Relationships Between the Factors That Influence Customer Relationship Management, Customer Trust, and Customer Loyalty

Pearson Correlations in Public Sector Banks (n=496)				
	Customer knowledge management	Customer satisfaction	Customer trust	Customer loyalty
Customer knowledge management	1	0.717**	0.659**	0.740**
Customer satisfaction		1	0.655**	0.686**
Customer trust			1	0.688**
Customer loyalty				1

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Primary Data

Pearson Correlations in Private Sector Banks (n=283)				
	Customer Knowledge Management	Customer Satisfaction	Customer Trust	Customer Loyalty
Customer knowledge management	1	0.714**	0.768**	0.801**
Customer satisfaction		1	0.686**	0.742**
Customer trust			1	0.736**
Customer loyalty				1

** . Correlation is significant at the 0.01 level (2-tailed).

The above results confirm that factors such as customer knowledge management, customer satisfaction, customer trust, and customer loyalty were positively correlated with each other at 1% level of significance in both public and private sector banks. All factors were found to have strong and considerable high correlations with each other ($R = +0.60$ to $+0.70$) and hence the performance of each factor was found to be similar to the results obtained by Schober et al. (2018).

In case of public sector banks, the highest correlation was found between customer knowledge management and customer loyalty $r=0.740^{**}$ at 1% level of significance) and the

lowest correlation between customer satisfaction and customer trust ($r=0.655^{**}$ at 1% level of significance). Through the R^2 value, 47% variation was shown by the customer satisfaction on customer loyalty.

Regarding private sector banks, the highest correlation was found between customer knowledge management and customer loyalty ($r=-0.801^{**}$ at 1% level of significance) and the lowest correlation between customer satisfaction and customer trust ($r=0.686^{**}$ at 1% level of significance). Through the R^2 value, 55% variation was shown by the customer satisfaction on customer loyalty. Hence, it is confirmed that the lowest variation gap that was found between the customer satisfaction and loyalty was with the private bank.

Multiple Regression Analysis Between the Factors Considered for Customer Relationship Management, Customer Trust, and Customer Loyalty

In order to analyze the impact of the factors considered under customer relationship management like customer knowledge management and the customer satisfaction on customer loyalty among the customers of the banking sector in India, multiple regression analysis was carried out by considering the customer loyalty as the dependent variable and factors such as customer knowledge management, customer satisfaction, and customer trust as independent variables. The details of analysis are shown in Table 5 below.

Table 5. Details of Regression Coefficient and the Statistics for the Proposed Model of the Study

Factor (dependent)	Factor (independent)	Public sector banks (n=496)					Private sector banks (n=283)				
		Regression coefficient (B)	Standard error	"t" value	Collinearity statistics Tolerance VIF		Regression coefficient (B)	Standard error	"t" value	Collinearity statistics Tolerance VIF	
Customer Loyalty	(Constant)	-0.404	0.546	-0.739	-	-	0.500	0.609	0.820	-	-
	Customer knowledge management	0.394	0.041	9.585**	0.423	2.362	0.411	0.051	8.099**	0.343	2.911
	Customer satisfaction	0.259	0.050	5.148**	0.427	2.342	0.340	0.056	6.093**	0.444	2.254
	Customer trust	0.300	0.041	7.385**	0.497	2.012	0.191	0.051	3.721**	0.371	2.695
	R^2 value			0.638					0.715		
	Adjusted R^2 value			0.636					0.712		
	F value			288.931**					233.006**		
	Number of samples			496					283		
	Durbin Watson test value			1.996					1.977		

Source: Primary data

From the result of the multiple regression analysis, the F-value was found to be significant at 1% level of significance, and this confirmed the model fitness. In addition, all the independent variables were highlighted as the significant forecaster for the customer loyalty in both public sector and private sector banks. Moreover, the R^2 value confirmed that a unit increase in the independent variable increases the dependent variable (customer loyalty) 63.8 percent in respect of public sector banks and 71.5 percent in respect of private sector banks. From the value of Durbin Watson test, Tolerance value, and variance inflation factor, it is confirmed that there was no multi-collinearity among the factors and variables.

Table 5 indicated the results of the hypotheses testing through multiple regression analysis. It is observed that the customer knowledge management, customer satisfaction, and customer

trust have positive and significant relationships with customer loyalty and hence the alternative Hypothesis (H_3) is accepted.

Association Between the Demographic Variables of the Study and Customer Knowledge Management, Customer Satisfaction, Customer Trust, and Customer Loyalty

To find the association between the demographic variables considered in this study and the factors that influence the customer loyalty, paired sample t-test and one way ANOVA F-test were carried out. The findings are detailed in Table 6 below.

Table 6. The Relationship between the demographic variables and the factors considered under Customer Relationship Management, Customer Trust, and Customer Loyalty in the Indian Banking Sector

Factors	Customer knowledge management		Customer satisfaction		Customer trust		Customer loyalty	
	Public sector banks	Private sector banks	Public sector banks	Private sector banks	Public sector banks	Private sector banks	Public sector banks	Private sector banks
Paired-Sample T-Test								
Marital status	95.974**	68.788**	93.696**	68.502**	111.170**	74.451**	86.909**	67.403**
Type of family	93.845**	68.608**	91.248**	66.596**	108.744**	73.630**	84.638**	66.115**
Idea about implementation of CRM in the bank	96.642**	70.650**	94.196**	70.755**	112.325**	76.457**	87.802**	68.461**
One-Way ANOVA								
Age	0.878	1.265	1.057	2.116	1.843	2.861*	1.260	1.828
Gender	0.603	1.846	0.178	0.960	0.996*	1.946	0.122	4.317*
Educational Qualification	0.617	0.447	0.730	0.525	0.986	2.191*	0.317	0.248
Occupation	0.378	1.416	0.386	1.471	1.627*	1.969	0.301	0.849
Monthly Income	2.735*	2.493*	2.208*	1.912	1.097*	1.237	1.278	1.735
Status of the residential Area	2.325*	0.863	2.292*	0.324	0.387	0.267	1.373	0.286
Dependent members	0.238	7.816**	0.788	2.237	0.110	3.857**	1.279	5.283**
Type of account	2.526	0.616	0.748	0.861	0.201	4.016*	0.337	2.486
Experience with bank	0.114	1.767	0.307	0.269	0.406*	1.316	0.234	0.942
Frequency of visits	0.301	1.325	0.660	0.236	0.574	2.259	0.131	0.216

**- 1% level of Significance and *-5% level of Significance

Source: Primary Data

Regarding the relationship between the demographic variables of the respondents of this study and the factors that influence customer loyalty, the obtained results revealed that all the factors in respect of both public sector and private sector banks were significantly associated with marital status, type of the family, and idea about the implementation of CRM in their respective banks, as the t-value was significant at 1% level.

The results of analyzing the relationship between the demographic variables and the factors through one-way ANOVA test indicated that only the customer trust was related to the age variable of the private bank customers. while customer trust was related to gender among the customers of the public sector banks and customer loyalty in respect of private sector banks at 5% level of significance. Next to this, the occupation type was found to be significantly related to customer trust in public sector banks and monthly income to customer knowledge management in both sectors and to customer trust and customer satisfaction in public sector banks. The status of the residential areas of the customers was found to be significantly

related to customer knowledge management and customer trust in public sector banks. The variable “Dependent members in the family” was found to be significantly related to customer satisfaction, customer trust and customer loyalty at 1% level of significance. Regarding the relationship between the type of the account and the experience with the bank, only the customer trust was found to be significantly related at 5% level of significance. Regarding the frequency of visits, no significant relationship was found between the demographic variables and the factors taken up for consideration in this study. These results confirm the alternative Hypothesis (H₁).

Discussion and Conclusion

To confirm the objectives of this research, research questions were coined based on the conceptual model by considering factors such as customer knowledge management, customer trust, and customer satisfaction that constitutes the entire CRM system. WE also found relationships with satisfaction with services and loyalty.

Attempt was made to find the relationship between the factors under customer relationship management through structural equation modeling, Correlation and regression analysis were run, and the results revealed that there was a significant relationship between customer relationship management, customer trust, and customer satisfaction. The details of the casual paths along with the result of the hypotheses are detailed below in Table 7.

Table 7. Structural Model Results About the Hypothesis

Hypothesis	Critical path		Estimate	C.R.	Decision of the hypothesis
	Independent variable	Dependent variable			
H ₂	Customer knowledge management	← Customer relationship management	0.946	32.621**	Supported
H ₃	Customer trust	← Customer relationship management	0.749	19.557**	Supported
H ₄	Customer satisfaction	← Customer relationship management	1.022	22.325**	Supported
H ₅	Customer loyalty	← Customer satisfaction	1.142	23.653**	Supported

Source: Primary data

The above result confirms that a unit increase in the CKM increases the CRM to the tune of 0.946 positively. It also confirms the significant relationship between the two factors, which has been substantiated in the findings of Srivastave et al. (2018) which confirmed knowledge management as an essential tool for creating satisfaction through CRM. Sugiarto et al. (2017) noted that customer knowledge management is an integration of customer relationship management, while Lee (2014) and Chiu et al. (2017) highlighted that the customer knowledge management is an important approach that improves the organization’s innovative capabilities through customer relationship management. Nonetheless, the findings are against the output of the study by Attafar et al. (2013) who pointed out that inadequate supporting budgets and the management commitment to CKM were barriers in implementing the CRM. Despite the disagreement among previous studies, our study confirmed the alternative hypothesis (H₂).

Similarly, while analyzing the association between customer trust and customer relationship management, a significant relationship was found between the factors. That is to

say, when the trust increases by 1 unit, the CRM increases 0.749 times, which is in line with the findings of Simanjuntak et al. (2020) who suggested that there occurred an indirect relationship between trust and retention and Agyer et al. (2020) who pointed out that trust in service provider and trust in regulator significantly impact the engagement of customers with the services and act as a mediator to loyalty. Nonetheless, our finding disagrees with that of Upamannyu et al. (2015) who maintained that there was no effective relationship between customer trust and loyalty. Once again, the findings of our study agree with the results obtained by Nguyen et al. (2013), Bhat et al. (2018), and Rizan et al. (2014). Then, the alternative hypothesis (H_3) of this study was confirmed.

The results of analyzing the association between the customer satisfaction and the CRM in the Indian banking sector revealed that there existed a significant and positive relationship between the factors based on the result of the estimates (1.022) and the critical ratio values. In addition, while analyzing the effect customer relationship management on customer loyalty through the satisfaction level of the customers, the direct effect of the satisfaction on the loyalty was found to be 0.935 and the indirect effect of the customer relationship management on the loyalty through customer satisfaction was found to be 0.972. This implied that increase in CRM and satisfaction increases the loyalty to the tune of 93.5% and 97.2%, respectively. This confirmed positive impact coincides with the findings of Velnampy and Sivesan (2012) who suggested that relationship marketing has an impact on satisfaction with low CRM level. Our finding also agrees with that of Hassan et al. (2015) that indicates that CRM role increases the satisfaction level and also increases the profit by reducing the cost of approach towards the customers. Our obtained result is also in line with those of Al-Queedi et al. (2017) and Chiguvi and Guruwo (2015) who highlighted the moderating effect respondents' income level on the relationship between satisfaction and loyalty. Finally, our finding agrees with that of Azzam (2014) who suggested that CRM elements were responsible for customer satisfaction and loyalty through solving the problem and complaint of the customers. Thereby, we can confirm the alternative hypothesis (H_4).

Regarding the impact of the customer relationship management on the customer loyalty through customer satisfaction, it is seen that all the factors of customer relationship management like CKM, CT, and CS were highlighted as a significant predictor of customer loyalty. This has substantiated the findings of Hajiyan et al. (2015) who revealed that the implementation of CRM would increase the quality of services and customer loyalty. Therefore, we can confirm the alternative hypothesis (H_5).

The results also confirmed that there is a significant relationship between the demographic variables and the factors considered to determine the impact of loyalty. Thereby, we can confirm the Hypothesis (H_1), which agrees with the findings of Mirzagoli and Memarian (2015).

The main aspect of implementing customer relationship management is to solve the customer problem and satisfy their wants and needs. To know the problem, it is mandatory for every organization to have a customer database. Moreover, customers should be educated about the services offered and this could be done only through an effective CRM system. This research is based on the effective implementation of the CRM system and its impact on the customer loyalty in the public and private banks in India. The findings of the research highlighted many positive insights about CRM implementation through various key parameters with in-depth understanding, and proved the benefits theoretically and practically in Indian banking sector by demonstrating positive relationships and impacts of independent factors such as customer knowledge management, customer satisfaction and customer trust on customer loyalty.

Even though the CRM factors have significant relationships with loyalty, the same scenario will not continue if there is any deficiency in the quality of services offered by the banks. Moreover, the findings of this study have pointed out the difference in the performance of the CRM system between the public and private sector banks in India. In particular, customer trust should be given importance by the private sector banks as the beta value is found to be low ($\beta = 0.191$) and importance of customer satisfaction that should be caused by the public sector banks ($\beta = 0.259$).

Hence, the bank authorities should view these outputs as a source of improvement and provide more value-added services needed by the customers through their CRM system effectively so as to retain them in this competitive scenario.

Limitation of the Study and Scope for Future Research

The present study is conducted among the banks located in India with findings based on the opinions of a particular sample selected through simple random sampling method. Therefore, the findings may not be applicable to other markets. Hence, further research on this topic may be conducted with different sample sizes and with various sampling techniques through cross-sectional studies in various geographical areas so that more precious results may be obtained which will be useful for the entire audience universally.

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