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The Role of Customer Knowledge Management, Value, and Retention in CRM: Enhancing Satisfaction and Long-lasting Loyalty Insights from Structural Equation Modeling

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Abstract
Purpose: Customer Relationship Management maintains the existing customers and targets potential customers with personalized and attractive offers for their services and products, enhancing sales development. Therefore, the overall goal of this study is to observe the influence of CRM on customer satisfaction and its impact on customer loyalty in selected public sector banks in Bihar.
Methodology: To achieve the research objective, essential data were collected through the five-point Likert Scale of questionnaires through a convenient random sampling method. An exploratory Factor Analysis test was employed to determine the sample adequacy and measurement model to confirm the extracted variables, then Structural Equation Modeling to check the hypotheses of this study using SPSS 21 and AMOS 23.
Findings: Customer satisfaction is influenced by customer retention, value, and knowledge management, and customer satisfaction has an intensely favorable effect on customer loyalty. Public sector banks such as SBI, Bob, and PNB are enriched to implement CRM constantly and adequately to achieve competitive improvement through building long-term, cost-effective relationships with their customers and accomplishing customer loyalty (Kiyar et al., 2023).
Implications: The model provides a quantitative basis for implementing CRM in the banking industry as variables studied. Further, the literature review exposed an important knowledge gap and established a testable agenda for evolving the CRM concept from the banking perspective. Knowingly forthcoming investigation potential exists through framework repetition, extension, and realistic validation.
Originality: This study comprehensively studied existing literature to find an innovative assessment measurable model absent in earlier studies. It provides a robust conceptual framework and rationale for ongoing scholarly investigation of the impact of CRM on customer satisfaction and its impact on loyalty in the banks.

Keywords: Customer Relationship Management, Customer Satisfaction, Customer Loyalty, Exploratory Factor Analysis, Structural Equation Modeling.

Introduction

Customer Relationship Management (CRM) is a strategic technique for managing customer collaborations and potential sales perspective. It leverages technology to streamline, organize, and synchronize business operations to enhance profitability, revenue, customer satisfaction, and brand loyalty. Retaining a loyal customer base is particularly valuable due to its direct impact on profitability, making customer loyalty a critical metric in marketing (Oliver, Rust, & Varki, 1997). CRM encompasses business practices and processes emphasising the relationship between key customers and the essential association. When customers develop brand loyalty, they form a positive insight into the company, leading to sustained commitment. This loyalty is further reinforced when customers experience an emotional connection with the brand beyond intellectual appreciation. According to Winter and Strauch (2003), CRM benefits businesses by integrating data, automating marketing and sales processes and strengthening and expanding profitable customer relationships.
Additionally, CRM enables businesses to attract new customers by offering personalized and appealing deals, thereby driving sales growth (Sauers, 2008). The discovered issue must be acknowledged within the appropriate offices and remedied by putting remedial measures in place. Additionally, this study substantially contributes to the field's professional

and scholarly literature (Ahmed et al., 2022). CRM also includes a framework of procedures, tools, and organizational behaviours designed to cultivate customer loyalty profitably. It is a strategy approach that integrates people, processes, culture, and attitudes to realize this goal while coordinating desired customer experiences with supporting technology. According to Muzeyin et al. (2022), CRM fosters customer relationships to guarantee their expansion, vitality, and long-term viability. This study emphasizes long-term advantages and maintaining durable consumer relationships by focusing on CRM practices and their influence on customer loyalty.

In contrast, previous studies mainly examined CRM from the standpoint of organizational profitability (Kiyar et al., 2023). By investigating how customer relationship management affects customer satisfaction and how that affects customer loyalty, the study seeks to close the research gap. With an emphasis on Bihar's public sector banks, it focuses on five crucial aspects: customer loyalty, customer satisfaction, customer retention, customer value, and customer knowledge management.

Literature Review

Customer satisfaction

Customer loyalty is acknowledged to be significantly influenced by customer satisfaction. Oliver (1980) suggested that there is an association between future goals and satisfaction, both directly and indirectly using attitude. Customer pleasure leads to loyalty (Heskett, Sasser, and Schlesinger, 1997). Kolter (2000) established satisfaction as an individual's attitude of joy or disappointment after assessing their expectations and the perceived performance of online buying. Customers' decisions to return to the store in the future are influenced by their level of satisfaction at the last stage of satisfaction development (Tsai & Huang, 2007). Customers' loyalty to a business dramatically increases when they trust the service provider (Kassim & Abdullah, 2008; Kishada & Wahab, 2013). Ningsih and Segoro (2014) described customer satisfaction as a confluence of their attitude, assessment, and emotional reaction after a transaction. Yoo et al. (2015) confirmed increased customer satisfaction increases customer loyalty. Previous research has repeatedly shown that customer satisfaction is a significant factor in determining loyalty since happy customers are more likely to make more purchases (Nyadzayo & Khajehzadeh, 2016). There are two types of pleasure: "pleasurable satisfaction," which results from emotional reactions to a reasonable or service, and "attribute satisfaction," which is founded on logical and cognitive assessments. Although it might not always be enough in every situation, Ganiyu (2017) underlined the crucial role that customer pleasure plays in fostering loyalty and increasing profitability. Rychalski and Hudson (2017) provided evidence of a strong relationship between customer loyalty and customer satisfaction.

Customer Knowledge Management

CKM, or customer knowledge management, is an aspect that businesses should implement. A competitive advantage may be gained by efficiently gathering, organizing, and disseminating consumer knowledge (Murillo & Annabi, 2002). CKM is a business's capacity to comprehend its clients' wants and preferences, both now and in the future (Lee, Naylor, & Chen, 2011). It also includes information, guidelines, and tactics for handling consumer relations and building a favourable opinion of the business (Motowidlo, Borman, & Schmit, 1997). By facilitating insights into consumer profiles, behaviours, preferences, and expectations, CKM assists businesses in improving their customer interactions and increasing customer loyalty and satisfaction (Xu & Walton, 2005). According to Mithas, Krishnan, and Fornell (2005), CKM helps businesses tailor their products to match the demands of particular clients, which raises customer satisfaction levels. According to Oliver (1999), handling customer knowledge and information well can help to build trust. Banks can use the data produced by CKM to encourage loyalty and trust among their clients. Additionally, CKM increases the efficacy and speed of an organization's customer replies, which lowers customer attrition and increases perceived value (Jayachandran, Hewett, & Kaufman, 2004; Bueren, Schierholz, Kolbe, & Brenner, 2005). Establishing confidence in customers is becoming more complex, yet it is essential for creating enduring partnerships, according to Peppers and Rogers (2004). Understanding their customers is essential for businesses that modify their procedures, goods, and services to satisfy their wants and build strong, exciting relationships. Banks get crucial data and insights to improve customer connections (Abdullah & Siddique, 2017). According to research, CKM significantly and favourably impacts customer satisfaction in public sector banks.

H1: There is a positive and significant impact of customer knowledge management on customer satisfaction in public-sector banks.

Customer value

One of the most important factors from the perspective of customer relationship management (CRM) is assessing customer value. Customer value assessment, however, can be exhausting and is highly dependent on the evaluation technique used. In contrast to contemporary treatments, traditional assessment techniques are frequently complicated and difficult to execute. Online surveys, evaluations of customers' perceived worth of goods and services before and after buying them, and other facilitated procedures are characteristics of contemporary evaluation methodologies. To evaluate their service performance using customer data, banks should also occasionally schedule customer audit meetings (Sheik Abdullah et al., 2016). In the banking industry, "customer value" refers to the advantages and experiences a client obtains compared to the expenses and work required to use a bank's goods and services. Providing outstanding customer value is essential for ensuring client pleasure, loyalty, and retention in a banking environment that is becoming increasingly digitalized and competitive. Banks provide value by providing individualized financial solutions, smooth digital services, and first-rate customer assistance. Customer service is improved by convenience, such as mobile applications and round-the-clock internet banking. Competitive interest rates, minimal fees, and customized products such as investment alternatives and loans further enhance perceived value. Competitive interest rates, minimal fees, and customized products such as investment alternatives and loans further enhance the idea of value. Transparency and trust are also important. Strong connections are fostered by upholding ethical standards, protecting data, and communicating clearly. In the end, customer value in banking extends beyond financial gains and includes ease, trust, and service quality, all of which contribute to long-term success for both banks and their customers.

H2: There is a positive and significant impact of customer value on customer satisfaction in public-sector banks.

Customer retention

According to Eriksson and Lofmarck (2000), perceived trust and total happiness from satisfying customer needs or increasing revenues are linked to client retention. According to Sin et al. (2002), commercial banks must create, maintain, and enhance enduring, mutually advantageous relationships with their clients in order to maximize long-term performance, such as keeping customers. Kuria said, citing Zeithaml (2008), that service companies may increase customer satisfaction and perceived advantages to promote retention by providing higher value through improved offers. A relationship marketing approach may help Jordanian banks retain their clientele, according to research by Alrubaiee and Al-Nazer (2010). Information and communications technology (ICT) implementation has improved customer loyalty and retention, according to Kuria's (2010) study on Kenyan commercial banks. The respondents emphasized how important technology is for improving customer satisfaction through more effective service delivery. Service processing times have been significantly shortened, especially thanks to ICT. Kibeh (2013) highlighted that Customer Relationship Management (CRM) is now an essential strategy for organizations in research on relationship marketing and customer retention within Nairobi's mobile phone industry. Better customer retention, loyalty, and satisfaction can result from an efficient CRM deployment. The report also points out that relationship marketing techniques may be implemented by marketers using a variety of tactics, which can have a favorable impact on retention of customers.

H3: There is a positive and significant impact of customer retention on customer satisfaction in public-sector banks.

Customer Loyalty:

The ultimate goal of CRM, which makes use of a thorough 360-degree perspective of interactions with customers, is customer loyalty. According to Lam et al. (2004), recurring business from a service provider and referrals to others are signs of customer loyalty. CRM provides a comprehensive perspective of a customer's transactional activity with a business, according to Kannabiran and Narayan (2005). Customers who are loyal are more likely to keep up long-term ties with the business, recommend their favourite brand to others, and renew contracts, claim Jumaev and Hanaysha (2012). According to Salimon, Yusoff, and Abdullateef (2013), loyalty frequently corresponds with a brand, which is what a company represents through its name, goods, services, costs, and other unique characteristics that separate it apart from rivals. According to Read et al. (2014), a customer's preference for a particular product or service and their repurchase behavior are descriptions of both behavioral and attitude of loyalty. Customer perceptions have an impact on loyalty, especially when evaluating the costs of terminating the relationship and comparing the existing service provider to alternatives. Even unsatisfied customers may keep up long-term connections in order to save money on switching, as noted by White et al. (2007). Although further research is needed to fully understand the nature of this connection, Dagger and David (2012) suggest that switching fees benefit customer loyalty. Additionally, they point out that customers may feel "trapped" or excessively devoted to the relationship when perceived advantages are significant (Dagger & David, 2012; Pumim et al., 2017). Since keeping current customers is more cost-effective

than finding new ones, banks must monitor customer loyalty to avoid attrition. Furthermore, it has been demonstrated that customer satisfaction significantly enhances loyalty, especially in public-sector banks.

H4: There is a positive and significant impact of customer satisfaction on customer loyalty in public-sector banks.

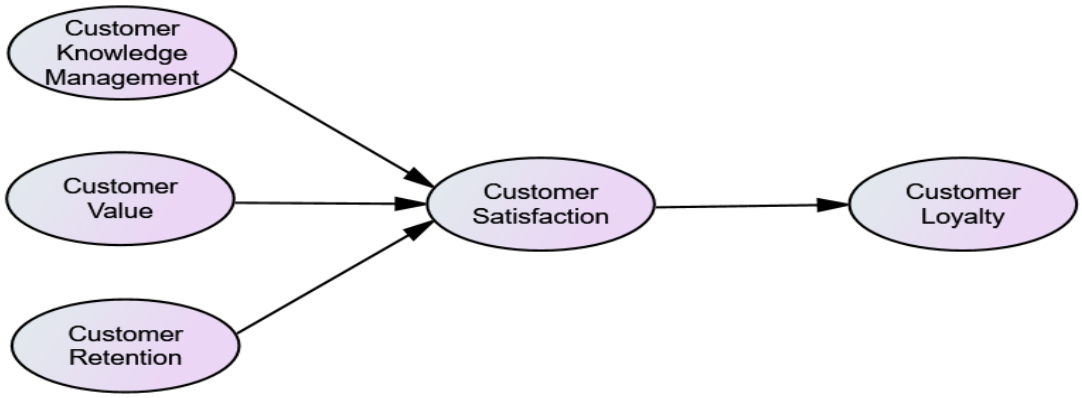

Fig. 1. Conceptual model

Research Methodology

Research sample

Three top banks in North India—SBI, BOB, and PNB—specifically in Muzaffarpur and Vaishali, were chosen for this study based on their financial performance. It was performed at a well-known public-sector bank in India. A standardized questionnaire was used to gather information from bank customers. Respondents were contacted personally by researchers, while those who were difficult to reach were contacted by WhatsApp and email. To make sure that choosing respondents was feasible, easy and random sampling techniques were used. Parameters from previous studies were used to establish the sample size, and they indicate that most studies need between 200 and 500 answers (Hill & Alexander, 2002; Tabachnick & Fidell, 2007). According to Hair et al. (1998), each questionnaire item should receive five to ten responses. A final sample of 318 valid replies was obtained from the 350 questionnaires that were initially issued, of which 20 were rejected and 12 were incomplete.

Descriptive statistics, Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM) were used in data analysis utilizing SPSS and AMOS software to achieve the study's goals.

Development of questionnaire and collection of data

To ensure the items were suitable and had relevant substance, a subset of customers was personally contacted to validate the research instrument. The items in the questionnaire were taken from earlier studies by Bhat et al. (2018) and Khodakarami and Chan (2014). It comprised 26 CRM-related statements that were divided into five latent variables. The survey also asked about the respondents' socioeconomic and demographic characteristics, bank account information, and the cities in which the bank operated. The chosen questions were measured, and the necessary data was collected using a five-point Likert scale, which goes from strongly disagree (1) to strongly agree (5). A Google Form version of the survey was made to make gathering information more manageable, and it was circulated via email and social media.

Findings of the study

Table 1. Demographic Profile

Items	**Frequency**	**Percentage**
Age		
upto 20	13	4.1
20-40	256	80.5
41-60	42	13.2
61-80	7	2.2
Gender		
Male	213	67

Female	105	33
Marital Status		
Married	174	54.7
Unmarried	144	45.3
Education		
Upto High School	21	6.6
Intermediate	92	28.9
Graduate	132	41.5
Post Graduate	60	18.9
Ph.D.	10	3.1
Others	3	.9
Occupation		
Professional	25	7.9
Salaried class	78	24.5
Self-employed/Business	141	44.3
Students	49	15.4
Home-maker	21	6.6
Others	4	1.3
Monthly Income		
Nil	17	5.3
Below 10,000	51	16
10,000-25,000	113	35.5
25,001-50,000	98	30.8
50,000-1,00,000	39	12.3
City		
Muzaffarpur	170	53.5
Vaishali	148	46.5
Banks		
SBI	127	39.9
Bob	105	33
PNB	88	27

The above table revealed the respondents' demographic profile and banking account status.

Reliability test

The reliability statistics of a 26-item scale evaluated using Cronbach's Alpha are shown in the table. This statistical metric assesses internal consistency by measuring how effectively the items collectively measure the same underlying notion. The test was used to evaluate the validity and dependability of the scale's assertions. Cronbach's Alpha values of 0.7 and higher are regarded as trustworthy, according to Straub et al. (2004). High reliability is shown by the value obtained of 0.877, which shows that the items have a strong correlation and produce reliable results. Good dependability is indicated by numbers above 0.8; however, values above 0.7 are considered acceptable. This outcome shows that the scale measures the desired construct with little measurement error and is suitable for research and real-world applications.

Table 2. Reliability of Data

Cronbach's Alpha	N of Items
.877	26

Source: Author's finding

Exploratory Factor analysis

Data appropriateness for factor analysis is determined using the Kaiser-Meyer-Olkin (KMO) measure, which evaluates sampling adequacy based on the correlations and partial correlations of the variables. Kaiser (1974) states that a decent analysis requires a KMO value of at least 0.5, with values between 0.7 and 0.8 being regarded as acceptable and values over 0.9 as outstanding. The data in this study are appropriate for factor analysis, as shown by the reported KMO value of 0.742.The strength of the correlations between the variables was also evaluated using Bartlett's Test of Sphericity. The null hypothesis that the correlation matrix is an identity matrix with all diagonal members around 0 is investigated in this test. A substantial Bartlett's test result supports moving forward with factor analysis. The dataset is "meritorious" for factor analysis if the KMO value is 0.833, as values more than 0.8 are regarded as excellent. This implies that the data is appropriate for factor analysis as there are adequate correlations between the variables.

A rotational factor solution was obtained by using Exploratory Factor Analysis (EFA) and loading each item onto a single factor. 73% of the variation is explained by just one component, which is significantly more than the 50% requirement. As a result, the factor analysis validates that the variables chosen are appropriate and reliable for subsequent research.

Table 3. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.833
Approx. Chi-Square		7419. 942
Bartlett's Test of Sphericity	df	325
Sig.		.000

Source: Author's finding

Table 4. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.855	26.366	26.366	6.855	26.366	26.366	4.382	16.854	16.854
2	4.497	17.295	43.661	4.497	17.295	43.661	4.300	16.538	33.392
3	3.076	11.830	55.490	3.076	11.830	55.490	3.599	13.841	47.233
4	2.631	10.118	65.609	2.631	10.118	65.609	3.589	13.804	61.037
5	2.066	7.948	73.556	2.066	7.948	73.556	3.255	12.519	73.556
6	.883	3.396	76.952						
7	.756	2.907	79.860						
8	.680	2.617	82.477						
9	.583	2.244	84.721						
10	.538	2.071	86.792						
11	.509	1.956	88.748						
12	.398	1.531	90.279						
13	.381	1.467	91.746						
14	.345	1.326	93.072						
15	.298	1.146	94.218						
16	.254	.978	95.197						
17	.244	.939	96.135						
18	.197	.756	96.892						
19	.164	.632	97.523						
20	.142	.548	98.071						
21	.131	.504	98.576						
22	.101	.388	98.964						
23	.094	.363	99.327						
24	.075	.290	99.617						

25	.069	.265	99.882						
26	.031	.118	100.000						

Extraction Method: Principal Component Analysis.

Factor analysis findings show how much of the overall variation is explained by each component. With eigenvalues larger than 1, the top five components together account for 73.56% of the Variance. This suggests that the the majority of the data in the dataset can be explained by each of these factors. Table 5 (Rotated Component Matrix) demonstrates how the variation is redistributed across the components following rotation in order to enhance interpretability. After the rotation, the percentage of variation described by each component varies from 12.52 to 16.85%, while the overall percentage of Variance explained remains at 73.56%. This procedure preserves the overall explanations while improving the components' meaning and clarity.

Table 5. Rotated Component Matrix[a]

	Component				
	CR	CL	CS	CV	CKM
CR1	.907				
CR5	.898				
CR2	.868				
CR6	.834				
CR4	.747				
CR3	.725				
CL4		.950			
CL2		.948			
CL1		.927			
CL5		.899			
CL3		.817			
CS3			.828		
CS2			.825		
CS1			.731		
CS5			.705		
CS4			.651		
CV3				.932	
CV2				.879	
CV4				.852	
CV5				.768	
CV1				.640	
CKM2					.835
CKM5					.823
CKM1					.814
CKM4					.728
CKM3					.720

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Confirmatory factor analysis

The uni-dimensionality of the measurement model was further validated through CFA. Chau (1997) confirmed that the CFA was evaluated using a variety of model fit metrics, both positive and negative. With item loadings well over the 0.70 cutoff, the measurement model ($\chi 2$ / df = 4.270, GFI = 0.774, AGFI = 0.726, CFI = 0.871, NFI = 0.839, RMR = 0.035, RMSEA = 0.066) fulfilled all necessary fit indices. The measurement model's path estimates (CFA loadings), which are all more than

0.60 and show good convergent validity and internal consistency, are shown in Table 7. Additionally, build reliability surpasses 0.70 and AVE values reach 0.50.

Table 6. Factor loading

Variables	Scale items	Path Estimates	Construct Reliability	Average Variance Extracted	Maximum Shared Varianc
Customer Retention	CR1	.953	0.920	0.662	0.957
	CR2	.818			
	CR3	.604			
	CR4	.739			
	CR5	.936			
	CR6	.779			
Customer Loyalty	CL1	.915	0.959	0.825	0.116
	CL2	.971			
	CL3	.769			
	CL4	.974			
	CL5	.896			
Customer Satisfaction	CS1	0.733	0.872	0.583	0.193
	CS2	0.869			
	CS3	0.919			
	CS4	0.680			
	CS5	0.563			
Customer Value	CV1	.584	0.895	0.637	0.076
	CV2	.815			
	CV3	.968			
	CV4	.808			
	CV5	.718			
Customer Knowledge Management	CKM1	.512	0.872	0.589	0.193
	CKM2	.573			
	CKM3	.867			
	CKM4	.821			
	CKM5	.958			

Path estimates, construct reliability (CR), average Variance extracted (AVE), and maximum shared Variance (MSV) are used in the table to evaluate the validity and reliability of the constructs. CR scores above 0.7 show that all structures are dependable. Convergent validity is confirmed by AVE values, which are more than 0.5. MSV values suggest that the majority of assumptions have variations.

Table 7. Discriminant Validity Results

	CR	AVE	MSV	MaxR(H)	CR	CL	CS	CV	CKM
CR	0.920	0.662	0.108	0.957	**0.814**				
CL	0.959	0.825	0.116	0.978	0.061	**0.908**			
CS	0.872	0.583	0.193	0.917	0.329***	0.341***	**0.764**		
CV	0.895	0.637	0.076	1.013	-0.057	0.218***	0.276***	**0.798**	
CKM	0.872	0.589	0.193	0.945	0.288***	0.189**	0.440***	0.042	**0.767**

Note:
Significance of Correlations: † p < 0.100, * p < 0.050, ** p < 0.010, *** p < 0.001
The matrix assesses all aspects of customer retention (CR), customer loyalty (CL), customer satisfaction (CS), customer value (CV), and customer knowledge management (CKM) in terms of validity, reliability, and interrelationships. The square root of AVE is shown by the diagonal bold values, which are used to evaluate discriminant validity. Discriminant validity is confirmed by these diagonal values being more significant than the off-diagonal correlations. Substantial dependability across constructs is shown by CR values that are all over 0.7. The components demonstrate discriminant validity (square root of AVE > inter-construct correlations), convergent validity (AVE), and construct reliability (CR). Strong correlations draw attention to the relationships between the dimensions and provide insightful information for more research. Furthermore, for every concept, MSV values are less than AVE, supporting discriminant validity.

STRUCTURAL EQUATION MODELLING RESULTS

This study used structural path modeling to investigate a number of proposed causal relationships. As shown in Figure 1, customer value, customer retention, and customer knowledge management were considered as exogenous (independent) factors, but customer satisfaction was regarded as the endogenous (dependent) variable. Furthermore, customer satisfaction has been investigated as an exogenous variable, and customer loyalty as an endogenous variable. The model summary was assessed as an essential stage in the hypothesis testing procedure to ascertain if the conceptual and hypothesized models that were suggested fit the data presented.

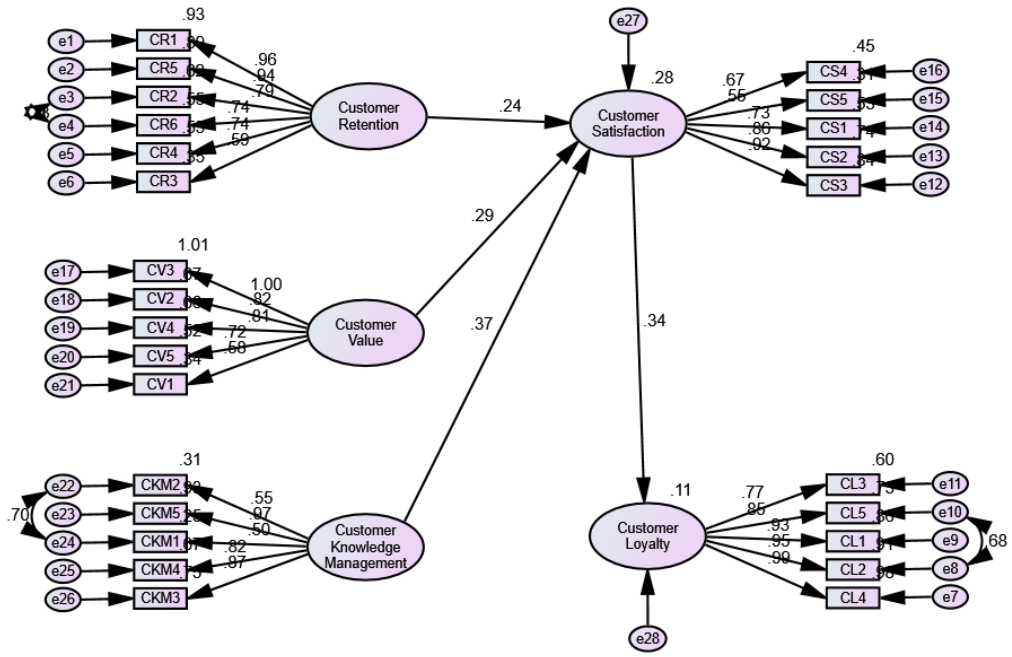

Fig. 2: Structural Model (Path diagram)

As shown in Fig. 2, outcomes indicate that the suggested model fits the observed data well. For the current model, a number of fitness indicators were assessed. To evaluate the relationships, AMOS was employed for structural equation modeling. Hair et al. (2013) state that a model is considered to be well-fitted if the goodness-of-fit indices, including GFI, TLI, and CFI, are more significant than 0.90 and the CMIN/df value is less than 5. Furthermore, according to Hair et al. (2017), a model is considered to fit well if the root mean square error approximation (RMSEA) falls between 0.05 and 0.08 and the standardized root mean square residual (RMR) is less than 0.05. According to the specified criteria, the present model's fitness indices—CMIN/df = 2.303, GFI = 0.862, AGFI = 0.834, TLI = 0.942, CFI = 0.948, RMR = 0.049, and RMSEA = 0.064—are favorable (Kline, 2011; Hoyle, 2012; Byrne, 2016).

Table 8. Hypothesis testing

Hypothesis	Regression Weight	Beta Coefficient (β)	t- value	p-value	Hypothesis
H1	CS←-CR	.168	4.639	***	Supported
H2	CS←-CKM	.500	6.062	***	Supported
H3	CS←-CV	.205	5.591	***	Supported
H4	CL←-CS	.420	5.938	***	Supported

Notes: *** p value < 0.01.

The suggested theoretical model was further validated by hypothesis testing. According to the path analysis results, consumer satisfaction and customer retention are positively and significantly correlated ($\beta = 0.168$, $t = 4.639$, $p < 0.05$). Likewise, there is a high and positive correlation between customer satisfaction and customer knowledge management ($\beta = 0.500$, $t = 6.062$, $p < 0.05$). Additionally, there is a positive and substantial correlation between customer satisfaction and customer value ($\beta = 0.205$, $t = 5.591$, $p < 0.05$). Additionally, the loyalty of customers is significantly and favorably impacted by customer satisfaction ($\beta = 0.420$, $t = 5.938$, $p < 0.05$).

All assumptions were verified, and all structural paths had regression estimates more than 0.20 and were significant ($p < 0.05$). With substantial favorable relationships between the constructs ($p < 0.001$), the hypotheses are altogether confirmed. With $\beta = 0.420$, the largest effect among the connections examined was found between customer satisfaction and customer loyalty (H4), emphasizing the vital role that satisfaction plays in boosting loyalty to them.

Conclusion

The study emphasizes how customer loyalty is strongly impacted by customer satisfaction. The results indicate that increasing customer awareness about goods and services, keeping accurate customer data, and fully comprehending customers' dynamic characteristics can all improve customer loyalty, even though customer retention has a comparatively smaller impact on customer satisfaction and customer value has less influence than customer knowledge management (Kiyar et al., 2023). Increasing consumer knowledge enhances loyalty tactics even more. Furthermore, by improving customer relationship management procedures, technological developments, better information management abilities, and increased managerial capacity may strengthen the social aspects that comprise customer loyalty. Customer loyalty is strongly positively impacted by customer satisfaction, which is demonstrated to be influenced by customer retention, customer value, and customer knowledge management. According to these results, which are consistent with other studies (Consuegra et al., 2007; Wong & Zhou, 2006), customer satisfaction continues to be one of the most important contributing elements and partially drives customer loyalty. Banks that want to improve their relationships with their customers must constantly assess both their internal procedures and consumer behavior. Ineffective relationship-building skills have the potential to erode trust, converting loyal customers into disloyal ones and creating unfavorable opinions of the bank. This may eventually harm the bank's viability and reputation.

According to the study's findings, the suggested model improves the banking industry's comprehension of client loyalty. It emphasizes, although, that the model's confirmation should not be seen as conclusive, especially in the case of better-fit indices. The results emphasize how crucial it is for Bihar's commercial banks to offer accurate and timely service information, especially when launching new offerings. Enhancing customer satisfaction via efficient administration of each interaction encourages loyalty. Furthermore, in public sector banks, customer relationship management (CRM) is essential for promoting customer satisfaction and long-term retention of customers. In order to accomplish this, banks must concentrate on developing and maintaining their capacity to provide customers with precise and reliable information, nurturing customer loyalty and improving their overall banking experience.

Managerial Implications

According to the report, one of the main factors influencing loyalty among customers is their satisfaction. Banks have to give top priority to initiatives that improve customer satisfaction by offering smooth services and fast, accurate information. Effective customer knowledge management has a greater impact on customer satisfaction than on customer value. Thus, banks must invest in cutting-edge CRM systems to handle customer data and provide individualized services. This strategy can improve loyalty and strengthen ties with customers. Banks must concentrate on educating staff on how to efficiently

manage relationships with customers and use technology to maximize touchpoints in order to increase customer retention. Offering cutting-edge services proactively and assisting customers in optimizing advantages will boost contentment even more. Transparent communication and upholding social integrity are essential for retaining customer loyalty and confidence. Banks may safeguard their brand and guarantee long-term success by coordinating internal procedures with customer-centric objectives, especially in the fast-paced and robust banking industry.

Limitation

This study has an assortment of weaknesses, even if it provides insightful information on CRM strategies. A questionnaire-based survey that was exclusively directed at the customers of the banking institution was used to conduct the study at a public sector bank. It did not collect data from every individual engaged in the bank's CRM procedures. Furthermore, the study's geographic scope was limited to Muzaffarpur and Vaishali, two cities in North Bihar. The cross-sectional methodology of this study could have limited its capacity to adequately capture the variations in loyalty and satisfaction with customers over a lengthy period of time, in contrast to longitudinal studies that monitor changes in consumer behavior over time.

Further research area

The present study investigated how customer satisfaction with loyalty relates to customer acquisition, customer enhancement, and customer information. To find other factors that can help us better grasp the connection between loyalty and customer satisfaction, this relationship needs more research. Future studies might build on this work by using it in different regions and countries or by concentrating on different banks and non-banking businesses. These studies might incorporate mediation and moderation effects, as well as other factors like customer value, customer retention, technology-based CRM, and e-CRM, to give a more thorough study.

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