ANALYZING THE IMPACT OF CRM ADOPTION ON CUSTOMER SATISFACTION AND RETENTION WITH JUGL TECHNOLOGY SOLUTION PVT.LTD

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Abstract: This study investigates the impact of Customer Relationship Management (CRM) adoption on customer satisfaction and retention within Jugl Technology Solution Pvt. Ltd. The research explores how CRM implementation enhances customer interactions, streamlines business operations, and fosters loyalty. Using a mixed-methods approach, data were collected through structured questionnaires and analyzed with SPSS using chi-square, ANOVA, and correlation techniques. The study found that CRM adoption positively influences customer satisfaction, which in turn significantly improves customer retention. These insights provide valuable guidance for optimizing CRM strategies in SMEs.

Keywords: CRM adoption, customer satisfaction, customer retention, Jugl Technology, SPSS analysis, employee perception

I. INTRODUCTION

Customer Relationship Management (CRM) has become a strategic necessity in today's customer-driven business environment. It enables organizations to manage interactions with current and prospective customers effectively by using technology to streamline processes, improve communication, and enhance service delivery. As customer expectations continue to rise, businesses are under pressure to adopt systems that personalize experiences and strengthen relationships, thereby increasing satisfaction and retention. Despite the widespread adoption of CRM systems, many small and medium-sized enterprises (SMEs) struggle to convert this investment into tangible improvements in customer outcomes. Jugl Technology Solution Pvt. Ltd., a growing technology company based in Coimbatore, has adopted CRM tools to enhance operational efficiency and customer engagement. However, the extent to which CRM adoption has influenced customer satisfaction and retention in this specific context has not been empirically studied.

Statement of Problem

Customer Relationship Management (CRM) systems have become vital tools for organizations aiming to improve customer satisfaction and retention. These systems help businesses manage customer interactions, personalize services, and enhance decision-making through data-driven insights. While large enterprises often succeed in leveraging CRM technologies, small and medium-sized enterprises (SMEs) frequently face challenges in implementation and optimization.Jugl Technology Solution Pvt. Ltd., a growing SME in Coimbatore, has adopted CRM tools to streamline operations and improve customer engagement. However, it remains unclear whether this adoption has led to measurable improvements in customer satisfaction and loyalty. Despite the company's investment in CRM for order processing, support ticket management, and internal communication, the actual impact on customer experience and retention has not been empirically assessed.Existing literature supports a positive relationship between CRM adoption and customer-centric outcomes, but there is a lack of contextual studies focusing on SMEs in emerging markets like India. Factors such as ease of use, employee involvement, and integration capabilities can significantly affect CRM success.Thus, the research problem centers on assessing whether CRM adoption at Jugl Technology effectively

enhances customer satisfaction and retention, and identifying key factors that influence this relationship within the SME context.

Objectives
- To analyze the impact of CRM adoption on customer satisfaction at Jugl Technology Solution Pvt. Ltd.
- To examine the relationship between CRM adoption and customer retention, identifying how CRM practices influence long-term customer loyalty.
- To identify the key factors affecting the effectiveness of CRM systems in enhancing customer experience and business performance.
- To provide strategic recommendations for improving CRM implementation to maximize customer satisfaction and retention outcomes.

Research Questions
1. How does CRM adoption affect customer satisfaction at Jugl Technology Solution Pvt. Ltd.?
2. What is the impact of CRM systems on customer retention?
3. What are the key factors that influence the effective use of CRM in the organization?
4. How do specific CRM features contribute to building customer loyalty?
5. What improvements can be made to enhance CRM implementation and outcomes?

Need for Study
This study is significant as it explores the practical impact of CRM adoption on customer satisfaction and retention within the context of a growing Indian SME, Jugl Technology Solution Pvt. Ltd. As businesses increasingly rely on technology to manage customer relationships, understanding how CRM systems influence customer outcomes becomes essential. The findings of this research will help Jugl identify strengths and gaps in its CRM implementation and provide a strategic roadmap to enhance customer engagement. For SMEs, where resources are limited, effective use of CRM can lead to improved service delivery, stronger customer loyalty, and increased competitiveness. Academically, the study contributes to the limited body of empirical research focusing on CRM adoption in emerging markets, particularly in the SME sector. It also adds value by examining how specific CRM features influence customer behavior, offering insights that can inform policy, practice, and future research in CRM and customer management strategies.

II. LITERATURE REVIEW

A growing body of research highlights the critical role of Customer Relationship Management (CRM) systems in enhancing business performance through improved customer satisfaction and retention. Das et al. (2018) established the foundational relationship between CRM implementation and customer retention, demonstrating that customer satisfaction serves as the key mediating factor, particularly through personalized service delivery and efficient complaint resolution. Expanding on this, Kumar and Misra (2021) revealed that CRM systems not only improve customer outcomes but also function as organizational learning tools, transforming customer data into actionable intelligence that drives continuous service improvement. Most recently, Malki et al. (2024) examined the evolution to social CRM, showing how social media integration fosters stronger emotional connections and higher loyalty through real-time engagement. Together, these studies illustrate CRM's progression from basic customer databases to sophisticated relationship platforms, while underscoring persistent research gaps regarding SME implementation, longitudinal impacts, and emerging market applications. The literature consistently confirms that when effectively implemented, CRM systems significantly enhance customer satisfaction, which in turn drives retention and loyalty, though optimal results require aligning technological capabilities with strategic business goals and human insights.

III. RESEARCH METHODOLOGY

Research design: Descriptive Research Design.
Sample design: Convenience Sampling
Sample size   : 63
Data source   : Primary data
Instrument   : Questionaire
Data Analysis tools.
Specifying tools like
- Chi – square
- ANOVA

Tools Used

- **Software:** SPSS
- **Statistical Techniques:** Descriptive statistical, correlation, ANOVA.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
1. Overall customer service provided be the company is :	63	2	5	4.11	.863
2. The company 4 addresses my queries or complaints :	63	2	5	3.79	.953
3. I feel the company's communication is personalized towards me :	63	1	5	3.89	.935
4. It is4 to me that companies use CRM systems to enhance customer experience :	63	2	5	3.95	.958
5. The following feature of the company's customer service influence my satisfaction the most :	63	1	5	3.71	1.373
6. CRM systems contribute to enhancing my satisfaction as a customer to the following extent :	63	2	5	4.10	.837
7. I interact with the company's CRM systems with the following frequency :	63	2	4	3.51	.644
8.I am 4 to continue using the company's services/products :	63	1	5	3.70	1.087
9.The company's ability to remember my preferences and purchase history influences my loyalty :	63	1	3	2.62	.580
10. The company's CMR system addresses y needs as a repeat customer :	63	2	5	3.92	.989
11. The company's customer service quality affects my decision to stay with them :	63	2	5	3.92	.989
12. The company could do the following to enhance my loyalty :	63	1	4	2.00	.916
13. The most4 factor in CMR adoption for me is :	63	1	5	2.21	1.095
14. I perceive the following barriers in using CRM systems 4 :	63	1	5	2.03	1.282
15. I would rate the impact of CRM adoption on customer retention as:	63	1	5	3.92	1.082
16. The company's CRM system provides me with relevant information :	63	2	5	3.86	.998

17.CRM integration 4 my overall experience with the company :	63	1	5	3.97	.950
18. I would like to see the following features or services improved in the company's CRM system :	63	1	5	1.97	1.015
19. Ease of use is4 when interacting with a company's CRM system :	63	3	5	4.25	.761
20.The following training or resources would help me better utilize the company's CRM system :	63	1	4	1.92	.903
21. Companies can 4 encourage customers to provide feedback through their CRM systems by :	63	1	4	2.05	.941
22. I suggest the following improvement for enhancing my satisfaction and retention through CRM systems :	63	2	4	2.70	.613

INTERPRETATION:

The data suggests that customers generally have a positive perception of the company's customer service and CRM system, particularly in ease of use and satisfaction. However, personalization and retention strategies could be improved to enhance loyalty. There are some barriers to CRM adoption, indicating potential usability concerns. Addressing customer feedback and refining CRM features could strengthen engagement and retention.

Correlations							
		Total csm	Total lrm	Total EM	Total CMRSA	Total SQF	Total IAD
Total csm	Pearson Correlation	1	-.017	-.302*	.457**	.359**	-.028
	Sig. (2-tailed)		.893	.016	.000	.004	.828
	N	63	63	63	63	63	63
Total lrm	Pearson Correlation	-.017	1	.612**	-.105	.109	.303*
	Sig. (2-tailed)	.893		.000	.413	.394	.016
	N	63	63	63	63	63	63
Tota lEM	Pearson Correlation	-.302*	.612**	1	-.308*	-.212	.350**
	Sig. (2-tailed)	.016	.000		.014	.095	.005
	N	63	63	63	63	63	63
Total CMRSA	Pearson Correlation	.457**	-.105	-.308*	1	.291*	.173
	Sig. (2-tailed)	.000	.413	.014		.021	.175
	N	63	63	63	63	63	63
Total SQF	Pearson Correlation	.359**	.109	-.212	.291*	1	.041
	Sig. (2-tailed)	.004	.394	.095	.021		.749
	N	63	63	63	63	63	63
Total IAD	Pearson Correlation	-.028	.303*	.350**	.173	.041	1
	Sig. (2-tailed)	.828	.016	.005	.175	.749	
	N	63	63	63	63	63	63

INTERPRETATION:

The correlation analysis shows that CRM satisfaction significantly enhances customer service quality and overall experience. Customer loyalty is strongly linked to engagement, meaning active interactions foster stronger retention. However, CRM system adoption negatively correlates with engagement, suggesting possible inefficiencies that could be improved. Strengthening CRM functionalities and addressing usability concerns may enhance customer interactions and loyalty.

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
TOTALDEPV *TOTALINDEPV	63	100.0%	0	0.0%	63	100.0%

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	248.344ª	225	.137
Likelihood Ratio	151.237	225	1.000
Linear-by-Linear Association	6.825	1	.009
N of Valid Cases	63		
a. 256 cells (100.0%) have expected count less than 5. The minimum expected count is .02.			

INTERPRETATION:

- The **Pearson Chi-Square value (248.344, p = .137)** indicates that there is no statistically significant association between the dependent and independent variables at the conventional 0.05 significance level.
- The **Likelihood Ratio (151.237, p = 1.000)** supports this, suggesting that the observed data does not strongly support a relationship between the variables.
- However, the **Linear-by-Linear Association (6.825, p = .009)** is significant, implying that there might be a **linear trend** between the variables.

Primary Hypothesis (H1):
CRM adoption positively impacts customer satisfaction.
- Supporting Evidence: Significant positive correlation between CRM use and satisfaction (p<0.01).
- ANOVA Validation: CRM integration significantly enhances overall experience (F=3.915, p=0.025).

Secondary Hypotheses:
H2: CRM systems improve query resolution efficiency.
- Supported by: Significant group differences in query resolution (F=6.412, p=0.003).
H3: CRM adoption strengthens customer retention.
- Supported by: Significant variance in retention impact (F=3.671, p=0.031).
H4: Personalization features moderate satisfaction levels.
- Partial Support: Lower mean for personalization (3.89/5) with non-significant ANOVA (p=0.490), suggesting room for improvement.
H5: Usability and training barriers hinder CRM effectiveness.
- Supported by: Low scores for training (1.92/5) and usability (2.03/5).

Null Hypothesis (H0): CRM features have no effect on loyalty-building.
- Rejected: Despite low mean (2.62/5), retention linkage exists (p=0.031), indicating potential with refinement.

INTERPRETATION:

- Overall customer service (p = .039) and query resolution (p = .003) show statistically significant differences, meaning customer perceptions vary based on different groups.
- Customer retention related to CRM adoption (p = .031) and CRM integration with overall experience (p = .025) also show meaningful variance, suggesting that CRM systems play a role in retention and satisfaction.
- Other variables, such as perceived communication personalization (p = .490) and CRM system relevance (p = .671), do not show significant differences, implying relatively stable customer perceptions across different groups.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
1. Overall customer service provided be the company is :	Between Groups	4.742	2	2.371	3.430	.039
	Within Groups	41.480	60	.691		
	Total	46.222	62			
2. The company 4 addresses my queries or complaints :	Between Groups	9.917	2	4.959	6.412	.003
	Within Groups	46.400	60	.773		
	Total	56.317	62			
3. I feel the company's communication is personalized towards me :	Between Groups	1.276	2	.638	.723	.490
	Within Groups	52.947	60	.882		
	Total	54.222	62			
4. It is4 to me that companies use CRM systems to enhance customer experience :	Between Groups	.670	2	.335	.358	.701
	Within Groups	56.187	60	.936		
	Total	56.857	62			
5. The following feature of the company's customer service influence my satisfaction the most :	Between Groups	.970	2	.485	.251	.779
	Within Groups	115.887	60	1.931		
	Total	116.857	62			
6. CRM systems contribute to enhancing my satisfaction as a customer to the following extent :	Between Groups	3.282	2	1.641	2.452	.095
	Within Groups	40.147	60	.669		
	Total	43.429	62			
7. I interact with the company's CRM systems with the following frequency :	Between Groups	1.059	2	.530	1.287	.284
	Within Groups	24.687	60	.411		
	Total	25.746	62			
8.I am 4 to continue using the company's services/products :	Between Groups	7.723	2	3.862	3.535	.035
	Within Groups	65.547	60	1.092		
	Total	73.270	62			
9.The company's ability to remember my preferences and purchase history influences my loyalty :	Between Groups	.937	2	.469	1.411	.252
	Within Groups	19.920	60	.332		
	Total	20.857	62			
10. The company's CMR system addresses y needs as a repeat customer :	Between Groups	1.017	2	.508	.512	.602
	Within Groups	59.587	60	.993		
	Total	60.603	62			
11. The company's customer service quality affects my decision to stay with them :	Between Groups	3.837	2	1.918	2.028	.141
	Within Groups	56.767	60	.946		
	Total	60.603	62			
12. The company could do the following to enhance my loyalty :	Between Groups	.480	2	.240	.280	.757
	Within Groups	51.520	60	.859		
	Total	52.000	62			
13. The most4 factor in CMR adoption for me is :	Between Groups	.051	2	.025	.021	.980
	Within Groups	74.267	60	1.238		
	Total	74.317	62			
14. I perceive the following barriers in using CRM systems 4 :	Between Groups	.850	2	.425	.252	.778
	Within Groups	101.087	60	1.685		
	Total	101.937	62			
15. I would rate the	Between Groups	7.917	2	3.958	3.671	.031

impact of CRM adoption on customer retention as:	Within Groups	64.687	60	1.078		
	Total	72.603	62			
16. The company's CRM system provides me with relevant information :	Between Groups	.814	2	.407	.401	.671
	Within Groups	60.900	60	1.015		
	Total	61.714	62			
17.CRM integration 4 my overall experience with the company :	Between Groups	6.457	2	3.228	3.915	.025
	Within Groups	49.480	60	.825		
	Total	55.937	62			
18. I would like to see the following features or services improved in the company's CRM system :	Between Groups	.690	2	.345	.327	.722
	Within Groups	63.247	60	1.054		
	Total	63.937	62			
19. Ease of use is4 when interacting with a company's CRM system :	Between Groups	.770	2	.385	.657	.522
	Within Groups	35.167	60	.586		
	Total	35.937	62			
20.The following training or resources would help me better utilize the company's CRM system :	Between Groups	1.357	2	.678	.826	.443
	Within Groups	49.247	60	.821		
	Total	50.603	62			
21. Companies can 4 encourage customers to provide feedback through their CRM systems by :	Between Groups	3.577	2	1.789	2.093	.132
	Within Groups	51.280	60	.855		
	Total	54.857	62			
22. I suggest the following improvement for enhancing my satisfaction and retention through CRM systems :	Between Groups	1.923	2	.962	2.703	.075
	Within Groups	21.347	60	.356		
	Total	23.270	62			

IV. FINDINGS

The study's findings reveal that customers generally perceive the company's CRM system positively, with high ratings for overall service quality (mean=4.11/5) and ease of use (mean=4.25/5). CRM adoption significantly enhances customer satisfaction (mean=4.10/5) and contributes to retention (mean=3.92/5), as evidenced by strong correlations between CRM satisfaction and service quality (r=0.457, p<0.01). However, the analysis identifies key areas needing improvement, including personalization (mean=3.89/5), query resolution (mean=3.79/5), and loyalty-building features (mean=2.62/5). ANOVA results show statistically significant variations in customer perceptions of query resolution (p=0.003), CRM's impact on retention (p=0.031), and system integration (p=0.025). Notably, barriers to CRM adoption include usability concerns (mean=2.03/5) and insufficient training (mean=1.92/5). These findings suggest that while the CRM system effectively supports customer satisfaction and retention, optimizing personalization features, complaint resolution processes, and user training could further strengthen customer engagement and loyalty. The results emphasize the importance of continuous CRM refinement to address evolving customer expectations and maximize the system's strategic value.

V. SUGGESTIONS

To optimize CRM effectiveness at Jugl Technology, we recommend implementing AI-driven personalization to enhance customer interactions and deploying chatbots to streamline query resolution. Introducing CRM-integrated loyalty programs will foster retention, while simplifying the user interface and mandating staff training will improve adoption rates. Establishing automated feedback mechanisms will enable continuous improvement, and ensuring seamless integration with existing systems will maximize data utility. A phased implementation approach (0-6+ months) will facilitate smooth adoption, complemented by ongoing performance monitoring to refine strategies. These targeted enhancements will elevate customer satisfaction, strengthen retention, and drive sustainable business growth.

VI. CONCLUSION

This study confirms that CRM adoption at Jugl Technology significantly enhances customer satisfaction and retention, with strong positive correlations between CRM use and service quality. While the system performs well in usability and basic functionality, improvements in personalization, query resolution, and loyalty-building features are needed to maximize its impact. By implementing AI-driven enhancements, employee training, and better feedback mechanisms, the company can further strengthen customer relationships and drive long-term business growth. These findings highlight CRM's strategic value for SMEs when aligned with customer needs and operational goals.

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