The Journal of Academic Science

journal homepage: https://thejoas.com/index.php/

Digital CRM Tools and Consumer Retention in Nigeria's FMCG Sector: A Quantitative Analysis



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KEY W O R D S	ABSTRACT
Psychoanalysis,	This study explores the impact of digital Customer Relationship Management (CRM) tools
Personality	on consumer retention within Nigeria's Fast-Moving Consumer Goods (FMCG) sector
Conflict, Superego,	through a quantitative analysis. As competition intensifies in the FMCG industry,
Jamal	companies increasingly adopt digital CRM tools to build and maintain strong consumer
	relationships. These tools gather and analyze consumer data, personalize marketing
	efforts, and enhance customer satisfaction, leading to higher retention rates. By surveying
	FMCG companies in Nigeria, the research reveals a significant positive relationship
	between the use of digital CRM tools and consumer retention, highlighting functionalities
	such as personalized communication, loyalty programs, and data-driven insights as key
	drivers. The analysis also identifies challenges in adopting these tools, including
	technological barriers, cost considerations, and the need for skilled personnel. The study
	concludes that while digital CRM tools are crucial for improving consumer retention, their
	success depends on strategic implementation and continuous adaptation to consumer
	behavior trends, offering valuable insights for FMCG companies aiming to foster long-
	term consumer relationships and maintain a competitive edge.

1. INTRODUCTION

The Fast-Moving Consumer Goods (FMCG) industry is characterized by intense competition, low-profit margins, and a high volume of sales. In such a dynamic environment, retaining customers is critical to maintaining market share and ensuring long-term profitability. Traditional methods of customer relationship management are increasingly being supplemented or replaced by digital CRM tools, which offer advanced capabilities for understanding, engaging, and retaining customers (Paravin, & Parveen, 2024). These tools integrate customer data from various touchpoints, allowing companies to personalize interactions, automate marketing efforts, and enhance customer service.

In recent years, the advent of digital CRM tools has transformed the way FMCG companies interact with their consumers (Oyolola, et al., 2023; Nuseir, et al., 2023). These tools enable businesses to gather and analyze vast amounts of data, providing insights into consumer behavior, preferences, and trends. Therefore, leveraging these insights, companies can tailor their marketing strategies and communications to meet the specific needs of their customers, thus fostering greater loyalty and increasing retention Personalized rates. marketing and communication have become critical in maintaining customer engagement in an era where consumers expect brands to understand and cater to their individual preferences

(Jabado, & Jallouli, 2023).

Moreover, digital CRM tools have revolutionized customer service management, ensuring that consumer inquiries, complaints, and feedback addressed promptly and efficiently. Automated customer service systems integrated within CRM platforms help streamline support processes, reduce response times, and ensure consistent communication across all channels (Magatef, Al-Okaily, Ashour, & Abuhussein, 2023). This enhanced level of service not only improves customer satisfaction but also builds trust and loyalty, which are essential for retaining customers in a highly competitive market.

Several studies underscore the importance of relationship marketing and digital CRM in consumer retention. Albérico (2023) highlighted the critical role of relationship marketing in long-term customer fostering emphasizing the need for systematic approaches to understanding customer dynamics. The impact of social CRM on customer retention has also been explored in different contexts, such as Islamic banks in Kuwait, where Aldaihani et al. (2020) found that customer empowerment plays a mediating role in enhancing retention through social CRM practices. Similarly, Alshurideh et al. demonstrated that social contributes significantly to customer happiness and retention in service industries, indicating its broad applicability.

Despite the recognized benefits of digital CRM tools in enhancing customer retention, there remains a gap in understanding the specific mechanisms through which these tools impact consumer retention in the FMCG industry. While existing research has explored the role of CRM in various sectors (Cavaliere et al., 2021; Dwivedi et al., 2024), there is a paucity of studies

that focus on the FMCG sector, particularly concerning the integration of digital CRM strategies and their direct effects on consumer retention.

Moreover, as consumer expectations continue to evolve in the digital age, FMCG companies face challenges in maintaining consistent meaningful engagement. customer The effectiveness of digital CRM tools in addressing these challenges, especially in a sector known for its high churn rates and low customer loyalty, remains underexplored. Fuad and Abdullah (2023) emphasized the need for further research the relationship between E-CRM implementation and customer loyalty, suggesting that more focused studies necessary to understand how these tools can be optimized for retention purposes.

Additionally, the fast-paced nature of the FMCG industry requires companies to be agile in their marketing and customer service approaches. However, the extent to which digital CRM tools can provide the necessary agility and flexibility to meet customer needs is still unclear. As Girma (2024) pointed out in her study on the banking sector, the ability of CRM tools to adapt to changing consumer behaviors is crucial for retention. Therefore, this study aims to bridge these gaps by investigating the impact of digital CRM tools on consumer retention in the FMCG industry, with a focus on personalized marketing, automated customer service, and data-driven decision-making.

The study provides a strong foundation for understanding the impact of digital CRM tools on consumer retention, yet they also reveal critical gaps that necessitate further exploration, particularly in the FMCG sector. Albérico (2023) accentuates the importance of relationship marketing in customer retention but does not

delve deeply into the specific mechanisms of digital CRM tools within FMCG. Similarly, the studies by Aldaihani et al. (2020) and Alshurideh et al. (2023) focus on social CRM in different industries, revealing its positive effects on customer retention but leaving a gap in understanding how these findings translate to FMCG companies. The need for targeted research is further emphasized by Fuad and Abdullah (2023), who call for more studies on E-CRM and its direct impact on customer loyalty, signaling the necessity to explore these dynamics within the context of FMCG. This underlines the problem that, despite the growing body of literature, there remains a lack of specific research on how digital CRM tools can be effectively utilized to enhance consumer retention in the FMCG industry, thereby justifying the focus of this study.

2. METHOD

The study employed a quantitative research design to investigate the impact of digital CRM tools on consumer retention within the FMCG sector in Nigeria. The population for this study consisted of consumers of FMCG products across various regions in Nigeria, representing a broad spectrum of demographics and purchasing behaviors. To ensure both representativeness and manageability, a sample size of 500 respondents was selected using stratified random sampling. This method helped capture diverse consumer perspectives and ensured that various demographic segments were adequately represented.

Regression analysis was conducted using SPSS to examine the relationships between digital CRM tool dimensions—such as personalized marketing, automated customer service, and data-driven insights—and consumer retention. This statistical approach facilitated the

assessment of the strength and direction of these relationships while controlling for potential confounding variables. The analysis involved testing hypotheses to determine how each CRM dimension impacted retention rates, thereby providing insights into how different aspects of digital CRM tools contributed to sustaining customer loyalty in the FMCG sector.

3. RESULT AND DISCUSSION

The response rate of 376 out of 500 survey participants while the population is infinite and represents a robust sample size for analysis. To justify this, it is essential to calculate the response rate percentage, which is obtained by dividing the number of responses by the total number of participants and then multiplying by 100. A response rate of 75.2% is considered high and indicates a strong level of engagement and reliability in the data collected. This high response rate enhances the validity and generalizability of the study's findings, as it suggests that the sample is representative of the larger population. Moreover, such a substantial response rate typically reflects effective survey distribution and participant interest, which are crucial for obtaining accurate and actionable insights.

The respondent sample consisted of 67% males and 33% females, highlighting a predominantly male demographic. This gender distribution can influence the preferences and behaviors observed in the study. Specifically, the analysis reveals differing preferences between genders, these differences are significant. For instance, 70% of males prefer personalized marketing communication while only 60% of females show the same preference, it suggest a notable genderbased variation in how marketing strategies impact customer retention. Such differentiation emphasizes the importance of considering gender-specific preferences when designing CRM strategies to effectively address the needs and expectations of diverse customer segments. This breakdown allows businesses to tailor their approaches more precisely, enhancing overall

Table 1. Model Summary

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.536ª	.288	.282	.69074

a. Predictors: (Constant), PMC, ACS, DDI

b. Dependent Variable: CR

The model summary in table 1 reveals that the regression analysis produced an R-value of indicating a moderate positive 0.536, relationship between the predictor variables and consumer retention (CR). The R Square value of 0.288 suggests that approximately 28.8% of the variability in consumer retention can be combined explained by the effects personalized marketing communication (PMC), automated customer service (ACS), and dataretention.

driven insights (DDI). The Adjusted R Square of 0.282, which adjusts for the number of predictors in the model, confirms that these predictors account for a significant portion of the variation in consumer retention while considering the model's complexity. The Standard Error of the Estimate, 0.69074, reflects the average distance that the observed values fall from the regression line, providing an indication of the model's accuracy in predicting consumer

Table 2. Analysis of Varience

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	71.683	3	23.894	50.080	.000 ^b
	Residual	177.490	372	.477		
	Total	249.173	375			

a. Dependent Variable: CR

b. Predictors: (Constant), PMC, ACS, DDI

The ANOVA table 2 shows that the regression model significantly explains variations in consumer retention (CR), with an F-value of 50.080 and a p-value of 0.000, indicating that the model's predictors (personalized marketing communication, automated customer service, and data-driven insights) collectively provide a statistically significant explanation of the variance in consumer retention. The Sum of

Squares for the regression (71.683) and residuals (177.490) demonstrate that the model accounts for a substantial portion of the total variance (249.173) in consumer retention. The mean square for the regression (23.894) compared to the residual mean square (.477) highlights the model's effectiveness in explaining the dependent variable's variability. Overall, the analysis confirms that the predictors included in

Table 3 Test of Hypotheses

Coefficientsa

				Standardized		
		Unstandardized Coefficients		Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	2.189	.177		12.353	.000
	PMC	.127	.064	.154	1.982	.048
	ACS	.247	.052	.289	4.702	.000
	DDI	.115	.054	.156	2.149	.032

a. Dependent Variable: CR

Table 3 revealed Hypothesis 1: Personalized marketing and communication (PMC) positively impacts consumer retention (CR). The coefficient for PMC is 0.127 with a standard error of 0.064 and a t-value of 1.982, which is statistically significant at a p-value of 0.048. This result indicates that personalized marketing communication has a positive and significant effect on consumer retention, supporting the hypothesis that personalized marketing efforts contribute to higher customer retention rates.

Hypothesis 2: Automated customer service (ACS) is positively correlated with increased consumer retention (CR). The coefficient for ACS is 0.247 with a standard error of 0.052 and a t-value of 4.702, which is statistically

significant at a p-value of 0.000. This finding strongly supports the hypothesis that effective automated customer service significantly enhances consumer retention, demonstrating its critical role in maintaining customer loyalty.

Hypothesis 3: The use of data-driven insights (DDI) significantly improves consumer retention (CR). The coefficient for DDI is 0.115 with a standard error of 0.054 and a t-value of 2.149, which is statistically significant at a p-value of 0.032. This result confirms that data-driven insights have a positive and significant impact on consumer retention, validating the hypothesis that leveraging customer data to inform strategies contributes to improved retention outcomes.

Table 4 Robustness Test

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.9314	4.6333	4.3014	.43721	376
Residual	-2.56448	1.83766	.00000	.68797	376
Std. Predicted Value	-3.133	.759	.000	1.000	376
Std. Residual	-3.713	2.660	.000	.996	376

a. Dependent Variable: CR

The robustness test results show that the predicted values of consumer retention (CR)

range from 2.9314 to 4.6333, with a mean of 4.3014 and a standard deviation of 0.43721, indicating a reasonable spread and central tendency in the predicted values. The residuals, which measure the difference between observed and predicted values, vary from -2.56448 to 1.83766, with a mean of 0.00000 and a standard deviation of 0.68797, suggesting that the residuals are symmetrically distributed around zero. The standardized predicted values and standardized residuals indicate that the data conforms to typical assumptions of regression analysis, with the standardized residuals ranging from -3.713 to 2.660 and a mean of 0.000, showing no significant deviations from the expected distribution. Overall, these statistics suggest that the regression model provides robust and reliable predictions of consumer retention.

Discussion of Findings

The findings from the regression analysis personalized indicate that marketing communication (PMC), automated customer service (ACS), and data-driven insights (DDI) all have significant positive impacts on consumer retention (CR) in the FMCG sector. The significant positive coefficient for PMC suggests that tailored marketing messages and offers significantly enhance customer retention. aligning with previous research that highlights the importance of personalized marketing in fostering customer loyalty. For instance, Fuad Abdullah (2023)emphasize and personalized marketing efforts in e-commerce can improve customer experiences and loyalty, thus supporting the positive relationship observed in this study.

Automated customer service (ACS) also emerged as a strong predictor of consumer retention, with its significant coefficient indicating that efficient and prompt customer service enhances customer satisfaction and loyalty. This finding supports the work of Massoud and Al-Dulaimi (2023), who found that automated customer service strategies can significantly boost consumer retention by improving overall customer satisfaction. The positive correlation between ACS and CR highlights the value of leveraging automation to streamline service processes and maintain customer loyalty.

Lastly, the use of data-driven insights (DDI) was found to significantly improve consumer retention, reinforcing the idea that leveraging customer data to tailor strategies enhances retention outcomes. This aligns with the findings of Miguel and Crespo (2023), who discuss how data-driven CRM strategies enable companies to better understand and meet customer needs, leading to higher retention rates. The results underscore the critical role of data analytics in crafting effective CRM strategies that drive customer loyalty and retention in the digital age.

Theoretical Contribution

The findings from this study provide significant theoretical contributions to the understanding of digital CRM tools' impact on consumer retention in the FMCG sector. Thus, demonstrating that personalized marketing communication. automated customer service, and data-driven insights each play a critical role in enhancing customer retention, this study supports and extends existing CRM theories. It emphasizes the relevance of these CRM dimensions in improving consumer loyalty and satisfaction, aligning with and building upon theories such as Relationship Marketing Theory and Customer Experience Management. These contributions enhance our theoretical understanding of how digital CRM tools can be leveraged to sustain competitive advantage and drive consumer

retention in a rapidly evolving digital marketplace.

Practical Contributions

The practical contributions of this study emphasize actionable strategies for FMCG companies aiming to enhance customer retention. The significant positive impact of personalized marketing communication (PMC) suggests that businesses should invest in CRM tools that enable tailored marketing efforts. Thereby, leveraging data to craft personalized messages and offers, companies can more effectively engage customers and foster loyalty. Implementing advanced CRM systems that facilitate these personalized interactions can help FMCG companies differentiate themselves in a competitive market and strengthen their customer base.

Moreover, the findings highlight the critical role of automated customer service (ACS) in improving consumer retention. **FMCG** companies should focus on integrating efficient automated service solutions that streamline customer interactions and resolve issues promptly. This approach not only enhances customer satisfaction but also builds long-term loyalty by providing reliable and responsive service. Additionally, utilizing data-driven insights (DDI) to analyze customer behavior and preferences enables companies informed decisions and adapt their strategies to better meet customer needs. Collectively, these practical applications of digital CRM tools can significantly boost customer retention. ultimately contributing to sustained business success.

4. CONCLUSION

This study highlights the significant impact of digital CRM tools on consumer retention within the FMCG sector. The analysis reveals that personalized marketing communication, automated customer service, and data-driven insights each play a pivotal role in enhancing loyalty and retention. customer demonstrating the positive relationships between these CRM dimensions and consumer retention, the study confirms that effective utilization of digital CRM tools can substantially improve customer engagement and satisfaction. These findings underscore the importance of integrating advanced CRM strategies to maintain a competitive edge in the rapidly evolving FMCG market.

Based on these findings, it is recommended that FMCG companies prioritize the implementation of sophisticated CRM systems that support personalized marketing efforts, automate customer service processes, and leverage datadriven insights. Companies should invest in technologies CRM that enable tailored communication to address individual customer needs, enhance service efficiency through automation, and use analytics to inform strategic these decisions. Therefore, adopting businesses recommendations. **FMCG** can improve their customer retention rates, foster stronger customer relationships, and achieve greater long-term success in the marketplace.

5. REFERENCES

Albérico, R. (2023). Relationship marketing and customer retention-a systematic literature review. Studies in Business and Economics, 18(3), 44-66.

Aldaihani, F. M. F., Ali, N. A. B., Hashim, H. B., & Kamal, N. (2020). Impact of social customer relationship management on customer retention of Islamic banks in

- Kuwait: The mediating role of customer empowerment. International Journal of Supply Chain Management, 9(1), 330-337.
- Alshurideh, M., Kurdi, B., Alhamad, A., Hamadneh, S., Alzoubi, H., & Ahmad, A. (2023). Does social customer relationship management (SCRM) affect customers' happiness and retention? A service perspective. Uncertain Supply Chain Management, 11(1), 277-288.
- Bojei, J., Julian, C. C., Wel, C. A. B. C., & Ahmed, Z. U. (2013). The empirical link between relationship marketing tools and consumer retention in retail marketing. Journal of Consumer Behaviour, 12(3), 171-181.
- Cavaliere, L. P. L., Khan, R., Sundram, S., Jainani, K., Bagale, G., Chakravarthi, M. K., ... & Rajest, S. S. (2021). The Impact of customer relationship management on customer satisfaction and retention: The mediation of service quality. Turkish Journal of Physiotherapy and Rehabilitation, 32(3), 22107-22121.
- Dwivedi, R. K., Lohmor Choudhary, S., Dixit, R. S., Sahiba, Z., & Naik, S. (2024). The Customer Loyalty vs. Customer Retention: The Impact of Customer Relationship Management on Customer Satisfaction. In Web Intelligence (No. Preprint, pp. 1-18). IOS Press.
- Fuad, E., & Abdullah, Z. (2023). Impact of E-CRM Implementation, Customer Experience, and Customer Loyalty in E-Commerce: Literature Review. Finance, Accounting and Law in the Digital Age: The Impact of Technology and Innovation in the Financial Services Sector, 389-399.
- Girma, A. (2024). Effect of customer relationship management on customer retention; case of

- the commercial bank of Ethiopia bole district (Doctoral dissertation, St. Mary's University).
- Jabado, R., & Jallouli, R. (2023). A Systematic Literature Review on CRM Critical Success Factors. In International Conference on Digital Economy (pp. 237-262). Springer, Cham.
- Lamrhari, S., El Ghazi, H., Oubrich, M., & El Faker, A. (2022). A social CRM analytic framework for improving customer retention, acquisition, and conversion. Technological Forecasting and Social Change, 174, 121275.
- Mabzor, S. C., Nwaizugbo, I. C., & Okeke, T. C. (2023). Customer relationship management and customer retention in the Nigeria broadcast industry: a study of Anambra state. Journal of the Management Sciences, 60(4).
- Magatef, S., Al-Okaily, M., Ashour, L., & Abuhussein, T. (2023). The impact of electronic customer relationship management strategies on customer loyalty: A mediated model. Journal of Open Innovation: Technology, Market, and Complexity, 9(4), 100149.
- Massoud, M., & Al-Dulaimi, N. T. A. (2023). E-CRM A Leverage tool for consumers' retention an analysis of Iraqi consumers' perspective. World Economics and Finance Bulletin, 21, 13-29.
- Miguel, M. D., & Crespo, C. F. (2023). The impact of the implementation of CRM strategy on consumer behaviour. Polish Journal of Management Studies, 27.
- Nuseir, M. T., El Refae, G. A., Aljumah, A., Alshurideh, M., Urabi, S., & Kurdi, B. A. (2023). Digital marketing strategies and the impact on customer experience: A systematic review. The Effect of Information Technology on Business and Marketing Intelligence Systems, 21-

44.

- Nwachukwu, C., Omofowa, M. S., & Omofowa, S. (2024). A Systematic review of electronic customer relationship management (e-CRM).
- Oyolola, T. J., Abubakar, A., Bello, U., & Sani, L. (2023). Electronic customer relationship management and customer retention of deposit money banks in Dutsin-Ma, Nigeria. Journal of Management and Science, 13(2), 89-97.
- Paravin, S., & Parveen, M. (2024). A Study on the impact of CRM strategies on customer retention at HDFC bank in Tirhut division.
- Yerpude, S., & Rautela, S. (2023). Customer Relationship Management–Review of Technology Impact and Use Cases. Digital Transformation, Strategic Resilience, Cyber Security and Risk Management, 87-99.