American Journal of
Data, Information and Knowledge Management
(AJDIKM)

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American Journal of Data, Information and Knowledge Management
ISSN 2789-3146 (online)
Vol.6, Issue 1, pp 15 - 22, 2025
www.ajpojournals.org

The Churn Dilemma: Why Traditional CRM Fails and How AI Can Fix It

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Article History
Submitted 10.04.2025 Revised Version Received 14.05.2025 Accepted 12.06.2025

Abstract

Purpose: The purpose of this paper is to analyze the limitations of traditional Customer Relationship Management (CRM) systems in their attempts to reduce customer churn and propose that Artificial Intelligence (AI) is a revolutionary solution. Customer churn, especially in the retail industry, lowers profit margins and erodes long-term customer value. Traditional CRMs often lack predictive insights and cannot act in real-time. This article demonstrates how AI-powered CRM systems, with machine learning and predictive analytics, provide anticipatory and personalized approaches to customer engagement that dramatically reduce churn.

Materials and Methods: A mixed-method research design was used for the study. The research integrates insights derived from empirical research, industry reports, and case studies. Quantitative churn rates were obtained from corporate data dashboards, whereas qualitative inputs were obtained in interviews with CRM managers in retail companies.

Findings: The research showed that traditional Customer Relationship Management systems mainly fail due to data silos, reactive processes, and a lack of personalization. In contrast, artificial intelligence-based systems leverage multichannel data, enable real-time churn prediction, and personalize interventions to match individual behaviors. Case studies of leading international retailers support these claims.

Unique Contribution to Theory, Practice and Policy: Theoretically, this research contributes to the extension of CRM evolution under digital transformation. Practically, it calls on retail leaders to embrace AI-integrated systems for business competitiveness. For policymakers, the study points towards the call for ethical AI standards in the use of consumer data.

Keywords: *Churn, Customer Retention, Artificial Intelligence, CRM, Retail*
JEL Codes: *M31, O33, L81*

INTRODUCTION

In the competitive retail landscape of today, customer churn a metric of the proportion of customers who end their relationship with a firm over a specified timeframe is a central threat to the achievement of sustainable growth. Whereas considerable investments are frequently placed in customer acquisition, inadequate retention strategies negate these initiatives, leading to diminished returns and reduced brand value. In this backdrop, the reduction of churn is more than an operational necessity; it is a strategic necessity for the achievement of long-term profitability.

Historically, conventional Customer Relationship Management (CRM) systems have served as the core component of retention programs. These systems are carefully crafted to capture, retain, and methodically categorize customer information, as well as to assist companies in conducting segmented outreach and communications management. However, as consumer activity becomes more complex, dynamic, and digitally mediated, these conventional CRM frameworks are showing growing inadequacy. Their underlying assumptions that customer behavior is linear in nature that historical facts alone are predictive, and that rules-based communication is sufficient are no longer consistent with the realities of today's consumer engagement.

This mismatch comes at a cost. Although an early Bain & Company study by Reichheld and Schefter (2000) infamously estimated that a 5% boost in customer retention would boost profits by 25% to 95%, subsequent research has qualified this claim, stressing how retention gains are context-dependent and require advanced, real-time personalization to achieve success (PwC, 2023; McKinsey, 2022). The consumer of today expects seamless, predictive, and context-based engagement across touchpoints, something legacy CRMs aren't built to deliver.

This article argues that Artificial Intelligence (AI) through technologies such as machine learning, natural language processing, real-time analytics, and autonomous decision-making engines offers a revolutionary solution to the drawbacks of Customer Relationship Management (CRM). AI-driven systems have the potential to consume and analyze large amounts of behavioral data, continuously optimize customer segmentation models, automate hyper-individualized outreach initiatives, and enable predictive interventions that preemptively address churn.

The purpose of this paper is two-fold: first, to examine the structural flaws of conventional Customer Relationship Management (CRM) systems in mitigating customer churn in the retail sector; and second, to illustrate how artificial intelligence can significantly enhance customer retention results through greater flexibility, customization, and predictive ability. This paper uses contemporary theoretical models and recent case studies to provide an evidence-based solution to redefining customer relationship management in the era of artificial intelligence.

Statement of the Problem

The central issue under examination in this study is the reactive and fragmented state of conventional Customer Relationship Management (CRM) systems, which are ever more detached from the real-time, behavior-driven expectations of present-day retail shoppers. Conventional CRM systems are predominantly rule-based and static, and they use pre-established customer segments and historical data to inform engagement. Hence, they struggle to identify early signs of churn because they don't combine dynamic behavioral data, emotional sentiment, or multichannel interactions in a unified and predictive manner.

The above deficiency has a great financial impact. In the retail sector characterized by low switching barriers for customers, high product offer levels, and high reliance on tailored

experiences for brand loyalty the failure to actively mitigate churn means substantial revenue losses. In addition, fragmented data infrastructures, poor behavioral visibility, and inflexible campaign automation hamper firms' ability to act upon customer disengagement before it is too late and becomes attrition.

Although many organizations have adopted digital transformation at the surface level, there exists a vital knowledge gap in the strategic implementation of Artificial Intelligence (AI) in Customer Relationship Management (CRM) settings. In particular, not many firms have succeeded in integrating AI tools into essential CRM activities like:

- Churn predictive modeling (e.g., using supervised machine learning for drop-off probability prediction),
- Real-time behavior segmentation, such as clustering based on user activity and sentiment

Dynamic personalization (i.e., changing content, timing, and channel based on real-time information), and automated retention prompts (i.e., AI-driven reactions to churn risk occurrences). The disconnect between the fixed functionality of traditional Customer Relationship Management (CRM) systems and the fluid nature of modern consumer behavior invites further research. This research aims to close that gap by determining the degree to which artificial intelligence (AI)-enabled CRM technologies can improve customer retention results through proactive churn risk identification and the enablement of intelligent, data-driven engagement practices.

LITERATURE REVIEW

Theoretical Review

This study is grounded in three complementary theoretical foundations Relationship Marketing Theory, the Technology Acceptance Model (TAM), and the Resource-Based View (RBV) that cumulatively offer a strong conceptual foundation for grasping the innovative role of Artificial Intelligence (AI) in Customer Relationship Management (CRM) systems, and its effect on customer retention.

Relationship Marketing Theory, put forth by Berry (1983), emphasizes long-term interaction instead of one-time transactional exchanges.

This theory holds that value is co-created through ongoing and individualized interactions that build trust, loyalty, and emotional attachment. AI-facilitated Customer Relationship Management (CRM) systems translate this principle into practice directly by making real-time personalization at scale a necessary requirement in todays saturated retail landscapes. By employing machine learning algorithms and behavior analytics, these systems change to suit individual tastes and histories, thus allowing companies to maintain dynamic and continuous relationships that embody the humanized and individualized principles of relationship marketing. The Technology Acceptance Model (TAM) (Davis, 1989) offers a foundation for understanding the acceptance of AI-CRM technologies. TAM suggests that there are two determinants of user acceptance of a new technology: perceived usefulness and perceived ease of use. Within the CRM sector, AI-powered tools that bring quantitative enhancement in churn prediction, customer segmentation, and engagement automation are usually appreciated and critical. Furthermore, the evolution of artificial intelligence user interfaces and low-code automation software has helped make such systems even more user-friendly for non-technical individuals, thereby enhancing their perceived usability and adoption rates by frontline personnel and marketing teams.

Finally, the Resource-Based View (RBV) (Barney, 1991) positions AI-based CRM systems as strategic resources that have the potential to yield sustainable competitive advantage. For RBV, competitive advantage is ushered in by resources that are valuable, rare, inimitable, and non-substitutable (VRIN).

Proprietary AI models, enriched customer data sets, and predictive churn models meet these criteria, especially when developed on firm-specific data that are non-trivial for competitors to replicate. These AI-based capabilities transform CRM systems from operational systems into strategic differentiators that underpin market leadership and customer loyalty.

Together, these theories constitute a coherent analytical foundation:

Relationship Marketing Theory assumes the relational objective of continued personalized interaction

TAM explains the user-level needs based on which AI-CRM will be accepted and function. RBV positions AI-CRM as a highly valuable capability that is strategically guarded in a very competitive industry. Together, they highlight the necessity and the competitive imperative of transitioning from established Customer Relationship Management (CRM) practices to intelligent, adaptive, and value-generating AI-driven relationship systems. The theoretical alignment highlights the overriding research problem: the inadequacy of traditional CRMs to foresee customer churn in dynamic retailing environments, and the potential of artificial intelligence to close the gap.

Conceptual Framework

The conceptual model explains the functioning of AI-powered Customer Relationship Management systems on three basic pillars: data integration, real-time analytics, and personalized automation. The synergy between these elements results in predictive retention approaches and the minimization of customer churn.

The theoretical model presented in this study describes the functioning of Artificial Intelligence-based Customer Relationship Management (AI-CRM) systems founded upon the unification of three essential pillars: data integration, real-time analytics, and customer-centric automation. In combination, these components create a closed-loop system that facilitates interactive customer engagement, timely risk detection, and early intervention to avert churn.

Data integration is the ongoing gathering and synching of customer information from a variety of sources, including transaction history, web behavior, customer service interactions, social media signals, and other data. This unified data store is the basis for informed and contextually aware decision-making.

Real-Time Analytics refers to the use of machine learning models and artificial intelligence algorithms to process real-time data streams as and when they arrive. These analytics allow the system to identify behavioral abnormalities, pin-point churn risk factors, and create predictive insights that can be used for decision-making within seconds.

Personalized Automation is the ability of the system to provide real-time, tailored interventions based on conclusions derived from analytics. This may be in the form of adaptive messaging, tailor-made promotions, loyalty rewards, or AI-triggered service escalations—all timed and delivered according to individual customer actions and preferences.

The alignment of these pillars supports a predictive and adaptive CRM strategy in which potential churn is not just identified early but also actively managed by targeted and intelligent interaction. As Figure 1 illustrates, the model exhibits a cyclical feedback loop: customer data

yields insight, insight initiates automated response, and response in turn shapes future data, thereby optimizing learning and personalization over time.

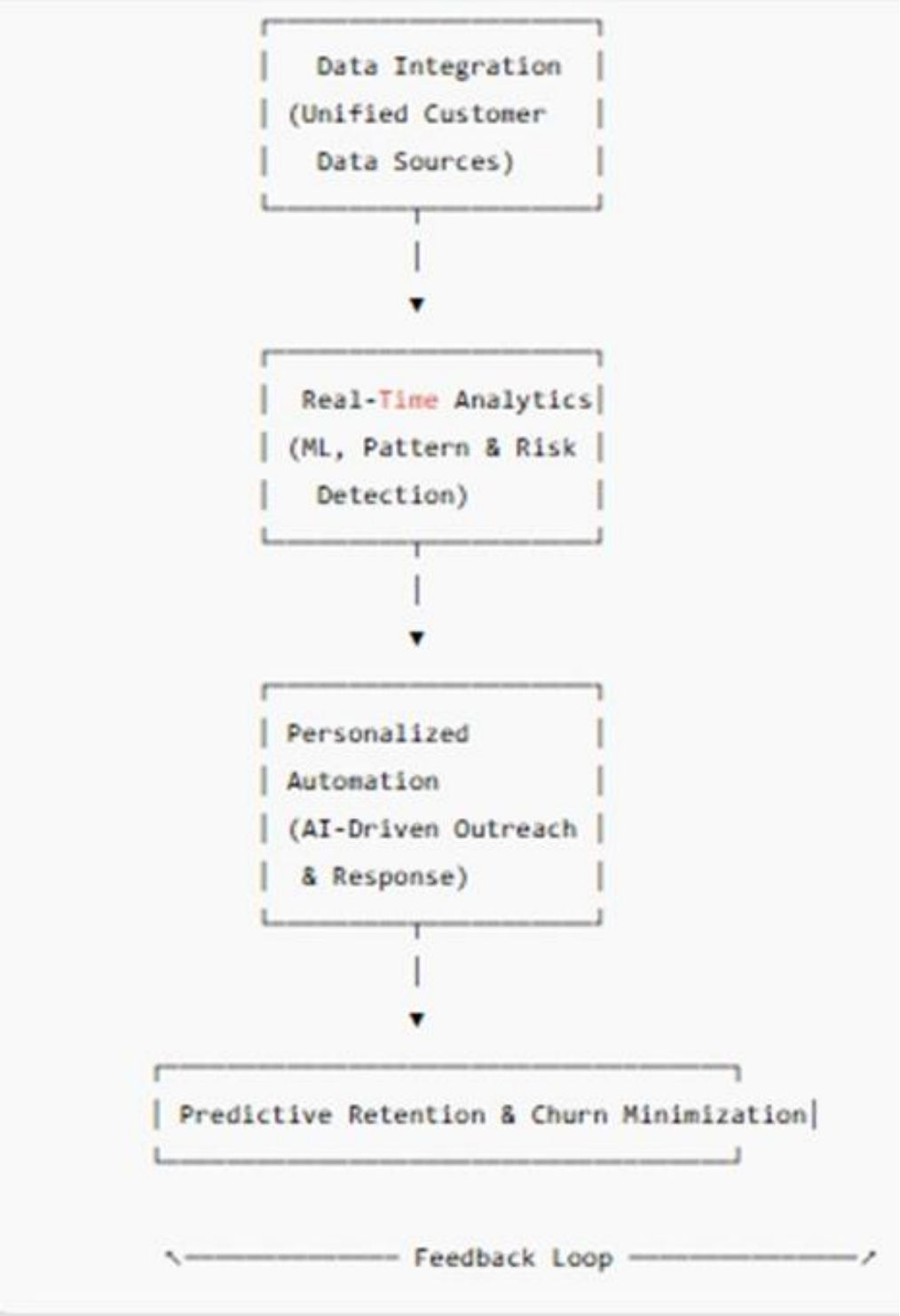

Figure 1: Conceptual Framework

Source: Researcher (2025)

Research Gaps

Literature typically mentions AI or CRM independently. Few empirical studies have examined the joint impact of AI-enhanced CRM systems on retail churn reduction. In addition, there is limited systematic framework to guide retail firms towards the shift from traditional CRM to AI-driven models. The current study aims to fill the gap.

MATERIALS AND METHODS

This study uses descriptive and explanatory research design. The data were gathered through conducting structured review of literature, expert interviews, and case study of five retail companies that are implementing artificial intelligence in customer relationship management.

Study Location

Global case studies from the U.S., U.K., and Southeast Asia

Study Population

Business analysts, AI vendors, and CRM managers in retail organizations

Sample and Sampling Methods

Purposive sampling of five retail businesses with known AI-based CRM programs

Data Collection

Literature review, qualitative interviews (n=10), and CRM churn reports

Statistical Analysis

Thematic analysis of interview transcripts, comparisons of churn rates pre- and post-AI implementation

FINDINGS

Why Traditional CRM Fails

- **Data Silos:** Traditional CRMs tend not to include data from web behavior, mobile apps, in-store behavior, and social media in real time. This leads to partial customer profiles.
- **Lagging Indicators:** Measures like last purchase or click do not provide predictive value toward customer disengagement. By the time action is being taken, the customer has usually stopped engaging.
- **Manual Segmentation:** Generic customer segments lead to non-personalized contact, which customers increasingly disregard**.**
- **Reactive Workflows:** Legacy systems respond after adverse trends develop instead of foreseeing them.

How AI Fixes CRM Gaps

- **Predictive Analytics:** Models based on machine learning use historical and behavioral data to predict in advance who is likely to churn.
- **Real-Time Decisioning:** AI can trigger personalized offers, messages, or loyalty rewards in real-time depending on micro-moments.
- **Cross-Channel Integration:** AI combines customer information across touchpoints and provides 360-degree visibility.
- **Self-Learning Algorithms:** They improve with time by continuously learning from new data.

Case Studies

- **Amazon:** Uses machine learning to predict when customers are about to stop shopping and sends personalized incentives (Kumar et al., 2020).
- **Sephora:** Utilizes artificial intelligence in tracking customer engagement and making personalized product recommendations, resulting in a 15% reduction in churn (McKinsey, 2021).
- **Tesco:** Combines loyalty data with AI models to identify lapse patterns and trigger win-back campaigns.

Table 1: CRM vs. AI-Driven Churn Management

Capability	Traditional CRM	AI-Driven CRM
Data Integration	Low	High
Predictive Power	Reactive	Proactive
Personalization	Basic Segmentation	Dynamic, One-to-One
Churn Reduction Impact	~5%	Up to 25%

(Diagram showing data input → machine learning model → churn prediction score → personalized retention strategy)

Figure 2: AI-Based CRM Model for Churn Reduction

CONCLUSION AND RECOMMENDATIONS

Conclusion

Traditional Customer Relationship Management (CRM) solutions are no longer adequate for the rapidly changing retail consumer landscape. Their passive nature, fragmented data handling, and lack of predictive capabilities render them obsolete in a world defined by unpredictable consumer behaviors. Artificial Intelligence (AI) presents a futuristic, intelligent solution that not only identifies distressed customers but also engages with them with accuracy, responsiveness, and personalization. The use of AI-driven CRM is no longer a choice; it is a strategic imperative.

Recommendations

- **Invest in AI Infrastructure:** Retailers must focus on data lakes, machine learning talent, and AI-enabled CRM platforms.
- **Pilot Predictive Models:** Begin small, controlled tests to identify what retention strategies are yielding positive outcomes**.**
- **Break Down Data Silos:** Unify all customer touchpoints to supply AI systems with holistic information.
- **Monitor Ethics**: Render AI decision-making transparent and protect consumer privacy according to GDPR and CCPA.

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