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A STUDY ON AI-DRIVEN CUSTOMER ENGAGEMENT IN MODERN COMMERCE

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ABSTRACT

Artificial Intelligence (AI) has emerged as a transformative force in modern commerce, reshaping the way businesses interact with customers. AI-driven tools such as chatbots, recommendation engines, predictive analytics, and sentiment analysis enable organizations to deliver personalized, real-time, and data-driven customer experiences. This paper examines the role of AI in enhancing customer engagement, improving customer satisfaction, and strengthening long-term customer relationships. In a competitive landscape where customers have plenty of choice, customer engagement strategies are vital for encouraging them to choose you—and to stay loyal. With high volumes of interactions and the demand for personalization, though, this can be difficult to achieve. AI customer engagement is the key to creating an authentic connection with customers at scale, as it delivers deep insights and enhanced efficiency. 79% of customer service agents believe that having AI as a co-pilot supercharges their abilities. But what exactly does it do? Let's explore the impact of AI on customer engagement by diving into the benefits and challenges, and sharing some best practices to help you keep customers engaged.



INTRODUCTION

- ✓ Customer engagement has become a critical factor for competitive advantage in modern commerce. With the rapid growth of digital platforms, customers expect personalized and seamless interactions across multiple channels. Artificial Intelligence enables businesses to analyze large volumes of customer data and respond intelligently to customer needs.
- ✓ In direct interactions, then, AI is ideal for automating responses to common customer service inquiries. It can also automate the workflows that happen backstage, which are also crucial for maximizing efficiency and customer engagement.
- ✓ AI tools may, for instance, automatically update your CRM after each interaction, eliminating manual data entry. As we mentioned, they'll also pull in relevant CRM data during conversations—either to create automated responses or to help human agents out.
- ✓ We can also use AI for audience research and segmentation, and for lead qualification. Customer engagement automation enables consistent email messages, social media posts, and retargeting ads that reach the right people at the right times, while generative AI can create the content.
- ✓ In a contact center setting, automated triage and intelligent routing make sure every inquiry goes to the agent who is best suited to engaging with that customer. Coupled with AI-powered self-service, this reduces agents' workload and frees them up for high-value tasks.

AI-driven customer engagement refers to the use of intelligent systems to interact with customers, predict their preferences, and enhance their overall experience.

Modern contact centers are redefining customer service with AI-powered analytics, delivering tailored experiences, optimizing operations, lowering expenses, and boosting agent effectiveness. Unlike traditional sampling methods and delayed reporting, these tools extract actionable insights from every interaction in real time. Through natural language processing, machine learning, and sentiment analysis, AI uncovers patterns, detects emerging issues, monitors agent performance, and strengthens compliance. Together, these capabilities not only improve day-to-day service and efficiency but also equip organizations with the intelligence to make smarter, forward-looking business decisions.

Applications of AI in Customer Engagement:

- **Conversational AI and Chatbots:** Virtual assistants use NLP to understand context and intent, providing immediate, human-like responses to inquiries 24/7, reducing wait times and human agent workload.
- **Hyper-Personalization:** AI analyzes vast datasets, including browsing history and purchase patterns, to deliver tailored content, product recommendations, and offers at the individual level.
- **Predictive Analytics & Customer Insights:** These tools anticipate customer needs and behaviors, such as predicting the optimal time for a reorder or identifying potential churn before it happens.
- **Sentiment Analysis:** AI monitors customer feedback,

social media, and support interactions to detect emotional tones, allowing companies to proactively address dissatisfaction and improve brand loyalty.

- **Automated Marketing Campaigns:** AI optimizes the timing and channel (email, SMS, push) for marketing messages to increase engagement, removing the need for manual, segmented targeting.
- **Chatbots and Virtual Assistants:** Chatbots and virtual assistants are Artificial Intelligence-based software applications designed to simulate human conversation through text or voice. They interact with users, answer queries, provide information, and perform basic tasks without human intervention.

These tools are widely used in customer service to provide 24/7 support, reduce response time, and improve customer satisfaction. They can handle multiple users at the same time and learn from past interactions to give more accurate responses.

Personalized Recommendations

Personalized recommendations refer to the use of Artificial Intelligence and data analytics to suggest products, services, or content to customers based on their individual preferences, browsing history, past purchases, and behavior.

This technique helps businesses understand customer needs better and deliver relevant suggestions, thereby improving customer satisfaction and increasing sales

Benefits of AI-Driven Customer Engagement

- **Enhanced Personalization:** AI analyzes customer data to deliver tailored recommendations and messages, driving engagement and brand loyalty.
- **24/7 Support and Efficiency:** AI-powered chatbots and virtual assistants provide immediate, round-the-clock responses, reducing wait times and improving CSAT scores.
- **Reduced Operational Costs:** By automating routine queries, AI lowers the need for large, manual support teams, allowing for more efficient resource allocation.
- **Predictive Insights and Analytics:** AI identifies customer behavior patterns and sentiments (via sentiment analysis) to anticipate needs and proactively solve problems, which decreases customer churn.
- **Consistency Across Channels:** AI ensures a uniform experience across email, chat, social media, and voice channels, creating a seamless customer journey.
- **Scalability:** AI tools can manage high volumes of interactions, allowing businesses to scale support operations without proportional increases in staff.

Challenges in Implementing AI

- **Quality & Availability:**

AI needs vast, clean, accessible data, but many organizations struggle with siloed, inaccurate, or insufficient proprietary data.

- **Security & Privacy:**

Protecting sensitive data used in AI models is a major concern, requiring robust security measures.

Talent & Expertise Gaps

- **Skills Shortage:**

A lack of experienced data scientists, ML engineers, and AI professionals slows development.

- **Training:**

Existing staff often need retraining to work with new AI tools effectively.

Technical & Integration Hurdles

- **Legacy Systems:** Integrating AI into outdated infrastructure and workflows is complex.
- **Scalability:** Ensuring AI solutions can grow with the business requires careful architectural planning.

Future Prospects

Future prospects represent anticipated opportunities, trends, and potential outcomes for a specific subject, field, or, and are shaped by current data, strategic planning, and external factors. These prospects involve evaluating possibilities to navigate risks and leverage future advancements, commonly analyzed through PEST (Political, Economic, Social, Technological) factors:

- **Technology & Innovation:** Development of advanced, efficient technologies, such as improved renewable energy, AI applications, and sustainable materials, to address current limitations.
- **Sustainability & Environment:** A shift towards green technologies, waste reduction, and sustainable practices in industrial and consumer sectors.
- **Economic & Career Trends:** Trends showing shifts toward non-farm or informal employment, along with the need for upskilling in a rapidly changing job market.
- **Strategic Planning:** The necessity of using research and evidence-based predictions to prepare for potential challenges.

CONCLUSIONS

AI-driven customer engagement plays a vital role in modern commerce by enabling personalized and efficient interactions. AI-driven customer engagement in modern commerce has transitioned from a luxury to a necessity, significantly enhancing personalization, operational efficiency, and customer satisfaction. By leveraging machine learning, chatbots, and predictive analytics, businesses can foster deeper brand loyalty, increase customer lifetime value, and achieve a competitive edge through tailored experiences.

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