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Evaluating the Effect of AI-Powered Chatbot Integration on Customer Satisfaction and Experience in Digital Customer Service

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Abstract: This study evaluates the effect of AI-powered chatbot integration on customer satisfaction and experience in digital customer service. As artificial intelligence advances, chatbots have become essential tools in improving service delivery by providing immediate, consistent, and scalable customer interactions. This research investigates the relationship and causal effects of chatbot integration on customer satisfaction, emphasizing critical features like response time, accuracy, and natural language processing. Using a sample of 178 respondents from the service sector, the study employs correlation and regression analyses to demonstrate significant positive associations between chatbot usage and customer satisfaction. The findings highlight the dual role of chatbots in enhancing operational efficiency and enriching the customer experience, while acknowledging challenges such as limited emotional intelligence and the necessity of human-agent escalation. Practical and theoretical implications are discussed to guide organizations in optimizing chatbot deployment and advancing the theoretical understanding of technology acceptance in service contexts. This study provides valuable insights for businesses aiming to leverage AI chatbots to achieve competitive advantage through superior customer engagement.

Keywords: AI chatbots, customer satisfaction, digital customer service, artificial intelligence, chatbot integration, customer experience, service automation, technology acceptance







