

Examining the Impact of AI Chatbot Service Quality Adoption on Customer Loyalty in Food Service Sector

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ABSTRACT

Artificial intelligence (AI) technologies are increasingly reshaping customer service, particularly with AI- chatbots that enable real-time, personalized, and scalable communication. In service-intensive industries such as food service, AI-chatbots are seen as a strategic response to growing customer expectations for responsiveness, availability, and consistency. While AI adoption is accelerating globally, actual integration—especially among small and medium-sized enterprises in emerging markets—remains limited due to infrastructural and capability constraints. Nevertheless, the application of AI chatbots offers promising opportunities to enhance service quality, foster loyalty, and streamline operations. Although existing studies have investigated the relationship between service quality and customer loyalty, few have examined how AI chatbot specific service attributes affect loyalty outcomes, particularly in food service contexts. Traditional frameworks like SERVQUAL, though useful, often fail to capture the nuanced characteristics of AI-enabled service interactions. Moreover, customer loyalty is commonly treated as a singular construct, ignoring the important distinction between attitudinal loyalty—the customer’s psychological attachment—and behavioral loyalty, reflected in repeat patronage. This study addresses these theoretical gaps by extending prior models and incorporating two underexplored dimensions—omnipresence (the perceived constant availability of the chatbot) and human-like empathy (its ability to simulate emotional understanding)—alongside four established attributes: ease of use, availability, response accuracy, and assurance. By focusing on the food service sector, this research investigates how each of these six service quality attributes influences both attitudinal and behavioral loyalty. Specifically, it examines whether chatbot features such as ease of use enhance customer trust and loyalty; whether availability and responsiveness drive repeat engagement; and whether novel attributes like omnipresence and empathy contribute meaningfully to customer attachment and satisfaction.

JEL Codes:

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