

Chatbot or Virtual Human? Investigating the Impact of Self-service Technology (SST) Order Agent on Restaurant Impulsive Ordering and eWOM

Abstract

With the proliferation of AI in service settings, self-service technologies (SSTs) increasingly deploy intelligent agents (chatbots). This research comprises two controlled online experiments in a self-ordering context. Study 1 compares order-agent types and examines effects on affective, cognitive, and relational responses, with downstream impulsive purchase intention and electronic word-of-mouth (eWOM) intention. Study 2 restricts the design to digital humans and compares role types exposure appearance constant to isolate role-driven differences in the same mechanisms and intentions. Grounded in social presence and anthropomorphism perspectives, we model age as moderators. Analytically, we employ manipulation checks, reliability assessment, ANOVA, and mediation/moderation tests (PROCESS/SEM). The study identifies which agent forms and role scripts enhance SST effectiveness, clarifies psychological pathways from experience to intention, and offers actionable guidance for optimizing and personalizing digital ordering journeys.

Key Words *Self-service Technology (SST), Chatbot, Virtual human, social presence, Restaurant impulsive ordering, eWOM*

Track *Technological Human-Centered Innovations*

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