The Impact of Using Service Robots on Customer Experience in Restaurants

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Abstract:

As the integration of service robots in restaurants transforms service delivery, this study examines how robotic characteristics—anthropomorphism, autonomy, and risk—impact customer service experience through acceptance attributes (perceived usefulness, ease of use, and enjoyment) framed by the Service Robot Acceptance Model (sRAM) and CASA theory. Analyzing data from 404 restaurant customers, the study explores the moderating effect of motivation (utilitarian vs. hedonic). Results indicate that anthropomorphism and autonomy positively influence perceived usefulness, ease of use, and enjoyment, while risk negatively affects these perceptions. Multi-group analysis reveals significant differences: anthropomorphic features enhance the service experience for hedonic consumers, whereas utilitarian consumers prioritize autonomy. Additionally, utilitarian consumers exhibit a strong negative perception of risk, substantially reducing acceptance of robot. In contrast, hedonic consumers, focused on enjoyment, display a buffered risk impact. These findings underscore the need for tailored strategies addressing diverse consumers' motivations.

Keywords:

Service Robots, Anthropomorphism, Customer Experience, Technology Acceptance.