The Role of Innovativeness in Smart Hotel Adoption: A Dual-Method Analysis of Personality Traits

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Abstract:

This study explores how consumer personality traits influence the intention to stay in smart hotels, which utilize advanced technologies like AI, IoT, and automation to enhance service quality. Despite their potential, consumer adoption of smart hotels remains limited. Guided by Mowen's 3M model, which organizes personality traits into elemental, compound, situational, and surface levels, the study employs both Partial Least Squares Structural Equation Modeling (PLS-SEM) and fuzzy-set Qualitative Comparative Analysis (fsQCA) to analyze data from Taiwanese participants.

PLS-SEM results indicate that elemental traits (openness to experience, conscientiousness, and agreeableness) and compound traits (need for arousal and material resources) indirectly influence stay intention through personal innovativeness. Innovativeness emerges as the only direct predictor of intention. The fsQCA analysis further reveals that multiple trait configurations, rather than single traits, lead to high or low stay intention. High-intention profiles consistently include innovativeness, while its absence characterizes low-intention groups.

The study offers theoretical contributions by extending the 3M model to the smart hospitality context and applying a dual-method approach. Managerially, it suggests that enhancing consumer innovativeness through personalized, engaging experiences can boost adoption. Personality-based segmentation can guide marketing strategies and service design in smart hotel development.

Keywords:

Smart hotels, personality traits, innovativeness, 3M model, PLS-SEM, fsQCA.