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The Mediating Effect of Smart Technology on the Relationship Between Homestay Management and Collaborative Digital Economy

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ABSTRACT

Understanding the role of smart technologies in enhancing homestay operations is crucial. The research employs a quantitative methodology. Uses the purposive sampling technique, whereby respondents sourced are 131 active homestay operators. Theoretical foundations are developed based on the TAM and Stakeholder Theory. Data analysis was conducted using IBM SPSS and PLS-SEM, employing techniques such as descriptive analysis, measures of convergent validity, and bootstrapping. The results showed a complex interplay between Smart Homestay Management practices and Collaborative Digital Economy Smart Partnership outcomes. Smart Tourism Promotion was found to have a strong positive direct effect on Collaborative Digital Economy Smart Partnership, while Smart Technology positively mediated relationships between Smart Assistants and Smart Payment. However, Smart Payment had a weak negative direct effect. This study adds to the expanding pool of information, about homestay management and sharing economy providing perspectives for policy makers, homestay operators, and tech innovators.

KEYWORDS

Collaborative Economy, Homestay Management, Sharing Economy, Smart Technology, Smart Partnership, Smart Tourism

INTRODUCTION

The world tourism industry has evolved due to technological advancements and changing consumer preferences. Online platforms like Airbnb and HomeAway have made homestays popular, blurring the line between services and peer-to-peer offerings (Zhu et al., 2017). The integration of technology in hospitality management has enhanced efficiency and customer satisfaction through innovations such as devices and artificial intelligence (AI)-driven services, transforming how accommodations are operated and how tourists interact with their surroundings (Buhalis et al., 2019).

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According to Cognitive Market Research (2024), the global homestay market size is expected to reach 19,581.2 million in U.S. dollars in 2024. Digitalization and the rise in online platforms and experiential travel will further drive the sales to 31,856.8 million by 2031 with a compound annual growth rate of 7.20% between 2024 and 2031 (Cognitive Market Research, 2024). Homestay is the most promising field for development due to the existing tendencies and potential markets. Malaysia's national tourism policy aims to position the country as a tourism destination by 2030, emphasizing Smart Tourism 4.0 (Koo et al., 2020). This strategy focuses on ecotourism, which contributes to Malaysia's competitiveness, tourist experiences, and sustainability tourism.

Malaysia's focus on ecotourism aligns with the increasing trend toward travel practices that promote conservation and preservation of heritage. The success of Smart Tourism 4.0 depends on partnerships among the government, private sector, and local communities. Leveraging tools like travel apps and social media platforms enhances tourists' experiences by facilitating interactions and prompt feedback. By integrating data analysis, intelligence, and IoT technologies, managing resources becomes more feasible.

The Malaysian homestay program was initiated in 1988 to encourage connections between tourists and homestay operators. However, as of 2023 the number of registered homestay operators in Selangor (one of the states in Malaysia) dropped from 449 to 222 primarily due to the effects of Coronavirus disease 2019 (COVID-19) and increased competition from accommodation choices. While research has extensively examined how technology impacts homestay management and partnerships in developed areas, there remains a research gap concerning the influence of technology in developing regions (Aziz et al., 2019; Buhalis & Moldavska, 2022; Mohd Amin et al., 2023). This study aimed to fill this gap by examining how technology shapes the relationship between homestay management and the collaborative digital economy. By investigating how technologies impact homestay management and participation in the sharing economy, valuable insights can be gained into the factors contributing to success in this evolving industry. These findings not only enhance comprehension but also offer practical recommendations for enhancing homestay operations platform development and policy influence.

Research Objectives

First research objective (RO1): To examine the homestay management smart payment (HMSP) effect on a collaborative digital economy smart partnership (CDESP).
Second research objective (RO2): To examine the homestay management smart assistant (HMSA) effect on a CDESP.
Third research objective (RO3): To examine the homestay management smart tourism promotion (HMSTP) effect on a CDESP.
Fourth research objective (RO4): To examine how smart technology (ST) mediates the relationship between an HMSP and a CDESP.
Fifth research objective (RO5): To examine how ST mediates the relationship between an HMSA and a CDESP.
Sixth research objective (RO6): To examine how ST mediates the relationship between HMSTP and a CDESP.

BACKGROUND OF STUDY

Homestay Industry in Malaysia

Malaysia, well known for its diversity and stunning landscapes, welcomes tourists to experience authentic moments through homestays. Homestays provide an opportunity for tourists to explore