

Emerging Technologies Adaptation in Tourism Services: The Managerial Implication Study

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Abstract: *The growing integration of emerging technologies within tourism reflects a remarkable shift in how service providers interpret and respond to customer expectations in an increasingly hybrid world. It is evident that the convergence of artificial intelligence, virtual reality, livestreaming, blockchain, and digital adaptation strategies is not just transforming operations but redefining the essence of experiential engagement. This study brings together recent high citation research to examine how tourism managers can pragmatically harness these technologies for enhanced customer interaction and operational resilience. The review highlights that while AI and VR open doors to more impressive and emotionally attuned experiences, blockchain offers much needed safeguards for cybersecurity and data transparency. That said, the paper also cautions that adaptations must be context-sensitive as managers should embrace gradual technological investments aligned with their financial and operational feasibility. This suggests that success in tourism's digital transformation lies in balancing technological innovation with human understanding, ensuring that technology complements rather than complicates the service experience.*

Keywords: Tourism Technology; Artificial Intelligence; Virtual Reality; Blockchain; Digital Transformation

1. Introduction

Companies are actively participating in emerging technological trends to fulfil the demands of competitive landscape. In today's digital age the intersection of physical and virtual space has redefined the time and space relationship. Emerging technologies such as artificial intelligence and chat-boards; augmented and virtual reality; blockchain; internet of things are enhancing services experience and operational capabilities. Similar to a coin's dual sides, technological benefits also present contrasting aspects.

To maximise the benefits of technological adaptation, this study reviewed several practical implications for tourism managers from different technological oriented researches conducted in the context of tourism services in last six months with high citation. These implications will help in better insights of adaptation and engage customers more attractively.

Artificial Intelligence (AI)

Adapting AI to improve tourism services outcomes, the meta-analysis study (Li et al., 2024) suggests managers that they should first take measures to improve AI functional sensory and effective features, for example expanding its multilingual services capabilities or enhancing emotional response capabilities. Secondly manager should undertake effective management of AI and customer interaction where they need to focus on customers positive psychological response and take steps to reduce their perceived sacrifices and negative emotions. Thirdly optimize the AI functions with enhancement of their ability to understand the service context and tailor information as per customer needs. Finally particular attention should be given to customer features

filtration to carefully segment and identify the target customer using AI.

Virtual Reality (VR) and Livestreaming

The review study of VR advancement over traditional websites (Talawar et al., 2024) suggests managers to invest in developing VR content and technology ensuring accessibility across multiple social media platforms where both promotional and preservation activities can be showcased. VR is capable of delivering in-situ experiences even to the transcend physical constraints. Therefore, managers should adapt VR technologies for better customer services.

Livestreaming can also be focused to better integrate real and virtual experiences as it is suggested to boost travel intentions by enhancing viewers awareness and integrating real time promotional features for better services. Live-streamers can resolve audience inquiries in real time and can enrich the visual experience and increase loyalty. The managers should maximise media functions to engage audience psychologically by considering factors like timing, frequency, emotions, presentations, benefits, and a balance of objective and subjective elements in the livestream.

Blockchain

The study conducted on cybersecurity (Ghaderi et al., 2024) suggests managers to develop incident response strategies that clearly outline the procedure for identification, containment, eradication, and recovery from cyber security breaches. They should divide networks into smaller controlled segments and decentralise the data processing and decision making across the multiple nodes to contain breaches more effectively. This comprehensive approach ensures that managers can quickly respond to cyber incidents and minimise their impact maintaining trust and operational continuity. Adaptation of blockchain into cyber security strategies

presents a promising avenue for enhancing security measures and better services to customer.

Adaptation Constraints

The study conducted on investment on technology (Hu et al., 2024) gives critical insight for managers to recognise that positive impacts of digital transformation may not always be exactly proportional. The study suggested to adapt as per the feasibility instead of mindlessly implementation of technology without considering their financial constraints. Low, slow and gradual adaptation can be a strategical approach to avoid the overload of technologies and to improve the flexibility, familiarisation, and fundings for both the exchange parties.

Practical Evidence

The study conducted on customer satisfaction with cultural attractions (Suzuki et al., 2024) shows that some tourists may not appreciate cultural attractions that provide detailed explanations and some also dissatisfied with making explanation open to all. The study suggests to consider leveraging personalised services through intelligent navigation system and smartphones to put interpretation at their will. Personalising experiences can better promote advocacy and tolerance, strengthening the overall customer relationship loyalty. Emerging technological adaptation provides a promising positive result of experience, engagement and efficiency if implemented well.

Funding

No funding has been received.

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