


# Chapter 9

## Examining the Effect of AI Innovations on Consumer Experience by Mediating the Role of Competitive Advantage in the Case of Eco Hotels in Ethiopia

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### **ABSTRACT**

*The study investigates the impact of Artificial Intelligence (AI) advances on both competitive advantage and guest experiences at environmentally responsible hotels. Through quantitative analysis we studied the relationships between these constructs and identified competitive advantage as a mediating factor. The quantitative anal-*

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*ysis indicates AI innovations have a direct positive effect on consumer experience at 0.40 while their indirect influence through competitive advantage is measured at 0.45 resulting in a total effect of 0.85. The data indicates strategic alignment of AI developments with competitive advantages leads to substantial improvements in customer satisfaction. Eco hotels should direct their efforts towards implementing AI technologies and showcasing their unique offerings while consistently monitoring these technological developments for success. Theoretical implications deepen understanding of technology's role in hospitality while practical suggestions provide actionable strategies for managers.*

## **INTRODUCTION**

In the last couple of years, the development of Artificial Intelligence (AI) Technologies has revolutionized various industries, and the hospitality sector is no different. It reflects the necessity to utilize AI developments to power trend consumer experiences worldwide, promote operational effectiveness and establish competitive differentiators. Consumers are increasingly getting pressured to embrace the AI offerings, with the promise of quick individual and problem-free services that cater to these demands. In developing countries such as the eco-hotel industry, especially in developing countries such as Ethiopia, provides a separate setting to investigate the association among AI progress and experience of customers, as it is stability with demand for contemporary technical solutions (Nyaga and Tanova, 2024) The idea of incorporating AI in the hospitality sector stems from major conversations about digital changes, in which technology is considered an important factor for improvement of service provision and operational efficiency. Research literature shows many uses of AI in hospitality, including chatbot for customer aid, AI-based pricing techniques and data analysis to understand consumer preferences. Research has shown that this progress can increase customers' satisfaction and loyalty, which helps the hotel to gain competitive lead. Also, despite the widespread discussion about the benefits of AI, there is still inadequate targeted research on how this progress specifically affects consumer experiences in eco-hotels, especially in Ethiopian Settings (Hussain at al., 2024).

The AI adoption in the Ethiopian eco-hotels has been faced with different unique obstacles that hindered their potential from increasing experience of their customers. First, limitation of access to new or advanced technologies and a reliable internet creates an obstacle for implementation of system of AI (Salama et al., 2024). Several green hotels word in far regions that infrastructure of technology is less developed. Moreover, there is absence of qualified staff member sophisticated in the discipline of AI and data analysis, who further complicates adoption as staff member of green

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