ACADEMIC WEEKLY DIGEST

YOUR WEEKLY DIGEST OF KEY RESEARCH FINDINGS

HOW DO AI INNOVATIONS IN TOURISM CONTRIBUTE TO ITS SUSTAINABILITY PERFORMANCE?

The growing number of artificial intelligence (AI)-powered innovations in tourism present numerous potential solutions for sustainable tourism issues.

However, little is known regarding how such innovations have contributed to the sustainability performance of the tourism industry and where the future directions of AI innovations in tourism should head towards. PhD candidate Gilang Majid supervised by Prof Iis Tussyadiah and Dr Yoo Ri Kim reflect on where AI innovations in tourism should go next.

WHERE SHOULD AI INNOVATIONS IN TOURISM GO NEXT? LOOKING INTO THE AI4GOODTOURISM FRAMEWORK

Gilang Majid, **Prof Iis Tussyadiah** & **Dr Yoo Ri Kim**

Gilang M. Majid, Prof Iis Tussyadiah and Dr Yoo Ri Kim conducted a systematic review of 213 scholarly articles to map the current landscape of research on intelligent automation in sustainable tourism. Five major themes were identified: intelligent automation to enhance tourist experience, preserve heritage, promote quality of life, measure tourist experience, and conserve the environment. Scholarly work on this topic has paid more attention to the economic and sociocultural aspects of sustainability but less to addressing environmental issues.

To determine future research directions of AI innovations in tourism, they further outlined sustainability transition pathways using two dimensions: sustainability inclusion and tourist involvement.

After investigating twenty-three distinct AI-based innovations using the pathways, the findings explain the lack of AI-based solutions that offer high levels of sustainability inclusion and tourist involvement. The "AI4GoodTourism" framework was proposed as the solution, inferring that intelligent automation with high sustainability inclusion levels can scale up the marginal contributions that tourists provide collectively.

Among the examples includes leveraging AI travel assistants so that they can deliver educational nudges on how tourists can behave more pro-environmentally throughout their travel stages. Innovations benefitting from the ChatGPT momentum may be key to transforming the environmental sustainability of the industry.

AI4GoodTourism framework encourages tourism stakeholders and tech innovators to improve the environmental sustainability performance of the industry using AI-powered technologies

Majid, G. M., Tussyadiah, I., Kim, Y. R., & Pal, A. (2023). Intelligent automation for sustainable tourism: A systematic review. *Journal of Sustainable Tourism.*
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