Themed editorial: The impact and usage of automation and AI in the hospitality and tourism industry

Worldwide Hospitality and Tourism Themes

The hospitality and tourism industry is at a critical juncture, as automation and AI are ready to redefine service paradigms, operational efficiency, customer experiences and competitive strategies. This thematic issue focuses on a current and relevant topic, examining recent progress, practical uses and emerging patterns that are impacting the industry globally. The primary objective of this issue is to thoroughly investigate the profound and extensive influence of automation and AI on the industry. This particular edition is notable for its concentrated examination of the profound impacts of automation and AI in the hospitality and tourism sector. Unlike more general discussions about technology in business, this focuses specifically on AI-driven innovations, operational changes and the resulting changes in consumer behavior and industry standards. It is aimed at offering new and unique perspectives on how automation and AI transform service delivery, management practices and strategic decision-making in a sector known for its strong customer orientation and dependence on human interaction.

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The impact and usage of automation and AI in the hospitality and tourism

It encapsulates the transformative impact of automation and AI in the tourism and hospitality industry, highlighting the juxtaposition of enhanced operational efficiency against employment security concerns. It emphasizes the need for ethical governance to address AI's ethical dilemmas and security vulnerabilities. The exploration of consumer attitudes towards AI, particularly in service robots and facial emotion recognition technologies, is deemed crucial for leveraging AI's full potential in service delivery. Furthermore, AI's entry into gastronomy prompts a reevaluation of traditional culinary practices, advocating for a balance between technological innovation and the preservation of cultural heritage. The first paper explores the detrimental effects of AI on the tourism industry, specifically examining the consequences for employees in the sector. The second paper performs a bibliometric analysis of using AI in transportation systems. This analysis uncovers patterns, contributions from different countries, significant terms, prominent authors and organizations involved in this field. The third paper systematically reviews articles about service robots in the restaurant industry, with a specific emphasis on AI applications. The fourth paper performs a thematic content analysis on utilizing facial emotion recognition (FER) in the hospitality and tourism sector, examining 45 publications from the Scopus database. The fifth paper examines the incorporation of robots in the tourism industry using the Technology Acceptance Model based on publications from the Web of Science database. The sixth paper explores the development of gastronomy in connection with the emergence of intelligent cooking technologies. The seventh paper presents a bibliometric analysis of AI research in the tourism and hospitality industry, emphasizing the recent popularity and surge of scholarly activity. The eighth paper assesses the progress and competitiveness of the top 20 tourist destinations regarding AI development. This evaluation uses the entropy-TOPSIS integrated method based on the DOI 10.1108/WHATTO-42024-184



Worldwide Hospitality and Tourism Themes Vol. 16 No. 2, 2024 © Emerald Publishing Limited WHATT 16,2 Global AI Index. The ninth paper conducts a bibliometric and thematic content analysis of 33 articles from the Web of Science database to examine the use of chatbots in the tourism and hospitality industry.

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Theme Editors

126

About the Theme Editors:

Dr Seden Dogan is an assistant professor of instruction and internship coordinator at the School of Hospitality and Tourism Management. Dogan earned a Ph.D. and master's degree from Akdeniz University. Her research interest includes how employees and customers perceive emerging technologies. Her research has been published in internationally refereed journals including the *International Journal of Contemporary Hospitality Management, the Journal of Hospitality and Tourism Technology, The Services Industrial Journal* and *Tourism Management Perspectives*. She has presented her research at various international conferences including SECSA, MTCON and EuroCHRIE. She has 18 years of hospitality and tourism experience with companies like Inter Continental, Renaissance and Yeego.com.

Dr Trishna G. Mistry is an assistant professor in the School of Hospitality and Tourism Management in Sarasota-Manatee, teaching courses that focus not only on hospitality and tourism but also hospitality human resources management and organizational effectiveness as well. Mistry earned a PhD and master's degree from the University of Central Florida, concentrating on hospitality and tourism management. She received a bachelor's degree from the University of Florida in broadcast journalism. Her research interests include diversity management, human resources management, organizational behavior and strategic management. Her research has been published in internationally refereed journals including the *International Journal of Hospitality Management* and the *Journal of Hospitality Marketing and Management*. She has presented her research at various international conferences including ICHRIE, Euro CHRIE and Elsevier World Research Summit for Tourism and Hospitality. She holds several professional memberships, including CHRIE and the Society for Human Resource Management. She has several years of lodging industry and management experience with companies like BlueGreen Vacations and Wyndham Destinations.

Dr Luana Nanu is an assistant professor in the School of Hospitality and Tourism Management at the Muma College of Business at the University of South Florida. She also serves as the coordinator of the M3 Center for Hospitality Technology for the School of Hospitality and Tourism Management. Nanu has studied and worked in four different countries prior to receiving a PhD in Hospitality Management from Auburn University in 2022. Her major research interests are the physical environment in the hospitality industry, research methodologies as well as big data, business and hospitality analytics.

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