

Artificial Intelligence in Tourism: Ethical Concerns and Future Directions

OPEN ACCESS

Volume: 13

Special Issue: 1

Month: February

Year: 2026

P-ISSN: 2321-4643

E-ISSN: 2581-9402

Citation:
Nivenitha, D., and
Nagarajan. P. S.
“Artificial Intelligence in
Tourism: Ethical
Concerns and
Future Directions.”
*Shanlax International
Journal of Management*,
vol. 13, no. S1, 2026,
pp. 125–29.

DOI:
[https://doi.org/10.34293/
management.v13iS1-i1-
Feb.10340](https://doi.org/10.34293/management.v13iS1-i1-Feb.10340)

D. Nivenitha

*Research Scholar, Alagappa Institute of Management
Alagappa University, Karaikudi*

Dr. P.S. Nagarajan

*Professor, Alagappa Institute of Management
Alagappa University, Karaikudi*

Abstract

This research paper examines the planning of Artificial Intelligence (AI) in tourism business, ethical concerns of data privacy, prejudice, labour replacement, and dehumanization, and consumes how the industry regulates the technology such as the EU AI Act and self-regulation in tourism. It also identifies the future trends like hyper-personalization, sustainable analytics and agentic systems which will produce very transformative effects on travel experiences and economic sustainability by the year 2030. The paper identifies gaps in empirical test results and provides policy prescriptions related to bias audit, inclusive governance and human-AI symbiosis based on systematic liter

Keywords: AI Tourism, Digital Transformation, Ethical Concerns, Future Directions.

Introduction

The introduction of Artificial Intelligence (AI) has brought a paradigm shift in the tourism sector due to its ability to offer customized recommendations on traveling as it predicts trends and establishes adaptable machinery that improves the experiences of visitors and the conduct of business. The fast technological use has presented three major ethical issues, which involve violation of privacy and automated system discrimination and employee layoffs. The technology has an opportunity in coming up with a sustainable environment which will connect people with artificial intelligence systems in the future.

AI Applications in Tourism

Customer service Chatbots are driven by AI, recommender systems used in tailor-made travel projects and dynamic pricing engines to gain revenue. Service robots and augmented reality assistants make tourists more involved in the tourist attraction, whereas predictive analytics predicts demand to control the congestion. These technologies simplify processes and need massive datasets which are produced based on the behavior of users.

Key Ethical Concerns

The AI systems gather sensitive traveller data which when failures handled can have privacy consequences such as unauthorised access and use of the data. The algorithms are really causing biased output that is reinforcing the current social inequalities since they filter one or more demographic groups and regions yet not another. The hospitality industry has two significant challenges, with AI technology ending employment and automation technology eliminating part of the work that had hitherto been handled by people. The two sustainability challenges connected with the AI systems in terms of their ability to raise the number of tourists on the particular sites are an overload of the number of tourists visiting certain places.

Future Directions

The sector will be changed by innovations such as hyper-personalization through generative AI, and integration with VR/IoT of interactive experiences, as well as ethical structures to create transparency. Researchers and managers must stress the analysis of bias, equity, and sustainable strategies to make sure that innovation corresponds to the social advantage. A responsible approach to leadership would contribute to the establishment of trust and facilitating even-handed development by 2030.

Literature Review

The development of literature on AI in tourism has evolved beyond simple uses of AI in efficiency to having a comprehensive approach that is ethically and sustainable.

The initial studies were devoted to machine learning in forecasting and personalization, and Lopez-Naranjo et al. (2025) state that NLP chatbots and systems that optimize the bookings and customer satisfaction of hotels and airlines are only a few kinds of technologies with which machine learning can be applied. The systematic reviews confirm the use of AI in revenue management and service automation but indicate the interoperability issue in SMEs.

Recent studies are centered on roboethics and bias correction because conceptual frameworks of the human-AI symbiosis in terms of job displacement are suggested by Ivanov and Umbrello (2021). Siddik et al. (2025) also relate AI to sustainable tourism development by the emission-optimal analytics, whereas Henriques (2024) underlines the significance of PRISMA-related gaps in the empirical validation of the effects on privacy. Herrera et al. (2023) consider AI to be an agent of change in the sphere and suggest interdisciplinary studies on the issue of cultural sensitivity.

Erdoş (2025): Regarding the interaction between humans and AI, as well as ethical indicators, he appears to pay less attention to them and suggests that longitudinal research be conducted on the social effect of generative AI. Future research priorities consist of international case studies, consideration of laws as an e.g., the EU AI Act, and more balanced research to resolve the problem of Western bias in the existing literature.

Objectives

1. To investigate Artificial Intelligence (AI) ethical issues in Tourism.
2. To Get acquainted with the existing regulatory system and industry standards in the field of AI ethics in tourism.
3. To Investigate the influence of future directions in Artificial Intelligence (AI) in Tourism.

Ethical Concerns of Artificial Intelligence in Tourism

Data Privacy and Surveillance Risks

Artificial Intelligence in Tourism Artificial Intelligence Ethical Concerns. The risks associated with data privacy and surveillance will be considered in the 4.1 field. The AI tourism systems

accumulate huge volumes of information on the travellers which may cause breaches and unwanted monitoring upon smart destinations using facial recognition and location tracking. The absence of working consent tools results in the loss of trust and low adherence to the rules, including GDPR.

Algorithmic Bias and Discrimination

Discriminative training information results in discrimination within AI recommendation algorithms or automated price setting, e.g. when some population groups or businesses owned by minorities are prone to be charged higher rates or because minority-owned companies are absent. The disparities in the movement of tourists and economic opportunities are perpetuated. Auditing algorithms on various data is important.

Job Displacement and Dehumanization

Chatbots and robots can be used to automate tasks undertaken by hospitality employees, resulting in the displacement of workers, thereby increasing socioeconomic inequalities in labour-intensive tourism. Real human experience is being lost and the culture is commodified. Hybrid forms of human and artificial intelligence can be used to address this.

Accountability and Transparency Gaps

In the failure of AI systems, e.g. misleading visa information, or pricing bias, it is hard to blame someone due to the decentralization of responsibility between the creators and the users. It is not easy to monitor because it can not be explained. Ethical governance is the need of impact studies and paths of human escalation.

Regulatory Framework and Industry Practices of Artificial Intelligence in Tourism

Global Regulatory Frameworks

Tourism AI, e.g. biometric e-gates or HR software, is high-risk AI that will be regulated by the EU AI Act (not in effect yet: 2024) and mandatory compliance evaluations, documentation, and a maximum penalty of 6% of global turnover in case of non-compliance. Guidelines by UNESCO on AI Ethics and G7/OECD promote responsible application, such as reduction of bias and expanding the tourism industry. The AI Risk Management Framework by NIST facilitates federal aligned procurement, in the US and the National AI Strategy in India suggests industry responsive data protection.

Industry Practices and Self-Regulation

The voluntary principles adopted by the tourism companies are transparency in AI interaction, audit of fairness in the pricing and recommendation as well as privacy by design. Companies, including the hospitality sector, have AI compliance officers, use watermarking in synthetic media, and design with a human-centered approach. The use of AI in preventing the over-tourism and the assessment of the local impact is also a sustainable practice.

Future Directions and Impact of Artificial Intelligence in Tourism

Hyper-Personalization and Predictive Experiences

Integrating generative models will guide to personalized travel-related plans by assessing data, preferences, and trends as the reasons to immerse in VR and AR guides. Such issues like delays will be foreseen by predictive analysis, and travel plans will be automatically altered so that there could be no difficulties related to traveling. This enhances satisfaction but needs impartial algorithms. Its innovation in services and security (6.2) defines its potential to evolve into an

extremely popular college or university app. The end-to-end planning will be handled by agentic AI concierges and self-driving logistics, as well as computer vision enhances safety by detecting the threat. Multimodal artificial intelligence combines text, speech and images by offering all-inclusive experiences. These facilitate innovation and impose requirements to upskill the workers.

Innovation in Services and Security

Future-directions is AI audits, transparent governance according to G7 / OECD, and SME support Incorporation. The need to balance innovation and protections provide fair benefits.

Policy and Ethical Imperatives

Future-directions involves AI audits, transparent governance per G7/OECD, and SME support for Incorporation. Balancing innovation with protections ensures equitable benefits.

Limitations

The research paper on Artificial Intelligence in Tourism: Ethical Concerns and Future Directions is also faced with several critical limitations that delimit the scope of the research and its degree of generalization. To begin with, the completeness and updatedness of the information on tourism sites is restricted by the proprietary character of the information, which, in turn, does not allow scientists to study the bias in recommendation algorithms and the risk of privacy breach of smart tourist sites. Secondly, large-scale longitudinal surveys and experiments that can be used to study causal associations of job displacement and sustainability effects in various global contexts are currently constrained by the usage of secondary sources of literature and, case studies as sources. The high rates of evolution of AI technologies including generative AI and agential networks have the threat of making the results of the study obsolete by the time of publication, while the focus on such popular frameworks like the EU AI Act does not take into account emerging trends in like ar~

Conculsion

The potential of AI integration in tourism industry demonstrates the potential of revolutions in the field in terms of personalization, sustainability and efficiency, yet the realization of the goals requires rational measures to mitigate the ethical concerns of data breach, algorithm biasness, and job loss in order to obtain equitable results. The starting point of accountability through EU AI Act and UNESCO guidelines along with industry standards that emphasize transparency and privacy by design have been a critical foundation, yet furthers with respect to the adoption of SMEs and regional adoption, as with developing markets like India. The potential uses of AI in the tourism sector with its uses in agential AI, generative experiences, and eco-optimally efficient analytics have gigantic potential to change tourism systems by 2030, but, again, only, unless interdisciplinary research can m')+;0,*('&'&-

Reference

1. Erdős, F., Thinakaran, R., Firuza, B., & Koloszár, L. (2025). The Rise Of Ai In Tourism-A Systematic Literature Review. *GeoJournal of Tourism & Geosites*, 60.
2. Henriques, H. J. G., de Almeida, C. R., & Ramos, C. M. Q. (2024). The Application of artificial intelligence in the tourism industry: a systematic literature review based on Prisma methodology. *Journal of Tourism, Sustainability and Well-Being*, 12(1), 65-86.
3. Herrera, A., Arroyo, A., Jimenez, A., & Herrero, Á. (2023). Artificial intelligence as catalyst for the tourism sector: a literature review. *Journal of Universal Computer Science*, 29(12), 1439.

4. Herrera, J. C. (2023). Inteligencia artificial, investigación y revisión por pares: escenarios futuros y estrategias de acción. *RES. Revista Española de Sociología*, 32(4), 199.
5. Ivanov, S., & Umbrello, S. (2021). The ethics of artificial intelligence and robotization in tourism and hospitality-A conceptual framework and research agenda. *Journal of Smart Tourism*, 1(4), 9-18.
6. López-Naranjo, A. L., Puente-Riofrio, M. I., Carrasco-Salazar, V. A., Erazo-Rodríguez, J. D., & Buñay-Guisñan, P. A. (2025). Artificial intelligence in the tourism business: a systematic review. *Frontiers in Artificial Intelligence*, 8, 1599391.
7. Siddik, A. B., Forid, M. S., Yong, L., Du, A. M., & Goodell, J. W. (2025). Artificial intelligence as a catalyst for sustainable tourism growth and economic cycles. *Technological Forecasting and Social Change*, 210, 123875.