Research Journal of Economics and Business Management

ISSN: 2945-3941

Research Article

Harnessing Artificial Intelligence in Sustainable Tourism in the Post-Pandemic World

Zijun Zhao
Dongying Jinqiao International Travel Agency Co., Ltd,
No. 60-2 Shengxing Road, Dongying District, Dongying City, China.

Abstract

The tourism industry around the world is constantly being challenged to adopt sustainability due to environmental imperatives and changed traveler preferences. This paper examines the transformative role that artificial intelligence can take in the post-pandemic era in the development of sustainable tourism. From applications in environmental monitoring, resource optimization, carbon footprint reduction, waste management, and developing personalized sustainable experiences, AI can be seen as a crucial enabler of tourism in tune with ecological goals. Besides, the paper mentions challenges such as costs, technical barriers, and ethical ones, keeping in mind balanced implementation approaches. In any case, AI, from the perspective of sustainable tourism, opens opportunities for the protection of ecosystems and experiences for visitors.

Keywords: Artificial Intelligence, Sustainable Tourism, Environmental Monitoring, Resource Optimization, Post-Pandemic Tourism, Carbon Footprint Reduction.

How to cite this article: Zijun Zhao. Harnessing Artificial Intelligence in Sustainable Tourism in the Post-Pandemic World. **Research Journal of Economics and Business Management. 2025 Feb 11,4(1):1-11.**

Source of support: Nil.

Conflict of interest: None

DOI : doi.org/10.58924/rjebm.v4.iss1.p1

1. Introduction

Sustainability has become a mainstream concern in the global tourism industry, given the combination of increased environmental awareness, shifts in consumer expectations, and a need to respond to the ecological impact of travel. Travelers, after the COVID-19 pandemic, are focusing more on experiences that resonate with personal values and environmental awareness. This shift has increased the call for sustainable tourism practices that no longer just minimize harm but contribute positively to local ecosystems and communities (Kalra & Taneja, 2022). Thus, in this changed paradigm, artificial intelligence is evolving as a powerful enabler of sustainability, providing a new approach to address those challenges in the tourism industry. With AI, there can be significant impacts on the betterment of environmental monitoring, resource optimization, reducing carbon footprint, managing wastes, and personalized experiences with sustainability in general.

Received: **10-11-2024**
Revised: **20-12-2024**
Accepted: **27-01-2025**
Published: **08-02-2025**

The paper brings forth the transformative ability of AI and how it might mold the tourism industry toward the balance of ecological preservation and visitor satisfaction enrichment. It explores the many dimensions in which AI will be applied, suggesting a potential enhancement of ecological resilience through sustainable tourism practices and the potential for long-term sustainability (Khan et al., 2024). This practically describes the practical challenges related to the integration of AI. It's very high costs, technical complications, and ethical issues are discussed and well-balanced strategies to overcome these problems are also suggested. As the tourism sector looks to align with the global sustainability agenda, AI offers a route for innovation and adjustment so that tourism continues to be a pillar of ecological stewardship and

Corresponding Author: Zhaozijun2025@126.com

community well-being in the post-pandemic world.

2. Literature Review

Growing literature underlines the role of technology in pushing sustainable tourism agendas. Different studies suggest there is hope in AI-driven solutions, such as those dealing with environmental management, resource optimization, and even improving tourist experiences. Patrichi (2024) emphasizes the role of real-time monitoring tools in observing the environment, focusing on their ability to identify threats to the environment, like deforestation and habitat destruction. Singh (2024) discusses how AI can be utilized to harness the resources available to the hospitality industry with significant reductions in energy and water usage. Palahan and Arunthari (2024) discussed AI applications in personalizing tourist experiences, arguing that a personalized recommendation will make tourists become more environmentally friendly. However, much has been left in the pursuit of socio-cultural implications and adaptability of AI to other contexts that are diverse and ecological. This review serves as a basis for understanding the transformative potential of AI while discussing its limitations in sustainable tourism.

3. Methodology

This research adopts a qualitative approach to analyze the applications and implications of AI in sustainable tourism. A collection of data involved an analysis of peer-reviewed journal articles, industry reports, and case studies between the years 2018 and 2023. In doing the theme analysis, major components included environmental monitoring, optimization of resources, carbon footprint reduction, waste management, and more personalized experiences by the tourists. Further interviews of experts in tourism, technology, and sustainability helped in understanding the issues and opportunities at the implementation level. A thematic analysis was used to synthesize the findings to ensure an all-encompassing understanding of AI in the promotion of sustainable tourism in the post-pandemic world.

3.1. Data Collection Method

3.1.1. Article Search and Selection:

The databases used were academic databases such as Scopus, Web of Science, and Google Scholar, while specialized tourism and technology journals included Journal of Sustainable Tourism, Tourism Management, and AI & Society.

3.1.2. Search Terms:

The major keywords used included "AI in sustainable tourism," "artificial intelligence for resource optimization," "AI and carbon footprint reduction," "personalized tourism experiences using AI," and "AI post-pandemic tourism."

3.1.3. Screening Method:

- A total of about 150 articles were screened out relating to the topic.
- Articles were then further narrowed down to 60 articles as shown by titles, abstract, and keywords.
- Article full-text screening to narrow to 40 articles, selected based on a direct focus on AI application in tourism and sustainability.

3.2. Inclusion and Exclusion Criteria:

3.2.1. Inclusion Criteria:

- Published between 2018 and 2023.
- Peer-reviewed journal articles or credible industry reports.

- Explicit focus on AI applications in sustainable tourism practices.
- Empirical studies, case studies, or theoretical frameworks that provided actionable insights.

3.2.2. Exclusion Criteria:

- Articles focused on general tourism without emphasis on AI.
- Irrelevant papers on AI in unrelated industries or general topics unrelated to sustainable tourism.

4. Findings and Discussion

4.1. AI-Driven Environmental Monitoring

Effective environmental monitoring is fundamental to sustainable tourism because it ensures that development does not compromise ecological health in destinations. Under this concept, drones, machine learning algorithms, and other AI-enabled sensors will help transform the ecosystem and biodiversity monitoring(Mobo et al., 2025). Thus, they transform industry and provide tools for gathering, analyzing, and interpreting environmental data with unprecedented accuracy and efficiency. These devices can rapidly scan vast and mostly inaccessible lands with unprecedented precision using AI-equipped drones, thus acting as a precious source. They capture very high-resolution images that could be assessed on-site or in real-time for indicators of illegal logging, habitat destruction, or shifts in animal movement patterns. For example, the use of AI to analyze footage captured by drones can be sensitive enough to capture the minute changes in the coloration of corals and hence become an early warning system against coral bleaching and other marine ecosystem threats (Veeranjaneyulu et al., 2024). This would therefore allow for early detection and intervention in the enhancement of conservation efforts.

Another sophistication that AI-enabled sensors can bring to environmental monitoring is the continuous tracking of air, water, and soil pollution levels (Popescu et al., 2024). These sensors go live with the information they produce to send to the intended stakeholders and authorities, where the relevant threats may then be dealt with quickly-toxic chemical spills, rising carbon emissions, or any form of contamination of the natural water bodies. Moreover, AI-based systems would connect a vast pool of data from different sources; among them are satellite images, climate models, and other historical records that build models to predict how environmental degradations are likely to manifest. For example, in predictive analytics, it helps identify areas most likely prone to deforestation or where certain invasive species would infest, thus being able to start proactive conservation actions. Incorporation of AI in monitoring is beyond accuracy and efficiency. This would be able to provide the decision-making layer with insights that would help policymakers make data-informed policies that align the tourism development strategy with the objectives of preserving ecological goals. These insights would improve the utilization of resources and prioritize the places that require urgent attention. The tourism stakeholders will apply AI to ensure that their activities not only cause least harm but also contribute to natural ecosystem protection, biodiversity preservation, and sustainability of the very critical resources for posterity. It is a technological advancement that bridges the gap between tourism and environmental stewardship, thereby creating a framework for responsible and sustainable development.

4.2. AI for Resource Optimization

Resource efficiency is an integral aspect of sustainable tourism and provides a way to reduce the environmental footprint associated with tourism activities while promoting the optimal performance of the business. In this regard, AI technologies are revolutionizing a new paradigm in the way accommodations, tourist facilities, and infrastructure manage their resources (Kannan, 2024). Through accurate monitoring, data analysis, and control, AI ensures the effective use of its resources while providing benefits to the environment alongside business operations (Haider et al., 2024). One of the most impactful applications of AI is in energy and water management, where it works in conjunction with the Internet. Here, the systems analyze real-time consumption data to identify patterns and areas of inefficiency, meaning that operators can make informed decisions about adjustments. For instance, property managers can apply AI to vary the heating, cooling, and lighting systems based on the number of guests checked in, weather conditions, and the time of day. Such micro-level interventions result in minimum wastage of energy resources, leading to cost savings with less carbon emission. In another similar area, AI-based systems optimize water usage; detect leaks, monitor changes in consumption patterns, and identify where water conservation actions may be implemented without incurring the dissatisfaction of its guests.

The other area in which AI does wonders is predicting and managing seasonal demand. Analyzing historical data, weather forecasts, local events, and booking trends with AI-based algorithms can produce accurate predictions about peak and off-peak tourist seasons (Vetrivel, Vidhyapriya, & Arun, 2025). These enable the tourism operators to use their resources more effectively, from changes in the number of staff required to manage the inventory to scaling up transportation services. Moreover, this type of ability to predict reduces the likelihood of overloading the ecosystems at high-demand periods; thus, it supports long-term ecological balance. AI also helps optimize resources more than just reducing waste and saving on scarce resources such as fresh water. For instance, AI-based systems may be able to notice trends and patterns in the way waste is generated. Therefore, this could give way to a reduction in the general amounts of total waste produced. It is aligned with international aspirations for sustainability and allows tourism enterprises to play their part in the wider effort at conserving resources and protecting the environment. Beyond efficiency and savings, AI-based resource optimization of the tourism sector establishes a culture of sustainability within its operations. Institutions of business that apply AI in their business see a benefit in better performance and cost reduction, but always ensure sustainability, which gets them on the sustainability path as increasingly environmentally sensitive tourists seek their service to remain sustainable. Finally, AI's role in resource optimization underlines its ability to transform tourism into an industry that can be even more sustainable and responsible for creating a future where the preservation of ecology and economic growth go together.

4.3. Carbon Footprint Reduction Using AI Travel Solutions

The reduction of carbon footprints of tourism has now become one of the important priorities in the global fight against the escalating impacts of climate change. Tourism is very enriching and economically important, but the energy-intensive activities involved in it are air travel, accommodation, and local transportation, which significantly contribute to greenhouse gas emissions (Serrano-Bernardo et al., 2012). The challenge of tourism has thus been addressed by artificial intelligence, emerging as a transformative force by providing innovative solutions for the promotion of low-carbon tourism practices. AI enables both the traveler and the industry stakeholders to adopt sustainable practices that are in line with global climate goals by facilitating green travel solutions. AI-based systems have become the most useful in promoting sustainable transportation

options and designing an eco-friendly itinerary. They consider many variables, from traveler preferences to trip information and environmental impact data, to give advice that suits the individual best. Some possible solutions for sustainable transportation could be electric vehicles, public transport, bicycles, or ride-sharing services. These are actionable insights so visitors can make better-informed decisions about adopting the lower-carbon alternatives and decrease their total impact on the environment. The working of AI goes beyond a suggestion; it optimizes the logistical dimension of green transportation efficiently and makes it accessible to everyone.

AI plays a paramount role in promoting carbon offsetting initiatives besides advocating for sustainability in transportation. The sophisticated algorithms can calculate the level of emissions for every particular trip, whether it may be flights, accommodation stay, or any other form of tourism (Banerjee et al., 2024). This stage allows people participating in this type of tourism activity to balance their carbon footprint using different environmental programs, such as the initiation of reforestation programs, renewable energy production technologies, or carbon sequestration technologies (Dauvergne, 2020). In addition to these alternatives by incorporating them into user-friendly interfaces, AI facilitates accessibility to carbon offsetting to be less complicated and easier to reach a broader audience. AI also assists travel companies in optimizing their fleet. This is achieved through factors such as traffic, consumption, and efficiency through the routes. Through all this, AI will come up with routes that burn the least amount of fuel and provide information on carbon emissions minimization. Another AI capability is predictive maintenance, which enables vehicle maximization in performance while cutting out energy wastage by mechanical issues even before they become bigger. These platforms also assist travel operators' transition to renewable energy-powered systems, thus leading to a long-term shift towards greener operations. Apart from transportation, AI-based platforms are changing the way itineraries are designed, focusing on low-impact activities that promote ecological conservation. The platforms encourage tourists to engage in nature-based activities such as hiking, biking, birdwatching, or wildlife observation. This promotes such activities in a way that AI minimizes the availability of carbon-intensive alternatives, for example, helicopter tours or over-reliance on motorized recreation which is often very destructive to their environments (Basu & Basu, 2021). The better the knowledge acquired by travelers about the 'ecological price tags' placed on high-carbon activities, the more individuals can be encouraged and aware. This way, travel companies and destinations can align their day-to-day practices with this greater vision of ecological protection and climate action by becoming more 'AI-friendly'. AI enables travelers to be empowered with information and tools that they need to make sustainable choices and also enables operators to cut emissions and improve efficiency. Ultimately, the application of AI in reducing the carbon footprint of tourism represents a pivotal step towards a more sustainable and climate-conscious industry, ensuring that tourism remains a force for positive global change.

4.4. AI-Based Tourism Waste Management

Waste management remains one of the most long-standing challenges facing tourist destinations, especially during peak seasons when many visitors result in an unbelievable multiplication of volumes of waste generated. The impact of waste if not managed is calamitous to the environment since it leads to pollution, destruction of habitats, and deterioration of natural and cultural heritage sites (Belsoy, Korir, & Yego, 2012). This is emerging AI, which has become a revolutionary technology for solving problems. This technology brings innovation in the improvement of efficiency and sustainability in waste management. One of the latest innovations within sustainable tourism is artificial intelligence-based systems when it comes to waste sorting and recycling. These technologies work through such cutting-edge technologies as the use of image

recognition, robotic arms, and a machine learning algorithm in automated segregation of material that could either be recyclable or biodegradable or even nothing at all. It will streamline the sorting process with AI, thus decreasing the likelihood of errors and ensuring an efficient and accurate process of waste management. Smart sensors enable AI-powered bins to keep tabs on the amount of waste, giving immediate real-time data. Bins remind the staff when it's time to collect, making unsightly overflow not appear, which is significant in maintaining cleanliness, particularly in tourist hotspots.

Beyond operational improvements, AI helps with community-based waste reduction efforts, promoting a sustainable culture among tourists and local people (Pasanchay & Schott, 2021). For instance, apps powered by AI provide travelers with information on local recycling facilities and composting plants while also offering tips on the reduction of single-use plastics. Such apps make tourists responsible contributors to the reduction of waste while traveling. With the connection of tourists with local recycling programs or community clean-up initiatives, AI enables tourists to be more engaged and involved in sustainability activities (Al-Romeedy, Emam, & Tyagi, 2025). The benefits of AI in waste management go towards preserving natural and cultural attractions. These are mainly what people come to visit. Litter and pollution reduction from AI help keep beaches, forests, and historical sites looking pristine. This keeps destinations attractive and accessible for generations yet to visit. Third, as far as enhancing the sustainability of tourism operations is concerned with the efforts put by the entire world against environmental degradation and resource saving, there exists waste-based solutions through AI-based end. This means that AI-based waste management systems make the most transformative stride in the effort to address one of the most daunting challenges in sustainable tourism. It automates waste sorting, increases the efficiency of operations, and involves the community through AI, thus making destinations handle their waste better and more sustainably. The results contribute to a cleaner environment that is also more attractive but, most importantly, ensures long-term viability for tourism.

4.5. Tailor-made Sustainable Activities to Enhance Visitor Experience

AI greatly improves sustainable tourism with personalized recommendations that facilitate and encourage eco-friendly behaviors that are in line with an individual's preferences as a traveler. AI systems analyze tourist profiles, their interests, past travel behavior, and preferences to develop the best suggestions for conservation projects, eco-tourism activities, and green initiatives (Jain Jain, & Jain, 2024). Thus, a wildlife lover can be led to participate in volunteer activities at the local wildlife rehabilitation centers. Meanwhile, an environmental activist would be led to local reforestation or beach cleaning events. These also highlight visits to protected natural sites, eco-lodges, and cultural experiences that are positive for the local community and ecosystem. For example, AI could suggest staying in an accommodation certified in sustainable practice, like renewable energy or supporting local artisans. Also, AI-based tools typically utilize gamification techniques such as rewards for promoting sustainable behavior. Tourists can earn points as they save water, use less energy, or travel by green transportation to earn discounts, free passes, or eco-friendly merchandise. The AI-recommended educating components teach the traveler not just about the ecological aspects, but also about the cultural significance. For example, AI might provide information that will advise on guided tours and there will be data on the history behind protected areas, the importance and value of local flora and fauna, and the impact of conserving those through sustainable practices (Heikinheimo et al., 2017). This does not only personalize enrichment for the visitor, but an ecotourism-friendly culture may be encouraged which nurtures long-term commitment towards sustainability. Lastly, AI transforms tourism into a

transforming power for the tourist and for the destination by having an equal balance of discovery and preservation.

4.6. Challenges in Implementing AI in Sustainable Tourism

Although AI is potentially capable of transforming sustainable tourism, several obstacles exist to this end. The most crucial is cost, since developing, deploying, and maintaining AI systems are very expensive affairs (Afzal et al., 2024). Small destinations, particularly in developing regions, are often financially incapable of affording such advanced technologies, which creates disparities between the well-funded and the under-resourced tourist areas. Technical know-how is yet another pertinent challenge. AI solutions require technocrats for system integration and analysis of data on routine maintenance. In such places, especially those that may be remote or less technologically advanced, such gurus are difficult to garner and retain, and due to this gap appears in the proper exploitation of AI. Another important issue regarding familiarity with such technologies persists that highlight capacity-building programs. Some of the principal problems arising from privacy and ethics concerns include massive data accumulation for AI systems, preferences in visitors, behavioral patterns, location-based information, and personalization in recommendation and operation. If proper data protection frameworks are not implemented, it can lead to misuse, breaches, or violation of privacy. Thus, trust in AI could be eroded and hindered from adoption on the side of travelers and operators.

Another major limitation is contextual appropriateness. AI solutions designed and developed in one region or environment cannot be applied elsewhere simply because of differences in characteristics related to the ecosystem, culture, or social backgrounds. AI algorithms trained in urban tourist destinations to suppress waste generation do not necessarily work for such areas, even when isolated rural sites require it. Such disparity can cause unforeseen impacts on the environment or be destructive to local traditions or economic structures. All of this requires a balanced and strategic approach, with support from the government side, as well as subsidies to the smaller destinations. In the public-private sector, technology resources should be shared and comprehensive training programs established for building local expertise. Data collection should be ethically sound, including privacy regulation and community involvement in the AI deployment process. Lastly, AI technologies designed for the local conditions with the support of the players and scientists of the place are efficient and culturally relevant as it is sustainable.

5. Conclusion

Artificial intelligence has proved to be a transformative force in taking sustainable tourism further, mainly by addressing some of the key environmental and operational challenges. Its use in areas such as optimization of resources, environmental monitoring, reduction of carbon footprint, and waste management can change many aspects of this industry. AI allows operators to make informed choices the impact the environment less but help in enriching the visitors' experiences. AI promotes community-based tourism, bringing the industry in line with sustainability goals worldwide, and offering ecologically friendly, personalized recommendations. Sustainable practices will also benefit tourists and destinations alike. However, many challenges need to be surmounted before all the AI potential is finally achieved for sustainable tourism. There are financial barriers and technical gaps in terms of expertise needed, along with ethical considerations regarding data protection and privacy, that the governments, private sectors, and the local communities themselves need to work out through common collaboration. Equitable and effective implementation also requires tailoring AI technologies to the unique needs and contexts of diverse

destinations. Stakeholders must emphasize capacity building, transparent data governance, and localized solutions to maximize the benefits of AI while minimizing the risks. It's the first chance to build the post-pandemic era of tourism to make it truly sustainable and resilient in the wake of integrating AI. It is an innovation that is balanced ecology and cultural preservation in such a manner that will ensure destinations become thriving centers for the conservation of the very natural and cultural heritage which makes them unique.

References

1. Afzal, M. I., Al. Azhari, S., Kishwer, R., & Shah, S. B. A. (2024). Sustainable Expansion of the Tourist Industry Due to the Application of Artificial Intelligence: Evidence from the Chinese Hospitality Industry. In The Role of Artificial Intelligence in Regenerative Tourism and Green Destinations (pp. 85-99). Emerald Publishing Limited. https://www.emerald.com/insight/content/doi/10.1108/978-1-83753-746-420241006/full/html
2. Al-Romeedy, B. S., Emam, M. E., & Tyagi, P. K. (2025). Exploring Waste Reduction Potential in Rural Tourism: What Solutions Can Be Implemented?. In Solid Waste Management for Rural Regions (pp. 193-214). IGI Global Scientific Publishing. https://www.igi-global.com/chapter/exploring-waste-reduction-potential-in-rural-tourism/363984
3. Banerjee, A., Mahmudov, T., Adler, E., Aisyah, F. N., & Wörndl, W. (2024). Modeling Sustainable City Trips: Integrating CO2 Emissions, Popularity, and Seasonality into Tourism Recommender Systems. arXiv preprint arXiv:2403.18604.https://arxiv.org/abs/2403.18604
4. Basu, A., & Basu, L. B. (2021). Questioning the green recovery: a take on Post-COVID scenario. In COVID-19 Pandemic Trajectory in the Developing World: Exploring the Changing Environmental and Economic Milieus in India (pp. 117-144). Singapore: Springer Singapore.https://link.springer.com/chapter/10.1007/978-981-33-6440-0_6
5. Belsoy, J., Korir, J., & Yego, J. (2012). Environmental impacts of tourism in protected areas. Journal of Environment and Earth Science, 2(10), 64-73.
6. Dauvergne, P. (2020). AI in the Wild: Sustainability in the Age of Artificial Intelligence. MIT Press.
7. Haider, S., Rashid, M., Tariq, M. A. U. R., & Nadeem, A. (2024). The role of artificial intelligence (AI) and Chatgpt in water resources, including its potential benefits and associated challenges. Discover Water, 4(1), 113.https://link.springer.com/article/10.1007/s43832-024-00173-y
8. Heikinheimo, V., Di Minin, E., Tenkanen, H., Hausmann, A., Erkkonen, J., & Toivonen, T. (2017). User-generated geographic information for visitor monitoring in a national park: A comparison of social media data and visitor survey. ISPRS International Journal of Geo-Information, 6(3), 85.https://doi.org/10.3390/ijgi6030085
9. Jain, P., Jain, P., & Jain, A. (2024). Harnessing Artificial Intelligence for Sustainable Tourism Practices. In The Need for Sustainable Tourism in an Era of Global Climate Change: Pathway to a Greener Future (pp. 249-267). Emerald Publishing Limited. https://www.emerald.com/insight/content/doi/10.1108/978-1-83608-668-020241034/full/html

10. Kalra, S., & Taneja, C. (2022). Sustainable tourism behaviour in the post pandemic era. Academy of Marketing Studies Journal, 26(2).
11. Kannan, R. (2024). Revolutionizing the Tourism Industry through Artificial Intelligence: A Comprehensive Review of AI Integration, Impact on Customer Experience, Operational Efficiency, and Future Trends. International Journal for Multidimensional Research Perspectives, 2(2), 01-14. https://www.chandigarhphilosophers.com/index.php/ijmrp/article/view/115
12. Khan, N., Khan, W., Humayun, M., & Naz, A. (2024). Unlocking the Potential: Artificial Intelligence Applications in Sustainable Tourism. The Role of Artificial Intelligence in Regenerative Tourism and Green Destinations, 303-316. https://www.emerald.com/insight/content/doi/10.1108/978-1-83753-746-420241020/full/html
13. Mobo, F. D., Garcia, A. L. R., & Miłek, K. (2025). Leveraging AI for Real-Time Environmental Monitoring: Innovations and Impacts. In Harnessing AI in Geospatial Technology for Environmental Monitoring and Management (pp. 201-212). IGI Global Scientific Publishing. https://www.igi-global.com/chapter/leveraging-ai-for-real-time-environmental-monitoring/364535
14. Palahan, S., & Arunthari, S. (2024, April). Innovating Tourism: Personalized Recommendations through AI. In Proceedings of the 2024 2nd Asia Conference on Computer Vision, Image Processing and Pattern Recognition (pp. 1-5). https://doi.org/10.1145/3663976.3663991
15. Pasanchay, K., & Schott, C. (2021). Community-based tourism homestays' capacity to advance the Sustainable Development Goals: A holistic sustainable livelihood perspective. Tourism Management Perspectives, 37, 100784.https://doi.org/10.1016/j.tmp.2020.100784
16. Patrichi, I. C. (2024). AI Solutions for Sustainable Tourism Management: A Comprehensive Review. Journal of Information Systems & Operations Management, 18(1), 172-185. https://www.proquest.com/openview/c4186efe32430cdea07de5c03ba27d52/1?pq-origsite=gscholar&cbl=1216366
17. Popescu, S. M., Mansoor, S., Wani, O. A., Kumar, S. S., Sharma, V., Sharma, A., ... & Chung, Y. S. (2024). Artificial intelligence and IoT driven technologies for environmental pollution monitoring and management. Frontiers in Environmental Science, 12, 1336088. https://www.frontiersin.org/journals/environmental-science/articles/10.3389/fenvs.2024.1336088/full
18. Serrano-Bernardo, F. A., Bruzzi, L., Toscano, E. H., & Rosúa-Campos, J. L. (2012). Pollutants and greenhouse gases emissions produced by tourism life cycle: Possible solutions to reduce emissions and to introduce adaptation measures. Air pollution-A comprehensive perspective, 105. https://www.google.co.in/books/edition/Air_Pollution/292dDwAAQBAJ?hl=en&gbpv=1&dq=tourism+air+travel,+accommodation,+and+local+transportation,+which+significantly+contribute+to+greenhouse+gas+emissions&pg=PA105&printsec=frontcover
19. Singh, A. B., Gaurav, G., Sarkar, P., Sharan Dangayach, G., & Lal Meena, M. (2024). Current understanding, motivations, and barriers towards implementing sustainable initiatives in the hospitality industry in the age of

automation and artificial intelligence. Recent Patents on Engineering, 18(7), 2-25. https://doi.org/10.2174/0118722121239293230926034213

20. Veeranjaneyulu, R., Govindarajan, D., Subramanian, C., Devi, D. U., Banerjee, S., Edpuganti, S. K., & Upadhyay, S. (2024). Marine Ecosystem Monitoring: Applying Remote Sensing and AI to Track and Predict Coral Reef Health. Remote Sensing in Earth Systems Sciences, 1-14.https://link.springer.com/article/10.1007/s41976-024-00141-z

21. Vetrivel, S. C., Vidhyapriya, P., & Arun, V. P. (2025). AI-Driven Solutions for Crowd Management in Tourism: Navigating the Swarm. In AI Technologies for Personalized and Sustainable Tourism (pp. 83-112). IGI Global. https://www.igi-global.com/chapter/ai-driven-solutions-for-crowd-management-in-tourism/359252

***

ABOUT EMBAR PUBLISHERS

Embar Publishers is an open-access, international research based publishing house committed to providing a 'peer reviewed' platform to outstanding researchers and scientists to exhibit their findings for the furtherance of society to provoke debate and provide an educational forum. We are committed about working with the global researcher community to promote open scholarly research to the world. With the help of our academic Editors, based in institutions around the globe, we are able to focus on serving our authors while preserving robust publishing standards and editorial integrity. We are committed to continual innovation to better support the needs of our communities, ensuring the integrity of the research we publish, and championing the benefits of open research.

Our Journals

1. Research Journal of Education , linguistic and Islamic Culture - 2945-4174
2. Research Journal of Education and Advanced Literature – 2945-395X
3. Research Journal of Humanities and Cultural Studies - 2945-4077
4. Research Journal of Arts and Sports Education - 2945-4042
5. Research Journal of Multidisciplinary Engineering Technologies - 2945-4158
6. Research Journal of Economics and Business Management - 2945-3941
7. Research Journal of Multidisciplinary Engineering Technologies - 2945-4166
8. Research Journal of Health, Food and Life Sciences - 2945-414X
9. Research Journal of Agriculture and Veterinary Sciences - 2945-4336
10. Research Journal of Applied Medical Sciences - 2945-4131
11. Research Journal of Surgery - 2945-4328
12. Research Journal of Medicine and Pharmacy - 2945-431X
13. Research Journal of Physics, Mathematics and Statistics - 2945-4360

Contact info:
editor.rjhss@embarpublishers.com
contact@embarpublishers.com
director@embarpublishers.com
ceo@embarpublishers.com