Mapping the Impact of Technology on Tourist Experiences: A Bibliometric and Systematic Literature Review

Luciana Maria Popa (Anghel)
Bucharest University of Economic Studies, Bucharest, Romania

popaluciana18@stud.ase.ro

Abstract: The study aims to investigate how emerging technologies are transforming the modern tourism experience, through a systematic literature review combined with a bibliometric analysis of 137 scientific articles published between 2015 and 2025 in the Web of Science database. The results reveal a consistent rise in scholarly interest in the digitalisation of tourism, particularly during the period of the pandemic, when technological solutions became crucial for the industry's resilience. The study reveals a clear dominance of positive perceptions of the impact of technology on the tourism experience, while marginal critical perspectives signal potential risks. Keyword analysis reveals high connectivity within the network, suggesting a well-established theme with multiple interconnections between technology, tourism, experience, and user behaviour. Internationally, research is highly collaborative and globalised, dominated by contributions from Western Europe, Asia and North America, with limited participation from Africa and South America. Over the last decade, research has been dominated by technologies such as virtual and augmented reality (VR/AR), artificial intelligence (AI), mobile applications and online platforms, while studies dedicated to the Metaverse and blockchain technologies are limited. From the perspective of the co-authors' network, there is a tendency for the network to present a fragmented structure, consisting of several closely related groups (clusters) that collaborate frequently. This shows thematic specialisation and collaboration in small groups, led by leaders in specialized literature who facilitate interdisciplinarity and the exchange of ideas. Overall, the study provides a comprehensive synthesis of the technological transformation of tourism, emphasising the need for the ethical, sustainable, and human-centred integration of digital innovations so that technology enriches, rather than substitutes, the authentic tourist experience.

Keywords: Technology, Tourist experience, Smart tourism, Tourism technology

1. Introduction

The digitalisation of tourism and the increased use of technology have transformed access to information and planning, as well as the tourism experience itself. This has increased tourist satisfaction and loyalty. However, it also requires the ethical and sustainable management of technology (Radhika et al., 2024; Sousa et al., 2024; Sharma et al., 2024; Nematpour et al., 2025). Digital technologies are transforming the tourism experience by extending it into virtual environments, thereby increasing the perceived value of destinations. Technological innovations also personalise and intensify tourist involvement (Perdana Kusumah et al., 2022; Panigrahy and Verma, 2025).

During the pandemic, digital technologies were essential for restructuring tourism by offering virtual alternatives and online connectivity (Bilan et al., 2022; Stankov et al., 2023; García-Milon et al., 2021; Goyal and Taneja, 2025). The adoption of VR and AR offers immersive experiences that are accessible to vulnerable groups, thereby increasing inclusion (Sousa et al., 2024; Costa et al., 2022; Paliwal et al., 2025).).

The analysed sources highlight the continuous evolution of technologies used in tourism and the need for their smart, inclusive and sustainable integration. Jo and Shin (2021) emphasise the role of gamification and augmented reality as emerging technologies that can revitalise destinations and provide interactive experiences, particularly for younger generations (Skinner et al., 2018; Polo-Peña et al., 2024).

Digital marketing influences the image of destinations and the behaviour of tourists (Moisa et al., 2021; Jiménez-Barreto et al., 2023), while gamification is an important tool for engaging with Millennials and Generation Z (Jo and Shin, 2021; Skinner et al., 2018). Panigrahy and Verma (2025) emphasise the development of automatic image processing technologies to enable quick access to information and improved visual interactions.

Digital transformation in tourism involves the integration of technologies such as the Internet of Things (IoT), virtual reality (VR) and smart platforms to create smart ecosystems, and this improves the management of urban destinations through business models and innovation (Nematpour et al., 2025; Anjum and Ali, 2022). The design of tourism experiences is evolving towards ''phygital'' concepts, in which mobile technologies reconfigure tourists' spatio-temporal behaviour, generating efficiency and optimizing the experience (Mieli, Zillinger and Nilsson, 2024). These ecosystems promote sustainability by offering VR as an alternative to physical tourism, using gamification to interpret the environment and providing competitive intelligence based on big data, and this increases the perceived value of destinations and promotes social inclusion (Sharma et al., 2024; Pena et al., 2024; Aljaafreh et al., 2024).

The responsible use of digital technologies, as demonstrated by ethical tour guiding, necessitates accountability and professionalism (Çiçekda and Akgül, 2023). Mashkov and Shoval (2025) emphasise the need for technologies to monitor tourist flow and reduce overcrowding. Ezzatian et al. (2024), meanwhile, propose the metaverse and digital platforms as sustainable solutions for redistributing tourist traffic. The digital motivations of Generation Z support the integration of virtual worlds into tourism planning (Paliwal et al., 2025). In conclusion, technological evolution in tourism is shifting towards intelligent systems that address the clear need for personalisation, accessibility, social inclusion, sustainability, and tourism flow management (Radhika et al., 2023; Panigrahy and Verma, 2025; Sousa et al., 2024; Costa et al., 2022; Çiçekda and Akgül, 2023; Jo and Shin, 2021; Paliwal et al., 2025; Sharma et al., 2024; Sustacha et al., 2022; Ezzatian et al., 2024; Nematpour et al., 2025).

The literature highlights the major benefits of integrating technology into the tourism experience, but also emphasises the need for balance to avoid negative effects on authenticity, privacy and social inclusion (Radhika et al., 2023; Sustacha et al., 2022; Musa et al., 2023). Identified negative aspects include digital addiction and psychological isolation, both of which can decrease the quality of the authentic experience (Merkx and Nawijn, 2022; Hassan and Saleh, 2023). Other negative aspects include the negative environmental and cultural impact of technology through overtourism and degradation (Femenia-Serra et al., 2023), as well as privacy and data protection issues related to the use of the Internet of Things (IoT) and big data (Tassikas, 2021; Alsharif et al., 2022). Digital inclusion remains a challenge due to inequalities in access to technology (Vila et al., 2022; Costa et al., 2022). The complexity and cost of implementing advanced technologies such as VR and AR can pose challenges for tourism operators and destinations (Sousa et al., 2024; Nuno et al., 2023). Additionally, robot anxiety can affect the perception of the hospitality experience (Șchiopu et al., 2024).

This research is particularly relevant as it addresses several unresolved issues in existing literature. These include the balance between digital immersion and maintaining the authenticity of tourist experiences, the psychological risks involved, the inequalities in access to technology, and overtourism (Merkx & Nawijn, 2022; Femenia-Serra et al., 2023; Vila et al., 2022). Furthermore, the emergence of technologies calls into question previous assumptions about VR/AR/AI, necessitating a re-evaluation of sustainability and social inclusion that transcends traditional physical boundaries (Ezzatian et al., 2024; Paliwal et al., 2025; Nematpour et al., 2025).

Analysing the specialised literature, we found that there is a lack of comprehensive syntheses showing the impact of technologies on the tourism experience.

1.1 The study aims to identify:

(1) What are the major trends in research on the impact of technology on the tourism experience over the past decade? (2) What technologies have been analysed most frequently in specialised literature over the last 10 years? (3) What are the prevailing perceptions of the impact of technology on tourism? (4) Which networks and authors have had the greatest influence on research in the field of digital tourism and technologically mediated tourism experiences? (5) What gaps have been identified in the development of digital tourism, and what are the future research directions?

2. Methodology

This study employs a systematic literature review (SLR) and bibliometric analysis.

Data was obtained exclusively from the international Web of Science database, with an initial total of 2,047 articles obtained through the keywords 'technology' and 'tourist experience'. After applying relevance, English language, type, and field criteria (Hospitality, Leisure, Sport and Tourism), 714 studies left. Study inclusion and exclusion criteria were used. Inclusion criteria: peer-reviewed articles in English that address the impact of technology on the tourist experience and the link between technology and the tourist experience. Studies not interconnected with the field of analysis were excluded. Data were extracted exclusively from the Web of Science (WoS) database without applying any filters based on journal rankings (e.g. impact factor) or the prestige of outlets. All indexed publications that met the selection criteria and were connected to the field of analysis corresponding to the subject of the paper were included.

A total of 137 articles were collected from the period 2015–2025. The analysis process consisted of creating a coded table with columns such as author, year, methodology, technology analysed (e.g. VR, AR, AI), aspect of the studied experience, conclusions and future directions. VOSviewer software was used to analyse the evolution of study publication over time and identify trends. For the bibliometric analysis, including keyword co-occurrence, a minimum threshold of five occurrences was established for terms to be included. Exploration of co-author networks was carried out with a minimum threshold of two collaborations for inclusion in the

network. The PRISMA report was used for visualisations, reporting and the study selection process, and the visual results include diagrams showing the distribution of articles by year, WOS categories and document types.

3. Discussions

To ensure scientific rigour, we used the international database Web of Science (WoS) as a source. A total of 2,047 bibliographic sources were obtained using the keywords 'technology' and 'tourist experience'. These results were refined by relevance, publication language (English) and open-source type, resulting in 714 works. Of these, only the 203 works from the WoS categories of Hospitality, Leisure, Sport and Tourism were taken into account for the analysis. Ultimately, 137 articles were selected after applying exclusion criteria and limiting the search to the last 10 years (2015–2025) due to the rapid evolution of technology.

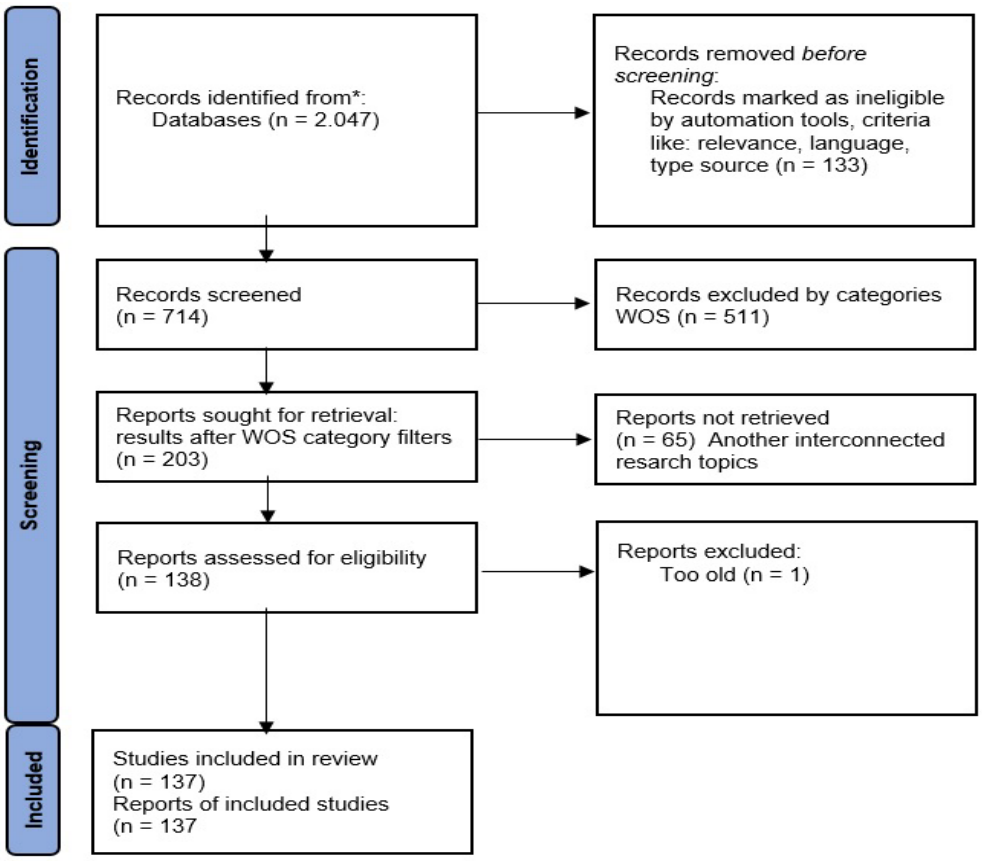

Figure No. 1: Prisma Report of extracting data between period 2015-2025

Source: created by the author using Prisma

Analysing the evolution of publications between 2015 and 2025 reveals an increasing academic interest in the impact of technology on tourism experiences. Between 2016 and 2018, the number of studies was relatively low, with between two and nine publications per year, suggesting an incipient phase of research on the topic. However, starting in 2019, a sharp increase in scientific output was observed, rising from 13 articles in 2019 to 20 in 2020, peaking at 22 articles in 2021. This period saw the number of articles almost double compared to previous years. This peak coincided with the period of the global pandemic, accelerating the adoption of digital technologies as solutions to mobility limitations and the need for safety and contactless interactions. A 'boom' in research in this field is evident. After 2021, literature production did not return to previous levels, but stabilised at a consistently high rate of 16–19 articles per year between 2022 and 2024. This indicates the maturation of the field and the consolidation of technology as a dimension of the tourism experience. Partial data for 2025 (14 articles indexed to date) suggests that this trend will continue, with the annual total likely to approach previous years' levels. Overall, the analysis confirms the transformation of technology from a marginal topic to a central pillar of tourism research.

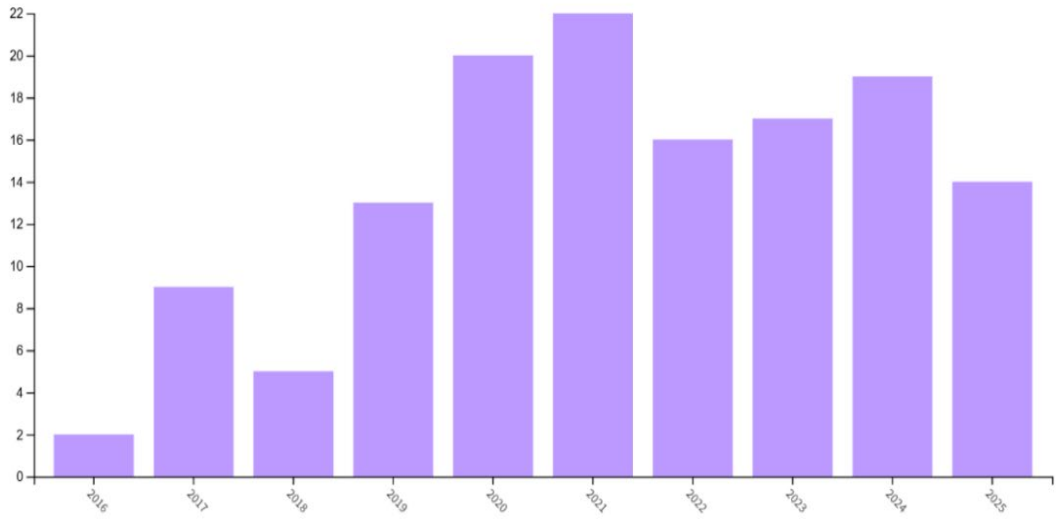

Figure No. 2: Year of publication

Source: created by the author

Analysis of the distribution by type of published document reveals that literature on the impact of technology on the tourism experience is dominated by original research articles, with over 120 publications. This confirms the scientific nature of the field, in which most studies contribute to the body of knowledge by collecting data through quantitative, qualitative or mixed methods. The presence of Early Access publications indicates the recent interest and emerging nature of the research topic, showing that new results are constantly brought to the attention of the scientific community. Conversely, the limited number of proceedings papers indicates that the subject is also active within international conferences, where innovative ideas are tested and disseminated prior to publication in specialised journals. In contrast, review articles are limited, indicating a lack of comprehensive syntheses and meta-analyses in the field. This absence also justifies the relevance of the present systematic literature review, which makes a valuable contribution to the specialised literature. Editorial material is marginal and does not influence the overall profile of the research.

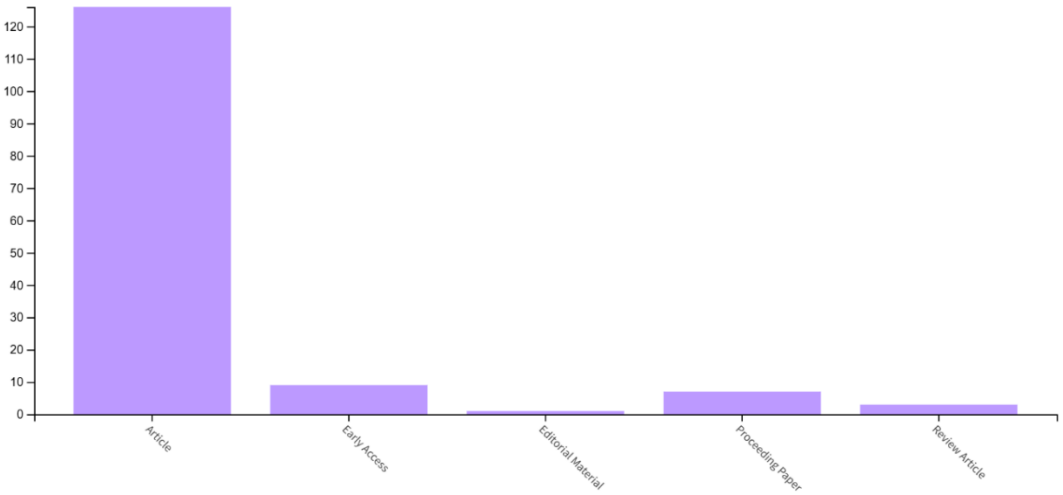

Figure No. 3: Type of published document

Source: created by the author

In the co-author network, consistent groups of co-authors are highlighted. These reflect potentially influential research teams in the field of digital tourism. The large nodes, (for example: Ulrike Gretzel, Miroslav Vujiciv, Ugljesa Stankov, Sousa Nuno, Filimonau Viachaslau, Dimitrios Buhalis, Ivars Baidal, and others) represent authors with a high impact, who are often considered to be opinion leaders due to their multiple publications and collaborations. This network, comprising at least two collaborations, (of the 112 clusters, only nine are represented by individual authors, the remaining clusters are formed by teams of at least two collaborators), demonstrates that the field is active and fragmented into distinct thematic clusters, each with groups of experts influencing research directions. The lack of strong connections between all the clusters indicates a high level of thematic diversity, topics include digital tourism, sustainability, destination tourism, tourism experience management, tourism marketing and consumer behaviour, as well as e-tourism.

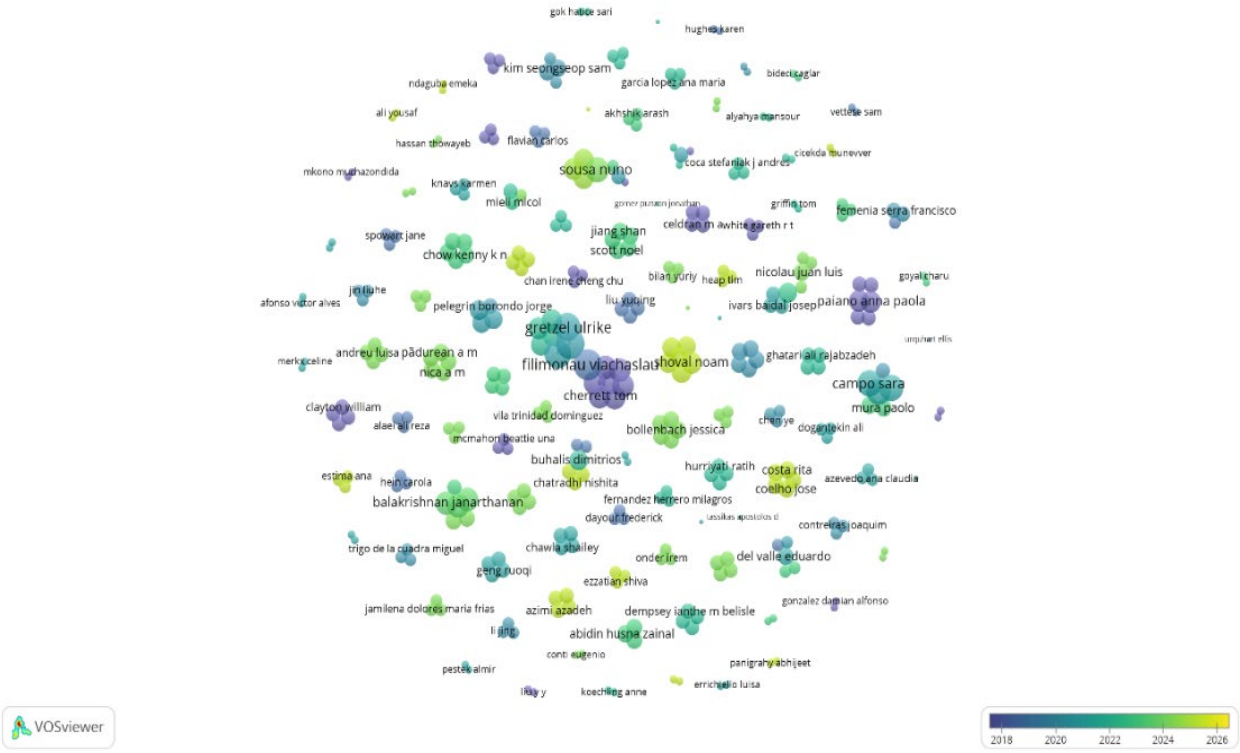

Figure No. 4. Network of Co-authors

Source: created by the author using VOSviewer

Keyword co-occurrence analysis using VOSviewer reveals the importance of the themes 'tourism', 'technology' and 'tourism experience' in specialised literature. These are the most frequent and interconnected nodes in the network. Starting with 137 articles and a minimum threshold of five occurrences, the results show that terms such as 'virtual reality', 'augmented reality' and 'smart tourism' revolve around technology and are linked to topics such as authenticity, gamification, sustainability and tourism marketing. This network structure clearly illustrates the contexts of post-pandemic innovation and adaptation in tourism, as discussed in recent literature. The nodes 'sustainability', 'accessibility', 'mobile technology' and 'future' demonstrate strong integration with the fields of technology and tourism experience. This suggests that recent research is highly concerned with inclusion, sustainability and the dynamics of mobile technologies. Links between 'cultural tourism', 'hospitality', 'role' and 'information' illustrate thematic diversification, highlighting the shaping of the tourism experience by the digital space, information flow and the role of technology in these processes. This interpretation visualises and confirms, through network analysis, the current directions of research in digitalised tourism—with an emphasis on experience, technological innovation, sustainability and the role of digital platforms in the tourism sector.

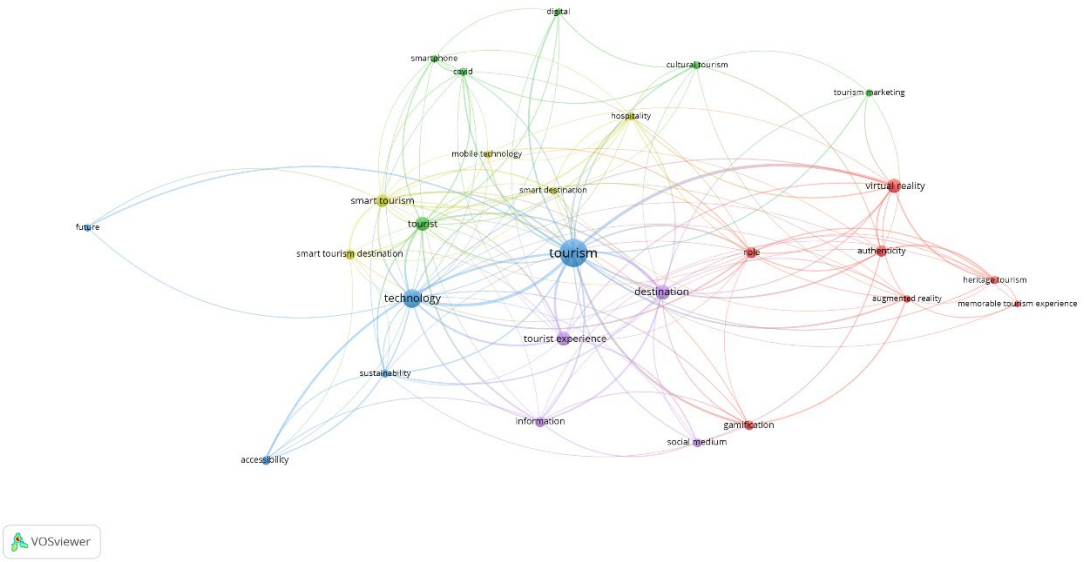

Figure no. 5. Co-occurrence of keywords

Source: created by the author using VOSviewer

The 137 articles researching the impact of technology on the tourism experience are geographically concentrated, with the majority of studies originating from Spain, England, China, Portugal and the USA. Western Europe is the most strongly represented region, followed by Asia and North America. There is a global imbalance, with countries in Africa and South America poorly represented, indicating a research gap for these regions.

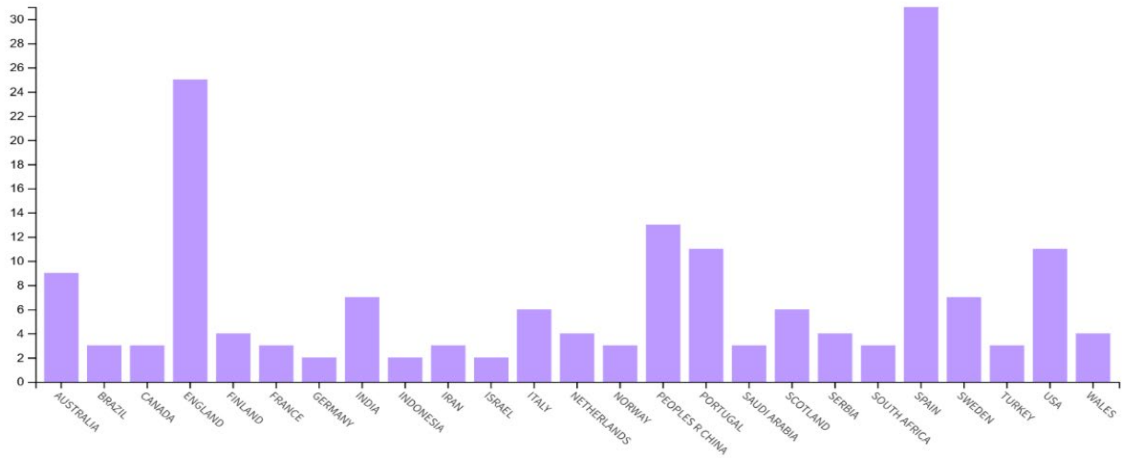

Figure No. 6. The distribution by countries/regions

Source: created by the author

Figure ,,**Top most relevant studies''** provides an overview of the impact of relevant studies on technology in tourism. The study 'Smart Tourism, Hospitality, and Destination: A Systematic Review and Future Directions', has significant visibility and recognition within the smart tourism research community. It offers a general view of the impact of ICT (information and communication technology) on the tourism experience and sustainability. The most influential studies cover a variety of topics, ranging from the impact of VR/AR and machine learning to digital marketing and tourism behaviours during the pandemic, which suggests diversification in the field of research. The presence of a peak in publications for 2024 demonstrates increased interest in tourism

technologies in recent years. Most of the studies were published in international collaborations, reflecting the broad scientific networks that were analysed in the bibliometrics of the co-authors.

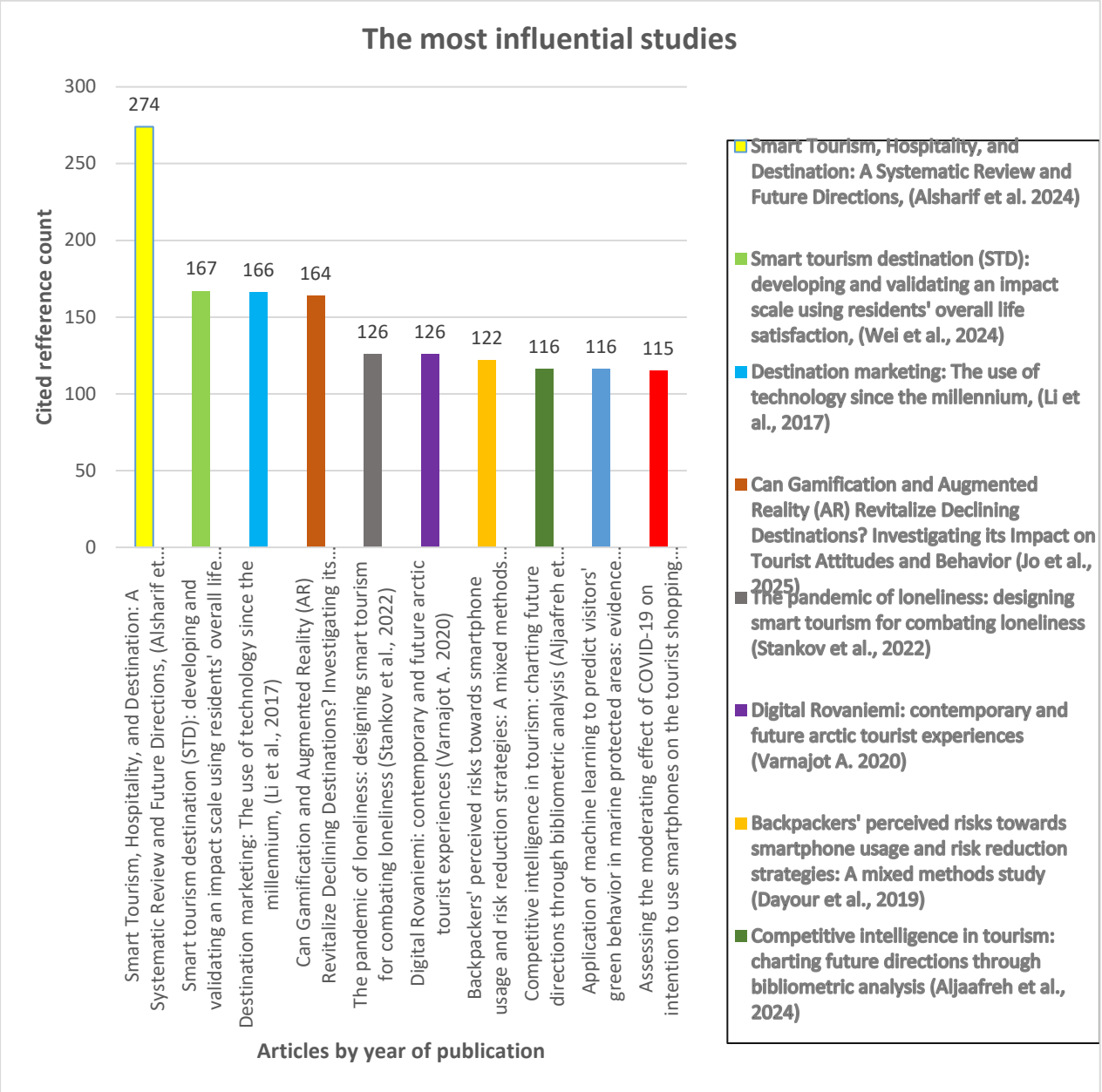

Figure No. 7. Top most cited studies:

Source: created by the author

The figure regarding study types shows the distribution of study types (coded numerically from 1 to 8) for the analysed articles. The most frequent codes are quantitative, qualitative and mixed methods, reflecting the fact that the results are based mainly on concrete, measurable data on tourism and technology rather than on purely theoretical interpretations. Theoretical studies (code 4), literature reviews (code 5), meta-analyses (code 6), bibliometric analyses (code 7) and essays/opinions (code 8) are much less common. The highlighted line at level 2 shows that quantitative studies are the most common, followed by qualitative and mixed methods studies. This indicates a preference for generalisable results and predictive models in the context of technology in tourism, but also suggests the need for additional qualitative research to explore tourists' subjective perceptions.

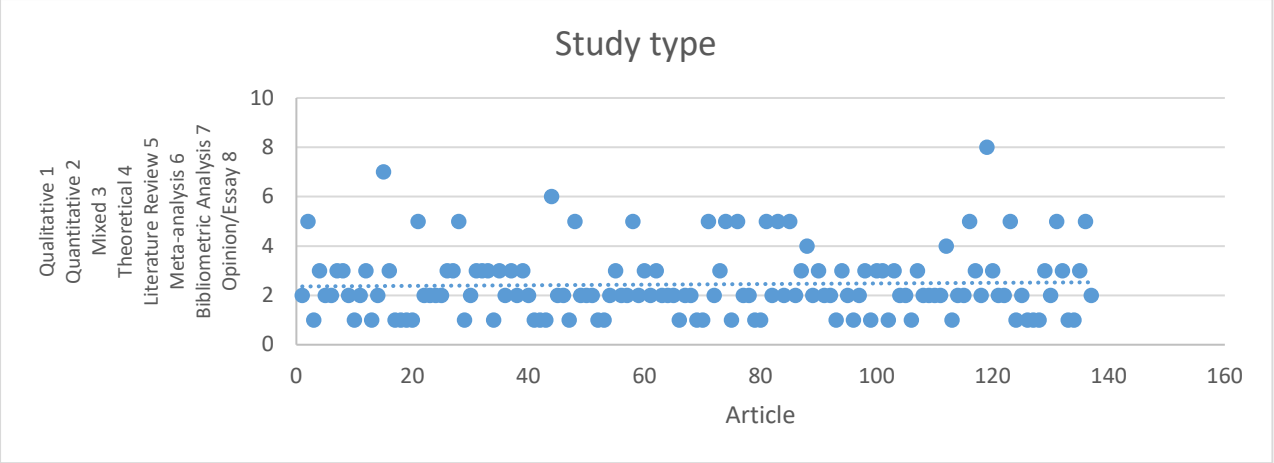

Figure No. 8. Identification of study types

Source: created by the author

An analysis of 137 studies indicates a consensus among the majority that technology has a positive impact on the tourism experience. However, several studies highlight risks, including the uneven development of the smart ecosystem, psychosocial isolation generated by VR, digital alienation from authenticity and the need to adjust the legal framework for managing personal data. These issues reflect challenges concerning digital maturity, balancing innovation with individual rights, and the role of tourism stakeholders (Ballina, 2019; Merkx and Nawijn, 2021; Tassikas, 2021).

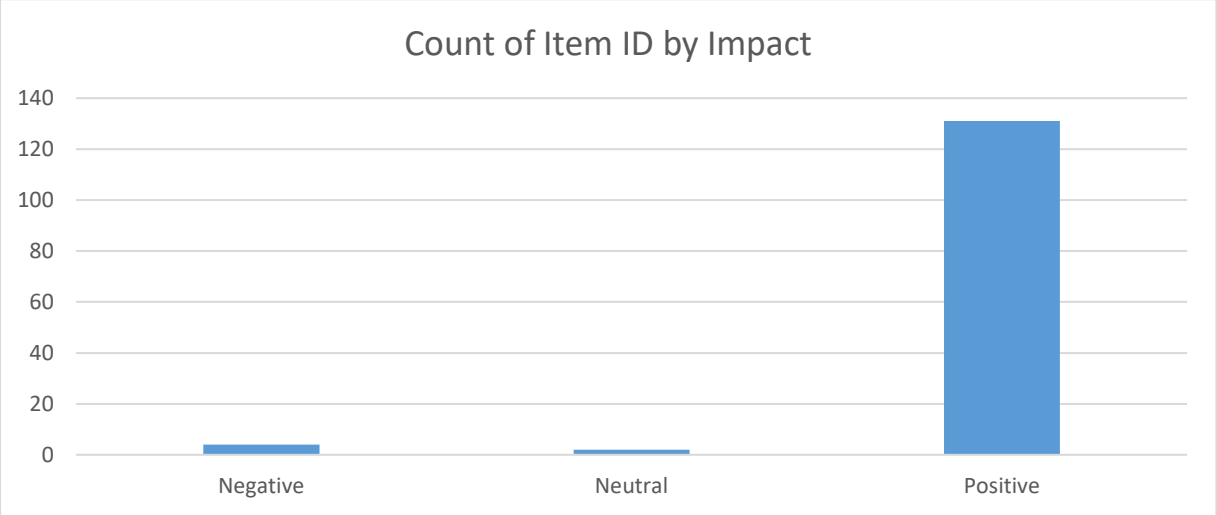

Figure No. 9. The impact of technology on the tourism experience

Source: created by the author

The figure regarding technology category shows the results of an analysis of the technological category, based on 137 studies of the impact of technology on the tourism experience. It highlights the types of technology addressed and how widely they are represented. The technological categories most frequently analysed in the studies are ICT, AI/VR/AR, mobile apps, platforms. The distribution of points shows a significant concentration of studies on these segments, confirming the global adoption of digital technologies and their essential role in the tourism experience. There is an underrepresentation of studies dedicated to the Metaverse and blockchain technologies. The category 'other technologies' (6), which includes digital ethics, security data, and data protection, is also underrepresented. This reflects a significant gap in the current literature, despite the growing importance of privacy, sustainability, well-being, and alternative experiences.

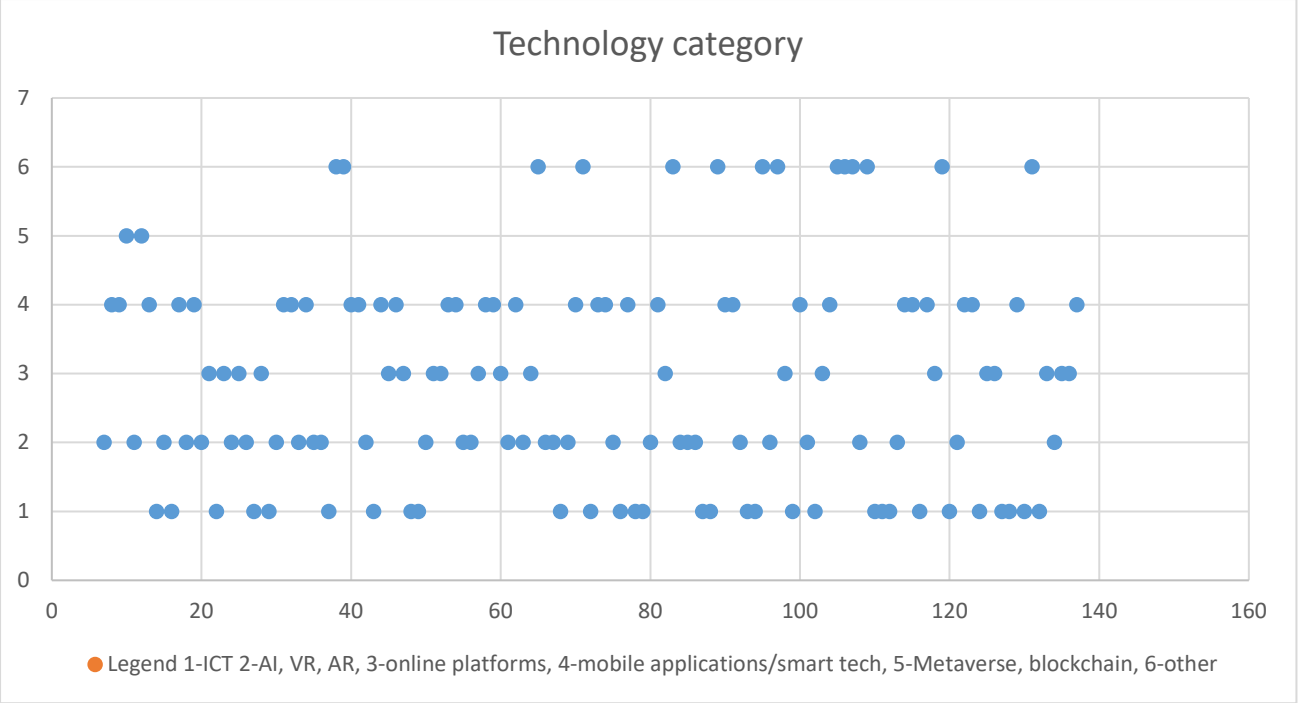

Figure No. 10. Technology category

Source: created by the author

4. Conclusions.

The article concludes that research into the impact of technology on tourism has developed significantly over the last decade, particularly since the pandemic, when scientific interest and the number of publications have increased considerably. Studies have mainly focused on technologies such as virtual and augmented reality, artificial intelligence, mobile applications, and online platforms. These technologies offer benefits such as personalising the tourism experience, increasing social inclusion, and promoting sustainability. However, there are also risks associated with excessive technology use, such as loss of experience authenticity, psychological isolation, privacy issues, and inequities in technology access, requiring careful integration and a human-centred focus.

The research shows that the collaboration network is fragmented into specialised thematic clusters, such as digital tourism, sustainability and marketing, with only nine individual authors out of 112 clusters. The main leaders are Ulrike Gretzel, Miroslav Vujičić, Uglješa Stankov, Nuno Sousa, Viachaslau Filimonau, Dimitrios Buhalis and Ivars Baidal, among others. They lead interdisciplinary teams and have made significant contributions to smart tourism and technological experiences.

These findings emphasise the importance of future research addressing these gaps through applied studies of emerging technologies, incorporating ethical and sustainable perspectives, and diversifying methodological analyses. Therefore, the integration of technology in tourism must be balanced and responsible, and focused on authentically improving the tourism experience without compromising the social and cultural values of the sector.

The systematic review highlights several major gaps and suggests important areas for future research. Firstly, studies dedicated to emerging technologies such as the Metaverse, blockchain are limited. These technologies have the potential to transform tourism and destination marketing, yet they remain under-explored. Secondly, the field is dominated by quantitative research, followed by qualitative or mixed-methods research capturing the subjective experiences and perceptions of tourists. This is vital for understanding the impact of technology on real-life experiences. There is also a need for systematic syntheses and meta-analyses to consolidate and integrate the fragmented results of specialised literature, facilitating practical application. Another issue is the geographical imbalance in research, with predominant representation of Western Europe, North America, and Asia, while studies of Africa and South America are limited, offering opportunities to investigate diverse socio-cultural and economic contexts.

Furthermore, the insufficient exploration of ethical issues, the integration of sustainability with new technologies and the socio-economic impact suggest a need for interdisciplinary investigation and hybrid approaches in future research. Studies focusing on the responsible and user-centred implementation of technologies are recommended to maximise benefits to the authentic tourism experience while minimising the risks of the negative effects of technology.

4.1 Limits

The study is limited by the selection of articles from WOS only, and by the fact that the articles are in English, in the last decade, open acces.

4.2 Practical implications

Tour operators, destination managers and decision-makers can use these conclusions to develop digital strategies incorporating personalisation, accessibility and data protection, thereby contributing to the sustainable development of smart destinations.

Tourism technology developers must ensure ethical integration, sustainable and user-centred technology to maintain the balance between digital innovation and the authenticity of the tourism experience.

Tourism managers must manage costs and overcome the complexity barriers of new technologies, adopting strategies that capitalize on technological benefits by improving the tourist experience, but also ensuring sustainability and respect for local culture and the environment.

Overall, the study provides a comprehensive synthesis of the technological transformation of tourism, emphasising the need for the ethical, sustainable, and human-centred integration of digital innovations so that technology enriches, rather than substitutes, the authentic tourist experience.

Ethics declaration

The author declare that this study complies with all relevant ethical standards and that no ethical conflicts are present.

AI declaration

The author used Grammarly to assist with language editing and grammar correction. This AI tool did not influence or modify the content, analysis, or conclusions of this paper.

Funding

This paper was co-financed by The Bucharest University of Economic Studies during the PhD program". Affiliation/Institution Bucharest University of Economic Studies

References:

Aljaafreh, N. a. A., De-Pablos-Heredero, C., & Orea-Giner, A. (2024). Competitive intelligence in tourism: charting future directions through bibliometric analysis. Journal of Tourism Futures. https://doi.org/10.1108/jtf-01-2024-0015

Alsharif, A., Isa, S. M., & Alqudah, M. N. (2024). Smart Tourism, Hospitality, and Destination: A Systematic Review and Future Directions. Journal of Tourism and Services, 15(29), 72–110. https://doi.org/10.29036/jots.v15i29.746

Anastasiadou, C., and Vettese, S. (2019). "From souvenirs to 3D printed souvenirs": Exploring the capabilities of additive manufacturing technologies in (re)-framing tourist souvenirs. Tourism Management, 71, 428–442. https://doi.org/10.1016/j.tourman.2018.10.032

Anjum, F., and Ali, Y. (2025). Smart tourism technologies and destination perception: Implications for revisit intentions in mountainous destinations. Tourism and Hospitality Management, 31(1), 107–123. https://doi.org/10.20867/thm.31.1.8

Atzeni, M., Del Chiappa, G., & Pung, J. M. (2021). Enhancing visit intention in heritage tourism: The role of object-based and existential authenticity in non-immersive virtual reality heritage experiences. International Journal of Tourism Research, 24(2), 240–255. https://doi.org/10.1002/jtr.2497

Ballina, F. J. (2022). Smart business: The element of delay in the future of smart tourism. Journal of Tourism Futures, 8(1), 37–54. https://doi.org/10.1108/JTF-02-2020-0018

Ballina, F. J., Valdes, L., & Del Valle, E. (2019). The Phygital experience in the smart tourism destination. International Journal of Tourism Cities, 5(4), 656–671. https://doi.org/10.1108/ijtc-11-2018-0088

Balakrishnan, J., Dwivedi, Y. K., Mishra, A., Malik, F. T., & Giannakis, M. (2024). The role of embodiment and ergonomics in immersive VR tours in creating memorable tourism experiences. International Journal of Contemporary Hospitality Management, 36(11), 3794–3822. https://doi.org/10.1108/ijchm-09-2023-1425

Bigne, E., Curras-Perez, R., Ruiz, C., & Andreu, L. (2023). I want to travel to the past! The role of creative style and historical reconstructions as antecedents of informativeness in a virtual visit to a heritage tourist destination. Current Issues in Tourism, 27(20), 3369–3384. https://doi.org/10.1080/13683500.2023.2263615

Bilan, Y., Tovmasyan, G., & Dallakyan, S. (2024). The impact of digital technologies on tourists' travel choices and overall experience. Journal of Tourism and Services, 15(29), 153–175. https://doi.org/10.29036/jots.v15i29.805
Calisto, M. D. L., and Sarkar, S. (2024). A systematic review of virtual reality in tourism and hospitality: The known and the paths to follow. International Journal of Hospitality Management, 116, 103623. https://doi.org/10.1016/j.ijhm.2023.103623
Cicekdagi, M., and Ozdemir Akgul, S. (2025). Responsible technology use in tourism: Evaluating tourist guides' digital practices through best-worst method. Journal of Tourism Management Research, 12(1), 138–156. https://doi.org/10.18488/31.v12i1.4220
Costa, R., Coelho, J., Lima, D., Duarte, C., & Moita, P. (2025). ElderWander: an accessible digital tourism platform for older adults. Information Technology & Tourism, 27(3), 833–863. https://doi.org/10.1007/s40558-025-00321-7
Dayour, F., Park, S., & Kimbu, A. N. (2018). Backpackers' perceived risks towards smartphone usage and risk reduction strategies: A mixed methods study. Tourism Management, 72, 52–68. https://doi.org/10.1016/j.tourman.2018.11.003
Ezzatian, S., Toghraee, M. T., & Farsani, N. T. (2025). Branding tourism destinations in the metaverse: insights from professionals and researchers. Journal of Tourism Futures. https://doi.org/10.1108/jtf-08-2024-0176
Femenia-Serra, F., and Ivars-Baidal, J. A. (2021). Do smart tourism destinations really work? The case of Benidorm. Asia Pacific Journal of Tourism Research, 26(4), 365–384. https://doi.org/10.1080/10941665.2018.1561478
Femenia-Serra, F., Perles-Ribes, J. F., & Ivars-Baidal, J. A. (2018). Smart destinations and tech-savvy millennial tourists: hype versus reality. Tourism Review, 74(1), 63–81. https://doi.org/10.1108/tr-02-2018-0018
Fennell, D. A. (2021). Technology and the sustainable tourist in the new age of disruption. Journal of Sustainable Tourism, 29(5), 767–773. https://doi.org/10.1080/09669582.2020.1769639
Flavián, C., Ibáñez-Sánchez, S., & Orús, C. (2019). Integrating virtual reality devices into the body: effects of technological embodiment on customer engagement and behavioral intentions toward the destination. Journal of Travel & Tourism Marketing, 36(7), 847–863. https://doi.org/10.1080/10548408.2019.1618781
Gao, B. W., Zhu, C., Song, H., & Dempsey, I. M. B. (2022). Interpreting the perceptions of authenticity in virtual reality tourism through postmodernist approach. Information Technology & Tourism, 24(1), 31–55. https://doi.org/10.1007/s40558-022-00221-0
GarcÃ-a-Milon, A., Olarte-Pascual, C., & Juaneda-Ayensa, E. (2021). Assessing the moderating effect of COVID-19 on intention to use smartphones on the tourist shopping journey. Tourism Management, 87, 104361. https://doi.org/10.1016/j.tourman.2021.104361
Goyal, C., and Taneja, U. (2025). Electronic word of mouth for the choice of wellness tourism destination image and the moderating role of COVID-19 pandemic. Journal of Tourism Futures, 11(3), 349–368. https://doi.org/10.1108/JTF-08-2022-0207
Hassan, T., and Saleh, M. I. (2024). Tourism digital detox and digital-free tourism: What do we know? What do we not know? Where should we be heading? Journal of Tourism Futures. https://doi.org/10.1108/JTF-12-2023-0274
Jiménez-Barreto, J., Rubio, N., Mura, P., Sthapit, E., & Campo, S. (2022). "Ask Google Assistant where to travel" Tourists' Interactive Experiences with smart Speakers: An Assemblage Theory approach. Journal of Travel Research, 62(4), 734–752. https://doi.org/10.1177/00472875221094073
Jo, Y., and Shin, H. (2025). Can gamification and augmented reality (AR) revitalize declining destinations? Investigating its impact on tourist attitudes and behavior. Journal of Travel Research, 00472875251332961. https://doi.org/10.1177/00472875251332961
Li, J., Pearce, P. L., & Oktadiana, H. (2020). Can digital-free tourism build character strengths? Annals of Tourism Research, 85, 103037. https://doi.org/10.1016/j.annals.2020.103037
Machado, V., Contreiras, J., & Duarte, A. P. (2019). Local tourist accommodation and institutional strengthening in the interior of the Algarve, Portugal. Journal of Place Management and Development, 13(3), 255–272. https://doi.org/10.1108/jpmd-12-2018-0107
Mashkov, R., and Shoval, N. (2025). Measurement of visitors' subjective and objective emotional response to congestion in public spaces. Journal of Travel Research, 64(6), 1431–1448. https://doi.org/10.1177/00472875241249385
Managing the digital campaign process for sustainable tourism destinations. (n.d.). www.witpress.com. Accessed 15 Oct. 2025. https://www.witpress.com/elibrary/wit-transactions-on-ecology-and-the-environment/201/35419
Merkx, C., and Nawijn, J. (2021). Virtual reality tourism experiences: Addiction and isolation. Tourism Management, 87, 104394. https://doi.org/10.1016/j.tourman.2021.104394
Mieli, M. (2024). Planned serendipity: Exploring tourists' on-site information behaviour. Current Issues in Tourism, 27(6), 988–1002. https://doi.org/10.1080/13683500.2023.2197198
Mieli, M., Zillinger, M., & Nilsson, J. (2024). Phygital time geography, or: what about technology in tourists' space-time behaviour? Tourism Geographies, 26(3), 389–406. https://doi.org/10.1080/14616688.2024.2318722
Mieli, M., and Zillinger, M. (2020). Tourist information channels as consumer choice: The value of tourist guidebooks in the digital age. Scandinavian Journal of Hospitality and Tourism, 20(1), 28–48. https://doi.org/10.1080/15022250.2020.1717991
Nematpour, M., Khodadadi, M., Azimi, A., & Mohammadkazemi, R. (2025). IoT-driven smart solutions: transforming urban tourism destinations. Journal of Hospitality and Tourism Insights, 8(7), 2649–2670. https://doi.org/10.1108/jhti-10-2024-1083

Nandasena, R., Morrison, A. M., & Coca-Stefaniak, J. A. (2022). Transformational tourism – a systematic literature review and research agenda. Journal of Tourism Futures, 8(3), 282–297. https://doi.org/10.1108/jtf-02-2022-0038
Panigrahy, A., and Verma, A. (2025). Tourist experiences: A systematic literature review of computer vision technologies in smart destination visits. Journal of Tourism Futures, 11(2), 187–202. https://doi.org/10.1108/JTF-04-2024-0073
Paliwal, M., Buhalis, D., Jha, S., & Chatradhi, N. (2025). Exploring Generation Z Motivations to use metaverse for travel planning. International Journal of Tourism Research, 27(4). https://doi.org/10.1002/jtr.70074
Kusumah, E. P., Hurriyati, R., Disman, D., & Gaffar, V. (2022). DETERMINING REVISIT INTENTION: THE ROLE OF VIRTUAL REALITY EXPERIENCE, TRAVEL MOTIVATION, TRAVEL CONSTRAINT AND DESTINATION IMAGE. Tourism and Hospitality Management, 28(2), 297–314. https://doi.org/10.20867/thm.28.2.3
Peña, A. I. P., Ruano, M. L. F., & Jamilena, D. M. F. (2024). The role of gamified environmental interpretation in boosting destination perceived value. Tourism & Management Studies, 20(2), 55–68. https://doi.org/10.18089/tms.20240205
Ritter, C. S. (2024). Gazing from the air: Tourist encounters in the age of travel drones. Tourism Geographies, 26(4), 618–634. https://doi.org/10.1080/14616688.2023.2264823
Santoso, C., and Gjerald, O. (2022). Guided discussion or immersive play? Influence of on-site presentation platform on visitor satisfaction in a heritage attraction. Scandinavian Journal of Hospitality and Tourism, 22(4-5), 393–410. https://doi.org/10.1080/15022250.2022.2112416
Șchiopu, A. F., Padurean, A. M., Nica, A., Toader, V., Hornoiu, R. I., & Rodriguez, M. C. (2024). Human-Robot Interaction: The Hospitality Experience of Young People in Hotels that Use Robots. Amfiteatru Economic, 26(Special 18), 1065. https://doi.org/10.24818/ea/2024/s18/1065
Sharma, I., Lim, W. M., & Aggarwal, A. (2024). Virtual reality as a sustainable alternative for authentic and satisfying tourism experiences. Tourism Recreation Research, 50(7), 1826–1838. https://doi.org/10.1080/02508281.2024.2413832
Sousa, N., Alén, E., Losada, N., & Melo, M. (2024). Breaking barriers: Unveiling challenges in virtual reality adoption for tourism business managers. Tourism and Hospitality Management, 30(2), 269–282. https://doi.org/10.20867/thm.30.2.10
Sousa, N., Alén, E., Losada, N., & Melo, M. (2025). Beyond physical boundaries: Assessing managers' intentions to adopt virtual reality technology in wine tourism. Tourism & Management Studies, 21(2), 53–66. https://doi.org/10.18089/tms.20250204
Stankov, U., Filimonau, V., & Vujičić, M. D. (2020). A mindful shift: an opportunity for mindfulness-driven tourism in a post-pandemic world. Tourism Geographies, 22(3), 703–712. https://doi.org/10.1080/14616688.2020.1768432
Stankov, U., Filimonau, V., Gretzel, U., & Vujičić, M. D. (2020). E-mindfulness – the growing importance of facilitating tourists' connections to the present moment. Journal of Tourism Futures, 6(3), 239–245. https://doi.org/10.1108/jtf-11-2019-0135
Stankov, U., and Gretzel, U. (2022). Tourism 4.0 technologies and tourist experiences: A human-centered design perspective. Information Technology and Tourism, 22(3), 477–488. https://doi.org/10.1007/s40558-020-00186-y
Tassikas, A. D. (2021). Data processing and legal protection in contracts in the technologically innovative tourism sector. European Journal of Tourism, Hospitality and Recreation, 11(1), 68–78. https://doi.org/10.2478/ejthr-2021-0008
Varnajot, A. (2020). Digital Rovaniemi: Contemporary and future arctic tourist experiences. Journal of Tourism Futures, 6(1), 6–23. https://doi.org/10.1108/JTF-01-2019-0009
Wei, W., Önder, I., & Uysal, M. (2024). Smart tourism destination (STD): developing and validating an impact scale using residents' overall life satisfaction. Current Issues in Tourism, 27(17), 2849–2872. https://doi.org/10.1080/13683500.2023.2296587