

Tech-Driven Tourism: Transforming Travel Through Digital Innovation and Sustainability

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Abstract:

In today's fast-changing digital world, the tourism industry is leading in change and innovation. The growing mix of technology and business has changed how travelers search, plan, and enjoy their trips. It has also redefined how companies work in a more digital marketplace. This paper looks at the lively connection between technology and business in tourism. It highlights how the use of digital platforms, modern tools, and business strategies are affecting consumer preferences and how they behave, and changing the way business functions. The study examines the history of tourism moving from traditional travel planning to the current time filled with online booking systems, mobile apps, and AI-driven personalization. It also looks at the impact of big data analytics, digital marketing, and immersive technologies like virtual and augmented reality in improving how travelers connect with destinations improving the overall experience of customers. The study also points out the challenges associated with technological advancements. The study identifies key challenges like data privacy issues, cybersecurity risks, environmental impacts and the social and economic changes caused by digital transformation. It also describes how business are adapting by developing new models, adopting responsible digital practices, sustainable use of digital tools and technologies like blockchain, IoT, and artificial intelligence to remain stable and competitive. The paper ends With a balanced view of opportunities and challenges, it offers practical insights, policymakers, tourism professionals, and researchers. Such insights can assist in adapting to digital changes and promote sustainable growth in global tourism.

Keywords —Technology, Tourism, Digital transformation, commerce, Big Data, Innovation.

I.INTRODUCTION

In the modern era(21st century) technology plays a crucial role in shaping industries, economies, and societies across the globe. Among the many sectors undergoing change, tourism stands out as one of the most affected by digitalization. Earlier, the tourism

industry depended mainly on human interaction, papaer based bookings, and local travel agents, tourism has now developed into modern, digitally integrated network. Today, travelers use search engines, online booking platforms, social media, and mobile apps not just to plan and book their trips but

also to improve their experiences while travelling and to share those experiences afterward. Businesses have embraced technology not just for convenience but as a key part of innovation, competitiveness, and creating value. The integration of technology with commercial activities has reshaped the way tourism operates throughout the entire customer journey. From the initial stage of inspiration and trip planning to booking, on-trip experiences, and interactions after travel, technology enables seamless processes and tailored services. This digital transformation goes beyond simple convenience and reflects a significant shift in how value is created and delivered within the tourism industry. This research paper seeks to examine the evolving connection between technology and commerce in tourism and to offer a clear insight into the opportunities and challenges presented by the digital age.

A. Understanding Tech-Driven Tourism

Tech-Driven Tourism describes how technology shapes travel experiences from start to finish. In contrast to traditional tourism which depended on guide books, personal recommendations, and manual reservations systems, tech-driven tourism integrates digital technologies with the human desire for exploration. Whether it's the ease of online booking systems, the convenience of mobile check-ins at airports and hotels, or the immersive possibilities of virtual and augmented reality, technology is now a crucial part of tourism. For customer's the use of technology in tourism delivers highly tailored and individualized experiences. Algorithms analyse browsing history, search queries, and previous travel behaviour to suggest destinations, accommodations and experiences that match individual preferences. Mobile app assist with real time navigation, language translation, and local discovery, keeping travelers connected and supported throughout their journey. For businesses, technology opens up new opportunities for data-based decision making, stronger customer interaction, and the development of innovative services that respond to the evolving demands of travelers around the world. In essence, tech-driven tourism goes beyond convenience, as it transforms travel experiences, strengthens relationships, and redefines customer expectations.

B. The Evolution of Travel Technology

Travel technology has evolved through continuous advancements and improvements. In early days, computerized reservation systems emerged in the mid - 20th century. This was a major step towards digitalization. Airlines led the way with electronic ticketing and reservation management systems. These systems later expanded to include hotel bookings and car rentals. When the internet became popular in the 1990s, traveler's could access online travel agencies(OTAs) like Expedia and Booking.com. This has changed the booking process by removing the need for physical travel agents. The rise of web 2.0 and social media platforms in the 2000s further changed tourism. These advancements allowed for peer -to- peer reviews, user-generated content, and digital word of mouth. Websites such as Tripadvisor and social media platforms like Instagram started to shape consumer decisions more strongly than traditional forms of advertising. During the 2010s, the rapid adoption of smart phones and mobile internet simplified the travelling planning process. Travel applications enabled users to search for information, make bookings, navigate destinations, and stay connected while travelling. More recently artificial intelligence and machine learning technologies have brought in features such as predictive analytics, customer service chatbots, and intelligent recommendation systems. Blockchain technology is being explored for secure transactions and decentralised booking systems. Each phase of this Evolution has increased access to information, improved transparency and given travelers more freedom. At the same time, businesses have gained from increased efficiency, new distribution channels, and global visibility. This shows how technology can empower consumers while also supporting commercial growth.

C. Exploring the Intersection of Technology and Commerce

The intersection of technology and commerce in tourism is complex and constantly changing. Innovation creates value, disrupts traditional practices, and defines how consumers and businesses interact. Established organisations such as airlines, hotel chains, and tour operators are required to adopt digital technologies within their work in order to satisfy the customer expectations. At the same time new businesses like Airbnb, Uber, and other peer-to-

peer travel platforms should update their technologies to disrupt existing markets and introduce innovative business models. For consumer, this convergence results in Greater choice, convenience, and control over travel decisions. Travelers can easily compare prices across multiple platforms, read authentic user reviews, and access global services with minimal effort. For businesses, however this integration presents both benefits and challenges. While technology enables personalized marketing and enhanced customer experience, it also intensifies competition and demands continuous innovation. Organizations that fail to adapt risk becoming irrelevant, whereas those that successfully embrace digital transformation can differentiate themselves in competitive markets. Moreover, the integration of commerce with digital platforms has established new expectations for trust and transparency. Blockchain systems promise to make transactions more secure. Data analytics help businesses understand customer behaviour more deeply than ever before. However, these advancements, also raise important concerns about privacy, ethical data use, and sustainability. This highlights the need for balanced approaches that connect business interests with consumer trust and societal well-being

I. LITERATURE REVIEW

1) A cloud-based internet of things platform for smart tourism was developed by Bi and Liu (2022) that uses machine learning to analyse behaviour of visitors and offer suggestions. The hybrid intelligence-powered KNN classifier is used in the authors' platform. Using tourism data, the classifier predicts destinations with 84% accuracy. The platform's use of IoT, AI, and 5G technology enhances the effectiveness and the level of services for both management and visitors. The authors demonstrate how smart tourism may improve the competition in the sector and user experience.

2) Siddik (2025) show that adopting artificial intelligence greatly improves efficiency and sustainability in the tourism sector, especially in the world's top ten destinations. Their analysis shows that AI, together with GDP, is a factor that stimulates tourism development. However, inflation is a constraint, and foreign direct investment has a less

significant effect. The conclusion is that the development of a sustainable tourism industry requires AI and sound economic policies.

3) Hamcerencu (2025) finds that AI technologies like chatbots and recommendation systems personalize travel and improve operational efficiency in tourism. However, widespread adoption brings up ethical issues regarding data privacy, transparency, and the decline of human interaction. The review states that balancing automation with human service is key for maintaining customer trust and achieving success in the industry.

4) Ho, Alam, Masukujjaman, Lin, Susmit, and Susmit (2022) demonstrate that the factors that influence the intention of Malaysian tourism businesses to use online services powered by AI are perceived usefulness, ease of use, cost, knowledge of technology, and attitude. Self-efficacy and social factors facilitate the process, but high implementation costs remain a barrier. A positive attitude is a crucial link between the factors and the intention to act. The authors suggest training and awareness programs to assist in the successful integration of AI in the industry.

5) The OECD (2024) paper on tourism and AI shows the role of AI in innovation and sustainable development in the sector of tourism. The significance includes ensuring protection of data for tourists, observing the impact of AI on occupation, and assisting small tourism businesses with fast change of technology.

6) Cardoso et al. (2024) find that open innovation in tourism is driven by four key factors: digital technologies, collaboration and co-creation, innovation culture, and sustainability. Their systematic review shows that these factors improve adaptability and competitiveness, especially when stakeholders and tourists collaborate using digital platforms. Fostering a culture of innovation and sustainable practices is essential for future success in the sector.

7) Zhang and Prebensen (2024) demonstrate that the content for tourism marketing produced by ChatGPT is very difficult to distinguish from the content produced by human marketers. The content is comparable to human text in terms of clarity and attractiveness. The experiments demonstrated that

tourists were unable to distinguish the content produced by AI from the content produced by human marketers. The marketing outcomes, such as attractiveness and fluency, were comparable regardless of whether the content was enhanced or fully developed by AI.

8) The ENTER 2021 eTourism Conference proceedings indicate that the rapid pace of the development of information technology, such as AI, chatbots, recommendation systems, and mobile applications, is transforming the tourism industry. They are increasingly being used for personalization, efficiency, and new service delivery. However, there are also issues concerning privacy, the cost of integration, and achieving a balance between technology and service delivery in the tourism sector.

9) Weng and Zhang (2023) examine the way IoT and big data techniques improve modern tourism. They find that not all the companies in China fully use IT and IoT resources, and they lack staff with technical skills. Due to weak data analysis and technologies their targeted marketing and operational efficiency are low. The authors suggest integrating big data platforms, supporting talent development, and using IoT management to increase personalized services and accuracy in management.

10) The FatBeacon Bluetooth IoT protocol provides rich, web-based tourist information directly to the visitor's smartphone in regions that lack cellular internet access. In rural and mountain resorts, FatBeacon enables visitors to view information such as maps and points of interest via BLE beacons. The protocol has been proven to be power-efficient and functional, although power management is necessary for continued functionality.

11) Yan and Du (2025) found that high-quality, interactive VR experiences of historical districts spark tourists' imagination and boost their engagement. This level of engagement increases their interest in visiting those sites. Issues of usability, information, and authenticity are far more important than learning outcomes in the context of the promotion of real travel. Participation and immersion are critical to the success of virtual tourism.

12) Baker, Nam, and Dutt (2023) examined the experience of VR application related heritage tourism. The study found that existence, attention, reality, and audio guides are all for satisfaction.

Factors such as lack of content diversity, discomfort, cybersecurity and navigation may lower it. The users are satisfied with high resolution aspects of VR, but there are concerns about comfort and cost. 13) Yin Maythu, Kwok, and Teh (2024) examine early blockchain adoption in tourism. Cost savings, control over customer data, and innovative business models that don't involve costly middlemen are the factors that are driving this trend. The companies will benefit from the strategic and reputation benefits, but for most, the financial benefits are still not much. The factors that are being considered as challenges are the maturity of the technology, talent, resistance to change, dominance of the existing solutions, and lack of clear use cases. Blockchain provides secure pay transparent reviews, automated booking, and flexible loyalty programs. But the adoption of blockchain in the industry is slow.

14) As stated by Balasubramanian, Sethi, Ajayan, and Paris (2022), blockchain technology has the potential to change the tourism industry by enabling digitalization, automation, and a smarter environment throughout the entire travel process. This will lead to increased transparency, security and efficiency. They point out the benefits of digital payments, immutable reviews, auto-bookings, and the capacity to control one's own data. They also point out the disadvantages of uncertainty, energy, complexity, and equity.

15) Results of the study done by Kieanwatana and Vongvit (2024) show the potential Positive images of destinations may have an important role to play in increasing the intentions of tourists for the actual destination. In conclusion, content that holds one's interest, human senses, and usability are all key aspects which should be highlighted with the aim of motivating people to travel this makes VR a useful tool for tourism development and marketing.

16) Thees, Erschbamer, & Pechlaner (2020) stress that blockchain can do both customer-facing and back-end tourism processes, such as booking, payment, and loyalty schemes, supply chain tracking, and automated identification. Their analysis shows that assist smaller companies, enhance clarity, and reduce the control of channel. However, the slow rate of adoption and disconnected, legal rule, have remained major challenges.

17) Zandi, the year 2023, looks at how extended and virtual reality transform Cultural Tourism along the Silk Road, especially about Kermanshah, Iran. It was put forward in the study that Immersive AR/VR technologies enhance maintenance, interpretation, and visitor engagement. Heritage sites more appealing, accessible, and sustainable. This will enable the virtual tours and interactive experiences further close the gaps in research and supplement the tools to end.

II. METHODOLOGY

A. Research Design

The research uses a mixed-method approach that combines both quantitative and qualitative methods to prove a clear understanding of how technology influences and changes the modern tourism experience. The quantitative part of the study identified numerical patterns, frequency trends, and measurable relationships between technology use and tourism practices. The quantitative aspect of the research was able to establish numerical patterns, trends, and relationships between the use of technology and tourism practices. The qualitative aspect of the research focused on the opinions, perceptions, and behaviors of the respondents, providing a deeper understanding of how technology influences the travel decisions and experiences of the respondents. The two aspects of the research were able to ensure that both data and opinions were collected, providing a comprehensive analysis of the objectives of the research. The research began by establishing the problem statement, which was: "How has the integration of technology and commerce altered tourism behavior, practices, and the overall tourism industry as a whole in the modern age?" This was established after the researcher had reviewed a number of academic papers and realized the increasing effects of technology on the tourism industry, especially after the COVID-19 pandemic. The research was intended to assess the extent to which technology has enhanced convenience, affordability, and sustainability in the tourism industry while examining the attitudes of travelers towards various technological innovations.

B. Data Collection

Primary data were collected using a structured Google Form questionnaire created and shared by the researchers. The survey included both closed and open questions, allowing for the gathering of various quantitative and qualitative data. It focused on several areas, such as how often people use technology while traveling, which specific tools they adopt, their views on affordability through digital means, the role of technology in prompting sustainability, and their levels of satisfaction as travelers. The google form was shared through Whatsapp groups and emails and this way helped us include people from age groups like jobs, and travel experiences. Totally 100 responses were collected, which consisted of males and females of different age group providing the data for research. Records were automatically recorded and was organized in google forms. Google forms generated statistical summary and displayed bar and pie charts.

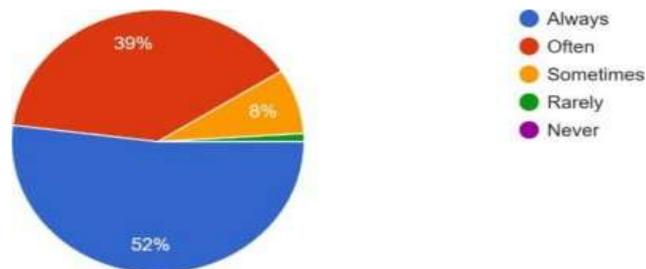
C. Sampling Technique

The study adopted a convenience sampling technique. The subjects were selected depending on their availability and willingness to participate in the study. This non-probability technique suited the digital nature of the study and ensured that a vast audience was easily reached. Though such a sampling method may not yield the best results to generalize, it offered a good mix of participants to ensure the study offered insights into technology-driven tourism behavior. The subjects selected through convenience sampling were participants of different age groups (18-45+ years), different occupations (students, working professionals, entrepreneurs, and travelers), and different geographic locations. It offered a good mix of participants to ensure the study offered insights into technology-driven tourism behavior.

D. Data Analysis

The data obtained from Google Forms was automatically analyzed using the in-built graphical tools that produced bar charts and pie charts for easy analysis. The charts demonstrated obvious trends and were useful in determining major patterns in various dimensions such as the frequency of technology usage, the preferred technology, affordability opinions, and sustainability opinions. The results from the analysis indicated the most responses with 91% who rely on technology while

traveling. Online payments and booking systems are most used technical tools. Graphs (bar and pie charts) were used to demonstrate data from the affordability opinion (83% agreement), sustainability opinions (77% agreement), and the dimensions of tourism most affected by technology (booking and payment systems). For analysis, the responses were manually analyzed to determine themes such as benefit, personalization, faith in technology and human experience. In addition to the numerical data, the theme analysis revealed detailed options that



provided deeper insights into travellers' choices.

E. Ethical Considerations

The participants were made aware of the academic nature of the research before they could take part in the survey. The survey was completely voluntary, and no personal details were required at any stage of the research. The results were anonymous, and this was entirely ethical. The research strictly followed the guidelines to ensure integrity, transparency, and privacy of the participants.

F. Summary Of Methodology

The research was conducted in an organized manner that combined both numerical data and personal perspectives to analyze the impact of technology on tourism in the modern world. Google forms was an well organized, convenient, and Environmentally Friendly way to collect trends and personal view, which helped us understanding the findings. The interpretation demonstrates how technology and online platforms are changing in 21st century.

III. ANALYSIS AND INTERPRETATION

This section explains the survey results based on responses from 100 people to evaluate how technology affects modern tourism practices. The analysis emphasizes key indicators like how often technology is used, the adoption of travel technologies, perceived affordability, views on sustainability, and the travel aspects most influenced by digital tools. Data are shown through charts and

tables , followed by the findings that relate to the study’s objectives.

A. Technology Usage During Travel

TABLE I
Technology Usage During Travel

Response option	Percentage (%)
Always	52
Often	39
Sometimes	8
Rarely	1
Never	0

Fig. 1 Technology Usage During Travel

About 52% of the people said that using technology is a regular part of their travel. 39% said they use it often. Only a small group – 8% - indicated that they use it occasionally, with every few responses for rarely or never. This shows that technology is now an essential part of traveler’s habits. The high rate of regular technology use points to a noticeable shift toward reliance on digital tools. It shows that people now rely more on mobile internet, booking apps, and maps to make their travel easier.

B. Different Technologies People Use While Travelling

TABLE 2
Different Technologies People Use While Travelling

Technology Type	Percentage
Online Booking platforms	78
Digital Payments Systems (UPI , PayPal , Cards)	81
Translational Apps	21
AR / VR virtual Tours	6
Online maps and navigation	58

Fig. 2 Different Technologies People Use While Travelling

No more than 3 levels of headings should be used. All headings must be in 10pt font. The data show that digital payment systems (81%) and online booking platforms (78%) are the most used technologies. This suggests that travelers increasingly prefer convenience, efficiency, and contactless transactions. Online maps and navigation tools (58%) also support independent travel significantly. On the other hand, translation apps (21%) and AR/VR experiences (6%) are used less, indicating that these immersive and language – based technologies are still not fully developed for mainstream travel. These trends reveal that travelers value functionality more than novelty, concentrating on technologies that make travel logistics help people access services more easily.

C. Technology and Affordable Travel

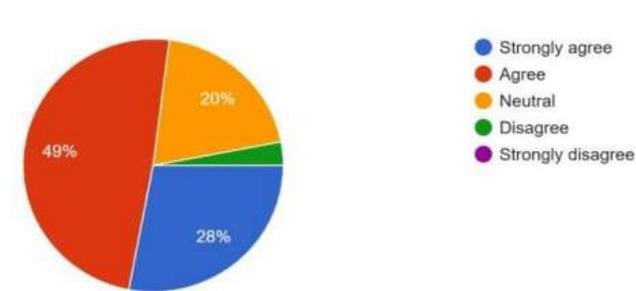
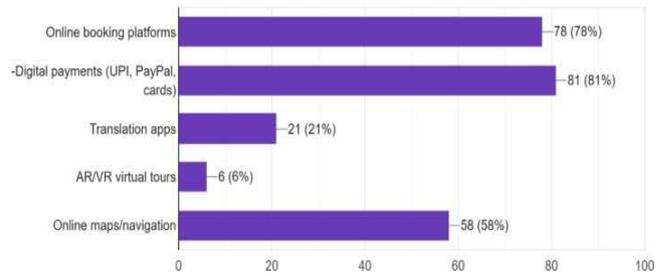


TABLE 3
 Technology and Affordable Travel

Response option	Percentage (%)
Yes	83
No	15
Not sure	2

Fig. 3 Technology and Affordable Travel

A significant 83% of respondents agreed that technology has made travel cheaper. On the other hand, 15% disagreed, while 2 % were not sure. This strong positive feedback shows how digital tools have lowered travel costs through price comparison



sites, budget aggregators, and discount – based online platforms. These findings support the idea that technology not only makes travel easier but also opens up access by making it financially possible for more people. It shows that technology in tourism helps people understand prices better and spend money more fairly.

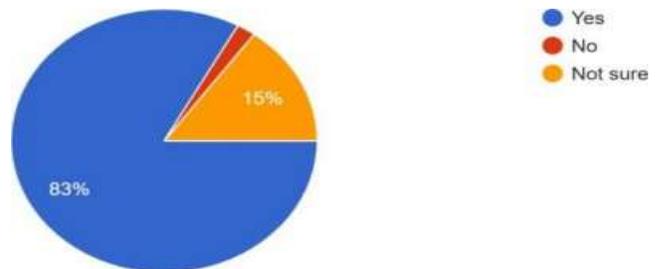
D. Sustainability of Tourism Supported by Technology

TABLE 4
 Sustainability of Tourism Supported by Technology

Response option	Percentage
Strongly Agree	28
Agree	49
Neutral	20
Disagree	3
Strongly Disagree	0

Fig. 4 Sustainability of Tourism Supported by Technology

Most participants (77%) felt that tourism supported by technology is sustainable over time. This shared feeling shows optimism about digital innovations like e-tickets, paperless communication, and smart operations that lessen environmental impact. However, a smaller neutral group (20%) shows some concerns about the indirect ecological costs of



data infrastructure and energy use. The findings

suggest that travelers often see technology as part of sustainable practices. This highlights the importance of adopting green digital strategies in tourism development.

E. Major Travel Ideas Enhanced by Technology

TABLE 5
Major Travel Ideas Enhanced by Technology

Aspect	Percentage (%)
Booking and reservation	72
Payments and Transaction	70
Navigation and maps	65
Information and Reviews	42
Virtual experienced (AR/VR)	17
Customer Service (chatbots , AI help)	19

Fig. 5 Major Travel Ideas Enhanced by Technology

According to the data, booking and reservations (72%) and payments and transaction (70%) are the travel aspects most improved by technology. These results highlight how digital tools have made important travel processes easier. Navigation and mapping tools (65%) help travelers be more independent, while access to information and reviews (42%) leads to better decision – making. The lower use of virtual experiences (17%) and AI-supported customer service (19%) suggests there is room for growth in immersive and smart tourism technologies. Overall, the findings suggest that technology plays a key role in improving efficiency, better decisions, and traveler satisfaction.

IV.RESULTS

A. How often Technology is Used During Travel

- More than half of the respondents (52%) always rely on technology during travel
- With 39 % using it often, a total of 91% of

travelers rely on digital tools while travelling.

- Just 1% reported rare use of technology, while none reported not using it at all.

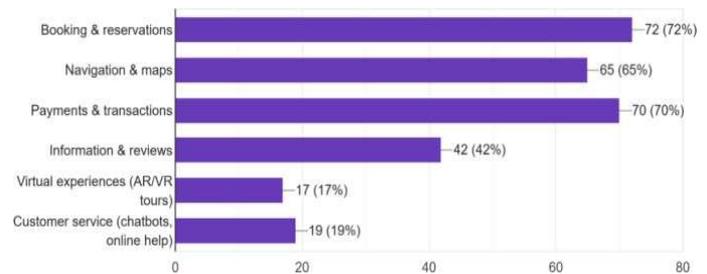
B. Types of Technologies used

- Most travelers use digital payments systems (81%) and online booking platforms (78%)
- About 58% of respondents rely on online maps and navigation while travelling
- The low use of translation apps (21%) and AR/VR tours (6%) suggests that immersive technologies are still in the early stages.

C. Affordability Through Technology

- Most respondents (83%) believe that technology has reduced travel costs by allowing easy price comparisons and access to discounts.
- Only 15% of respondents disagreed, while 2 % were unsure.

D. Perception of sustainability in Technology – Based tourism



- A total of 77% of respondents feel that tech-driven tourism helps promote sustainability.
- 20% remained neutral, showing awareness but some uncertainty about its environmental impact.

E. Travel Areas that Benefit the Most

- Navigation and maps (65%) show a high impact
- Information and reviews (42%), AI customer support (19%), and virtual experiences (17%) are important but growing areas.

VI.CONCLUSION

The aim of this research is to identify the effects of

technology on the tourism sector and its interaction with the operations of businesses. Most of the previous studies were conducted on only one dimension of the issue, such as the habits of tourists or the adoption of technology by businesses. This research attempts to address both to get a clearer picture of the prevailing scenario in the tourism sector. To achieve this, primary research was conducted among 100 participants using a Google Form, which helped to understand the actual opinions and experiences of people rather than just relying on already available Information. The use of graphs and simple graphical representation made it easier to understand how people use technology for traveling, what they like, and how they feel about issues like price and sustainability. As this research is grounded in actual opinions, it feels more relevant to the current scenario in the travel industry and actual user behavior. Another key aspect of this research is that it deals with the responsible use of technology. Rather than concentrating on the current trends of technology, such as AI, blockchain, or AR/VR, this research tries to understand how these technologies

can be used in a more effective and balanced way. The results of this research have shown that, in addition to convenience, tourists also want things to be affordable, trustworthy, and sustainable when it comes to technology.

This research can be very useful for businesses in the tourism industry because it can provide them with an understanding of how technology can be used in a balanced way. Simple things like digital check-ins, paperless transactions, and sustainable systems can make business operations more efficient while also reducing negative impacts on the environment.

It is evident from the above study that technology has the potential to improve the tourism industry, but it should be utilized in the correct manner. The future of the tourism industry is not only about adopting new technology but also about using technology in the correct manner for the benefit of tourists, businesses, and the environment.

REFERENCES

- [1] Baker,S.,Nam,H & Dutt, R(2023) User experiences with VR heritage tourism aops in the metaverse.Journal of virtual tourism Studies, 15(2),88-102
- [2] Bakasubramanian,V ,sethi , R., Ajaysn, R., & Paris , L. (2022). Blockchain for tourism:Transparency, automation,and sustainability. Tourism Management persoectives, 44, 101019.
- [3] Bi,J., & Liu,M.(2022) A machine learning m- based cloud IOT platform for smart tourism ecosystems.Journal if sustainable Tourism ,32 (1), 155-178.
- [4] ENTER eTourism Conference.(2021). Proceedings on Digital transformation in Tourism Springer.
- [5] FatBeacon Protocol (2023) Bluetooth IOT protocol for remote Tourism Experiences IEEE Iot Journal,9(4),2023-2032
- [6] Hancerencu,C.(2025).Ethical and operational impacts of AI in tourism. Tourism Futures, 31(3),48-63.
- [7] Ho,A,Alam,M., Masukujjaman,M.,Lin,S., & Susmit,R(2022). Determinants of AI adoption in Malaysian toursim firms.Asia pacific journal of Tourism Reaearch,28(5),872-889.
- [8] Kiranwatana,p., & vongvit, S. (2024) . The influence if VR experiences on destination image and visit intention . Tourism : policy outlook .OECD Publishing.
- [9] Siddik,M,Houque ,M., & kabir,S. (2025) AI and expnomic efficiency in global tourism.Journal of sustainable Development Studies, 18(1),75-93.
- [10] Thees,H., Erschbamer,G& pechlaner,H.(2020).Blockchain in tourism: opportunities and challenges . Information Technology & Tourism ,22(4),429-447.
- [11] Weng,F.& Zhang ,L.(2023). Improving Smarr tourism through Big Data and Iot integration . Journal of hospitality and tourism technology ,14(3),379-395.
- [12] Yan,H. &Du,C(2025).Impact of VR Experiences on historical tourism motivation.Journal if kulturak Tourism Studies,12(1), 91-108.
- [13] Y in maythu,K., Kwok ,H.,& Teh, K.(2024).Blockchain adoption in tourism: Early evidence.International Journal of Blockchain and smart systems.,7(1),23-41.
- [14] Zhang,L.,&Prebensen,N.(2024).AI in tourism Marketing Communication .Journal of tourism Research ,31(1),60-79x