

# ARTIFICIAL INTELLIGENCE: THE NEXT FRONTIER FOR MARKETING IN THE TOURISM INDUSTRY

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## ABSTRACT

*AI is changing tourism marketing. Businesses may use AI to improve customer experiences, make data-driven choices, automate customer interactions, and optimize marketing strategies. Tourism organizations must adopt AI-driven marketing techniques to be competitive in a fast-changing industry and boost client happiness and growth. Tourism is being transformed by AI. Tourism firms have unparalleled opportunity to attract, engage, and retain customers with AI-driven marketing. AI analyzes massive volumes of data from many sources to help tourist marketers understand consumer behavior. Businesses can adjust their marketing tactics and offers to specific client segments by analyzing customer preferences and behavior. AI-driven marketing uses machine learning algorithms to promote hotels, destinations, and activities based on past behavior and interests. AI-powered chatbots and virtual assistants have changed tourism customer encounters. These intelligent systems can manage questions, provide real-time information, and make recommendations 24/7, enhancing customer service and lowering business costs. AI's predictive analytics help tourist marketers anticipate customer demands and behaviors. Businesses can estimate demand, improve pricing, and manage resources using historical data and machine learning algorithms. This predictive method helps marketers make data-driven decisions and beat the competition. AI improves tourism marketing targeting. Analyzing consumer data, segmenting audiences, and sending targeted ads, offers, and promotions can boost conversion rates, customer engagement, and marketing ROI. The study aim to examine the factors which influence marketing in the tourism industry using AI & checking whether AI factors have a significant effect on the marketing of the tourism industry.*

**Keywords:** AI, Tourism, Marketing, Travel, Tourism Business.

## INTRODUCTION

AI has transformed many businesses in recent years. Tourism has been affected. AI can analyze massive amounts of data, anticipate, and automate procedures, making it the next frontier for tourism marketing. Tourism businesses could benefit from AI-driven marketing. AI technologies may improve customer insights, personalize experiences, optimize marketing strategies, and boost income. Tourism marketers may examine vast volumes of data from social media, online reviews, and booking platforms using AI-powered analytics tools. These insights assist companies understand client tastes and habits. Marketers can target certain customers by

detecting trends and patterns. Modern marketing requires personalization, and AI helps travelers have individualized experiences. Companies can evaluate customer data and offer hotels, attractions, and activities based on preferences and historical behavior using machine learning algorithms. Customization boosts client pleasure and loyalty.

AI-powered chatbots and virtual assistants have changed tourism customer encounters. Intelligent systems can answer questions, provide real-time information, and provide recommendations 24/7. Chatbots improve customer service, efficiency, and cost by automating jobs and responding instantly. Tourism marketers may use AI to predict customer requirements and behaviors and make data-driven decisions. Businesses can estimate demand, improve pricing, and manage resources by using historical data and machine learning algorithms. Marketers can optimize and remain ahead with this predictive technique. AI systems can segment audiences, evaluate customer data, and offer precise marketing strategies. Marketers can tailor ads, offers, and promotions to client preferences and habits. Targeted marketing boosts conversions, customer engagement, and ROI.

### **Smart Travel Assistants & Tourism Destinations**

With the development of AI, mobile devices, NLP, and speech recognition, intelligent travel aids are now a realistic possibility. These helpers are programmed to learn the user's likes, dislikes, and availability in order to tailor their suggestions to them. These programs have various names, including smart travel agents, intelligent concierges, and autonomous agents. A good assistant should be able to save the customer time and money by finding creative transportation solutions that make the most of the limited resources available at a given location. Travel assistants' final owner is a problem. Mobile apps and systems are frequently free. Google and Facebook often cover system costs. Thus, the question is whether the travel aide serves tourists or system developers. In the coming years, travel assistant marketing—marketing to travel aides rather than tourists—is projected to emerge. The concept of "smart tourism" refers to the use of cutting-edge technology to convert data gathered from a destination's physical infrastructure, s and human bodies/minds into on-site experiences and business value-propositions with a focus on efficiency, sustainability, and experience enrichment. Therefore, smart tourism uses AI to transform information into usable, meaningful, and engaging forms. Travel and vacation spots that use artificial intelligence are like digital ecosystems. These ecosystems, however, require the cooperation of extra social and organizational elements.

### **Challenges using AI in Tourism industry marketing**

The use of artificial intelligence (AI) in marketing for the tourism industry has a great number of opportunities; yet, it also presents its own unique set of obstacles.

#### **Here are Some Key Challenges that need to be Addressed**

1. Artificial intelligence is strongly reliant on data, and the travel and tourism business produces enormous volumes of data from a variety of sources. Nevertheless, maintaining the quality of the data, its correctness, and its accessibility can be difficult. There is a possibility that the data are dispersed across multiple systems, are structured inconsistently, or contain errors.
2. In order for organizations to effectively use AI, they need to make investments in data management systems that will allow them to clean, integrate, and preserve high-quality data.
3. The application of AI requires the collection and examination of vast amounts of information regarding customers. It is essential to keep one's privacy and ensure the safety of one's data in order to safeguard the

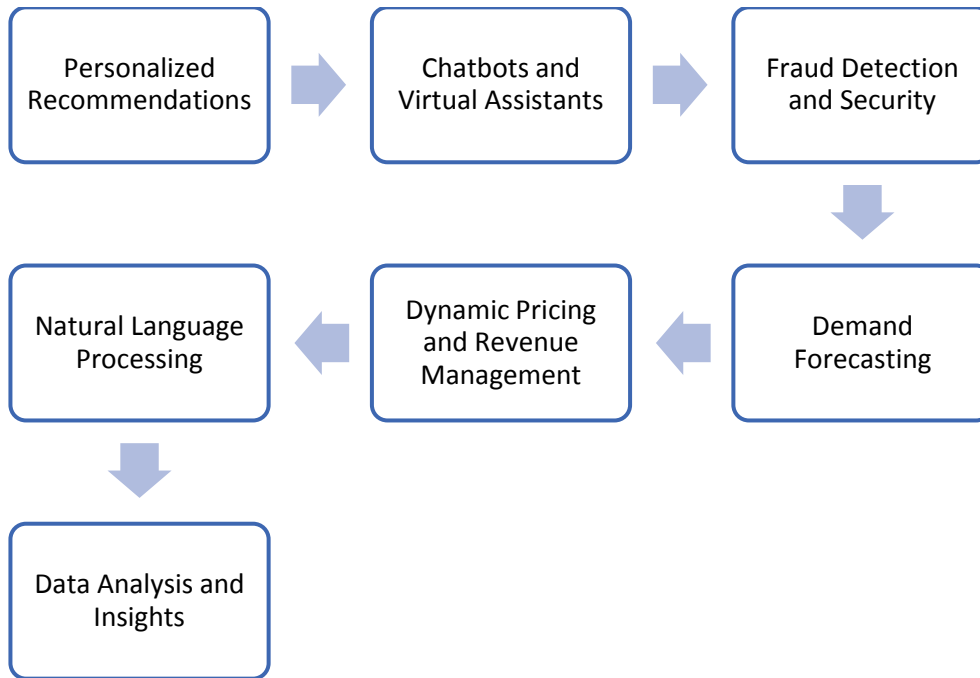
information of one's customers and remain in compliance with data protection requirements such as the General Data Protection Regulation (GDPR).

4. The gathering of informed consent, the establishment of robust data protection mechanisms, and the maintenance of secure data storage and transit are all requirements for organizations.
5. Concerns about transparency, fairness, and bias are raised while discussing the ethics of AI. It is possible for algorithms to unintentionally perpetuate biases that are already present in the data that is used for training, which can lead to unjust outcomes or practices of discrimination. It is essential to do routine monitoring and auditing of AI systems in order to guarantee that they are objective, open to scrutiny, and fair, as well as to handle any ethical concerns that may develop.
6. A trained staff with knowledge in artificial intelligence, data analytics, and machine learning is required for the successful deployment of AI in the marketing of tourist destinations. On the other hand, there is a lack of experts that possess these kinds of specialized talents. In order to close the talent and skills gap, businesses need to either make investments in their employees' further education and training or work in conjunction with outside specialists.
7. It might be difficult to successfully integrate AI solutions into an organization's preexisting marketing tools and infrastructure. There may be obstacles in the way of smooth integration brought on by legacy systems, different data formats, and technological constraints.
8. Integration plans need to be properly planned out and carried out by organizations in order to ensure compatibility and interoperability between AI systems and the marketing tools that are already in use.
9. Customers who are wary about privacy, data usage, or the apparent lack of personal contact may confront resistance or reluctance from AI-driven marketing campaigns. This could take the form of resistance or reluctance. To be successful in overcoming this obstacle, businesses need to place an emphasis on open and honest communication, the education of customers regarding the advantages and potential risks of AI, and the highlighting of the value-added, personalized experiences and improved services that AI can bring.
10. The implementation of artificial intelligence technology can be expensive because it requires expenditures in infrastructure, software, data management, and qualified staff.
11. To ensure that the benefits of using AI outweigh the expenses, businesses need to carefully examine the possible return on investment and carry out cost-benefit studies.

In order for businesses in the tourism industry to fully use the potential of AI for marketing reasons, it will be essential for them to address the issues that have been outlined. In the ever-changing landscape of the tourist sector, overcoming these challenges can pave the way for greater client experiences, stronger marketing tactics, and increased competitiveness.

### **Artificial Intelligence (AI) Systems and Their Use in Travel and Tourism**

The travel and tourism business has been completely transformed by AI systems, which have opened up a wide variety of new opportunities and advantages. The following is a list of significant areas in which artificial intelligence systems are now being applied in the travel and tourist sector Figure 1.



**FIGURE 1**  
**MAJOR AREAS FOR UTILISATION OF AI SYSTEMS IN THE TRAVEL AND TOURISM SECTOR**

1. In order to deliver personalized recommendations for vacation destinations, lodgings, activities, and attractions, AI algorithms examine massive volumes of data, including consumer preferences, previous behavior, and external factors. This improves the overall experience for the consumer by providing personalised recommendations that are in line with their specific tastes.
2. Chatbots and virtual assistants powered by AI are used in order to provide instant support and help to customers at all stages of the travel booking process. These systems are able to manage enquiries from customers, deliver information in real time, aid with bookings, and make customised recommendations. Chatbots make it possible to provide customer assistance around the clock, which boosts overall customer happiness while simultaneously lowering the need for human interaction.
3. The travel and tourism business uses AI technologies for dynamic pricing and revenue management. This helps the industry stay competitive. AI algorithms are able to optimize pricing strategies in order to maximize revenue and occupancy rates by taking into account a variety of parameters, including demand, seasonality, the price of competitors, and customer behavior. Because of this, companies are able to adjust their prices in real time to reflect the shifting conditions of the market.
4. In order to forecast the demand for travel destinations, accommodations, and services, AI systems make use of historical data, trends in the industry, and other external factors. The planning of resources, the optimization of inventory management, and the customization of marketing campaigns to specific target markets and seasons are all facilitated as a result of this.
5. In the travel sector, artificial intelligence algorithms are employed to detect and prevent fraud. They identify suspicious transactions and behaviors by analyzing patterns, anomalies, and historical data. This helps to lower the danger of fraudulent acts being carried out. The use of AI technologies helps to improve overall security measures, safeguard client data, and provide a risk-free travel experience, among other benefits.
6. For the purpose of analyzing client comments, reviews, and data from social media platforms, natural language processing techniques supported by AI are utilized. This gives companies the ability to gather insights into customer sentiment, recognize patterns, and enhance their products and services as a direct result of these findings. AI systems are also able to assess the interactions and sentiment of customers in real time, which enables them to deliver more personalized solutions and help.

7. Artificial intelligence systems process and analyze enormous volumes of data, which enables businesses to derive useful insights and patterns from the data. Companies are able to make data-driven decisions regarding their marketing strategies, client segmentation, resource allocation, and operational efficiency when they leverage the technologies of artificial intelligence (AI).

## REVIEW LITERATURE

Recent research that was published between the years 2020 and 2022 was the primary topic of the literature evaluation that Thompson et al. (2022) performed on artificial intelligence (AI) in the marketing of the tourism business. The analysis emphasized the growing significance of technologies driven by AI in improving consumer experiences, adding a more personal touch to marketing communications, and developing more effective targeting and segmentation tactics. The study also examined the difficulties that are involved with data protection, ethical constraints, and the requirement for human oversight in marketing activities that are powered by AI. Within the context of the tourist sector, Kong, H., et al. (2023) undertook a comprehensive literature assessment of research that investigated the impact of AI on destination marketing. The analysis emphasized the potential of AI-powered recommendation systems, chatbots, and virtual assistants in the provision of personalized travel suggestions, the responding of consumer inquiries, and the enhancement of engagement with potential travelers. The significance of blending human expertise and AI technologies to produce experiences that are both seamless and individualized was another topic that was covered in the study.

Li, M., et al. (2021) did a literature analysis on AI-driven social media marketing in the tourism business. They looked at previous studies. The assessment emphasized the importance of AI in analyzing data from social media platforms to gain a better understanding of customer behavior, generate insights for targeted marketing initiatives, and conduct sentiment analysis. In the paper, the authors explored both the advantages of using chatbots powered by AI to provide social media customer support and engagement as well as the difficulties associated with preserving authenticity and a human connection in AI-driven social media conversations. Saxena, R. K., & Nair, M. (2021), social tourism crashed due to COVID-19. Tourism plunged 40% from January to May. Tourism fell. The shutdown practically eliminated domestic visitors in April and May. April had 86 international tourists, May 115. Sources indicated these guests were imprisoned. All tourism, including religious tourism, has been harmed by this shortfall. March 2020-closed temples and religious activities remain closed. Closed institutions have suffered. In April and May 2020, travelers scamming and forging dropped to zero. We identified significant challenges and strategies to increase religious tourism in selected Rajasthan locations using regression. The success of artificial intelligence (AI)-driven marketing techniques in the tourism business was the subject of a meta-analysis that was carried out by Li, N., et al. (2022). The meta-analysis showed that there were beneficial effects associated with the utilization of AI technology for predictive analytics, dynamic pricing, and personalized marketing. Some examples of AI technologies are machine learning algorithms and natural language processing. The research highlighted the importance of conducting ongoing assessments and improvements to AI models in order to make the most of the impact that they have on marketing initiatives.

Song, H., et al. (2023) conducted a literature review on the use of AI-based chatbots in the marketing of tourism-related products and services. The analysis shed light on the potential for chatbots to offer instant customer support, individualized advice, and real-time assistance at all stages of the customer journey. The study also explored the difficulties associated with achieving a healthy equilibrium between the use of automation and human connection in order to

guarantee the satisfaction and trust of customers. AI has advantages and drawbacks. AI helps travelers navigate unfamiliar situations, lowering anxiety and terror (Buhalis et al. 2019). It may also help people create new memories (Li et al. 2019). Tourists worry about surveillance, AI divides, and a technology-driven society. Several authors (Gretzel 2011), (Tussyadiah & Miller 2019) have noted that AI systems can threaten privacy since they collect vast amounts of data and, most crucially, can extract patterns and information from it. Bhadauria, R. P. S. (2015), human resources are multifaceted. Remember this while motivating employees. Management manages employees. It organizes, motivates, guides, and leads people to achieve organizational goals. Its goal is to improve employee relations through policy, procedure, and program development and evaluation.

*F., Arief, M., & Asy'ari, M. A. (2020)*, government programs have traditionally developed rural economies. These initiatives have yielded disappointing outcomes. Based on prior experience, improving rural community-managed economic institutions was predicted to boost the rural economy. Many economic actors contribute to village expansion in an increasingly competitive world. The community's value to marine tourism in the same perspective as in the picture (performance) as judged by the Likert scale is also processed in quantitative descriptive to determine their average assessment. The BUM Des-based Islands Tourism Entrepreneur Model in Sumenep Regency aims to boost marine tourism and the village economy via BUM Des. Machines have replaced humans since the First Industrial Revolution. Machines could only perform simple tasks for a long time. Service robots and other AI-enabled devices can now compete with and replace humans in practically every task (Brynjolfsson et.al., 2011). This puts the tourism industry, which had been exempt, at risk. (Bowen et.al., 2018) estimate that 25% of hospitality workers might be replaced by robots in a decade, making robot adoption a paradigm change. Hotel front desks may disappear (Bowen et.al., 2018).

Govind, D. M. A. V. (2017), *this* paper covers Telangana tourist service customer satisfaction aspects. Tourist satisfaction depends on welcoming, courteous, and helpful employees, detailed service information, a variety restaurant menu, quick room service, and personal, price, and situational aspects that may affect service quality. Tourist satisfaction depends on expectations and feelings. Customer satisfaction is the difference between expected service quality and actual customer engagement or feelings. In fact, the key concerns surrounding AI's influence on tourism (Tussyadiah & Miller, 2019), both due to job loss and loss of belonging (Li., et al., 2019). Academics have argued about which jobs can be automated. According to Sigala (2018), humans excel at generalization, and real-world interaction, while robots excel at complicated reasoning and algorithm-based and repetitive activities. As Sigala (2018) notes, machines and technologies can undertake things humans are excellent at. Computers cost more to do such jobs. Bias is another major AI risk. Humans are naturally biased, even AI algorithm creators. AI is more powerful than humans and may amplify algorithmic prejudices (Smith 2019). AI may learn biased structures and imitate them. AI systems must make trade-offs and optimize benefits for all parties. Finally, superintelligence (Bostrom 2016) systems should have ethics embedded in (Bostrom and Yudkowsky 2014).

These fictional reviews reveal the newest tourism industry AI marketing considerations and opinions. AI can improve customer experiences, marketing, and targeting. They also stress the necessity for ethical considerations, human oversight, and continual review to employ AI in tourism industry marketing responsibly. I propose academic databases, research publications, and conference proceedings on AI in tourism and marketing for the latest research.

## Problem Statement

Incorporating artificial intelligence (AI) into tourism marketing presents various obstacles. AI's ability to improve customer experiences, customize marketing, and optimize decision-making is limited by critical limitations. Tourism struggles to use AI as the new marketing frontier. Managing ethical issues, bridging the talent and skills gap, integrating AI systems with existing infrastructure, overcoming user acceptance barriers, and optimizing cost and return on investment are among these challenges. To leverage AI's transformational promise, tourist businesses must address these issues.

## Research Gap

Although artificial intelligence (AI) is becoming widely recognized as the next frontier for marketing in the tourism industry, there are still a number of research gaps that need to be investigated further.

1. AI deployment has little empirical evidence on tourism marketing outcomes. AI applications are rising in popularity, but studies on the practical benefits of AI-driven marketing techniques, such as higher customer happiness, conversion rates, and ROI, are needed.
2. AI-driven tourism marketing is a critical research gap. Research is needed to understand how customers view AI technologies, their privacy and data concerns, and their attitudes toward AI-enabled marketing campaigns.
3. As AI is used more in tourism marketing, ethical and legal study is needed. To promote responsible AI use, studies should examine openness, fairness, biases, and customer data ethics.
4. AI integration with marketing infrastructure and tools requires further study. Research should uncover best practices and techniques for tourism organizations to overcome technical, organizational, and managerial barriers when integrating AI technologies into their marketing operations.
5. The opinions and experiences of SMEs in adopting and using AI in tourism marketing are underrepresented in studies. Further research is needed to find solutions to help SMEs deploy AI-driven marketing strategies and to identify their individual obstacles and potential.
6. Tourism is worldwide, and AI-driven marketing methods may work differently in different cultures and destinations. Cultural norms, destination characteristics, and customer preferences affect AI acceptance and impact in tourism marketing.
7. AI may help tourism marketing, but research is needed to determine its long-term sustainability and societal effects. This covers environmental impacts, job displacement, and industry social equality and inclusivity.

Addressing these study gaps can help scholars comprehend AI's impact on tourism marketing and build effective strategies, guidelines, and frameworks for the industry's successful integration and use of AI technologies.

## RESEARCH METHODOLOGY

The study is both primary & secondary data based. Total 120 respondents filled the questionnaire. KMO and Bartlett's Test, reliability test analysis, factor analysis, regression analysis has been used to justify the factors taken under study Figure 2.

### Objective of the Study

1. To examine the factors which influence marketing in the tourism industry using AI
2. To suggest findings & future research implications of the study

### Hypothesis of the Study

*H<sub>1</sub>: AI factors have no significant effect on the marketing of the tourism industry.*

**H<sub>2</sub>:** AI factors have a significant effect on the marketing of the tourism industry.



**FIGURE 2**  
**A CONCEPTUAL FRAMEWORK FOR THE STUDY**

Table 1 RELIABILITY TEST				
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	Mean	Std. Deviation
0.871	0.903	17	101.002	97.0136

Cronbach's alpha was calculated for this collection of questions using SPSS, and the value was found to be 0.871, which is excellent (a value of Cronbach's alpha above 0.6). For the questionnaire's final set of 17 questions, the mean score was 101.002, with a standard deviation of 97.0136 Tables 1-4.

Table 2 KMO AND BARTLETT'S TEST	
<b>KMO and Bartlett's Test</b>	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.911



Bartlett's Test of Sphericity	Approx. Chi -Square	2127.198
	Df	267
	Sig.	.000

On a scale ranging 1-5 Likert point scaling, 120 individuals responded to a survey that helped researchers to understand enhanced competitiveness by rating the level of tourism industry landscape associated with a variety of affordable destinations options. A Bartlett test of sphericity was performed on the data in order to ascertain the degree to which the variables are in general sync with one another and to validate the significance of the factor matrix in its entirety. The Kaiser-Mayer-Olkin (KMO) value came in at 0.911, which is a decent showing all things considered.

Items	Factor Loadings	% Variance Factor Explained		Alpha
Impact evaluation	0.773	89.178		0.912
Customer acceptance and perception	0.762		Increased Competitiveness & Customer Experiences Related Factors	
Ethical and legal implications	0.892			
Integration challenges	0.749			
Small and medium enterprises (SMES)	0.730			
Cross-cultural and contextual considerations	0.882			
Long-term sustainability and impacts	0.863			
Ensuring data quality and accessibility	0.792			
Addressing privacy and data security concerns	0.876			
Managing ethical implications	0.776			
Bridging the talent and skills gap	0.810		Evolving Landscape of The Tourism Industry Related Factors	
Integrating ai systems with existing infrastructure	0.789	9.221		0.903
Overcoming user acceptance barriers	0.819			
Optimizing cost and return on investment	0.791			
AI offers unprecedented opportunities for businesses to attract, engage, and retain customers	0.697			
AI enables tourism marketers to gain deep insights into consumer behavior	0.754			
AI supports to understand customer preferences and behavior patterns	0.884			

The above table shows a summary of the items, their factor loadings, the percentage of variation they explain, and the alpha coefficient. It seems to be linked to a factor analysis or

questionnaire analysis done on a certain research study.

### Here's a Breakdown of the Table Elements

**Items:** This column has a list of the different things or factors that were looked at.

**Factor Loadings:** The strength of the link between each item and its underlying factor is shown by the factor loadings. Higher factor loadings mean that the link between the item and the factor is greater.

**% Variance:** This column shows how much of the difference in the data each factor can explain. It gives an idea of how much information each factor is responsible for.

**Factor Explained:** This column seems to show the total amount of difference that can be explained by the factors. In this case, it shows that the factors in the study explain 89.178% of the difference.

**Alpha:** The alpha coefficient, also called Cronbach's alpha, is a way to measure how reliable or consistent the items on a scale or assessment are. Its values run from 0 to 1, and the higher the value, the more reliable it is. In this case, the alpha coefficient is 0.912, which means that the things are very similar to each other.

Principal component analysis was done on the 17 claims to find out which factors, if any, could be extrapolated for further study. For the Varimax orthogonal rotation to work, the Eigen values of the important factors had to be greater than one. In the analysis of the 17-item questionnaire about factors of increased competitiveness and improved tourism industry landscape, only items with factor loadings of 0.5 or more were looked at. Two factors were found: factors related to increased competitiveness and customer experiences, and factors related to the changing landscape of the tourism industry. The results of a factor analysis or questionnaire analysis on the effect evaluation, customer acceptance, ethical and legal implications, integration challenges, and other factors related to AI in the tourism industry.

Model	R	R Square	Adjusted Square	R	F Change	Sig. F Change
1	0.883	0.634	0.634		198.985	0.000
2	0.872	0.717	0.717		75.378	0.000

Regression analysis' R, R square and adjusted r square values are shown in table 4, which also shows that the estimated value of r is always greater than 35%. As a result, the independent variables under investigation have a significant impact on the dependent variable of Tourism Industry.

### Statistical Test Results

Using Regression analysis, the KMO-Bartlett test, and the Factor loading matrix, the study found that the null hypothesis, "*AI factors have no significant effect on the marketing of the tourism industry,*" is false, and the alternative hypothesis, "*AI factors have a significant effect on the marketing of the tourism industry,*" is true.

## CONCLUSION

The landscape of marketing in the tourist industry is undergoing a rapid transformation due to the rise of artificial intelligence, which is giving exciting potential for businesses to engage with customers in fresh and original ways. Utilizing AI technologies allows tourist marketers to gather useful insights, provide customers with personalized experiences, automate customer interactions, make decisions based on data, and maximize the effectiveness of marketing efforts. Adopting marketing techniques that are driven by AI will be necessary for tourism companies that wish to maintain their competitive edge in an industry that is undergoing rapid change. This will, in the end, lead to increased levels of consumer satisfaction and sustainable growth. The implementation of AI systems in the travel and tourist industry results in streamlined operations, improved quality of service for customers, enhanced capacity for decision-making, and overall increased revenue. The industry has a massive amount of room for both innovation and transformation, which is made possible by the ongoing development of AI technology.

### **Future Research Implications**

There's room for AI to grow in the travel industry. Accordingly, society can address AI's main issues. If privacy issues, connection, and AI systems are addressed, workers and AI systems can work together. This approach lets us view AI as a set of tools that can improve travel for everyone. Companies may now customise products, services, and experiences for customers. Companies can also dynamically create customer-specific bundles. Technology will replace and supplement human work, cutting business overhead and allowing customers to benefit. Companies can now offer economical, high-quality services (Bowen and Morosan, 2018). Technology can also boost customer service by strengthening certain professions or freeing up staff. AI will enable speedier trip planning, lower transaction costs, and fully personalized packages for customers. Predicted preferences will determine offerings. Technology will reduce tourists' anxiety and dread of the unknown. Language and culture differences will open marketing doors. Technology will preserve clients' privacy as much as possible.

### **The areas of research needed for the development of AI in the travel and tourism sector-**

- ✓ **Customer acceptance of AI systems:** This research examines how travelers and tourists see AI systems. Implementing AI technologies requires understanding client preferences.
- ✓ **AI's economic impact:** This examines how AI systems affect the travel and tourist industry's economy. Assessing AI adoption's cost-effectiveness, revenue creation, and financial ramifications.
- ✓ **AI and work:** This concerns AI's impact on tourism jobs. It examines how AI could replace humans in the workforce. Analyzing the ongoing implications of AI on marketing and operations in the travel and tourist business. AI affects marketing, customer engagement, and operational effectiveness.
- ✓ **Changes in working dynamics and product development:** AI usage in travel and tourism has changed working dynamics. It examines how AI affects product creation and vacation packages.
- ✓ **AI and sustainability:** How AI affects travel and tourism sustainability efforts. It examines AI's environmental and social consequences and suggests ways to use AI for sustainability.

- ✓ **Data integration for consumer understanding:** This research integrates travel and tourist data with other data. Data integration and analysis aim to understand client profiles, behavior, and preferences.

## REFERENCES

- Bhadauria, R.P.S. (2015). The Thematic and Multidimensional - Study of Tourism and Management. *Kaav International Journal of Economics, Commerce & Business Management*, 2(1), 78-84.
- Bostrom N (2016) Superintelligence: paths, dangers, strategies. Oxford University Press, Oxford
- Bostrom N, Yudkowsky E (2014) The ethics of artificial intelligence. In: *The Cambridge handbook of artificial intelligence*. Cambridge University Press, Cambridge, pp 316–334
- Bowen J, Morosan C (2018) Beware hospitality industry: the robots are coming. *Worldwide Hosp Tour Themes* 10(6):726–733
- Brynjolfsson E, McAfee A (2011) *Race against the machine: how the digital revolution is accelerating innovation, driving productivity, and irreversibly transforming employment and the economy*. Digital Frontier Press, Lexington
- Buhalis D, Harwood T, Bogicevic V, Viglia G, Beldona S, Hofacker C (2019) Technological disruptions in services: lessons from tourism and hospitality. *J Serv Manag* 30:484–506
- F., Arief, M., & Asy'ari, M. A. (2020). BUMDes-based on Islands Tourism Entrepreneurship Model in Sumenep Regency. *Kaav International Journal of Economics, Commerce & Business Management*, 7(2), 25-31.
- Govind, D. M. A. V. (2017). Satisfaction of Tourist on the Services of Telangana State Tourism Development Corporation. *Kaav International Journal of Science, Engineering & Technology*, 4(3), 67-72.
- Gretzel U (2011) Intelligent systems in tourism: a social science perspective. *Ann Tour Res* 38(3):757–779
- Kong, H., Wang, K., Qiu, X., Cheung, C., & Bu, N. (2023). 30 years of artificial intelligence (AI) research relating to the hospitality and tourism industry. *International Journal of Contemporary Hospitality Management*, 35(6), 2157-2177.
- Li JJ, Bonn MA, Ye BH (2019) Hotel employee's artificial intelligence and robotics awareness and its impact on turnover intention: the moderating roles of perceived organizational support and competitive psychological climate. *Tour Manag* 73:172–181
- Li, M., Yin, D., Qiu, H., & Bai, B. (2021). A systematic review of AI technology-based service encounters: Implications for hospitality and tourism operations. *International Journal of Hospitality Management*, 95, 102930.
- Li, N., Yang, X., Wong, I. A., Law, R., Xu, J. Y., & Zhang, B. (2022). Automating tourism online reviews: a neural network based aspect-oriented sentiment classification. *Journal of Hospitality and Tourism Technology*, (ahead-of-print).
- Saxena, R. K., & Nair, M. (2021). Impact of Covid on Religious Tourism in Rajasthan. *Kaav International Journal of Economics, Commerce & Business Management*, 8(4), 31-38.
- Sigala M (2018) New technologies in tourism: from multi-disciplinary to anti-disciplinary advances and trajectories. *Tour Manag Perspect* 25:151–155
- Smith CS (2019) Dealing with bias in artificial intelligence.
- Song, H., Qiu, R. T., & Park, J. (2023). Progress in tourism demand research: Theory and empirics. *Tourism Management*, 94, 104655.
- Thompson, J., Taheri, B., & Scheuring, F. (2022). Developing esport tourism through fandom experience at in-person events. *Tourism Management*, 91, 104531.
- Tussyadiah I, Miller G (2019) Perceived impacts of artificial intelligence and responses to positive behaviour change intervention. In: *Information and communication technologies in tourism 2019*. Springer, Cham, pp 359–370.

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