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## “THE ROLE OF ARTIFICIAL INTELLIGENCE IN PERSONALIZING TOURISM MARKETING STRATEGIES IN UTTAR PRADESH”

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### ABSTRACT

*Tourism Industry has always been a key driver of economic growth, cultural exchange, and regional development. In a state like Uttar Pradesh—home to world-famous heritage sites like the Taj Mahal, spiritual hubs like Varanasi, and emerging eco-tourism destinations—there is immense potential for growth. However, with increasing digitalization, modern travelers expect hyper-personalized experiences rather than generic marketing campaigns. This is where **Artificial Intelligence (AI)** is revolutionizing the landscape. AI is not just enhancing digital marketing but reshaping how travelers discover destinations, plan their trips, and engage with tourism services. From AI-driven chatbots providing real-time assistance to predictive analytics offering personalized recommendations, the tourism sector in Uttar Pradesh stands to benefit immensely from AI-powered marketing strategies. The study reveals that artificial intelligence (AI) can enhance audience segmentation, forecast traveler behavior, and provide material that is customized to individual interests. In order to increase efficiency and tourist pleasure, Uttar Pradesh can employ chatbots and virtual assistants to develop personalized itineraries, carry out targeted advertising, and provide round-the-clock assistance.*

**KEYWORDS:** *Artificial Intelligence, Tourism Marketing, Personalization, Machine Learning, Customer Experience, AI-driven Chatbots, Data Privacy.*

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### REFERENCES: -

- Buchanan, B. G., & Shortliffe, E. H. (1984). Rule-based expert systems: The MYCIN experiments of the Stanford heuristic programming project. Addison-Wesley.
- Buhalis, D., et al. (2020). Smart tourism destinations: ecosystems for tourism destination competitiveness. *International Journal of Tourism Cities*, 6(3), 537-551.

- Cambria, E., et al. (2017). Sentiment analysis is a big deal for brands. *Journal of Intelligent Systems*, 26(1), 17-29.
- Campbell, M., Hoane, A. J., & Hsu, F. H. (2002). Deep Blue. *Artificial Intelligence*, 134(1-2), 57-83.
- Cavoukian, A. (2019). Privacy by Design: The 7 Foundational Principles. Information and Privacy Commissioner of Ontario.
- Devlin, J., Chang, M. W., Lee, K., & Toutanova, K. (2018). BERT: Pre-training of deep bidirectional transformers for language understanding. *arXiv preprint arXiv:1810.04805*.
- Expedia. (2020). Personalizing Travel Experiences with AI. Expedia
- Feng, Y., et al. (2020). The influence of AI on the travel industry: A review and research agenda. *Journal of Tourism Futures*, 6(2), 123-139.
- Følstad, A., Brandtzæg, P. B., et al. (2018). What makes users trust a chatbot for customer service? An exploratory interview study. In *International Conference on Internet Science* (pp. 194-208).
- Gretzel, U., et al. (2020). AI and robotics in hospitality and tourism: A review of current literature. *Current Issues in Tourism*, 23(14), 1707-1733.
- Hennessy, J. L., & Patterson, D. A. (2002). *Computer architecture: A quantitative approach*. Morgan Kaufmann.
- Hilton. (2019). AI-Powered Chatbots Enhance Guest Experiences. Retrieved from Hilton Newsroom
- Huang, L., & Rust, R. T. (2018). Artificial intelligence in service. *Journal of Service Research*, 21(2), 155-172.
- Ivanov, S. H., & Webster, C. (2017). Adoption of robots, artificial intelligence and service automation by travel, tourism and hospitality companies – a cost-benefit analysis. *International Journal of Contemporary Hospitality Management*, 29(9), 2279-2310.
- Kannan, K. (2017). Leveraging big data analytics for planning tourism development: A case study of India. *International Journal of Business Information Systems*, 24(3), 343-362.
- Krizhevsky, A., Sutskever, I., & Hinton, G. E. (2012). ImageNet classification with deep convolutional neural networks. *Advances in Neural Information Processing Systems*, 25.
- MakeMyTrip. (2020). Enhancing Customer Experience with AI. MakeMyTrip
- McCarthy, J., Minsky, M. L., Rochester, N., & Shannon, C. E. (1956). A proposal for the Dartmouth summer research project on artificial intelligence. *AI Magazine*, 27(4), 12-14.
- McCulloch, W. S., & Pitts, W. (1943). A logical calculus of the ideas immanent in nervous activity. *The Bulletin of Mathematical Biophysics*, 5(4), 115-133.
- McDermott, J. (1980). R1: An expert in the computer systems domain. *Artificial Intelligence*, 19(2), 113-116.

- Newell, A., & Simon, H. A. (1956). The logic theory machine: A complex information processing system. IRE Transactions on Information Theory, 2(3), 61-79.
- Newell, A., & Simon, H. A. (1961). GPS, a program that simulates human thought. In Computer Models of Thought and Language (pp. 279-293).
- OpenAI. (2020). GPT-3: Language Models are Few-Shot Learners. OpenAI.
- OpenAI. (2023). Introducing GPT-4. OpenAI.
- Page, L., Brin, S., Motwani, R., & Winograd, T. (1999). The PageRank citation ranking: Bringing order to the web. Stanford InfoLab.
- Samuel, A. L. (1959). Some studies in machine learning using the game of checkers. IBM Journal of Research and Development, 3(3), 210-229.
- Silver, D., Huang, A., Maddison, C. J., Guez, A., Sifre, L., Van Den Driessche, G., ... & Hassabis, D. (2016). Mastering the game of Go with deep neural networks and tree search. Nature, 529(7587), 484-489.
- Ricci, F., et al. (2015). Recommender Systems Handbook. Springer.
- Sinha, A., et al. (2018). Artificial intelligence in travel and tourism: Applications and future directions. In Information and Communication Technologies in Tourism (pp. 61-73).
- TripAdvisor. (2020). How TripAdvisor Uses Machine Learning. TripAdvisor.
- Turing, A. M. (1950). Computing machinery and intelligence. Mind, 59(236), 433-460.
- Tussyadiah, I. P., et al. (2019). Artificial intelligence for travel decision-making: The case of destination recommendations. Journal of Travel Research, 58(7), 1095-1111.
- Weizenbaum, J. (1966). ELIZA—a computer program for the study of natural language communication between man and machine. Communications of the ACM, 9(1), 36-45.
- Yatra. (2021). Yatra's AI-Powered Travel Solutions. Yatra.