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EXCURSION TOURISM DEVELOPMENT ON THE BASE OF DIGITAL TECHNOLOGIES

Modern artificial intelligence (AI) technologies are actively used at all stages of the travel experience – from trip planning to post-service. AI enables deep personalization of recommendations and travel planning: neural networks analyze search history, previous bookings, social media behavior, reviews, and geolocation, creating customized itineraries, hotels, transportation, excursions, and activities that fully match the traveler's interests, budget, and style [1].

Among the directions of innovative approaches to organizing excursions, the use of information technologies is highlighted, followed by a conditional classification into technical (QR coding, GPS tour guides, radio guides in museums, etc.) and technological (interactivity in excursions, quest excursions, etc.) [2, 3].

We will systematize and analyze the ways in which artificial intelligence technologies are applied in the tourism industry to understand how it can be used to make businesses more efficient and increase tourist satisfaction.

Artificial intelligence is revolutionizing tourism, providing personalized travel and improving service quality. The main ways in which AI can be applied are: chatbots and virtual assistants, recommendation systems, demand forecasting (data analytics), review analysis, image recognition for attractions and VR / AR tours. Virtual tourism is a new type of tourism in the Republic of Belarus, which uses 3D effects, innovative programs, spherical panoramas, allowing for travel [4]. Its peculiarity is that it is primarily due to the ban on travel and the impossibility of physical travel. The advantages of virtual tourism are that it is cost-effective, safe, capable of improving the development of the tourism industry and increasing revenues to the state budget. Disadvantages – lack highly developed technical infrastructure and significant investments.

This is evidenced by the formed attitudes of travelers and their readiness to use such new digital products of the tourism industry as: digital hotel, digital ecosystem, digital activities and entertainment, etc. The results of a telephone survey of German residents aged 16 and older, conducted by Bitkom in 2019, show that new digital needs of tourists have taken hold [4]: the majority of German travelers are ready to use VR- glasses to experience a trip or to watch their own travel videos in 360° technology; im-

portant to have access to all room settings on a smartphone, use smart technologies in the hotel and service robots, AR-reality tools for a virtual trip or getting to know tourist places.

AI assists in pricing by responding to changes in demand, seasonality, competitor occupancy, weather, events, and exchange rates, enabling rapid optimization. At the same time, algorithms forecast demand for destinations, hotels, and flights months in advance by analyzing big data on search queries, bookings, and macroeconomic trends, helping companies plan marketing, staffing, and resources in advance.

AI generates and selects personalized content – articles, video guides, photo collections, and descriptions of attractions – that perfectly match the interests of each user. It also optimizes internal business processes for travel companies: automating document processing, inventory management, guide scheduling, review analysis, fraud detection, and service quality monitoring.

AI is rapidly transforming the travel industry. Leading global players like Booking. Holdings and Expedia. Group use AI-powered recommendation systems that analyze user preferences and search history. This allows them to offer highly relevant hotel options, flights, and attractions, significantly improving the user experience and increasing sales efficiency. Platforms like TripAdvisor use machine learning to process millions of reviews, helping travelers make informed choices, while specialized AI tools like iMean AI helps plan complex routes taking into account real-time prices.

AI is also making significant changes in terms of operational optimization and customer service improvement. Airlines (British Airways, KLM), and hotel chains are rapidly deploying intelligent chatbots and virtual assistants to provide 24/7 support and prompt responses to routine requests, reducing the workload on staff. Some Hilton hotels employ robotic concierges to interact with guests, while Novotel hotels employ digital concierges. The Russian company Sletat.ru uses AI to automate travel agent inquiries, while the Ostrovok.ru platform improves service search and booking. In the area of security and infrastructure efficiency, examples include the use of biometric facial recognition technologies at Dubai airports to speed up security checks. Finally, companies like Amadeus and Travelport are developing advanced AI solutions for hyper-personalization and dynamic pricing, while Russian companies like tour operator PAKS are actively implementing AI to optimize internal business processes.

The implementation of artificial intelligence in the travel industry is demonstrating significant positive effects, confirmed by both qualitative improvements and specific quantitative metrics. These technologies not on-

ly improve service but also significantly reduce trip planning time and minimize errors.

From a business perspective, AI facilitates operational efficiency and economic benefits.

In general, the application of artificial intelligence in the tourism sector opens up vast opportunities for the industry to improve efficiency, customer service and financial indicators. By as these technologies develop, they're the role will become more significant. For example, for the hotel business, opportunities developments in artificial intelligence look very promising as these technologies improve, their influence on the industry will only grow. The use of artificial intelligence with the purpose of analyzing guest preferences will help to anticipate the needs of guests and automatically adjust services to them.

The use of artificial intelligence in tourism will open up new opportunities for automation and optimization of the hotel's internal business processes from management of the room stock up to procurement planning. Robots, voice assistants and chatbots on basis AI will play an increasingly important role in helping guests quickly access information and order services. Such solutions will ensure a higher level of service for the company. Computer vision technologies are already being used to automate security checks, guest monitoring, and quality control of cleaning. This example of application in the hotel business will only expand. Artificial intelligence is dramatically improving the efficiency of the tourism industry and increasing traveler satisfaction through personalization, automation, and accurate forecasting. Leading companies are already seeing conversion and revenue increases of 15–30% while reducing costs by up to 50%. Its role in the industry will only increase in the coming years.

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