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ARTIFICIAL INTELLIGENCE'S IMPACT ON THE TOURISM DEVELOPMENT

Summary. The article considers the impact of artificial intelligence on the transformation of the tourism sector by optimizing the operations of tourism enterprises and improving customer experience. The process of providing tourist services after the introduction of chatbots, automated translators and data collection systems, which ensures efficiency, personalization and safety of travel, is investigated. The author identifies such threats from the integration of AI in the tourism sector as problems with data privacy and job losses, which requires a balanced approach to cybersecurity.

Keywords: artificial intelligence, tourism, automation, technology, customer satisfaction, European Union.

Artificial intelligence is gradually changing the face of many sectors of the economy, trade, and big business. In turn, AI is actively integrating into the tourism industry. Integration has led to transformational changes in the way travel businesses operate, offering numerous benefits to all stakeholders - consumers, retailers, and intermediaries. From improving customer experience to optimizing operations and driving revenue growth, AI has proven to be a game changer. Travel agencies, accommodations, and customer support services will be experimenting more deeply with ChatGPT and other forms of generative AI to make travel easier and more fun.

The use of text and voice communication systems, so-called chatbots and virtual assistants, as a means of communication between the customer and the company is gaining popularity in the tourism industry. They have many advantages that significantly save time and resources, as well as provide clear, verified information, thus reducing the workload on staff. These advantages include 24/7 availability and instant information support. Chatbots offer a personalized approach to customers, i.e. help them find tickets, hotels, optimizing the booking process as much as possible, or provide information about tourist destinations or entertainment events [1]. The advantage of these AI-powered chatbots is that they provide automated answers to

common questions using a predefined algorithm. Examples include Expedia Virtual Assistant, Google Assistant, Airbnb Virtual Assistant, Blue Bot, Amadeus Chatbot, Hilton's Connie, Siri, and Alexa, which help users search for flights, hotels, and rental cars, ensuring a smooth booking experience. Importantly, travel agencies that incorporate AI-driven recommendations report a 15% increase in customer satisfaction and loyalty [4].

For AI tasks, an important aspect of its application is automatic translators used in applications. This makes it much easier for customers to find the information they need, as tourism and travel are often about communicating in different languages. With the help of AI, a potential tourist may not be hindered by the language barrier to find the necessary transportation, accommodation, or explore the local flavor [2].

Collecting and analyzing a huge amount of data related to consumer behavior, preferences, or various trends in the travel market is not possible without the use of AI. Quick access to this information helps companies to understand the specific needs of consumers. In the future, it will be able to adapt its plans and strategies to attract more customers to them, thus remaining a competitive player in the market.

AI-driven systems are equally important for improving travel safety. They monitor data in real time, identifying potential risks and providing timely alerts. Statistics show a 25% reduction in travel-related incidents when AI is applied to safety and security measures. Additionally, AI algorithms detect and prevent fraudulent activity in travel bookings and financial transactions. The use of an AI-based fraud detection system has led to a 30% reduction in fraudulent activity in the travel industry [4].

However, the integration of AI into tourism is a rather complicated process that is not without its challenges and risks. The biggest challenge at the moment is data privacy, security, and ethical use of AI. Compliance with data protection rules is extremely important, so organizations must implement strict security measures to protect sensitive data from unauthorized access, various types of breaches, and cyber threats.

Education and professional development of industry researchers, analysts, and optimization experts in the travel industry is another really important issue for the effective use and management of innovative tools. Specialists need to constantly update and replenish their knowledge in order to adapt to the changing environment in the future. AI technologies are developing at a rapid pace, which is why professionals need to be aware of new opportunities and threats that may arise in this area to maximize the power of artificial intelligence to improve business processes.

Data availability, relevance, and quality are also important for technology implementation. Inaccurate or incomplete data can undermine the effectiveness of AI algorithms and lead to erroneous conclusions and decisions. Only reliable data management systems should be used to solve these problems, with a focus on verification and continuous monitoring of data to ensure its accuracy and completeness [3].

Among the negative consequences of AI is the reduction of jobs in the tourism industry, which in turn can create a more global problem such as unemployment. On the same hand, the reduced need for human service will cause anxiety among

employees. The company's challenge is to find a balance between the introduction of new technologies and job security.

EU countries are unlikely to be able to abandon the latest technologies, which are now the main indicator of dynamic progress. For example, Austria was the European country with the largest share of hospitality businesses (44%) that viewed AI as a key opportunity over the next six months, compared to only 13% in Greece and 16% in France. The EU average was around 23%.

In the EU, Germany has the largest share of accommodation businesses that are already using artificial intelligence. Overall, 2 out of 10 German companies surveyed reported using artificial intelligence, while in Italy and Spain, only 8% and 4% respectively.

The most popular applications for accommodation businesses in the EU are customer chatbots (58%) and dynamic pricing (52%), followed by customer feedback management (47%) and content marketing (45%). [3]

This statistics clearly shows the impact that AI is having on all aspects of the travel industry. After the United States, EU countries are the largest users of the technology and intend to further improve their tourism industry using AI.

Generally speaking, artificial intelligence is the present and the future of the whole world, and it has already found the right application in tourism. It affects the quick decision-making of tourists, improves the quality of services provided, and improves the quality of feedback to identify patterns and trends in the tourism sector. It also speeds up the analysis of a particular company's performance and helps to develop more effective plans for a particular company. Nevertheless, there are also negative consequences of AI implementation related to data security and loss of jobs for employees. Still, innovative technologies are both a challenge and an opportunity, without which the travel industry will not be able to function adequately in a few years.

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