

IMPROVING THE COST EFFICIENCY OF TOURISM SERVICES THROUGH THE USE OF DIGITAL TECHNOLOGIES AND ARTIFICIAL INTELLIGENCE

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The rapid advancement of digital technologies and artificial intelligence (AI) has profoundly transformed the global tourism industry. Tourism is increasingly evolving into a data-driven sector where intelligent systems are used to enhance service quality, optimize operational processes, and improve customer satisfaction. Digital tourism platforms enable travelers to independently plan trips, search for information using voice commands, and receive personalized recommendations based on individual preferences.

The main objective of this article is to analyze the application of artificial intelligence and related digital technologies in tourism, assess their economic and functional benefits, and identify future trends in AI-driven tourism development. The increase in information technology devices and the successful adaptation of artificial intelligence to digital tourism in the regions has created a tremendous opportunity for increased economic efficiency. Now with the help of digital technologies, people can plan their own trips, search for information through voice surveys and reservation, that is, it can form orders. When used in combination with artificial intelligence, these technologies automatically provide individual recommendations based on the user's interests. These personalized recommendations can make your trip more meaningful and easier to plan. For example, the world famous AIR France KLM Company Flightbeat Through the software, it monitors the heart rate of its customers through sensors using artificial intelligence, which ensures a safe and comfortable flight of passengers¹⁹.

Another company that provides high passenger services using artificial intelligence – British Airlines is considered to be a This company is today Happiness Blanket technology in flight. With the help of this technology, passengers his – emotions are tracked and media products are recommended accordingly. Tourism Province With increasing globalization, a number of opportunities to optimize and facilitate search with the help of artificial intelligence are emerging, in particular, using voice queries, more efficiently find relevant information for users and increase the overall user experience. AI can understand user intent and provide more accurate search results, making it easy for travellers to find the information they need quickly and conveniently.

Blockchain technology, combined with artificial intelligence, has led to significant improvements in the tourism sector. Blockchain Various systems such as payments, smart contracts, transparency, load management, and loyalty programs can improve cost-effectiveness. For example:

-LockChain (LockTrip) – ushbu Blockchain Through technology marketing Hotels allows you to choose and compare.

¹⁹ <https://www.airfranceklm.com/en/our-strengths/klm>

-Winding Tree — it is a decentralized multifaceted, Ethereum It is a technology that helps to organize tourism services as a link between customers and sellers.

Visits.to the; Roam Around; GuideGeek; Tripnotes.to the; EazyTrip AI is a platform that is revolutionizing travelers' trip planning as an online platform. Only One Motion With artificial intelligence, your address and personal your needs Collects information about the Wikipedia article. The data can then be used to fine-tune recommendations and plan your trip. This not only saves time, but also provides a personalized travel experience based on traveler's specific preferences. The data can then be used to fine-tune recommendations and plan your trip. This will not only save time, but also enhance your personal travel experience based on the unique benefits of the trip.



Picture-1. Artificial intelligence travel planning platforms piri guide

With the help of artificial intelligence, these travel planning platforms help travelers prepare accurate, safe, affordable and reliable tour packages in a short period of time from home.

In the modern world of travel, artificial intelligence can be used to improve travelers' plans efficiently and efficiently. personalized Jump to navigation For example, Roam Around — ChatGPT is a travel itinerary tool based on technology that offers individual travel plans based on the user's interests, time, and budget. Through this platform you can not only find information about locations, but also provide comprehensive information about activities and cultural events tailored to your personal impressions.

Meanwhile, a free AI named GuideGeek has been releasedChatbot It has also become a reliable assistant for modern tourists. He is on WhatsApp, Instagram and Facebook Messenger and can provide services in more than 32 languages. This tool is about hotels, restaurants, events, and even suitable infrastructure for people with disabilities personalized provides information. The platform is an important step in introducing an inclusive approach to tourism.

As another example of technological advancement Tripnotes.to the platform can be recorded. It uses artificial intelligence to provide travelers with integrated routes and

personalized provides recommendations. All you need to do is enter the location on this platform, and the algorithms will fully plan the rest, including popular places, restaurants, cultural sites, etc. objects and activities.

Another innovative The solution — EazyTrip AI helps users with everything from travel planning to budget management. Platform specific to each location personalized recommendations, Local It provides information about events and hotels, thus making travel experience easier and more memorable.

If you prefer to receive information by eavesdropping while traveling, Piri Guide The platform is exactly for you. It offers artificial intelligence-based audio tutorials so you can not only see, hear and feel your trip. You will be provided with the appropriate audio information, including the travel address and interests of your trip.

Of course, the future of artificial intelligence in the tourism sector is a dynamic area that is difficult to predict. However, some technologies offer solutions that could reshape an entire industry in the coming years. For example, hotels and airlines big data Analysis and comparative economics algorithms to effectively manage their services. By doing so, they can better forecast demand, reduce costs, and achieve increased profits.

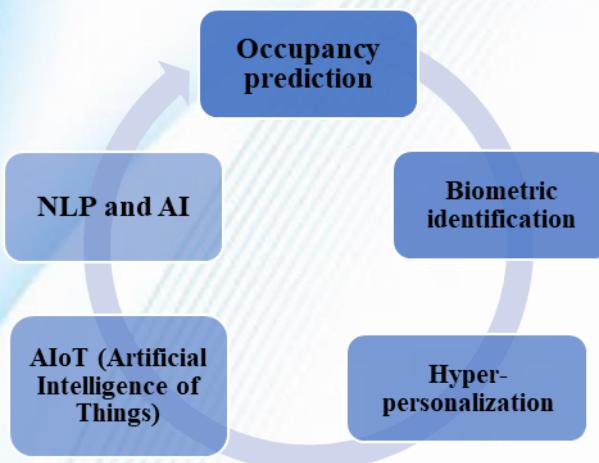
Also, biometric identification technologies are reflected in the experience of airports in the Bukhara region. Through facial recognition and biometric verification, travelers can quickly and conveniently reach their destination. The National Institute of Standards and Technology in the USA has proven that this technology works with 99,5% accuracy. Soon, this technology will be used not only in airports, but also in hotels, museums and tourist attractions. in objects It is also expected to become more popular.

In this process, NLP (Nature) is used to automatically translate the language and localize the content. Language Processing) technologies are of particular importance. For example, language models such as GPT-4 can correctly understand user needs and be able to communicate clearly and personalized to provide answers. This makes it easier to understand travel in a local context and improves the quality of services for travelers.

Symbiosis between artificial intelligence and devices — Intelligent of Things (IoT) also has great promise in the tourism sector today. Autonomous vehicles, i.e. driverless cars, in particular, can automate route selection and travel for tourists in the future. Imagine that a tourist determines the direction through his smartphone and the vehicle delivers him to the destination.

Another transformation in tourism today is hyper-personalization — Hyper personalization is a process. Amadeus such companies as "Up and Down" are working to create a service offering based on consumer behavior and preferences. It's not just personalized advertising and price policies, but also in the form of exclusive insurance contracts and individual travel packages. With the help of artificial intelligence technologies, travel companies can offer travelers services at the right time, place and price.

In a nutshell, artificial intelligence technology not only makes travel easier, but also makes it a process tailored to needs, safe, convenient and inspiring. Every innovation in the tourism industry is a sure step towards what the future of travel will look like.



Picture-2. Future technologies of artificial intelligence in tourism

A number of measures to increase economic efficiency based on the use of digital technologies and artificial intelligence in tourism policy in our country, in particular in Bukhara, Projects is being implemented. First of all, the "green" project being implemented in the newly built Baku Bukhara tourist ensemble Projects About It is pertinent to emphasize. Because no matter how advanced technology goes, green Territories and ecosystems Creation is the sovereign, to the regions Organizing the flow of tourists becomes difficult.

Artificial intelligence has become a transformative force in the tourism industry, reshaping traditional service models and enabling smart, personalized, and sustainable tourism development. AI-driven technologies improve operational efficiency, enhance customer experience, and support data-driven decision-making.

For regions such as Bukhara, the strategic adoption of artificial intelligence and digital solutions is essential to increase competitiveness and ensure sustainable tourism growth. Future developments in hyper-personalization, biometric identification, and smart tourism ecosystems are expected to further redefine the global tourism landscape.

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