

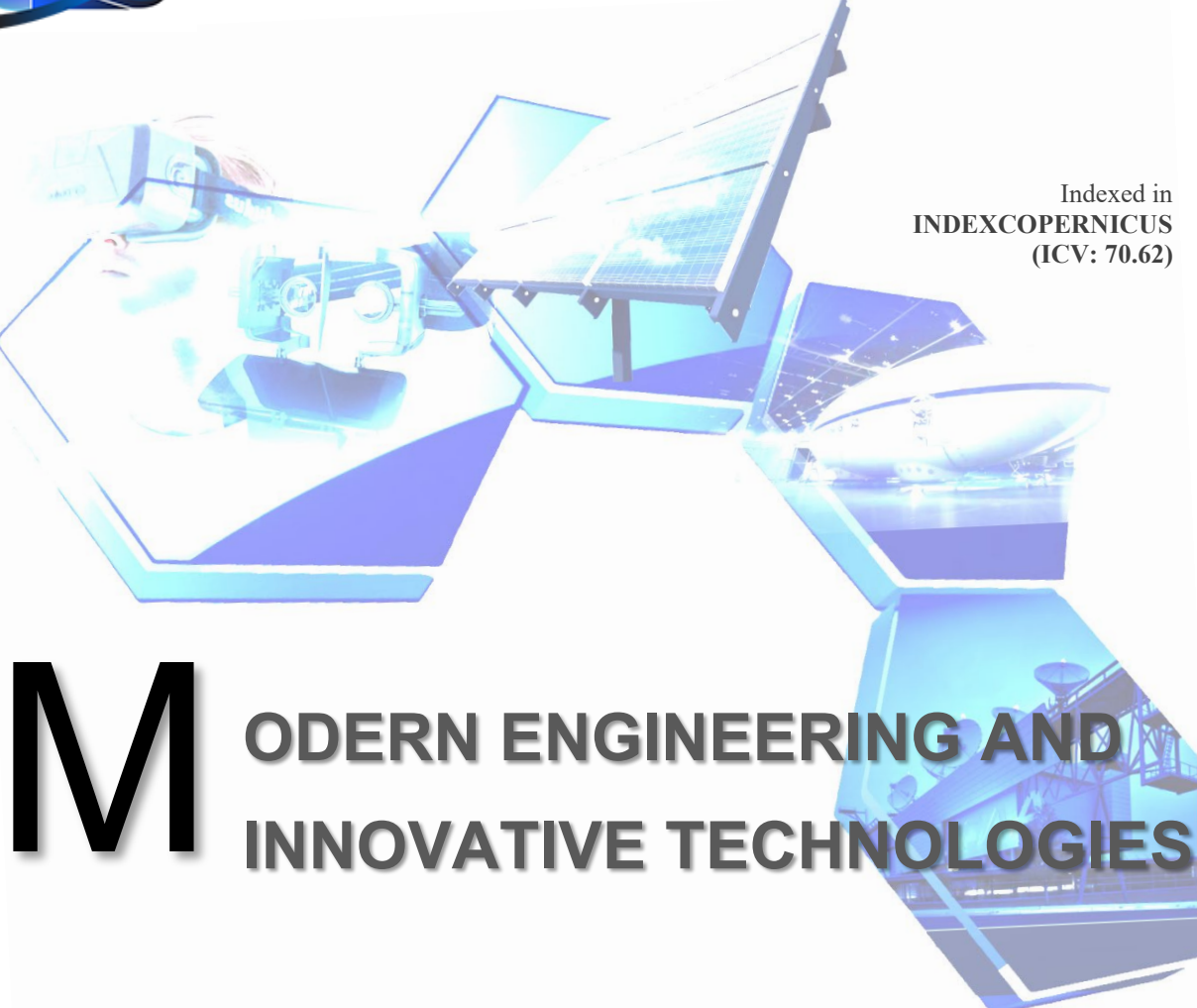


International periodic scientific journal

—*ONLINE*

www.moderntechno.de

Indexed in
INDEXCOPERNICUS
(ICV: 70.62)



MODERN ENGINEERING AND INNOVATIVE TECHNOLOGIES

Issue №44

Part 4

April 2026

Published by:
Sergeieva&Co
Karlsruhe, Germany

Editor: Shibaev Alexander Grigoryevich, *Doctor of Technical Sciences, Professor, Academician*
Scientific Secretary: Kuprienko Sergey, *PhD in technical sciences*

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<https://www.moderntechno.de/index.php/swj/expertteam>

The International Scientific Periodical Journal "**Modern engineering and innovative technologies**" has been published since 2047 and has gained considerable recognition among domestic and foreign researchers and scholars.

Periodicity of publication: 6 times a year

The journal activity is driven by the following objectives:

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The journal is registered in IndexCopernicus, GoogleScholar.

DOI: 10.30890/2567-5273.2026-44-04

Published by:

Sergeieva&Co

Lußstr. 13

76227 Karlsruhe, Germany

e-mail: editor@moderntechno.de

site: www.moderntechno.de



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UDC 338.48:004.9

VIRTUAL TOURS AS A TOOL FOR TOURISM DEVELOPMENT

ВІРТУАЛЬНІ ЕКСКУРСІЇ ЯК ІНСТРУМЕНТ РОЗВИТКУ ТУРИЗМУ

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Abstract. The article examines the role of virtual tours as an innovative tool for tourism development in the context of digital transformation. The impact of modern technologies on the formation of tourist experiences is analyzed. The main types of virtual excursions and platforms for their implementation are identified. It is proved that virtual tours contribute to increasing the accessibility of tourist destinations, improving marketing communications, and expanding the target audience.

Keywords: virtual tours, tourism, digitalization, smart tourism, AR/VR technologies, tourist experience.

Introduction.

In the context of rapid digitalization and the transformation of the global tourism market, innovative technologies are becoming an integral part of tourism activities. The importance of tourism services in the modern world is very significant. They not only contribute to the economic development of regions, but also create jobs, promote cultural exchange, and support the development of infrastructure [5, p. 25].

The development of information technologies, mobile applications, and immersive tools significantly changes the approaches to organizing tourist services and interacting with consumers. A modern tourist often relies on mobile technologies and interactive solutions when planning and experiencing a trip. They expect to receive information about attractions, points of interest, and services in real time, as well as to use audio guides, interactive maps, virtual tours, and other modern tools to ensure a convenient and rich tourist experience [3, p. 261]. In this regard, virtual tours are gaining particular importance as an effective tool for presenting tourist resources and forming consumer interest. The relevance of the study is determined by the need to analyze the possibilities of using virtual excursions as a tool for tourism development, especially in crisis conditions, including restrictions on physical travel.



Main part.

Virtual tours are an innovative form of excursion activity based on the integration of digital technologies into the tourism sector. Their development is directly related to the global processes of digital transformation and the formation of the so-called “experience economy”, where the main value for the consumer is not the service itself, but the impressions and emotions received [1, p. 119]. From a technological perspective, virtual excursions are created using panoramic 360° photography, 3D visualization, augmented reality (AR), virtual reality (VR), and interactive multimedia elements. The purpose of using virtual reality in tourism is to model and create three-dimensional virtual destinations that allow users to interact with tourist objects in a digital environment without physical movement [4].

These technologies allow not only to reproduce the physical characteristics of tourist objects but also to enhance them through additional informational layers, audio guides, animation, and interactive navigation. An important feature of virtual tours is their ability to simulate real presence. Due to immersive technologies, users can independently choose the route, view objects from different angles, interact with elements of the environment, and receive contextual information in real time. This significantly increases the level of user engagement and creates a personalized tourist experience. The implementation of virtual tours significantly affects the development of tourism at both micro and macro levels. At the enterprise level, they become an effective marketing tool that allows tourism companies to present their product in a visually attractive and interactive format. Unlike traditional advertising, virtual tours create a sense of presence, which increases consumer trust and positively influences the decision-making process. The main types of virtual tours used in tourism practice, their characteristics, and areas of application are summarized in Table 1.

At the destination level, virtual excursions contribute to the formation of a positive image and brand of the territory. They allow potential tourists to explore cultural, historical, and natural resources in advance, which increases the attractiveness of the destination and stimulates tourist flows in the future. Another important aspect is the social significance of virtual tours. They ensure the accessibility of tourism for various



categories of the population, including people with disabilities, elderly people, and those who do not have the opportunity to travel due to financial or physical constraints. In this way, virtual excursions contribute to the democratization of tourism and the expansion of its social functions [2, p. 191].

Table 1 – Types of virtual tours in tourism

Type of virtual tour	Technological basis	Key characteristics	Advantages	Limitations	Application areas
360° tours	Panoramic photography	Interactive panoramic viewing	Easy to use, widely accessible	Limited interactivity	Museums, cities, attractions
VR tours	VR devices, 3D modeling	Full immersion and simulation	High engagement, realistic experience	Requires special equipment	Cultural heritage, thematic sites
AR tours	Mobile apps, AR tech	Digital elements over real environment	Interactive and informative	Device-dependent	Urban excursions, open spaces
Video tours	Video, streaming	Guided recorded excursions	Low cost, easy distribution	Passive format	Destination marketing
Live virtual tours	Streaming platforms	Real-time guided interaction	Direct communication with guide	Internet dependency	Education, group tours

Author's development

In addition, virtual tours play a significant role in educational and cultural activities. They are widely used in museums, educational institutions, and cultural organizations as a tool for disseminating knowledge and preserving cultural heritage. The integration of multimedia content, historical reconstructions, and storytelling elements enhances the educational value of such excursions. At the same time, the effectiveness of virtual tours can be evaluated through a system of advantages that reflect their impact on different aspects of tourism development. These advantages cover not only economic outcomes but also social, cultural, and technological dimensions, forming a comprehensive basis for the transformation of the tourism industry in the digital environment.

The key advantages of using virtual tours in tourism and their impact on the development of the industry are presented in Table 2.

**Table 2 – Advantages and effects of using virtual tours in tourism**

Area of impact	Specific advantages	Practical implementation	Economic effect	Social/cultural effect
Marketing	Visualization of destinations, emotional engagement	Virtual previews, promotional campaigns	Increase in demand, higher conversion rates	Formation of positive destination image
Accessibility	Remote access to tourist sites	Online platforms, mobile applications	Expansion of target audience	Inclusion of people with disabilities and limited mobility
Innovation	Integration of AR/VR, interactive technologies	Smart tourism systems, digital platforms	Competitive advantage, modernization of services	Development of digital culture in tourism
Education	Informational content, interactive learning	Virtual museums, educational tours	Development of new educational products	Preservation and dissemination of cultural heritage
Cost optimization	Reduction of physical infrastructure costs	Digital content instead of physical tours	Lower operational costs	More sustainable tourism practices
Crisis management	Continuity of tourism activities	Online excursions during pandemics or conflicts	Support of tourism businesses in crisis conditions	Maintaining interest in destinations
Customer experience	Personalization and interactivity	Custom routes, adaptive content	Increased customer satisfaction and loyalty	Deeper cultural awareness
Branding	Strengthening destination identity	Digital storytelling, immersive presentations	Long-term competitive advantages	Formation of a unique destination image

Author's development

As can be seen from Table 2, virtual tours provide a wide range of benefits, including improved accessibility, enhanced marketing efficiency, and the modernization of tourism services through innovative technologies. They are also an important component of smart tourism, where digital tools improve destination management, optimize services, and enhance interaction with tourists. At the same time, the development of virtual tours faces certain challenges, such as high costs, technical requirements, and insufficient digital competencies. Moreover, they cannot fully replace real travel experiences due to the lack of physical interaction. However,



virtual tours should be considered as a complement to traditional excursions, forming a hybrid model of tourism that is increasingly popular today. Particular relevance of virtual excursions has been observed in crisis situations, such as the COVID-19 pandemic and military conflicts, when traditional tourism activities are significantly restricted. In such conditions, virtual tours become almost the only way to maintain interest in tourist destinations and ensure the continuity of tourism activities [2, p. 194].

Thus, the integration of virtual technologies into excursion activities contributes to the formation of a new paradigm of tourism development, based on innovation, accessibility, and digital interaction.

Conclusions.

The study confirms that virtual tours are an effective and promising tool for tourism development in the context of digital transformation. Their implementation enhances the presentation of tourism products, strengthens marketing communications, and expands interaction with consumers. It has been established that the use of technologies such as 360° visualization, augmented reality (AR), and virtual reality (VR) significantly improves the tourist experience by increasing immersion, interactivity, and user engagement. This positively influences consumer behavior and decision-making processes. Virtual tours perform multiple functions in tourism, including marketing, educational, social, and cultural roles. As demonstrated in Table 2, they contribute to increasing accessibility, expanding the target audience, and strengthening the image and competitiveness of tourist destinations. At the same time, certain challenges remain, such as high development costs and the need for appropriate technical and professional resources. In addition, virtual tours cannot fully replace real travel experiences. Therefore, virtual tours should be considered as a complementary tool that forms a hybrid model of tourism, combining digital and physical experiences. Their further development will contribute to the modernization and sustainable growth of the tourism industry.



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Анотація. У статті досліджено роль віртуальних екскурсій як інноваційного інструменту розвитку туризму в умовах цифрової трансформації. Проаналізовано вплив сучасних технологій на формування туристичного досвіду. Визначено основні види віртуальних екскурсій та платформи їх реалізації. Доведено, що віртуальні тури сприяють підвищенню доступності туристичних дестинацій, покращенню маркетингових комунікацій та розширенню цільової аудиторії.

Ключові слова: віртуальні екскурсії, туризм, цифровізація, смарт-туризм, AR/VR технології, туристичний досвід.