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VR in promotion of territory in the New Normal: empirical and research approaches in the times of crisis

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Abstract. In the New Normal, the most sought-after tools for territory promotion are digital and immersive, and closely intertwined with virtual reality technologies. This research centers on VR projects in Switzerland and Russia, two countries representing contrasting situations in the current tourist and promotion of territory landscape of 2023. The findings of the prior research on the incorporation of immersive VR technology in territory promotion in Switzerland with analogous research conducted in Russia are compared. By examining both theoretical and empirical data, including data analysis and semi-structured interviews with VR project managers in Switzerland and owners/managers in Russia, differences between Switzerland and Russia are identified. A spreading value-centered qualitative approach in English- and French-language scientific discourse on VR-driven territory promotion is connected with cultural heritage and sustainable consumption and is novel for Russia. Conceptual frameworks in this scientific field are still in their early stages. In Switzerland, the VR projects are more complex and are used as a part of territory and corporate promotion, despite the not valuecentered, but economic motivation. In Russia, VR is viewed as the next stage in the evolution of travel viewing and recreation, and it serves as an advertising tool to attract travelers to territory attractions. The ideas of VR-tours are connected with the past, and historical and cultural heritage. The best projects demonstrate the feasibility of combining on-site visits, VR, and sustainability awareness. VR-project in this case is the instrument of saving today's territory images and brands, and involve audience in active sustainable consumption.

Keywords: immersive promotion of territory, virtual reality, digital, hybrid, phygital, content, omnidirectional experience, value-centred approach, sustainable consumption

Conflicts of interest. The authors declare that there is no conflict of interest.

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VR в продвижении территории в условиях «новой нормальности»: эмпирические и исследовательские подходы во времена кризиса

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Аннотация. В условиях «новой нормальности» наиболее востребованными инструментами продвижения территорий являются цифровые и иммерсивные инструменты, в том числе виртуальной реальности. В исследовании проанализированы теоретические и эмпирические подходы проектов виртуальной реальности в Швейцарии и России, туриндустрии которых находятся на различных полюсах индустриального ландшафта в 2023 г. Распространяющийся ценностно ориентированный качественный подход в англо- и франкоязычном научном дискурсе по VR-продвижению территорий связан с культурным наследием и устойчивым потреблением, что является новым для России. Анализ полуструктурированных интервью с менеджерами VR-проектов также выявил различия. В Швейцарии VR-проекты более сложны и используются для территориального и корпоративного продвижения, несмотря на экономическую, а не ценностно ориентированную мотивацию. В России VR рассматривается как следующий этап эволюции туристического отдыха и инструмент рекламы достопримечательностей. Идеи VR-туров связаны с прошлым, историческим и культурным наследием. Лучшие VR-проекты демонстрируют возможность сочетания визитов на места, виртуальной реальности и продвижения идей устойчивого развития. VR-проект в данном случае является инструментом сохранения образов и брендов территорий, вовлечения аудитории в активное устойчивое потребление.

Ключевые слова: иммерсивность, новая нормальность, виртуальная реальность, цифровой, гибридный, физический, контент, разносторонний опыт, ценностно ориентированный подход, устойчивое потребление

Заявление о конфликте интересов. Авторы заявляют об отсутствии конфликта интересов.

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Introduction

The New Normal as a permanent crisis framework for promotion of territory is a problem. The World Tourism Organization, analyzing the impact of the special operation on the travel market, came to the conclusion that the protracted conflict could lead to a loss of \$14 billion in tourism revenues worldwide by the end of 2022. Conflict at the Far East at the end of 2023 also demonstrates the fragility of traditional territories famous due its tourist potential before. However, as traditional borders, the images of territory and its off-line promotion are collapsed and became a thing of the past.

In the era of the New Normal, the promotion of territories, whether on a global or national scale, is undergoing a transformation, shifting from traditional economic incentive models to those rooted in values (Han, 2021). In this perspective, communication is viewed as the dissemination of the values associated with a territory brand among stakeholders (Verma et al., 2022). The focal points for enhancing the effectiveness of territory promotion encompass omni-channel promotion and intricate personal immersive involvement and experience (Wirth, Shilina, 2023).

Presently, the most sought-after tools for territory promotion are digital, particularly in the post-COVID era. Primarily, these digital and internet-driven strategies enable audiences to engage in personalized, direct, 24/7, hybrid communication. These strategies are closely intertwined with technologies that afford the public a realistic, virtual, and/or hybrid visual encounter with the territory (Pestek, Sarvan, 2021). The most comprehensive communicative experiences with territories are facilitated by virtual reality (VR) technology, contingent on the level of user acceptance of the technology (Stienmetz et al., 2022).

Technologically, virtual reality is defined as a three-dimensional (3D) interactive computer-generated environment that incorporates a first-person perspective. It involves partial or complete, or hybrid (4D) immersion in the virtual/hybrid environment, whether distant or on-site, along with physical tactile sensory stimulation and other hybrid effects, providing a specific sense of "telepresence" (Steuer, 1992).

In a 3D project, users experience the illusion of being in a wholly different environment due to this omnidirectional encounter. In the realm of territory marketing, 360-degree virtual reality videos (360° VR videos) are gaining popularity. These videos offer advantages such as more intricate information, a higher level of interactivity, and a greater sense of immersion, presence, and embodiment, surpassing even classical 2D-based videos. The 360° VR videos expand the field of view and enhance the user's freedom to direct their attention (Choi, Nam, 2022).

Since the initial forays into virtual tourist tours in the mid-1990s, virtual reality technology has captured the attention of target audiences, providing a unique tourism experience and introducing specific dimensions of the real world to forge new models of reality cognition (Flavián et al., 2019). The surge in virtual tours during the COVID-19 pandemic underscores the worldwide public's interest in this type of experience.

In Russia, a recent online survey spanning 45 regions reveals that nearly half of respondents believe virtual reality can enhance the process of selecting a destination, making it more engaging. But demand for VR in tourist sphere in Russia is just beginning to emerge (Kartasheva et al., 2022).

In the New Normal, characterized by reduced and restructured tourist flows, virtual reality, as a significant technological shift, both digital/distant and hybrid/phygital, has the potential to introduce new challenges in the practical and research domains of territory promotion.

Research problem and methodology

In this research, we focus on the evolving landscape of territory promotion and its methodologies, both empirically and in terms of academic research, within the context of the New Normal. Our investigation centers on VR projects in Switzerland and Russia, two countries representing contrasting situations in the current tourist and promotion of territory landscape of 2023. To gain deeper insights, we address the following research questions:

RQ1a: What are the latest approaches in scientific research on the practical application of virtual reality (VR) in territory promotion in the New Reality?

RQ1b: Do these approaches emphasize values?

RQ2a: Does the integration of virtual reality in the practice and research of territory promotion differ between Switzerland and Russia in the New Reality?

RQ2b: If there are differences, what distinguishes the empirical and theoretical approaches?

We compare the findings of our prior research on the incorporation of immersive VR technology in territory promotion in Switzerland (2023) with analogous research conducted in Russia (2023). By examining both theoretical and empirical data, including data analysis and semi-structured interviews with VR project managers in Switzerland (n = 12) and owners/managers in Russia (n = 5), we identify key factors and approaches that motivated these entities to provide virtual experiences to their audiences during the New Normal.

Results and discussion

Conceptual framework. Despite the extensive exploration of virtual reality in various domains, such as education and professional training, spanning over twenty-five years, its application in territory promotion is relatively new. As of the 2020s, scientific research on VR technologies in promotion of territory is still in its early stages.

An analysis of international scientific discourses from 2015 to 2023 (n = 74) reveals a growing interest in exploring the affective potential of VR in territory promotion. While these tools are considered potentially effective, debates persist about their effects on target audiences. In the English-language discourse, VR efficiency is often measured by its real economic impact, whereas French-speaking researchers emphasize cause-and-effect relationships and conceptual value.

At the initial stage, the researchers investigated VR as a technological mode of travel that provides a person with a virtual experience in a 3D environment created using computer technology.

Researchers describe immersive, realistic and authentic sensory involvement in tourism, without physically moving (Lee, Kim, 2021). New experiences using in situ VR have also increased in the field of territorial promotion (Kim, Lee, Jung, 2020; Kim, Lee, Preis, 2020). The technology-centred approach is still

the main one. The research of VR technology experience of the public communication with a territory in virtual reality is possible to define as a quantitative one.

The emergence of VR technology has led to new research questions and a qualitative shift in scientific dialogue. It is mentioned that VR has great potential in various sub-sectors of place promotion: notably in the cultural heritage or sustainable development (Wirth, Shilina, 2023). The latest researches suggest that VR technology offers specific dimensions of the real world to create new models of reality cognition and positively influence audiences (Lee, Kim, 2021; Volkova, 2019). In the New Normal, researchers posit that VR technologies can impact the sustainable development of territories by promoting socially responsible destinations and practices (Zhu et al., 2023).

However, over the last decade, global research discourse on territory promotion has evolved from viewing VR as a technological mode of travel to recognizing its potential in cultural heritage, sustainable development, and influencing socially responsible consumption (Flavián et al., 2019; Wirth, Shilina, 2023). In Switzerland, the pioneering researchers in this field were made by the researchers of University of Applied Sciences and Arts Western Switzerland.

In the Russian research discourse, there is a notable lack of significant studies, during the New Normal crisis in particular, both theoretically and empirically, owing to the nascent implementation of VR technology. Theoretical and methodological approaches with a value-centered focus are just beginning to develop (Gorlova et al., 2020). In 2022, global economic, political, and cultural shifts prompted the need for operational changes in the promotion of Russian territories, as outlined in state documents like the "Strategy for Spatial Development of the Russian Federation until 2030", and the Roadmap for the development of virtual and augmented reality technologies by Ministry of economic Development of RF (2019), and other initiatives for the digitalization of territories.

The literature review indicates a growing value-centered qualitative approach in English- and French-language scientific discourse on VR-driven territory promotion, highlighting its novelty for Russia. This approach is connected with cultural heritage and sustainable consumption, but conceptual frameworks in this scientific field relevant to modern marketing person- and value-centered paradigms are still in their early stages.

Empirical research results. Factors such as presence, immersion, and sensory stimulation motivate users to engage with VR projects and subsequently visit a particular area. Semi-structured interviews with VR project managers and owners (n = 5 in Switzerland, n = 5 in Russia) revealed parameters for integrating VR technology into communication strategies of territory.

All the respondents in Switzerland and Russia emphasized "quantitative" factors that go beyond the increase in tourist flows, such as access to inaccessible places to make historical or cultural content accessible to the public. VR serves as a means to access sites temporarily unavailable due to restoration or restrictions. For instance, in Switzerland, the Red Bull The Edge – Matterhorn VR project offers an eco-friendly solution for experiencing mountain travel when real alpine experiences pose safety and environmental challenges. VR is used to raise awareness of climate change, as seen in exhibitions focusing on glacial retreat. VR-visitors are encouraged to understand and imagine the future of the environment by taking

global warming into account, especially concerning glaciers (Diavoles in canton of Graubünden, and Naters in canton of Valais). Nanters presents Jungfrau, the largest Alpine glacier, a UNESCO world heritage site, and offers an exhibition with interactive multisensory terminals, touch screens and virtual experiences, like a virtual journey around the great glacier to feel the effects of global warming in the Alps across generations. In both cases, the objective of promoting local heritage is coupled with the objective of educating and raising visitors' awareness of climate change through glacial retreat. The results of the interviews in Switzerland show that the economic reasons in contradiction to development of value-centred behavior are primary motivation of the companies interviewed.

In Russia, VR projects are still rare and predominantly focus on historical heritage. Examples include the "Discover Moscow" project, recognized internationally (the winner of the international WSIS Prizes 2022). This full-fledged interactive city guide (including a portal and an application) helps to explore the city and its history, including more than 3.6 thousand objects in total in different formats, and 3D excursions and the application, appeared in 2023. "Moscow that never existed" presents a VR-travel through the grandiose projects of Soviet architects of the avant-garde period of the 1920s, the Stalin era and the post-war period, which were not implemented due to economic and political reasons. In Kazan, the VR-project "Perekhod" presents three locations of the city, as an entire journey into the past with comparison with modern city to see how it has changed. In Kaliningrad, at the Museum of the World Ocean, visitors can take a virtual dive into the depths of the world's oceans, where the crew of the famous bathyscaphe "Mir-1" visited. There are VR tourist destinations to Altai or Crimea. Some travel agencies use VR glasses to get audiences an idea of different tourist regions and choose a paradise for upcoming vacation like the tour operator TUI.

The analysis of the expert interviews shows the traditional quantitative approaches to the VR-projects. The Russian VR market follows the general trend and the country has enough applications and solutions in this segment – both presentational and educational. VR can be compared to the next stage in the evolution of travel viewing, but as a type of leisure does not replace real tourism. VR travel catalogues will be developed, giving the opportunity to see a "demo version" of the upcoming trip. The main idea of the VR product is the creation of digital cultural heritage and its popularization using modern technologies. VR is viewed as the next stage in the evolution of travel viewing, not experiencing, and serves as a marketing tool to attract travelers. According to E. Kartasheva, V. Raik, D. Tsarev (2022), the capabilities of VR are still little known to the general public and underestimated by potential consumers of the product.

Conclusion

Our research is limited by the tiny number of projects to study, but it is possible to emphasize a few key results. Presently, VR projects are among the rather new and effective tools of the promotion of territory, both in Switzerland and Russia, although two countries represent contrasting situations in the current crisis tourist landscape of 2023. The practice and research of territory promotion differ between Switzerland and Russia.

The literature review indicates technology-centred, "quantitative", than value-based, "qualitative" approach. But a value-centered qualitative approach in English-and French-language scientific discourse on VR-driven territory promotion is growing, highlighting its novelty for Russia. This approach is connected with cultural heritage and sustainable consumption. Conceptual frameworks relevant to modern person- and value-centered paradigms are still in their early stages. In other words, the theoretical approaches have to be revised and new frameworks be built.

In Switzerland, the VR projects are more complex and are used as a part of territory and corporate promotion, although the primary motivation for VR projects is not the development of value-centered behavior, but economic reasons. More and more projects are built for an active VR-tourism. In Russia, VR is viewed as the next stage in the evolution of travel viewing and recreation, and it serves as an advertising tool to attract travelers to territory attractions. Traditionally, the ideas of VR-tours are connected with the historical and cultural heritage.

What are the prospects? The study respondents express their intention to continue using VR tourism to satisfy their desire to travel. According to Swiss and Russian experts, economic considerations have not prioritized replacing virtual visits with on-site visits. It should not be forgotten that the income generated by in situ travel exceeds that generated by ex situ travel.

The best Swiss projects demonstrate the feasibility of combining on-site visits, VR, and sustainability awareness. VR-project in this case is the instrument of saving today's territory images and brands, and involve audience in active sustainable consumption.

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