

From Heritage to Hashtags: Enhancing the Visibility of Khorezm's Tourism through Digital Technologies

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Abstract: This article explores the current state and future potential of promoting tourism destinations in the Khorezm region of Uzbekistan through information and communication technologies (ICTs). Using a combination of field observations, surveys, and stakeholder interviews, the research focuses on three key areas: the historic Ichan-Qal'a complex, the modern Khiva Arda City complex, and lesser-known rural tourism sites outside Khiva. The findings reveal that despite Khorezm's rich cultural and historical assets, the region suffers from weak digital visibility and fragmented online promotion strategies. The study highlights the lack of multilingual content, interactive tools, and social media engagement across key tourism platforms. It further identifies gaps in digital literacy, infrastructure, and collaboration among regional stakeholders. Drawing from international best practices in smart tourism and digital marketing, the article proposes a set of strategic recommendations to enhance Khorezm's digital tourism ecosystem. These include unified digital branding, content creation support for rural entrepreneurs, and the development of ICT-based tourism education. The research contributes to the broader discourse on sustainable regional tourism by emphasizing the role of ICTs in increasing accessibility, inclusivity, and competitiveness in culturally rich but digitally underserved destinations.

Keywords: Digital tourism, ICT in tourism, Smart destinations, Khorezm region, Ichan-Qal'a, Tourism marketing, Rural tourism promotion.

Introduction. Tourism has become one of the fastest-growing sectors in the global economy, driven in large part by advances in information and communication technologies (ICTs). Digital transformation has revolutionized the way destinations are promoted, tourists make travel decisions, and services are delivered. In this context, ICTs play a fundamental role in increasing the visibility, accessibility, and competitiveness of tourism destinations (Gretzel, Sigala, Xiang, & Koo, 2015). The use of social media, virtual tours, mobile applications, and destination websites enables tourists to obtain information, plan their trips, and share their experiences in real-time. Research suggests that destinations that actively employ ICTs tend to attract more tourists and generate higher economic returns (Mariani et al., 2016). Furthermore, the integration of digital platforms supports sustainable tourism by facilitating data collection and informed decision-making by stakeholders. In developing regions like Uzbekistan, the strategic application of ICT tools in tourism promotion remains underutilized but holds significant potential. In particular, the Khorezm region, known for its rich historical heritage and unique cultural landscapes, lacks a cohesive digital strategy to attract international tourists. The growing global

dependence on digital information requires that regions such as Khorezm invest in modern ICT-based promotional methods to enhance their tourism appeal and competitiveness.

Several scholars have emphasized the importance of aligning regional tourism development with digital innovation to create smart destinations (Buhalis & Amaranggana, 2015). A smart destination leverages ICTs to improve the efficiency of resource use, enhance visitor experiences, and integrate local communities into tourism planning and promotion. However, many heritage-rich regions, especially in Central Asia, face challenges in adopting such approaches due to limited digital infrastructure, low institutional capacity, and lack of digital content. Khorezm's cultural sites, including the ancient city of Khiva, are recognized by UNESCO and offer great tourism value, yet are not adequately represented in global digital spaces. A comparative study by Sigala (2018) found that regions with strong digital storytelling and multi-platform engagement attract more diverse tourist demographics. Moreover, user-generated content through platforms like Instagram, TripAdvisor, and Google Reviews can significantly influence destination image and tourist decision-making (Zeng & Gerritsen, 2019). Despite these global trends, Khorezm has yet to fully capitalize on digital marketing tools such as search engine optimization (SEO), geotagging, and interactive content creation. Bridging this digital divide requires collaboration between government bodies, tourism operators, and technology providers. This paper aims to address this gap by exploring how ICTs can be used to promote Khorezm's tourism potential more effectively and sustainably.

In light of these considerations, this study investigates the current state of ICT usage in promoting tourism destinations within the Khorezm region and offers practical recommendations for improvement. By assessing both the opportunities and limitations of digital tourism promotion, this research seeks to provide a framework for enhancing regional tourism competitiveness. Previous studies have shown that effective digital promotion not only attracts tourists but also contributes to the preservation of local heritage by raising awareness and generating economic support (Femenia-Serra & Ivars-Baidal, 2020). Through field research, content analysis of existing digital platforms, and stakeholder interviews, this paper identifies critical gaps in the current digital landscape of Khorezm tourism. The research contributes to the broader discourse on digital transformation in tourism, with a focus on culturally rich but underrepresented destinations. Furthermore, the paper highlights best practices from comparable regions that have successfully leveraged ICTs for destination marketing. Understanding the role of ICTs in shaping tourist behavior and perceptions is essential for designing effective digital strategies (Xiang et al., 2021). As Uzbekistan continues its national tourism development efforts, integrating Khorezm into a robust digital promotion framework is both timely and necessary. The findings aim to support policymakers, tourism professionals, and digital innovators in crafting collaborative, data-driven solutions for sustainable regional tourism growth.

Literature Review. The application of information and communication technologies (ICTs) in tourism has transformed the way destinations are promoted and experienced globally. Scholars agree that ICTs enhance tourism visibility, facilitate planning, and improve visitor satisfaction through real-time services and multimedia content (Buhalis & Sinarta, 2019). In the case of the Khorezm region, historical sites like *Ichan-Qal'a*—a UNESCO World Heritage Site in Khiva—illustrate the untapped potential of digital tools. While this walled inner city attracts many domestic and foreign visitors, its online presence remains limited to static websites and sparse user-generated content. Comparatively, heritage destinations in Europe have adopted virtual tours, QR-code storytelling, and multilingual apps to immerse tourists digitally before they arrive (Femenia-Serra & Neuhofer, 2018). *Ichan-Qal'a* could similarly benefit from a more dynamic digital identity, such as interactive maps, virtual museum exhibits, and AI-generated guides. As Xiang et al. (2021) note, digital engagement increases emotional connections with sites, especially among younger and international audiences. Moreover, integrating local narratives and legends through digital platforms would enrich the authenticity of the visitor experience. Strengthening the ICT presence of *Ichan-Qal'a* would not only promote cultural appreciation but also support heritage conservation by attracting sustainable tourism investments.

Beyond historical cores, modern tourism complexes like *Khiva Arda City* demonstrate how ICTs can be used for branding and visitor engagement in newly developed destinations. Designed as a cultural-entertainment center that blends traditional architecture with modern services, Khiva Arda offers a unique opportunity to showcase Khorezm's living heritage through digital platforms. Yet, as of now, its online representation lacks interactive content, multi-language support, and social media campaigns targeted at international markets. According to Sigala (2018), emerging destinations should use social media storytelling and influencer collaborations to rapidly build visibility and emotional appeal. Mobile apps or augmented reality (AR) experiences featuring traditional Khorezmian music, crafts, and cuisine could enhance Khiva Arda's attractiveness to digital-savvy tourists. As Buhalis and Amaranggana (2015) point out, such innovations are key to building "smart tourism destinations" that are responsive to visitor expectations. Furthermore, real-time digital feedback, online booking systems, and tourist-generated content (e.g., vlogs, blogs, hashtags) could help this modern complex compete with more established destinations. In Khiva Arda City's case, using ICTs not only enhances the tourist experience but also creates employment and marketing opportunities for local communities. This aligns with broader goals of inclusive tourism and digital development in Uzbekistan's western regions.

In addition to Khiva's urban attractions, the rural areas of Khorezm offer significant potential for *eco-tourism and cultural immersion experiences*, which remain largely underrepresented in digital tourism materials. Villages with traditional craft workshops, folk music schools, and eco-agriculture initiatives could attract niche markets seeking authentic, off-the-beaten-path travel (Navío-Marco et al., 2018). However, these areas suffer from poor digital visibility, minimal online content in foreign languages, and lack of digital infrastructure. Research by Zeng and Gerritsen (2019) emphasizes the importance of online platforms for promoting rural tourism, particularly when tourists rely on search engines and social media to discover new experiences. Interactive rural tourism maps, short videos showcasing local customs, and partnerships with travel bloggers could help promote these regions. For example, a virtual journey along the Amudarya River, or a storytelling series on the life of Khorezmian farmers, would add depth to the destination image. According to Femenia-Serra and Ivars-Baidal (2020), successful ICT use in rural tourism depends not only on access to technology but also on content development rooted in local identity. Training local youth and entrepreneurs to manage social media pages, design content, and engage with audiences could build sustainable digital promotion ecosystems. Thus, incorporating rural destinations into Khorezm's broader digital tourism strategy would diversify offerings and extend tourist stays.

Finally, scholars underline that without institutional coordination and digital capacity building, ICT applications in tourism may fail to yield long-term results (Ivars-Baidal et al., 2019). In Uzbekistan, the "Digital Uzbekistan 2030" initiative lays a foundation for tourism digitization, but local implementation—especially in regions like Khorezm—requires more targeted support. Collaborative efforts involving universities, local governments, and private stakeholders can lead to innovative and sustainable digital tourism promotion. For instance, Urgench State University and tourism boards could co-create multilingual content and establish media labs for training students in digital storytelling. As noted by Neuhofer, Buhalis, and Ladkin (2017), integrating cultural values with digital innovation is crucial for authenticity and community inclusion. The use of technologies such as geotagging, AI travel chatbots, and 360-degree video tours of Ichan-Qal'a and Khiva Arda City would align with global trends in smart tourism. Furthermore, data analytics from online behavior could guide future marketing campaigns and infrastructure investments. Khorezm's unique blend of history, art, and community life makes it an ideal candidate for a regionally led, ICT-based tourism revival. This literature supports the idea that combining local cultural assets with global digital practices is the key to sustainable and inclusive destination promotion.

Discussion. The findings of this study confirm that while Khorezm possesses significant tourism assets—such as the Ichan-Qal'a complex and Khiva Arda City—its digital tourism promotion

remains underdeveloped. As earlier literature emphasized, ICTs are essential in shaping the online image of destinations and influencing tourist decision-making (Xiang et al., 2021; Sigala, 2018). In the case of Ichan-Qal'a, although it is a UNESCO-listed site with deep historical value, its representation on digital platforms is limited and often outdated. This contrasts with global practices where virtual tours, interactive maps, and multilingual content play a key role in heritage site promotion. A lack of structured digital content and absence of engaging storytelling diminish Khorezm's competitive position, especially among international travelers seeking rich cultural experiences online before booking. Moreover, tourists interviewed during the study indicated they relied heavily on user-generated content and social media when choosing destinations—areas where Khorezm currently lacks visibility. This aligns with Zeng & Gerritsen's (2019) findings that social media serves as a primary driver of destination image. Therefore, there is an urgent need to digitize Khorezm's cultural narrative and create compelling content tailored to different audiences. This includes not only improving institutional websites but also involving local influencers, photographers, and youth in digital tourism campaigns.

The emergence of *Khiva Arda City* as a modern tourism complex presents an opportunity to apply ICT strategies from the outset. However, findings indicate that the complex has not yet adopted tools like mobile apps, digital ticketing, or virtual tours that enhance user experience and engagement. This represents a missed opportunity for innovation, especially when compared to new smart tourism hubs globally (Buhalis & Amaranggana, 2015). As a newly built destination, Khiva Arda City could serve as a pilot site for smart tourism features, integrating AR-guided tours, AI-powered visitor chatbots, and real-time data tracking to monitor tourist flows. Creating a digital identity for Khiva Arda through visual storytelling on Instagram, YouTube, and TikTok could attract younger tourists and diaspora audiences. The current lack of foreign-language content and limited use of hashtags weakens its global outreach. As discussed in the literature, early-stage digital strategies often determine long-term brand strength and tourist loyalty (Femenia-Serra & Neuhofer, 2018). Encouragingly, stakeholders expressed willingness to collaborate with universities and tech companies to improve digital tools, but emphasized the need for training and funding. Therefore, targeted investments and public-private partnerships could accelerate the integration of ICTs into Khiva Arda's development plans. This case demonstrates the importance of proactive digital planning in shaping a new destination's visibility and sustainability.

Another key point highlighted by the study is the *underrepresentation of rural and ecological tourism sites* outside Khiva in online content. Villages known for handicrafts, traditional cuisine, and natural landscapes have the potential to support cultural and eco-tourism but remain digitally invisible. This disconnect limits diversification in the region's tourism offerings and contributes to overcrowding in central Khiva. Previous research shows that developing rural tourism through digital platforms can spread economic benefits more evenly and promote cultural preservation (Navío-Marco et al., 2018). For instance, virtual tours of yurt stays, Amudarya riverbank eco-lodges, or seasonal folk festivals could enrich Khorezm's digital narrative. However, local entrepreneurs often lack the digital literacy and technical tools to create or manage such content. The discussion with local stakeholders revealed a need for ICT training programs, social media management workshops, and incentives for digital innovation in rural areas. Integrating these lesser-known destinations into regional tourism apps and maps would encourage longer tourist stays and more sustainable visitor distribution. Thus, ICT-based promotion must expand beyond Khiva city to embrace the full geographic and cultural diversity of the Khorezm region.

Finally, this research highlights a broader systemic issue: the *lack of coordinated digital tourism governance* at the regional level. While national programs such as "Digital Uzbekistan 2030" aim to modernize the country's digital infrastructure, their impact on regional tourism promotion has been uneven. Local tourism boards and city administrations often work in silos, without a unified digital strategy or content calendar. This fragmented approach contrasts with global best practices where destination marketing organizations (DMOs) operate as centralized hubs for content creation, data analysis, and audience targeting (Ivars-Baidal et al., 2019). Stakeholders

from Khorezm emphasized the need for a regional digital tourism office that could lead campaigns, coordinate between actors, and ensure quality standards in online materials. The creation of a regional tourism media lab—possibly in partnership with Urgench State University—could support innovation and provide students with practical skills in tourism technology. Moreover, adopting performance metrics, such as web traffic analytics and engagement rates, would allow data-driven improvement of digital strategies. A shift toward integrated, collaborative digital tourism planning is essential if Khorezm is to compete in the modern tourism landscape. In sum, the findings underscore the importance of aligning digital infrastructure, content creation, and policy frameworks for sustainable tourism promotion through ICTs.

Results. The results of the study indicate that *digital visibility of major heritage sites in Khorezm, particularly the Ichan-Qal’a complex*, remains limited and outdated on most global travel platforms. Content analysis of official tourism websites and social media channels showed that Ichan-Qal’a is often promoted using generic photographs and brief historical notes, with very little interactive or multilingual content. Survey responses from 50 domestic and international tourists revealed that 78% used online sources before visiting Khiva, but only 26% found the official content useful or engaging. Many tourists instead relied on content from individual bloggers or review platforms like TripAdvisor. Additionally, there was no official mobile application or virtual tour for the Ichan-Qal’a complex, despite increasing demand for such tools. Stakeholders from local tourism offices confirmed the lack of human resources and funding dedicated to digital promotion. Interviews with local guides also highlighted the absence of QR-coded self-guided experiences or digital storytelling features on-site. These findings suggest a significant gap between the cultural value of Ichan-Qal’a and its digital representation, limiting its potential to attract diverse international visitors.

A second major finding relates to *Khiva Arda City*, a modern tourism-entertainment complex that has not yet developed a strong digital identity despite its recent launch. Observations and interviews with staff revealed that while the complex offers rich cultural experiences such as open-air performances, craft fairs, and themed architecture, it lacks a structured digital marketing strategy. The official website is still under construction, and no mobile application or digital ticketing system is currently in place. Moreover, only 17% of visitors surveyed had heard about Khiva Arda through online advertisements or social media promotions. This contrasts with tourists’ expressed expectations—over 65% of respondents said they prefer destinations with strong social media presence, mobile apps, or online previews. Analysis of hashtags and mentions related to Khiva Arda on Instagram and TikTok revealed low engagement rates and inconsistent branding. While the site has visual appeal ideal for digital storytelling, it is not actively leveraging user-generated content or influencer marketing. These results point to missed opportunities for positioning Khiva Arda City as a digitally integrated tourism product for domestic and international markets.

The third key result concerns the *digital absence of rural and ecological tourism sites outside Khiva*, which possess strong potential for cultural tourism. Interviews with local entrepreneurs in Gurlan and Yangibozor districts showed that traditional craft centers, eco-lodges, and culinary experiences are developing, but receive minimal online exposure. Less than 10% of rural tourism providers surveyed had their own websites or active social media pages. Many expressed a desire to promote their services digitally but cited lack of skills, internet access, or funding. Tourists visiting Khorezm often remain unaware of these rural attractions due to their exclusion from digital maps and tourism itineraries. Furthermore, no centralized regional app or tourism portal currently integrates both urban and rural offerings across Khorezm. These results highlight the uneven distribution of digital resources, with most ICT-based promotion focused narrowly on central Khiva. The findings emphasize the need to build digital infrastructure and human capacity in rural tourism zones to support more inclusive and diversified tourism development.

Conclusion. This study examined the current state of ICT-based tourism promotion in the Khorezm region, with a focus on prominent destinations such as the Ichan-Qal'a complex, Khiva Arda City, and rural areas beyond Khiva. The results revealed a significant gap between Khorezm's rich tourism potential and its digital visibility on global platforms. While there is growing recognition of the importance of digital transformation in tourism, efforts in Khorezm remain fragmented and under-resourced. Ichan-Qal'a, despite its UNESCO status, lacks interactive and multilingual content that could attract a broader audience. Similarly, Khiva Arda City, though new and full of potential, has not yet established a strong digital identity. The study also found that rural tourism assets are largely invisible online, with limited digital infrastructure and little support for content creation. These challenges suggest the need for a comprehensive, coordinated, and inclusive digital strategy for the region. The integration of ICTs must be aligned with local capacity-building, storytelling, and regional branding to maximize impact. The findings contribute to the growing literature on digital tourism in heritage-rich but digitally underserved regions and offer practical directions for sustainable tourism development.

Recommendations. To enhance the digital promotion of Khorezm's tourism destinations, the following recommendations are proposed:

- **Develop a unified digital tourism strategy** for Khorezm that includes Ichan-Qal'a, Khiva Arda City, and rural tourism clusters under one regional brand.
- **Create an official multilingual tourism portal and mobile application** that offers virtual tours, booking options, interactive maps, and event calendars.
- **Digitize the Ichan-Qal'a experience** by incorporating QR-code guides, 360° video content, augmented reality (AR) features, and online exhibitions.
- **Establish a digital media team or regional tourism innovation lab** (possibly at Urgench State University) to train students and local businesses in tourism-focused ICT tools.
- **Support local entrepreneurs and rural tourism providers** with small grants, digital literacy workshops, and content creation toolkits (e.g., photography, social media, SEO basics).
- **Leverage social media marketing** by creating engaging storytelling campaigns, collaborating with travel influencers, and encouraging user-generated content through hashtags and contests.
- **Monitor digital performance** using web analytics, visitor feedback, and platform engagement to guide continuous improvement of digital strategies.
- **Encourage public-private partnerships** to fund and implement smart tourism solutions such as digital ticketing, AI chatbots, and real-time visitor data analysis.
- **Include digital promotion in regional tourism policy planning**, ensuring that ICTs are prioritized alongside infrastructure and heritage conservation efforts.

References.

1. Buhalis, D., & Amaranggana, A. (2015). Smart tourism destinations enhancing tourism experience through personalisation of services. *Information and Communication Technologies in Tourism 2015*, 377–389. https://doi.org/10.1007/978-3-319-14343-9_28
2. Buhalis, D., & Sinarta, Y. (2019). Real-time co-creation and nowness service: Lessons from tourism and hospitality. *Journal of Travel & Tourism Marketing*, 36(5), 563–582. <https://doi.org/10.1080/10548408.2019.1618781>
3. Choe, Y., & Kim, J. (2018). Effects of tourists' photographs on destination image formation: Focused on visual content shared on social media. *Tourism Management Perspectives*, 28, 190–200. <https://doi.org/10.1016/j.tmp.2018.09.005>

4. Femenia-Serra, F., & Ivars-Baidal, J. A. (2020). Do smart tourism destinations really work? The case of Benidorm. *Journal of Destination Marketing & Management*, 18, 100509. <https://doi.org/10.1016/j.jdmm.2020.100509>
5. Femenia-Serra, F., & Neuhofer, B. (2018). Smart tourism experiences: Conceptualization, key dimensions and research agenda. *Journal of Regional Research*, 42, 129–150.
6. Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: Foundations and developments. *Electronic Markets*, 25(3), 179–188. <https://doi.org/10.1007/s12525-015-0196-8>
7. Hays, S., Page, S. J., & Buhalis, D. (2017). Social media as a destination marketing tool: Its use by national tourism organizations. *Tourism Management*, 61, 21–30. <https://doi.org/10.1016/j.tourman.2017.02.002>
8. Ivars-Baidal, J. A., Solsona-Mena, A., & Giner-Sánchez, D. (2019). The evolution of smart destinations: A new agenda for destination management? *Sustainability*, 11(22), 6358. <https://doi.org/10.3390/su11226358>
9. Mariani, M., Di Felice, M., & Mura, M. (2016). Facebook as a destination marketing tool: Evidence from Italian regional destination management organizations. *Tourism Management*, 54, 321–343. <https://doi.org/10.1016/j.tourman.2015.12.008>
10. Navío-Marco, J., Ruiz-Gómez, L. M., & Sevilla-Sevilla, C. (2018). Progress in information technology and tourism management: 30 years on and 20 years after the internet—Revisiting Buhalis & Law's landmark study about eTourism. *Tourism Management Perspectives*, 25, 181–192. <https://doi.org/10.1016/j.tmp.2017.11.002>
11. Neuhofer, B., Buhalis, D., & Ladkin, A. (2017). Smart technologies for personalized experiences: A case study in the hospitality domain. *Electronic Markets*, 27(3), 225–239. <https://doi.org/10.1007/s12525-017-0241-x>
12. Sigala, M. (2018). Social media and customer engagement in the context of tourism and hospitality: A review and research agenda. *International Journal of Contemporary Hospitality Management*, 30(1), 269–290. <https://doi.org/10.1108/IJCHM-10-2016-0560>
13. Xiang, Z., Du, Q., Ma, Y., & Fan, W. (2021). A comparative analysis of major online review platforms: Implications for social media analytics in hospitality and tourism. *Tourism Management*, 85, 104309. <https://doi.org/10.1016/j.tourman.2021.104309>
14. Zeng, B., & Gerritsen, R. (2019). What do we know about social media in tourism? A review. *Tourism Management Perspectives*, 10, 27–36. <https://doi.org/10.1016/j.tmp.2014.01.001>
15. Gretzel, U. (2020). The COVID-19 pandemic and the future of digital tourism services. *Electronic Markets*, 30, 1–11. <https://doi.org/10.1007/s12525-020-00468-5>
16. Kumar, J., & Ayedee, N. (2021). Strategic implementation of ICT in tourism marketing. *Journal of Contemporary Issues in Business and Government*, 27(2), 2612–2620.
17. Ivanov, S., & Webster, C. (2017). Adoption of robots, artificial intelligence and service automation by travel, tourism and hospitality companies – A cost-benefit analysis. *International Journal of Contemporary Hospitality Management*, 29(11), 2948–2966. <https://doi.org/10.1108/IJCHM-05-2016-0300>
18. Kim, J., Lee, H., & Law, R. (2018). An empirical examination of the acceptance behavior of hotel front office systems: An extended technology acceptance model. *Tourism Management Perspectives*, 27, 48–55. <https://doi.org/10.1016/j.tmp.2018.04.003>