







International Conference

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Foreword from Conference Chair

Responding to China's Belt & Road Initiative, the School of Hotel and Tourism Management at The Hong Kong Polytechnic University pioneered the "One Belt One Road One Tourism" International Conference. This conference serves as a dynamic platform for fostering a global tourism academic community with a shared future among Belt & Road countries and regions. The inaugural conference took place in Indonesia in 2018, followed by the second conference in mainland China in 2019. The third "One Belt One Road One Tourism" International Conference is co-organized by the School of Hotel and Tourism Management at The Hong Kong Polytechnic University and the Hospitality Management and Tourism School at Central Asian University in Tashkent, Uzbekistan, from June 24-27, 2025.

The conference brings together scholars and professionals in hospitality and tourism to engage in meaningful interactions and share research findings and best practices under the theme "Development, Marketing, Sustainability." This year, the conference has accepted 95 abstracts and 8 full papers, which are published in the Conference Proceedings, showcasing the latest advancements and insights in the field.

As the conference continues to grow, it strengthens the bonds between participating countries and regions, fostering collaboration and innovation in tourism. By addressing key challenges and opportunities, the "One Belt One Road One Tourism" International Conference plays a crucial role in shaping the future of global tourism, promoting sustainable development, and enhancing cultural exchange. We look forward to the impactful discussions and partnerships that will emerge from this year's event, paving the way for a more connected and prosperous tourism landscape.

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Action research on tourists' pro-enviromental behaviour
Ariel Zoltán Mitev ¹ , Anna Irimiás ² , Lívia Pintér Szabó ³ 11
A Cross-Regional Analysis of the Impact of Perceived Benefits of The China-Pakistan Economic Corridor on Investor Confidence in Tourism and Hospitality Industry
Sami Ullah ¹ , Muhammad Rehan Shaukat ² , Mohit Kukreti ³ , Abdul Sami ⁴
A Discourse on Silk Road Tourism as a Research Subject
Tony TSE ¹ , Chloe XIONG ² , Sarvinoz ODILOVA ³
AI-Driven Personalized Tourism Services Based on Big Data: Innovative Models and Platform Integration in the Context of the Belt and Road Tourism Development
Wang Biao17
An Examination of the Relationship Between Destination Image, Tourist Attitude, Tourist Motivation on Tourist Satisfaction in Coastal Tourism in Malaysia's Islands
Samshul Amry Abdul Latif ¹ , Muhammad Farihin Azhar ² , Umidjon Matyakubov ³ , Murodjon Matniyozov ⁴
Assessing Smart Tourism Readiness in Almaty: A Multi-Dimensional Approach Using AHP
Amina SHYRYNTAY ¹ , Yeldar NURULY ²
Assessing Willingness to Pay Hotel Tax
Mikul Manocha 24
A Systematic Literature Review of AI's Dark Sides in Hospitality Settings: Implications for Tourist Experiences
Narges Nazari ¹ , Sedigheh Shakib Kotamjani ² , Juho Pesonen ³
Behind the Smiles: Understanding Employee Challenges in the Hotel Industry in Uzbekistan
H. Elif Kutlugun ¹ , Dilzoda Raximova ²
Blockchain-Based Solutions for Enhancing Customer Data Security in Hospitality
Yeldar NURULY ¹ , Aisulu SEMBAYEVA ² , Aliya AKTYMBAYEVA ³
Bridging Cultures and Destinations: The Role of the INSTC in Enhancing Tourism Between India and Central Asia
Sanchita Chatterjee
Bridging the Gap: Collaborative Models for Sustainable Tourism Education and Industry Partnerships in Uzbekistan

Assessing Smart Tourism Readiness in Almaty: A Multi-Dimensional Approach Using AHP

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Abstract

Over the past six decades, the concept of smart cities has become a key focus of urban transformation, taking the forms of smart, digital, wired, or cybernetic cities. Information and communication technologies (ICT) are the backbone of the digital economy, facilitating innovative urban governance. The implementation of smart solutions in tourism improves the quality of the tourist experience, economic efficiency and sustainability of destinations.

A number of cities, including Barcelona, Amsterdam, Seoul and Singapore have already successfully implemented smart tourism, setting new standards for innovation and inclusiveness. For example, Barcelona is actively using public Wi-Fi networks, interactive apps and eco-friendly transportation, reinforcing its position as a leader in this area. European cities increasingly integrate smart tourism technologies, enhancing visitor engagement and destination management.

Central Asian countries are also striving for digital transformation of tourism. However, the implementation of smart tourism requires an assessment of infrastructural and technological readiness: evaluating current achievements, identifying necessary improvements, and analysing regional potential.

Almaty, the largest city in Kazakhstan, shows high potential for smart tourism development due to its cultural heritage, picturesque natural landscapes and strategic location in Central Asia. In 2023, 2,038,417 tourists visited the city, confirming its status as the country's key tourism hub (Bureau of National Statistics, 2024), which underscored its importance in the national tourism economy and potential for sustainable development.

This study analyses Almaty's readiness for smart tourism by looking at key indicators such as digitalization, accessibility, sustainable infrastructure, attractiveness and cooperation with partners. The results will help to determine the level of technological readiness of the city and develop recommendations for its promotion as a smart tourism centre of Central Asia.

The study integrates comparative analysis with focus group discussions (FGD) to enhance methodological rigor and mitigate bias. The hybrid methodological approach is realized through the use of international assessment frameworks including the Smart Tourism Competitiveness Index, SA6 and others. A comparative analysis of previous studies collected 179 indicators from four academic and industry sources. Indicators with conceptual similarities were consolidated and structured into a final set of 90 indicators, grouped into six categories.

A team of 18 experts with diverse professional backgrounds participated in the focus group discussions. The group included 7 people representing government organizations, 4 academics, 3 technology experts, and 4 business representatives. At the outset, the Analytic Hierarchy Process (AHP) was applied to assign weights to the shortlisted indicators and prioritize them effectively. The method utilized expert pairwise comparisons based on the Saaty Scale (1–9), with consistency ratios (CR) calculated to validate the coherence of judgments. AHP was chosen for its ability to systematically compare multidimensional criteria, ensuring a transparent and objective assessment of smart tourism readiness. Its application allows for the structured evaluation of key factorsdigitalization, accessibility, sustainability, attractiveness, collaborative partnership, and management systems-through pairwise comparisons, minimizing bias and enhancing result reliability. In total, 24 necessary indicators were identified and evaluated through AHP for the tourism ecosystem of Almaty. Data collection was performed using open-access platforms, expert consultations, and publicly available reports to ensure valid and contextually relevant evaluations. Then, Almaty's readiness as a smart tourism destination was assessed based on these criteria. Five expert meetings were conducted to ensure active engagement from all participants and facilitate the thorough review of each indicator. Each indicator was evaluated using a binary presenceabsence scale (1/0) for categorical variables and a weighted expert judgment scale for continuous variables, based on publicly available data and expert panel opinions. The total scores were grouped into three readiness levels:

- -Low index (0–6 points): Critical areas requiring immediate attention.
- -Mid index (6–12 points): Indicators with positive trends but requiring further improvement.
- -High index (12–18 points): Fully developed indicators with strong expert consensus.

After the initial scoring, the results were reviewed and discussed in detail during the expert meetings.

As a result, five indicators, including Smartphone penetration rate and Google Maps coverage, reached a maximum score of 18 points, indicating full agreement among experts. High indicators, such as smartphone penetration, availability in Google Maps and mobile banking services, point

to the existence of the digital infrastructure necessary for smart tourism development. Medium indicators, including availability of transportation hubs, density of Wi-Fi hotspots and projected smartphone usage, show positive trends but need further improvement. The least developed indicators are those indicating critical areas requiring immediate attention. These include the number of databases monitored by the integrated operations centre, the environmental index, traffic congestion, and real-time health and safety monitoring. The low values of these indicators indicate that additional actions are needed to improve the efficiency of the city's infrastructure and ensure the sustainability of smart tourism.

Thus, Almaty is at the forefront of the digitalization dimension among others, with smartphones and digital payment systems being actively used here. Nevertheless, the city faces challenges with accessibility, traffic management and real-time information. While natural and cultural resources are being utilized, more investment in barrier-free services and green infrastructure is needed to develop sustainable tourism.

Despite Almaty's progress in digitalization, the adoption of advanced smart technologies remains limited. While basic innovations have been introduced, the integration of artificial intelligence, blockchain, and big data analytics is still in its early stages.

As one of the first academic works to use global indicators and methodologies to analyse Almaty's readiness to become a smart tourism city, this study offers recommendations that can serve as a strategic reference for authorities, urban planners and stakeholders in the areas of accessibility, digital infrastructure and sustainable development. The framework also has the potential to assess the readiness of other cities around the world for smart tourism.