



## THE IMPACT OF INTERNET TECHNOLOGIES ON MANAGEMENT AND DEVELOPMENT IN TOURISM

**Tuychiev Elnurjon**

*"Silk Road" International University of Tourism and Cultural Heritage*

ORCID: 0009-0006-4388-3394

[elnur.tuychiyev@univ-silkroad.uz](mailto:elnur.tuychiyev@univ-silkroad.uz)

**Mamadiyorov Farrukh**

*"Silk Road" International University of Tourism and Cultural Heritage,*

*Tashkent State University of Economics*

ORCID: 0009-0007-4928-8980

[farrux.mamadiyorov@univ-silkroad.uz](mailto:farrux.mamadiyorov@univ-silkroad.uz),

[farruxsh97@gmail.com](mailto:farruxsh97@gmail.com)

**Abstract.** *This paper examines the impact of Internet technologies on the development and management of the tourism industry. I took the Republic of Zimbabwe, which is located in southern Africa, as an example to reveal this topic. Zimbabwe is in the process of development, which could lead to a clash with an unstable economy and politics since 2000. Despite its rich cultural heritage, it has suffered negative experiences due to international advertising, a significant reason for the rapid spread of which is online platforms. It is accepted that information and communication technologies (ICT) are aimed at helping rapid growth, but this situation shows how they can harm the reputation of a tourist destination, which is in the stage of economic development. The study examines the main reasons for how tourism operations are changing, focusing on promotion, customer interaction and business efficiency under the influence of digital transformations. It also analyzes the significant problems for tourism enterprises when using Internet technologies, and recommends steps on how to achieve achievements and advantages over competitors using digital tools. Key topics are digital promotion tasks, distribution through social networks, the invention of online travel agencies (OTA), the use of big data and artificial intelligence (AI) and the unification of the Internet of Things (IoT) in the tourism industry. Finally, one can get acquainted with the application of the dual role of ICT in both promotion and potential instability in countries that are in the process of economic development.*

**Keywords:** *internet technologies, tourism management, digital transformation in tourism, information and communication technologies (ICT), social media marketing, online travel agencies (OTA), artificial intelligence in tourism, tourism development.*

## INTERNET TEXNOLOGIYALARINING TURIZMNI BOSHQARISH VA RIVOJLANTIRISHGA TA'SIRI

**Tuychiev Elnurjon**

"Silk Road" turizm va madaniy meros xalqaro universiteti  
**Mamadiyorov Farrukh**

"Silk Road" turizm va madaniy meros xalqaro universiteti,  
Toshkent davlat iqtisodiyot universiteti

**Annotatsiya.** Mazkur maqolada internet texnologiyalarining turizm sanoatini rivojlantirish va boshqarishga ta'siri o'rganiladi. Ushbu mavzuni yoritish uchun Janubiy Afrikada joylashgan Zimbabve Respublikasi misol sifatida tanlangan. Zimbabve 2000-yildan buyon rivojlanish jarayonida bo'lib, bu jarayon beqaror iqtisodiyot va siyosiy vaziyat bilan to'qnash kelish ehtimolini yuzaga keltirgan. Boy madaniy merosiga qaramay, mamlakat xalqaro reklama ta'siridan kelib chiqqan salbiy tajribalarni boshdan kechirgan bo'lib, bunday axborotlarning tez tarqalishida onlayn platformalar muhim omil hisoblanadi. Axborot va kommunikatsiya texnologiyalari (AKT) tezkor rivojlanishni qo'llab-quvvatlashga qaratilgan deb hisoblanadi, biroq ushbu holat iqtisodiy rivojlanish bosqichida bo'lgan turistik yo'nalish obro'siga zarar yetkazishi mumkinligini ham ko'rsatadi. Tadqiqot turizm faoliyatida yuz berayotgan o'zgarishlarning asosiy sabablarini o'rganib, raqamli transformatsiya ta'siri ostida reklama, mijozlar bilan o'zaro aloqalar va biznes samaradorligiga alohida e'tibor qaratadi. Shuningdek, maqolada turizm korxonalarini internet texnologiyalaridan foydalanishda duch keladigan asosiy muammolar tahlil qilinadi hamda raqamli vositalardan samarali foydalanish orqali yutuqlarga erishish va raqobatchilar ustidan ustunlikka ega bo'lish bo'yicha tavsiyalar beriladi. Asosiy mavzular qatoriga raqamli marketing vazifalari, ijtimoiy tarmoqlar orqali tarqatish, onlayn sayohat agentliklari (OTA)ning paydo bo'lishi, katta ma'lumotlar (Big Data) va sun'iy intellekt (AI)dan foydalanish hamda turizm sanoatida Internet buyumlari (IoT) integratsiyasi kiradi. Yakunida, iqtisodiy rivojlanish jarayonida bo'lgan mamlakatlarda AKTning turizmni targ'ib qilishdagi ijobiy roli bilan birga potensial beqarorlik keltirib chiqarish ehtimoli mavjudligi ham ko'rsatib beriladi.

**Kalit so'zlar:** internet texnologiyalari, turizmni boshqarish, turizmdagi raqamli transformatsiya, axborot-kommunikatsiya texnologiyalari (AKT), ijtimoiy media marketingi, onlayn sayyohlik agentliklari (OTA), turizmdagi sun'iy intellekt, turizmni rivojlantirish.

## ВЛИЯНИЕ ИНТЕРНЕТ-ТЕХНОЛОГИЙ НА УПРАВЛЕНИЕ И РАЗВИТИЕ СФЕРЫ ТУРИЗМА

**Туйчиев Элнуржон**

Международный университет туризма и  
культурного наследия «Шелковый путь»

**Мамадияров Фаррух**

Международный университет туризма и  
культурного наследия «Шелковый путь»,

Ташкентский государственный экономический университет

**Аннотация.** В данной статье рассматривается влияние интернет-технологий на развитие индустрии туризма и управление ею. Чтобы раскрыть эту тему, я привел в качестве примера Республику Зимбабве, которая расположена на юге Африки. Зимбабве находится в процессе развития, которое с 2000 года может привести к столкновению с нестабильной экономикой и политикой. Несмотря на свое богатое культурное наследие, страна столкнулась с негативным опытом из-за международной рекламы, существенной причиной быстрого распространения которой являются онлайн-

платформы. Принято считать, что информационно-коммуникационные технологии (ИКТ) направлены на содействие быстрому росту, но данная ситуация показывает, как они могут навредить репутации туристического направления, находящегося в стадии экономического развития. В исследовании рассматриваются основные причины того, как меняется туристическая деятельность, с акцентом на продвижение, взаимодействие с клиентами и эффективность бизнеса под влиянием цифровых преобразований. В нем также анализируются существенные проблемы, с которыми сталкиваются туристические предприятия при использовании интернет-технологий, и рекомендуются шаги по достижению достижений и преимуществ перед конкурентами с помощью цифровых инструментов. Ключевые темы задачи цифрового продвижения, распространение через социальные сети, изобретение онлайн-турагентств (ОТА), использование больших данных и искусственного интеллекта (AI) и унификация Интернета вещей (IoT) в индустрии туризма. Наконец, можно ознакомиться с применением двойной роли ИКТ как в продвижении по службе, так и в потенциальной нестабильности в странах, находящихся в процессе экономического развития.

**Ключевые слова:** интернет-технологии, управление туризмом, цифровая трансформация в туризме, информационно-коммуникационные технологии (ИКТ), маркетинг в социальных сетях, онлайн-туристические агентства (ОТА), искусственный интеллект в туризме, развитие туризма.

### Introduction.

Despite being endowed with an abundance of natural wonders, game parks, rivers, lakes, cultural and historical sites, as well as diverse and friendly people, tourism has suffered greatly in Zimbabwe. The negative effect was felt even more so by the generally developing countries that were trying to put themselves on the tourism map. This paper explores the reticent effect that Information and Communication Technology (ICT) had on the growth and development of tourism in Zimbabwe by examining the international political events from 2000 that saw the country sliding into socio-economic and political turmoil. It discusses how the tumultuous events dented the image, identity, and reputation of Zimbabwe as a tourism destination and how ICT, especially the Internet, exacerbated the predicament through the speedy dissemination of bad publicity (Tsokota et al., 2019). Prior to 2000, Zimbabwe was viewed as a model of development for sub-Saharan Africa, but it was slowly becoming a pariah state following internal political disputes and violent land reform. This dented the country's image as a peaceful and safe tourism destination and despite efforts that were made to rectify the situation, tourism arrivals continued to decline. Ironically, at the time that the country was spiraling into turmoil, ICT, especially the Internet, was being embraced as a panacea to prospects for growth and development across all sectors, including tourism. It is argued here that while ICT was viewed as an enabler to the growth and development of tourism, it could also become a lethal weapon that could destroy the very same industry (Abdulhamid et al., 2016). This was one of the very few instances globally where, despite being positive, an event-induced bad publicity took over from good publicity in destroying a tourism destination. Furthermore, the adverse effect of the ICT-induced bad publicity was felt more so by developing nations that had just anchored themselves onto the global tourism arena.

In the last few decades, the world has witnessed dramatic improvements in Internet technologies which have transformed the way most organizations conduct their business. These technologies have impacted every sector of the economy including tourism.

Tourism is the fastest growing industry in the world and has become the largest contributor to world economy and job creation. It is also the largest industry in terms of export earnings and foreign direct investment. But despite being the largest and fastest growing industry, the overall market share and growth of tourism is declining for Mediterranean countries due to poor marketing, ineffective use of information technologies, inability to

reposition the tourism products, environmental degradation, geopolitical instability and erratic global economic conditions (Mavri & Angelis, 2009).

However, the Internet has allowed many tourism enterprises to revise and reform their strategies and become more competitive and efficient. Internet technologies can provide new opportunities for development, promotional marketing, distribution, product restructuring and designing to Mediterranean countries and other emerging economies to attract more foreign tourists (Abdulhamid et al., 2016).

The picture of the literature review is more consistent with advanced economies than with developing economies, and this inconsistency reveals a literature gap. Although some studies, for example, (Tsokota et al., 2019), have illustrated the impact of ICT on tourism in developing countries and suggested further investigation at the micro level, more qualitative in-depth case studies are still warranted. In contrast, some sub-Saharan countries, including Zimbabwe, are still grappling with a struggling economy that, among several inadequacies, is disparately affecting the development of infrastructure essential for broader ICT penetration and service delivery. Overall, Zimbabwean tourism organisations, including hotels, inadequately capitalise on the sophistication and development of ICT in terms of internet technologies, although some hotels are starting to embrace the technologies. Consequently, this study endeavours to fill the highlighted gap by undertaking a case study of selected hotels in Zimbabwean towns and cities, particularly Harare and Victoria Falls, as a way of discovering the impact of internet technologies on management and development (Abdulhamid et al., 2016). As a developing country, Zimbabwe presents upto-date and desirable research settings, given the inadequacies and inconsistencies relative to the developed and researched economies.

The primary aim of this research is to examine the impact of Internet technologies on the management and development of tourism. The objectives include:

Analyzing the industrial and infrastructural features of tourism development in different regions.- Evaluating the management systems of tourism enterprises and how they adapt to digital transformation. Understanding the role of digital technologies in enhancing tourism operations, including marketing, customer engagement, and business efficiency. Identifying key challenges faced by tourism businesses in integrating Internet technologies and proposing solutions to address these challenges. Developing recommendations for improving tourism management through ICT to ensure sustainable and competitive growth. The study seeks to answer the central question: "How have Internet technologies influenced the management and development of tourism in developing economies?" Additional sub-questions explored include: What are the key benefits of ICT adoption in tourism management and service delivery? How do digital platforms and mobile applications shape consumer behavior in tourism? What are the challenges faced by tourism businesses in integrating digital technologies, and how can they be overcome? How do emerging technologies like AI, Big Data, and IoT impact tourism industry trends and sustainability? This study holds significance for stakeholders in the tourism industry by shedding light on how digital innovations can drive competitiveness and improve service quality. The research contributes by: Providing insights into how digital transformation is shaping tourism management and development. Highlighting the role of ICT in attracting international tourists and enhancing customer experience. Offering actionable recommendations for policymakers and industry leaders to leverage digital tools effectively. Addressing gaps in existing literature regarding ICT adoption in tourism, particularly in developing economies.

The primary aim of this investigation is to study the impact of Internet technologies on management and development in tourism. However, in order to realize it, the following specific objectives have been set: to analyze the industrial and infrastructural features of tourism development in the Republic of Buryatia; to analyze the management system of tourism industry enterprises in the region; to analyze the impact of Internet technologies on the

functioning of tourism enterprises; and to develop recommendations to improve the management and development of tourism enterprises in the region using Internet technologies. The research examines the Industrial Economics discipline, investigating the management and development of tourism enterprises in the region using Internet technologies (Lara et al., 2017). Tourism plays a significant role in the social and economic life of the Republic of Buryatia, as it contributes to the development of the service sector, the growth of employment, the enhancement of the cultural and social level of the population, and the inflow of investments. The importance of tourism is growing in the country's economy and the economies of individual regions. Therefore, there is a need to study management and developmental issues of tourism independently, as well as to find new approaches to resolving them. In recent years, new information and communication technologies have been developed, and the Internet has become an integral part of everyday life. ICTs, particularly the Internet, are used for managing tourism and developing tourism services (Banoobhai-Anwar, 2016).

### Literature review.

Tourism is the most rapidly expanding industry globally, comprising hotels, travel agencies, airlines, and other services. The world's largest industry generates one-tenth of all jobs and one of the world's biggest net export earners. Most nations are striving hard to reap the extensive socioeconomic advantages that tourism can bring. The global tourism industry is worth more than \$6 trillion dollars, accounting for approximately 8.5% of the world's GDP and 7.9% of total jobs created (Abdulhamid et al., 2016). International tourist arrivals reached a total of 1.4 billion worldwide in 2018, up from 1.3 billion in 2017. The Internet is a worldwide network of computer networks that allows users access to a broad range of information and services. The Internet has become a remarkable phenomenon of the modern world and has emerged as an indispensable part of everyday life. Every aspect of human life in the last two decades has been enormously influenced by the Internet. The stunning and accelerating growth of the Internet has altered how society functions and how people interact, communicate, conduct business, and pursue recreation. Internet technologies continue to reshape various industries including education, health care, music, publishing, and tourism (Tsokota et al., 2019). While the emerging Internet technologies hold great promise for the progress and advancement of the tourism industry, there is still a great deal to learn about how these technologies influence management and developmental issues in tourism. Moreover, a significant proportion of existing research on the impact of the Internet in tourism tends to focus on developed countries ignoring issues of concern to developing nations. This literary review identifies and discusses a number of studies on the impact of Internet technologies on management and developmental concerns in tourism. Specifically, it examines prior investigations on the influence of the Internet on competitive advantage in tourism, destination marketing and market share, tourist behavior, and information search and dissemination, tourist safety, trust and privacy, as well as research gaps and issues of consideration for future inquiries.

Along with the new opportunities, changes brought by the Internet have also created new challenges for the travel and tourism industry. Due to rapid growth of Internet technologies, dramatic changes in customer characteristics and behavior have been observed. Consequently, it is important to be aware of the impacts of Internet technologies in order to help tourism companies to adapt to the new environment (Abdulhamid et al., 2016) (Mavri & Angelis, 2009). Internet technologies play a key role in the efficient management and development of tourism. Nowadays, tourism is a highly competitive service area and internet technologies ensure the competitiveness of tourism service providers by improving functionality of services provided and facilitating accessibility for consumers. Internet technologies are capable to make big changes in management, marketing and development of tourism and tourism services at different levels - countries, local regions, or individual service

providers as well. Internet technologies impact not only the creation of new services, but also the reconstruction and improvement of the existing management, marketing and service provision systems (Tsokota et al., 2019). The purpose is to evaluate the impact of internet technologies on the management and development of tourism, with the emphasis on the importance of internet technologies to improve the tourism sector. The various definitions of tourism and the impact of tourism on the economic development of countries is determined. Internet technologies and their impact on the management and development of tourism are analysed (Khan & Hossain, 2018). Solutions are provided how to effectively implement internet technologies in the management, marketing and service provision of tourism in contemporary situation. Digital marketing and social media have revolutionized how tourism businesses promote their services and engage with travelers. Key components include: Leveraging platforms like Facebook, Instagram, Twitter, and TikTok for destination marketing, realtime engagement, and audience targeting.

Utilizing search engine optimization (SEO) and content marketing strategies to enhance visibility and drive organic traffic. Employing paid digital advertisements, influencer partnerships, and video marketing to attract global tourists and showcase destinations interactively. Managing online reputation through user-generated content, customer reviews, and direct communication with tourists to improve credibility and trust. Implementing AI-driven analytics to personalize marketing campaigns and optimize customer conversion rates. OTAs and digital distribution channels have reshaped the tourism industry by: Providing travelers with convenient booking options, real-time pricing comparisons, and personalized travel recommendations. Offering a centralized platform for accommodations, flights, excursions, and activities, reducing the reliance on traditional travel agencies. Enhancing service provider visibility through customer feedback, ratings, and AI-driven recommendations. Posing challenges such as high commission fees, dependency on third-party platforms, reduced direct customer interactions, and risks related to data security and fraud prevention. Encouraging tourism businesses to develop direct booking strategies, loyalty programs, and personalized services to reduce OTA dependency. Big Data and AI play a transformative role in tourism by: Analyzing customer behavior patterns, preferences, and trends to tailor personalized travel experiences and recommendations. Automating customer service processes through AI-powered chatbots, voice assistants, and virtual tour guides. Enhancing predictive analytics for demand forecasting, revenue management, and dynamic pricing strategies. Optimizing marketing strategies by using AI-driven insights to segment audiences, personalize offers, and increase customer engagement. Enhancing safety and security measures through AI-based surveillance and automated threat detection in tourist destinations. **Smart Tourism and the Internet of Things (IoT)** Smart tourism leverages IoT to enhance travel experiences and operational efficiency. Key applications include: IoT-enabled sensors providing real-time tourist information, crowd management solutions, and navigation assistance for visitors. Smart hotel technology, including keyless entry systems, automated room controls, AI-powered concierge services, and energy-efficient smart rooms. Smart city initiatives using IoT for monitoring public transportation, environmental sustainability, and safety improvements in tourism destinations.

Real-time data collection from wearables, smart kiosks, and connected devices to provide hyperpersonalized experiences for travelers. Currently, tourism is one of the fastest growing sectors, with the internet playing a crucial role in its development, management, and marketing (Tsokota et al., 2019). The worldwide web has transformed the way modern tourism is planned and marketed. Digital marketing and social media are now essential aspects of sharing information and expanding tourism services. Tourists can review services and share their observations on social platforms, thus affecting the marketing strategy of each service provider. As social media shares both positive and negative impressions, it directly impacts marketing. Facebook, Twitter, Instagram, LinkedIn, TikTok, and YouTube are among the most

popular platforms for marketing tourism services (Farkhondehzadeh et al., 2013). These platforms allow for the posting of ads, photos, videos, and comments, and foster direct communication between service providers and tourists. Additionally, social media capabilities enable users to "like," repost, and share their experiences, thus initiating a chain reaction either for/against the service. Online travel agencies (OTAs) provide a package of services that a tourist can use to make reservations at various hotels, motels, hostels, low-cost apartments, etc. Though these agencies charge a commission for the service provided, they are an alternative to personal planning because they save a great deal of time and effort. Furthermore, they provide a variety of options tailored to the requesting criteria, like cost, geographical location, services included, etc. For the service providers, OTAs may be used as additional advertising to attract customers who might not be able to find the service otherwise. However, it should be noted that the capability of an OTA depends on its target group – meaning that a hotel listed on many OTAs might not be found on a particular agency. Most OTAs are very cautious when choosing what services to offer; thus, careful consideration is needed to estimate the potential revenue when choosing to work with a particular OTA. The Internet of Things (IoT) is a term used to describe a system of interrelated devices controlled via a network. In other words, any object capable of being connected to the internet can be part of the IoT system. The IoT is composed of two components: active and passive devices. Active devices can send and store data, while passive devices can only collect data. This technology has a significant impact on tourism development and management. Smart tourism relies on IoT technologies to monitor data in real-time, enabling faster reaction times and better services. Sensors deployed throughout the service or destination area can collect data on tourists' needs, expectations, movement, etc. This information should be stored, processed, and analyzed to improve the management strategy. To conclude, the impact of the Internet on tourism development and management is significant. Internet technologies allow better management and information sharing, providing numerous benefits and development opportunities for both service providers and users. However, the successful application of Internet technologies requires expertise in computer science.

### **Research methodology.**

The study employed qualitative research design. This study adopted exploratory research design to elicit information concerning the role of internet technologies on management development in tourism based on the views and perceptions of the respondents. This approach creates a more holistic picture of the phenomena which is required in the early stages of research (Abdulhamid et al., 2016). In addition, qualitative studies allow researchers to comprehend the perspective of the respondents in their natural context. Research Approach. The study used phenomenological approach because this approach tries to understand how individuals make sense of a phenomenon (Gruescu et al., 2009). In this regard, the study seeks to understand how the actors involved in tourism management perceive the impact of internet technologies on management and development in tourism. Data Collection Instruments. The primary method of data collection for this study was in-depth interview. An interview guide comprising 8 open-ended questions was developed for this purpose. The interviews were conducted in a place convenient for the respondents to allow them to express their views freely. All the interviews were audio recorded and were later transcribed verbatim. The study also used direct observation as a supplementary data collection method. The transcribed data were analyzed using thematic analysis. Thematic analysis is a method for identifying, analyzing, and reporting patterns or themes within data. In addition, thematic analysis organises and describes the data set in great detail and it is not tied to any one theoretical framework. Thematic analysis involves six stages: familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. This paper aims to investigate how the impact of internet technologies on the management and development in the tourism, covering the introduction, review of literature,

method, results, conclusion and recommendations. A case study of Khanpur Dam, Haripur is conducted to collect the primary information through structured closed ended questionnaire, and to analyze the data descriptive statistical calculations are used. Tourism industry and its development is a complex process necessitating the combined efforts of many inputs. At the macro level, the tourism industry is developed on the basis of availability of resources. After identification of the potential resources, the planning of the tourism industry is to be done at the state level. The planning at the micro level is related to the overall development of a tourist spot. Planning involves both the management and development of a tourist spot. Management refers to the arrangement of various inputs for the achievement of some predetermined goals. Development relates to the growth and expansion of the tourism industry and at a tourist spot it involves the qualitative and quantitative changes with respect to various inputs (Gruescu et al., 2009).

Internet technologies play an important role in the management and development of tourism industry. Internet technologies make easy the arrangement of inputs like accommodation, transport, fooding, guidance etc necessary for the tourism. A tourist can easily book the hotel, transport, food etc before visiting to the spot. With the help of internet technologies a tourist can get the real time pictures and details information about the touring spot, which helps a lot in planning the visit. Internet technologies have vital role in the advertisement of the tourism industry. Now-a-days maximum advertisements are done through internet technologies. Even the Government has a separate website regarding the details of tourist spots. Internet technologies also help a lot in the research and development of tourism industry (Abdulhamid et al., 2016).

The study employs a multi-method data collection approach to gather comprehensive insights into the role of Internet technologies in tourism development. The primary and secondary data sources include: Primary Data: Interviews: Semi-structured interviews with key stakeholders to explore experiences, challenges, and opportunities related to digital adoption. Surveys: Structured questionnaires distributed to tourism businesses, policymakers, and consumers to assess attitudes, preferences, and usage patterns of digital tools in tourism. In this case, I created a questionnaire on the online platform "Google Forms" and shared it through social networks such as Telegram and Instagram with young people from Uzbekistan. The survey asked about the role of using social networks while traveling. Observational Studies: Examination of tourism enterprises that have successfully implemented digital technologies, providing real-world insights. Academic research papers, government reports, and industry white papers related to ICT in tourism. Market research studies analyzing trends, challenges, and consumer behavior in digital tourism. Business reports from online travel agencies, hospitality companies, and technology firms. To strengthen the research findings, comparative analysis and case studies are conducted across different regions and sectors. The study includes: Comparative Analysis: Evaluating how ICT adoption in tourism differs between developed and developing economies. Comparing digital marketing strategies used by large-scale tourism businesses versus small and medium-sized enterprises (SMEs).

Analyzing regulatory frameworks and their impact on digital tourism adoption in different countries. Successful Digital Transformation Cases: Examining tourism businesses that have successfully integrated AI, Big Data, and IoT to improve customer experience and operational efficiency. Challenges and Failures: Analyzing businesses that faced difficulties in digital adoption, identifying key obstacles, and providing lessons learned. Best Practices: Highlighting exemplary strategies in digital tourism that can serve as models for other businesses and policymakers. Tourism is one of the fastest growing economic sectors globally and is becoming increasingly important for many provinces in developing countries. With the growth of the World Wide Web, the traditional business environment has changed, as Internet technologies are now widely used by consumers to conduct business transactions. The emergence of interactive web based tourism services has created new opportunities for

tourism development. The impact of Internet technologies on the management and development of tourism in a developing country, Sri Lanka, is explored. A number of issues related to the Internet based tourism services from the perspective of tourism management are identified. Recommendations towards strengthening the role of Internet based tourism services in the development of tourism are proposed (Abdulhamid et al., 2016). Local tourism will be promoted by local web based tourism companies and service providers thereby creating an opportunity for local income generation from tourism. Strategies will be developed for implementing the proposed recommendations including the introduction of a variety of web based tourism services and the establishment of a collaborative network of tourism organisations and companies in the region. Keeping in view the importance of tourism for economic growth, it is vital from the development perspective of a developing country to investigate the possible role of tourism services supported by Internet technologies. A web based e-commerce model for tourism services will be developed focusing on local resource management and community participation in tourism development (Sambhathan & Good, 2013).

### **Analysis and discussion of results.**

Rural areas contain fascinating cultural and natural heritage and account for more than 90% of the world territory. They provide refuge to almost a one-third of global population and support huge variety of ecological systems, get influenced by and influencing global trends and processes.

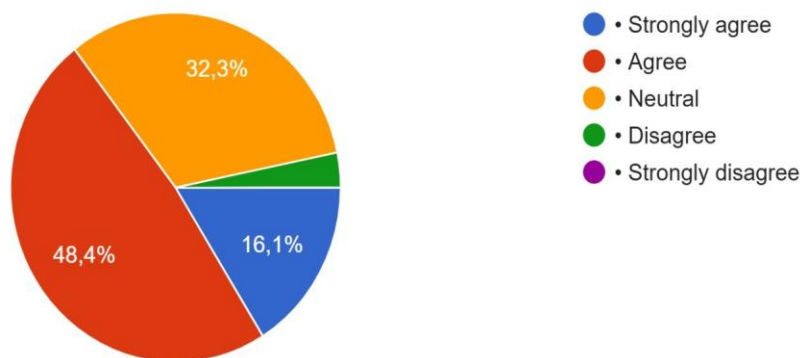
However, rural areas witness the out-migration of population looking searching for better life standards in urban areas. People migrating to urban areas usually belong to the young age cohort that possess generally higher education and skills. This results in the decrease of labour force in rural areas leading to the closure of schools, health institutions, public transportation, post offices, etc. The out-migration of population triggers the deprivation of rural areas and exacerbates social disparities between urban and rural areas (Tsokota et al., 2019). The pro-migration policies endorsed by national governments neglect the development opportunities and human capital embedded in rural areas. The tourism and travel sector is the key factor that shapes global, national, regional/local, and individual life course trajectories. On the one hand, tourism and travel provide employment and networking opportunities to rural population preventing the out-migration. On the other hand, rural population with no planned or desired mobility is perceived as non-users of tourism services and passive actors shaping the tourism development (Gambo Abdulhamid et al., 2016). The Internet strongly influences many aspects of life and provides an opportunity for economic and societal development that was impossible before (Gambo Abdulhamid et al., 2016). Internet technologies can dramatically change, and in fact have changed, how businesses operate. As the internet gives businesses greater market reach, the businesses' nature change, and new types of businesses emerge. Businesses are forced to adopt and/or develop technologies so that they can stay competitive. These technologies include not just hardware and software, but also networking technologies, and peripheral devices. The adoption and development of these technologies can have a significant impact on how a business is managed and/or what its managerial and developmental strategies will be (Mavri & Angelis, 2009). The analysis in this paper is based on the findings from the qualitative interviews and relevant secondary data concerning 4 star hotels and tourism development in Skopje. The model for analyzing the websites is based on previous research in the field (Lathiras et al., 2010). All interviewed hotel managers hold executive positions in the hotels and have direct involvement in IT planning and implementation. In addition, all hotels are categorized as businesses with high development and the judgments about the websites are made from the customer's perspective necessitating consideration of the hotel as a service provider. All hotels are rated with four stars according to a recently adopted categorization model and are in competitive environment regarding the

share of hotel accommodation in the overall tourism offer. The quality of websites was analyzed in accordance to four broad groups of quality factors. Each group consists of several factors that define them. The selection of these four groups of quality factors was based on their significance in previous research and the effect on the provision of information. The focus is on comparing the websites of four hotels in Skopje that recently offered Internet services as a response to the need for improvement of the competitive position. The aim is to point out their strong and weak characteristics in order to suggest further development. The importance of the Internet is accentuated by considering it a dynamic means for obtaining information and making transactions. The web is a medium for change that enhances flexibility, cooperation, rapidity, and ease of accessibility (Abdulhamid et al., 2016). The research findings are systematically presented using various formats to enhance clarity and interpretation. The data collecting process includes different charts and tables, that are shown below:

Almost half of the response shows that social networks have increased competition in travel. But also some part is neutral and has some disagreements

Do you believe social media has made travel experiences more competitive (e.g., people traveling for "likes")?

31 ОТВЕТ

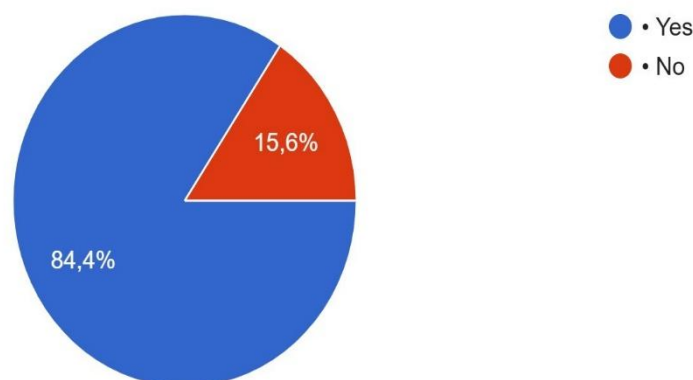


Picture 1. Social media's impact on travel competitiveness

As the illustration shows, most people prefer to use Google Translate, while 15% of them do without it.

Have you used apps like Google Translate for language assistance while traveling?

32 ОТВЕТА

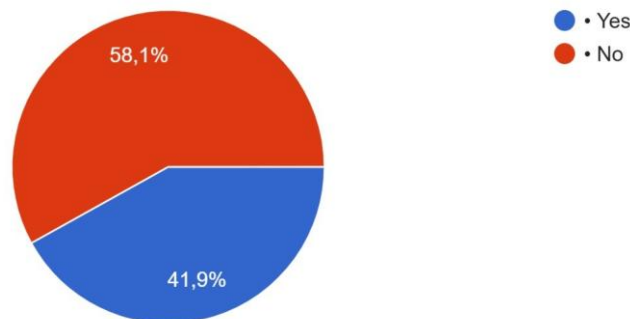


Picture 2. Usage of language-assistance apps while traveling

A significant portion of respondents have tried AR/VR or virtual tours to plan trips, indicating a growing demand for this technology, but some people haven't yet taken advantage of it.

Have you utilized virtual tours or AR/VR technologies to explore a destination before visiting?

31 ответ

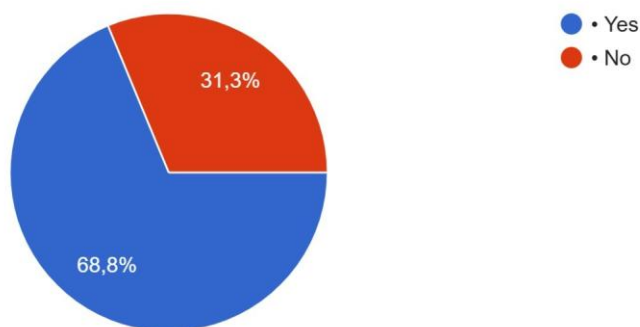


**Picture 3. Experiencing places via tech before visiting:**

Most people prefer to leave reviews about their travels, which is important for others

Have you written online reviews about your travel experiences?

32 ответа

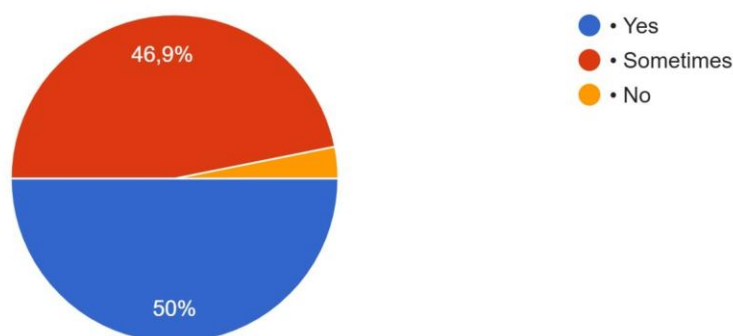


**Picture 4. Writing reviews about trips**

The illustration shows increased trust in online reviews, however, the rest of the respondents prefer to check with other sources as well

Do you trust online reviews for making travel decisions?

32 ответа

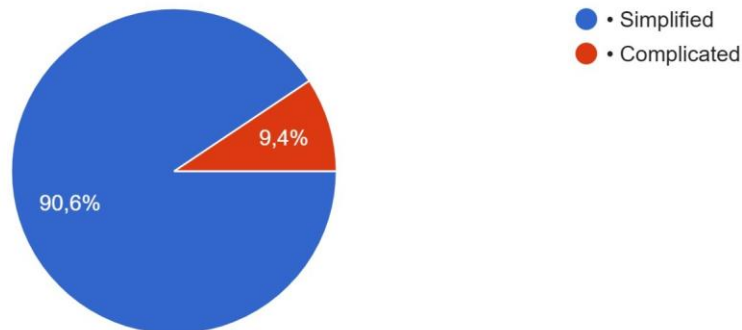


**Picture 5. Trust in online reviews for travel planning**

Despite the small amount of "information noise," travelers believe that the Internet has made their travels much easier.

Do you think the internet has simplified or complicated the travel experience overall?

32 ОТВЕТА



**Picture 6. Internet simplifies or complicates travel**

The discussion section critically evaluates the research findings by comparing them with existing literature and theoretical frameworks. Key aspects include:

**Implications of Digital Tourism:** Assessing how ICT adoption influences business operations, marketing effectiveness, customer experience, and tourism sustainability.

**Barriers to Digital Adoption:** Identifying the primary challenges that hinder digital transformation in tourism and suggesting mitigation strategies.

**Future Trends and Innovations:** Exploring the evolving role of AI, blockchain, virtual reality, and smart tourism applications in the next decade.

**Policy Recommendations:** Providing guidelines for governments and tourism organizations to enhance digital infrastructure, cybersecurity, and technology integration.

**Limitations and Further Research Directions:** Addressing study limitations, such as geographical scope or sample size constraints, and suggesting areas for future research, including longitudinal studies on digital tourism impact.

The reliability and validity of the applied quantitative questionnaire in determining the technologies greatly impact management and development planning in tourism across countries were examined. Using insights from a global survey and based on the Kruskal-Wallis H test and the Mann-Whitney U test, the results are presented in four groups of countries. The first group comprises developed countries, where the impact is the largest in all aspects of tourism management. The second group includes transition countries, where the technologies' impact and importance are similar to the average values of all countries, but lower than in developed ones. The third group represents developing countries with a similar tourism share as transition countries, but a lower impact of technologies in planning and management. Finally, the fourth group consists underdeveloped countries with the lowest share of tourism and impact of technologies.

Internet technologies have globally affected management and development planning in tourism, with varying impacts across developed/developing countries (Abdulhamid et al., 2016). The impact's significance is the highest in developed countries, while the lowest is in underdeveloped countries. Data from 1600 responses to an online quantitative questionnaire on applied technologies in tourism management, planning, and development were statistically analyzed and discussed in detail by grouping countries according to their underdevelopment (Tsokota et al., 2019). The applied questionnaire has a purpose of reliability and validity in determining the technologies' impact on management and planning in nationally grouped countries.

### **Conclusion and suggestions.**

The Impact of Internet Technologies on Management and Development in Tourism addresses the historical development of the Internet and the World Wide Web as a new utensil for the management and development of tourism, thereby outlining its basic implications for tourism management and development. The World Wide Web is internationally compared and analyzed within six tourism development countries. Supported by the analysis of 25 web pages, the chapter relates to the Internet's impact on the management and development of a country and an industry that are perceived as a net of nodes (places) shared by networks. The web pages are analyzed by means of textual analysis, including both their geographic and temporal development, as well as their structuring of information, services, and market access (target groups). The use of tourism web pages is surveyed by the producers and consumers of web presentations (Gambo Abdulhamid et al., 2016). This chapter closes with the challenges of industrial change in a tourism destination according to the development of its Internet technologies. The Internet's impact on an industry, like on a country, can be perceived as a net of nodes (places) shared by networks that is complemented by the web outside the industry and the development and change of that web. Therefore, the analysis limits itself to the web pages of an industry without outside web analysis. Accordingly, developmental web page comparisons are conducted between one developing country and five globally perceived tourism developing countries. The chapter's contribution is partly methodological by developing and employing a device to compare web pages. However, the contribution focuses on the Internet's impact on the management and development of tourism at the industry level, including tourism web pages' strategies to supply information, provide services, and create market access (Tsokota et al., 2019). The Internet has profoundly influenced many aspects of modern society. It has revolutionized the ways of living, thinking, working, and conducting business. Indeed, every facet of life is directly or indirectly linked to the Internet, which is becoming an essential part of everyday life. In recent years, the Internet has expanded from being a competitive instrument in tourism to a basic tool in managing and developing tourist destinations (Abdulhamid et al., 2016). Internet technologies necessitated the profound changes in the management structure of tourist destinations and the reengineering of the processes in destination management organizations (DMOs). Their role is changing from passive informers and suppliers of tourism products into active managers of tourist flows, images, and product offers of destinations. The successful application of internet technologies in the management of tourist destinations depends on many factors, with the developmental level of the destination itself being among the most significant determinants. Destinations that are at a low developmental stage in the Internet-transformed environment will face complicated problems and challenges affecting management and development in tourism. This study examines the impact of Internet technologies on the management and development of tourism in a developing country context, specifically Nigeria. The results of the quantitative analysis presented in chapter four reveal a number of important findings regarding the application of Internet technologies in the tourism industry. First, the technologies are viewed as effective management tools for tourism businesses, particularly in the areas of marketing and promotional management (Gambo Abdulhamid et al., 2016). Second, the application of Internet technologies is found to make significant contributions to the operational management of tourism businesses. This is also in line with earlier studies suggesting that Internet technologies are likely to make the most substantial contributions in the operational management of tourism businesses. However, the contribution of Internet technologies to financial management is found to be insignificant. This is somewhat unexpected in light of previous research suggesting that Internet technologies would contribute notably in the areas of financial and accounting management (Tsokota et al., 2019). Overall, the findings indicate that, although the contribution of Internet technologies is significant across the management functions, there are noticeable differences in the levels of contributions made to specific

management functions. In recent years, a great deal of attention has been given to the impact of technology on the management and development of sectors like tourism. However, there are still a number of limitations within the current understanding of internet technologies and tourism. Firstly, much of the current literature has a largely Western-centric focus and examines impacts in countries such as the USA or members of the EU. Given that internet and other information communication technologies (ICTs) have profoundly different impacts in different socio-cultural contexts, far more attention needs to be paid to the impact of these technologies in countries undergoing rapid development, like those in Asia and Africa. This focus is particularly pertinent when examining issues around the planning and development of tourism, as many tourism-dependent countries are found in the developing world (Farkhondehzadeh et al., 2013). Secondly, the published literature has tended to concentrate on the broad impact of ICTs on whole industries or systems, rather than looking in detail at specific technologies and their impacts. There is still a great deal of scope for examining individual internet technologies such as web-sites, blogs and search engines; the mechanisms through which these technologies operate, their impacts on different aspects of development and their socio-cultural context (Tsokota et al., 2019). Thirdly, there are still major gaps in understanding the employment and usage of internet technologies in the management and development of tourism. Much research has been conducted into the kinds of web-sites used by tourism-related organisations, the information and services they provide and the socio-economic impacts of internet technologies on tourism. However, very few studies have examined how organisations actually use and manage these technologies; how different organisations, or those in different socio-cultural contexts, manage technologies in different ways and the implications of this for tourism development. Finally, in terms of content, there has been a tendency to focus on the impacts of internet technologies on the initial planning and development of tourism, neglecting how on-line technologies mediate “everyday” management. Increase training and capacity-building programs that incorporate the latest socio-economic trends, practices, and policies that affect the development of communities involved in tourism, hospitality, and travel (translated into relevant local languages where necessary). Encourage the inclusion of local communities in Tourism, Hospitality, and Travel curricula development and review processes. This ensures that their socio-cultural values and aspirations are paramount. Advocate for the training of local people to be the course facilitators and trainers. This is excellent for building the confidence of local community people and gives them ownership of programs that, traditionally, exogenous agencies have driven. Advocate for allied Hospitality, Tourism, Travel, and Leisure programs (business, marketing, and management). At present, most programs offered only introduce a limited number of Hospitality, Tourism, Travel, and Leisure issues and discussion (Gambo Abdulhamid et al., 2016). Encourage local communities to raise their awareness and knowledge of tourism, hospitality, and travel issues nationally and globally. Programs should encourage the involvement and presentation of local community people in low-key seminars, workshops, or forums rather than having outside community involvement be the priority.

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