

Singidunum Tourism Conference

OCTOBER 17th
BELGRADE 2024

Book of proceedings

Tourism transformed:
Rethinking strategies for
modern tourism

October 17th, 2024

sitcon.singidunum.ac.rs



SiTCon

Singidunum Tourism Conference - 2024

BOOK OF PROCEEDINGS

Singidunum University International Scientific Conference

TOURISM TRANSFORMED: RETHINKING STRATEGIES FOR MODERN TOURISM

Belgrade

October 17, 2024

<https://sitcon.singidunum.ac.rs/>



SiTCon

Singidunum Tourism Conference - 2024

SCIENTIFIC COMMITTEE

- ◆ Nemanja Stanišić, Singidunum University, Serbia
- ◆ Milovan Stanišić, Singidunum University, Serbia
- ◆ Nemanja Stanišić, Singidunum University, Serbia
- ◆ Goranka Knežević, Singidunum University, Serbia
- ◆ Mladen Veinović, Singidunum University, Serbia
- ◆ Nebojša Bačanin Džakula, Singidunum University, Serbia
- ◆ Svetlana Stanišić, Singidunum University, Serbia
- ◆ Miroslav Knežević, Singidunum University, Serbia
- ◆ Ivana Brdar, Singidunum University, Serbia
- ◆ Aleksandra Vujko, Singidunum University, Serbia
- ◆ Ana Jovancai Stakić, Singidunum University, Serbia
- ◆ Angelina Njeguš, Singidunum University, Serbia
- ◆ Dragan Cvetković, Singidunum University, Serbia
- ◆ Dragana Četojević-Simin, Singidunum University, Serbia
- ◆ Dušan Borovčanin, Singidunum University, Serbia
- ◆ Goran Avlijaš, Singidunum University, Serbia
- ◆ Jelena Gajić, Singidunum University, Serbia
- ◆ Jelena Milovanović, Singidunum University, Serbia
- ◆ Jelena Šuleić, Singidunum University, Serbia
- ◆ Milan Milosavljević, Singidunum University, Serbia
- ◆ Milan Tuba, Singidunum University, Serbia
- ◆ Miodrag Živković, Singidunum University, Serbia
- ◆ Nataša Kilibarda, Singidunum University, Serbia
- ◆ Nikica Radović, Singidunum University, Serbia
- ◆ Olivera Nikolić, Singidunum University, Serbia
- ◆ Suzana Đorđević Milošević, Singidunum University, Serbia
- ◆ Tijana Radojević, Singidunum University, Serbia
- ◆ Valentina Gavranović, Singidunum University, Serbia
- ◆ Vule Mizdraković, Singidunum University, Serbia
- ◆ Alon Gelbman, Kinneret College on the Sea of Galilee, Israel
- ◆ Anya Diekmann, Université Libre de Bruxelles, Belgium
- ◆ Biljana Crnjak Karanović, University of Split, Croatia
- ◆ Eugenia Wicknes, University of Reading, United Kingdom
- ◆ Harald Pechlaner, Catholic University of Eichstaett-Ingolstadt, Germany
- ◆ Igor Stamenković, University of Novi Sad
- ◆ Irfan Arikan, IMC University of Applied Sciences Krems, Austria
- ◆ Jasmina Gržinić, University of Pula, Croatia
- ◆ Kerstin Wegener, Frankfurt University of Applied Sciences, Germany
- ◆ Kevin Griffin, Dublin Institute of Technology, Ireland
- ◆ Larry Dwyer, University of Ljubljana, Slovenia
- ◆ Lidija Petrić, University of Split, Croatia
- ◆ Marjan Bojadžiev, University American College Skopje, Macedonia
- ◆ Mihalis Kavaratzis, University of Leicester, United Kingdom
- ◆ Milenko Stanić, Synergy University, Bosnia and Herzegovina
- ◆ Nellie Swart, University of South Africa, South Africa
- ◆ Rade Kisić, University of Belgrade, Serbia
- ◆ Razaq Raj, Leeds Beckett University, United Kingdom
- ◆ Renata Tomljenović, The Institute for Tourism, Zagreb, Croatia
- ◆ Rob Davidson, MICE Knowledge, United Kingdom
- ◆ Roberto Micera, Institute for Studies on the Mediterranean (ISMed), Italy
- ◆ Sanja Kovačić, Faculty of Sciences, University of Novi Sad, Serbia
- ◆ Silvana Đurašević, Mediterranean University, Montenegro
- ◆ Stanislav Ivanov, Varna University of Management, Bulgaria
- ◆ Tadeja Jere Jakulin, University of Primorska, Slovenia
- ◆ Tatjana Pivac, Faculty of Sciences, University of Novi Sad, Serbia
- ◆ Uglješa Stankov, Faculty of Sciences, University of Novi Sad, Serbia
- ◆ Vanja Pavluković, Faculty of Sciences, University of Novi Sad, Serbia

ORGANIZING COMMITTEE

- ◆ Nemanja Stanišić, PhD
- ◆ Goranka Knežević, PhD
- ◆ Svetlana Stanišić, PhD
- ◆ Miroslav Knežević, PhD
- ◆ Ivana Brdar, PhD
- ◆ Dušan Borovčanin, PhD
- ◆ Tijana Radojević, PhD
- ◆ Aleksandra Vujko, PhD
- ◆ Aleksa Panić, PhD
- ◆ Nataša Kilibarda, PhD
- ◆ Nikica Radović, PhD
- ◆ Suzana Đorđević Milošević, PhD
- ◆ Jelena Gajić, PhD
- ◆ Marko Šarac, PhD
- ◆ Valentina Gavranović, PhD
- ◆ Predrag Obradović, MA
- ◆ Aleksandar Mihajlović, MSc
- ◆ Dušan Mandić, MA
- ◆ Petar Kresoja, MSc
- ◆ Aleksa Vidaković, MSc
- ◆ Katarina Bjelić, MA
- ◆ Milena Turčinović, MA
- ◆ Miloš Višnjic
- ◆ Tijana Vučićević

TOURISM TRANSFORMED: RETHINKING STRATEGIES FOR MODERN TOURISM

Electronic version

Publisher: Singidunum University, 32 Danijelova Street, Belgrade

Editor-in-Chief: Milovan Stanišić, PhD

Prepress: Miloš Višnjic

Design: Aleksandar Mihajlović, MA

Year: 2024

Circulation: 10

Printed by: Singidunum University

ISBN: 978-86-7912-834-8

Contact us:

Singidunum University

32 Danijelova Street, Belgrade Serbia

Phone: +381 11 3093220; +381 11 3093290

Fax: +381 11 3093294

E-mail: sitcon@singidunum.ac.rs

Web: <https://sitcon.singidunum.ac.rs/>

Copyright © 2024.

All rights reserved. No part of this work covered by the copyright herein may be reproduced, transmitted, stored or used in any form or by any means graphic, electronic, or mechanical, including but not limited to photocopying, recording, scanning, digitizing, taping, Web distribution, information networks, or information storage and retrieval systems, without the prior written permission of the publisher.



ABOUT THE CONFERENCE SITCON 2024

The 9th International Professional - Scientific Conference in the field of Tourism and Hospitality, SITCON 2024, was held at Singidunum University in Belgrade on October 17, 2024.

The main topic of this year's conference was:

Tourism Transformed: Rethinking Strategies for Modern Tourism

SITCON builds on the legacy of eight successful conferences, with a strong emphasis on enhancing scientific research and practical application in the tourism and hotel industry sectors. This year, the conference consisted of two segments: professional and scientific.

Amidst the profound shifts caused by globalization, rapid technological advancements, and contemporary challenges, the conference serves as a important platform for addressing emerging trends and charting the course for the future of tourism. Singidunum University, as the host institution, is committed to facilitating meaningful discourse and collaboration among stakeholders in the tourism and hospitality industries. The conference explores a diverse range of topics crucial for modern management practices, including sustainable tourism development, digital transformation, destination marketing strategies, and the integration of innovative technologies. By bringing together academic, professional, and industry perspectives, the event underscores the importance of interdisciplinary collaboration in shaping a resilient and forward-thinking tourism industry.

The conference featured four distinct panels, reflecting its dual emphasis on scientific exploration and practical applicability. The scientific panel showcased cutting-edge research and theoretical frameworks, offering a solid foundation for understanding the complexities of contemporary tourism dynamics. This panel served as an intellectual hub, fostering discussions that bridged academic insights with real-world challenges. In addition to the scientific panel, three practical panels were dedicated to addressing key industry topics, providing participants with actionable insights and strategies relevant to the tourism and hospitality sectors. These panels facilitated dynamic exchanges between researchers and practitioners, highlighting innovative solutions and best practices. Panel topics and speakers were carefully curated to align with the evolving needs of the industry, ensuring the discussions were both timely and impactful.

Introductory speakers at the plenary session were:

- Prof. Goranka Knežević, Ph.D., Rector of Singidunum University
- Mr. Nikola Selaković, Minister of Culture, Government of the Republic of Serbia
- Prof. Miroslav Knežević, Ph.D., Acting Dean of the Faculty of Tourism and Hospitality Management, Singidunum University
- Mr. Uroš Kandić, State Secretary in the Ministry of Tourism and Youth

Keynote Speaker at the Scientific Session at the conference was:

- Prof. Marko Koščak, Ph.D., Faculty of Tourism, University of Maribor, Slovenia

“Trends and Challenges for Modern Tourism”

The conference was organized in three plenary sessions, as well as in one scientific session. Scheduled sessions:

Panel 1: New Approaches in Measuring Competitiveness in Tourism – TOURCOMSERBIA

Panel 2: Artificial Intelligence and New Technologies in Tourism and Hospitality

Panel 3: Tangible and Intangible Cultural Heritage in the Development of Rural, Gastronomic, Wine, and Nautical Tourism



SCIENTIFIC SESSION

The SITCON Conference provided attendees with a unique opportunity to gain insights from leading experts on some of the most actual and forward-looking topics in the tourism and hospitality industry. The panelists comprised distinguished experts from the hospitality sector, travel agencies, tour operators, transportation services, and various other complementary industries. Discussions focused on innovative approaches to evaluating and enhancing competitiveness in tourism, emphasizing the application of advanced methodologies and strategic frameworks. Experts also examined the transformative impact of artificial intelligence and emerging technologies, highlighting their potential to redefine operational efficiency, enhance customer experiences, and drive innovation within the sector. Additionally, the role of tangible and intangible cultural heritage in sustainable tourism development was explored, with particular emphasis on its integration into rural, gastronomic, wine, and nautical tourism initiatives.

These expert-led sessions offered a comprehensive overview of contemporary challenges and opportunities, equipping participants with actionable knowledge and forward-thinking strategies to navigate the evolving global tourism landscape.

The SITCON 2024 review process was expertly managed by a dedicated team of 56 reviewers, ensuring a rigorous and thorough evaluation of all submissions. This team included 29 distinguished professors from Singidunum University and 28 esteemed professors from 24 reputable universities, scientific organizations, and professional institutions across Serbia and internationally. Supporting this effort was the Organizing Committee, comprised of 24 members who had an important role in the successful coordination and execution of the conference.

The overall statistics on the conference are the following:

Submitted Papers/Abstracts: 28 submissions in total.

Accepted for Presentation: 25 papers and abstracts met the criteria for conference presentation.

Rejected Papers: 10 submissions did not meet the evaluation standards for publication.

Publication in Proceedings: 19 papers, extended abstracts, and the keynote paper were accepted for publication in the Conference Proceedings.

As in previous years, the ninth SITCON conference garnered significant attention, attracting over 400 participants from both domestic and international settings. The attendees included university professors, researchers, tourism experts, and industry professionals, alongside a respectful number of students who demonstrated keen interest in the event and its topics. This diverse audience reflected the conference's reputation as a prominent platform for knowledge exchange and professional engagement in the field of tourism.

All papers are written in **English**, which is the conference's official language. All accepted manuscripts are published in **the Conference Proceedings**. The most innovative papers presented at SITCON 2024 conference will be recommended for publication in the European Journal of Applied Economics (M51). Each paper, excluding Extended Abstracts, is assigned its DOI number and a reference on Google Scholar.

TOPICS:

- Tourism Management
- Tourism Policy, Planning, and Development
- Crisis Management in Tourism & Hospitality
- Innovations and creativity in Tourism and Hospitality Management
- Sustainable & Responsible Tourism Development
- Green Technology in Tourism & Hospitality
- Information Technologies and Systems in Tourism & Hospitality
- The Use of Modern Technologies in Gastronomy
- Robotics in Tourism and Intelligent Systems in Tourism
- Smart Destination, eTourism and Tourism 2.0



- Tourism and Hospitality in Rural Areas
- Digital Marketing Applied to Tourism & Hospitality
- Tourism Branding
- Consumer Behaviour & Tourist Experience
- Human Resource Management in Tourism & Hospitality
- Tourism Industry Competitiveness
- Health and Safety in Tourism & Hospitality
- Alternative and Innovative Product Development in Tourism & Hospitality Industry
- Entrepreneurship and SMEs in Tourism
- Recent Developments in MICE Tourism
- Creative Industries and Events in Tourism
- Contemporary Trends in F&B Management
- Tourism and Financial Management
- Public-private partnership in tourism

Belgrade, December 2024

Organizing Committee of the International Scientific Conference SITCON 2024



CONTENTS

INVITED PAPER

- 3 - 18 | TRENDS AND CHALLENGES FOR MODERN TOURISM
Marko Koščak

CONFERENCE PAPERS

- 21 - 27 | SUSTAINABLE TOURISM - THE ROLE OF GREEN FINANCE IN ENHANCING ENERGY EFFICIENCY IN THE HOSPITALITY INDUSTRY
Danka Milojković, Milena Nikolić, Ana Milenković Anđelković, Marija Marković Blagojević
- 28 - 34 | ANALYSIS OF LABOR PRODUCTIVITY IN THE HOTEL INDUSTRY OF SERBIA
Vesna Filipović, Saša Mašić, Nikica Radović
- 35 - 42 | THE INFLUENCE OF EMPLOYEES' PERCEPTION ON SERVICE QUALITY AND SUSTAINABLE BUSINESS PRACTICES IN TOURISM AND HOSPITALITY
Milena Turčinović, Aleksandra Vujko, Dušan Mandić
- 43 - 49 | THE IMPACT OF ENVIRONMENTAL INDICATORS OF SUSTAINABILITY ON THE DEVELOPMENT OF (SPA) TOURISM IN SOKOBANJA
Martina Arsić, Aleksandra Vujko, Aleksa Panić
- 50 - 55 | CITY BRANDING AND INCENTIVE TRAVEL: EVOLVING RESEARCH TRENDS
Milica Filipović
- 56 - 64 | GLAMPING – CREATIVE ACCOMMODATION TREND AS FACTOR OF RURAL DESTINATION DEVELOPMENT
Katarina Bjelić, Aleksandra Vujko, Dušan Borovčanin
- 65 - 70 | TRANSIT TOURISM IN SERBIA - PREDISPOSITION AND DEVELOPMENT
Branko Vranešević, Miroslav Knežević
- 71 - 80 | ENHANCING TOURIST EXPERIENCE AND ENGAGEMENT THROUGH AI-DRIVEN REAL-TIME OBJECT DETECTION AND INTERACTIVE MOBILE APPLICATION
Marko Mihajlović, Angelina Njeguš
- 81 - 86 | THE TOURIST GUIDE PROFESSION IN THE TECHNOLOGY ERA: POTENTIAL BENEFITS AND CHALLENGES
Jovana Miljković, Željko Anđelković, Tatjana Pivac, Marija Bratić
- 87 - 94 | PROMOTION OF THE TOURIST PRODUCT USING PRESENTATION ON THE INTERNET AND SOCIAL NETWORKS IN THE FUNCTION OF IMPROVING THE OFFER OF THE CITY OF KOTOR
Milena Bogdanović, Nikica Radović
- 95 - 104 | MEASURING SATISFACTION OF TOURISTS WITH DENTAL SERVICES IN KVARNER REGION
Romina Alkier, Jasmina Okičić, Vedran Milojica



- 105 - 116 | DOES UNCERTAINTY CHANGE TOURIST CHOICES? THE IMPACT OF FEAR ON GUEST DECISION-MAKING
Dušan Mandić, Ilija Savić, Mirjana Delić Jović, Biljana Rađenović Kozić, Andrea Horvath
- 117 - 124 | CONSUMER PERCEPTIONS OF AI-GENERATED CONTENT VERSUS HUMAN CREATIVITY IN TOURISM MARKETING
Milica Milovanović, Angelina Njeguš
- 125 - 131 | INNOVATIONS IN TOURISM: THE ROLE AND CHALLENGES OF IMMERSIVE SPACES
Kristina Nikolić
- 132 - 144 | INVESTIGATION OF PERCEIVED RISKS IN HOLIDAY PURCHASES FROM WEB-BASED TRAVEL INTERMEDIARIES ACCORDING TO DEMOGRAPHIC CHARACTERISTICS
Ozan Aksöz, Furkan Haffif
- 145 - 150 | SEVERITY AND LOYALTY: THE EFFECT OF SERVICE FAILURES ON AIRLINE TOURISTS
Giuseppe Catenazzo, Seda Ceken, Vedran Milojica

EXTENDED ABSTRACTS

- 155 - 158 | SAFETY IN MOUNTAIN TOURISM: CASE OF SLOVENIA
Tomi Špindler, Dušan Mandić, Janez Mekinc
- 159 - 162 | THE POWER OF SOCIAL MEDIA INFLUENCE ON CONSUMERS IN TOURISM
Nevena Ćurčić, Ana Rac, Bojana Savić



SiTCon

**Singidunum Tourism
Conference - 2024**

INVITED PAPER



TRENDS AND CHALLENGES FOR MODERN TOURISM

Marko Koščak*

Faculty of Tourism, University of Maribor,
Brežice, Slovenia

Abstract:

Tourism has rebounded strongly after the sharp declines triggered by the COVID-19 pandemic, which caused tourism flows to plummet in 2020-21, following six decades of consistent growth. In 2022, tourism's direct contribution to GDP in OECD countries with available data had recovered to 3.9%, half a percentage point below 2019 levels, and the evidence suggests that the recovery has continued since. The return of international tourism demand, driven by the lifting of travel restrictions, has been a significant driver of this recovery, with tourism's share of services exports growing to 14.8% in 2022 in OECD countries. Although this figure remained 5.6 percentage points below pre-pandemic shares, international tourist arrivals have continued to strengthen and already exceeded pre-pandemic levels in some OECD countries in 2023.

A full global recovery is projected by the end of 2024, buoyed by positive traveller and business sentiment, with growth anticipated to return to pre-pandemic trends as demand and supply imbalances continue to unwind. However, the recovery remains uneven, and challenges persist. While tourism demand has demonstrated resilience, businesses struggle to attract and retain workers and, although inflation is abating, price pressures continue to impact transport, accommodation, and hospitality costs. Geopolitical tensions remain high, and the increasing frequency of wildfires, floods, heatwaves, and other extreme weather events is impacting the sector. Looking ahead, tourism is expected to continue to grow steadily in the long run, presenting significant opportunities but also posing renewed challenges. This underscores the need for policies that support a resilient, sustainable, and inclusive future for the industry.

Keywords:

Sustainable Tourism, Tourism Planning and Management, Tourist destinations, Over-tourism, Carrying Capacity, Partnership approach.

INTRODUCTION

The Covid-19 pandemic was a sobriety moment for society in general and the tourism sector in particular. It has produced the most serious crisis the sector has ever experienced. The level of the disruption caused by the COVID-19 pandemic was far more severe than that of previous crises (e.g., SARS or the 2008-09 financial crisis) and has led to fundamental changes in the travel industry worldwide. The global health crisis left governments across Europe grappling with a public health emergency while struggling to support their economies, and it has taken a severe toll on the tourism sector.

Correspondence:
Marko Koščak

e-mail:
marko.koscak@um.si



Global international travel was expected to decline by over 50% in 2020, with 2019 levels not being achieved until 2023, according to Tourism Economics' latest forecasts. The fundamental nature of tourism has changed, and the sector's recovery is expected to be as gradual as the reopening of different economies (ETC, 2020).

In addition, there are new challenges for sustainable tourism, which relate not only to the post-COVID era, but also to current political and security issues, the energy crisis, the cost-of-living crisis driven by inflation, as well as resource shortages in many tourism destinations (e.g. financial, managerial, labour and structural). Tourism planning and management should, therefore, provide a strategy for the sustainable development of tourism destinations. It is critical to examine and resolve conflicting interests through mutually acceptable and participative planning solutions, ensuring the compatibility of different strategies and the long-term satisfaction of all stakeholders in the tourism destination. Local people in tourism destinations are the most important stakeholders, as they provide local resources to visitors in exchange for economic benefits and an improved quality of life (Koščak & O'Rourke, 2023). Adequate returns on the resources utilised by tourists must be ensured. Measures should be taken to rationalise, regulate and legislate on the use of economic, socio-cultural and environmental resources. Appropriate types and levels of tourism activity should therefore be determined according to the goals and objectives established through a coherent and well-orchestrated planning process that examines all vulnerabilities and involves all stakeholders (Buhalis, 2000).

The expectation that pre-crisis levels of tourism demand would not recover before 2023 proved accurate for some tourism destinations, which provides an opportunity to reshape the industry into one that is more sustainable, innovative and equally beneficial for travellers, local communities, the environment and local economies. The COVID-19 crisis emerged as an unprecedented global challenge, highlighting the need for universal support, collaboration, and understanding to mitigate the social and economic impacts of the pandemic (ETC, 2020).

The events in the aftermath of the pandemic were harrowing for the tourism sector; unfortunately, predicted trends show that more negative events will likely continue to cripple the industry in future. On the other hand, tourist destinations that offered individual safety, distance, high-quality natural environment, and remoteness from crowds proved to be more successful survivors of the global health crisis. This highlights the need to thoroughly rethink the concept of sustainability. Pre-pandemic keywords associated with the concept included responsible management, adding value to local products and services, safety and social responsibility, accessibility for all, assessment of environmental carrying capacity, excessive tourism or "overtourism", participatory planning, and a partnership approach (Koščak & O'Rourke, 2023).

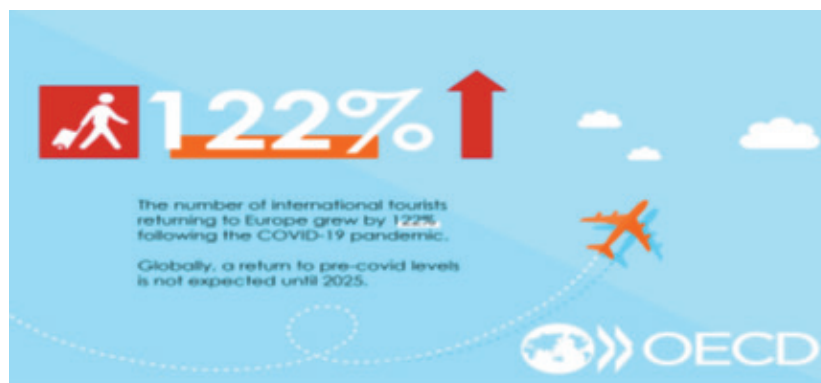
All these factors remain highly important for the future development of sustainable tourism. However, the post-pandemic discourse on sustainability has shifted towards understanding how an experiential approach to product design, security, general and personal hygiene, social distance, "green" practices – focusing on preserved environment rather than mass tourism - guest well-being, and targeting nearby markets should be considered to sustain tourism in the long run. Naturally, this also requires transforming development strategies and seeking new development paradigms that can no longer ignore the principles of sustainable and responsible tourism or be allowed to move away from them (Koščak & O'Rourke, 2023).

Some tourism trends and policies in 2024

Tourism remains an important driver of economic growth, playing a key role in stimulating economic activity, creating jobs, generating income and foreign exchange, promoting regional development, and supporting local communities. Before the COVID-19 pandemic, the tourism sector directly contributed 4.4% to GDP and 6.9% to employment, while accounting for 20.4% of service-related exports in OECD countries on average. The unprecedented shock from COVID-19 caused the average direct contribution of tourism to GDP to drop to 2.5% in 2020 across OECD countries with data available, resulting in significant knock-on effects for the wider economy. By 2022, this figure had rebounded to 3.9% on average across the same countries, with four countries returning to or surpassing pre-pandemic levels. According to UN Tourism, global direct tourism GDP reached pre-pandemic levels in 2023 (UN Tourism, 2024[1]).



Figure 1. The return of the tourists, Source OECD, 2023

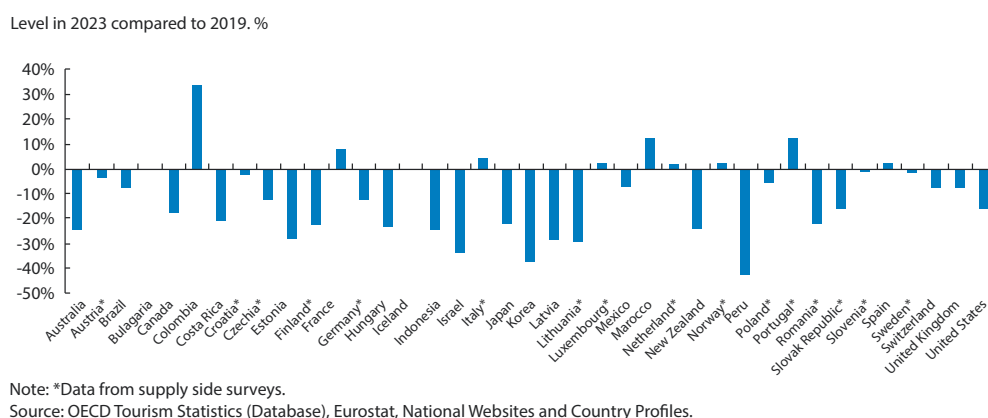


Tourism is a labour-intensive sector and labour shortages and skills gaps have constrained its recovery amid tight labour markets. In 2022, employment in the accommodation and food services sector across the OECD remained 5.3% below pre-pandemic levels, while job vacancy rates in 2023 were higher on average than in other sectors of the economy. Although not all jobs in accommodation and food services are directly linked to tourism, this sector accounts for approximately half of tourism employment, offering a partial yet valuable proxy. While labour markets are now easing, significant challenges persist in attracting, retaining and developing a skilled tourism workforce (OECD, 2024).

International tourism flows have bounced back strongly and are projected to fully recover by the end of 2024. However, the recovery remains uneven, and challenges persist. After falling by 68.3% in 2020 – slightly below the global drop of 72.3% – by the end of 2022 international tourist arrivals to OECD countries had recovered to 77.3% of 2019 levels – ahead of the global recovery rate 66.6%. OECD countries accounted for 65% of international tourism arrivals in 2022, up from 56% in 2019, highlighting their stronger performance compared to non-OECD countries since the pandemic (UN Tourism, 2024[2]). This recovery momentum has continued, driven by strong tourism demand, which has proven surprisingly resilient. Globally, an estimated 1.3 billion international tourists were recorded in destinations worldwide in 2023, making a recovery to 89% of pre-pandemic levels, and this figure is projected to reach 1.5 billion by the end of 2024 (UN Tourism, 2024[3]).

International tourist arrivals exceeded pre-pandemic levels in some OECD countries in 2023, with European countries leading the way. Portugal welcomed a record 19.4 million international tourists, 12.1% more than in 2019. Other countries that saw arrivals reach or exceed pre-pandemic levels include Colombia (up 34%), Luxembourg (2.1%), Netherlands (1.4%), Norway (1.2%) and Spain (2.0%). Figure 2 presents the available data on international tourist arrivals to selected OECD member countries and partner economies in 2023 compared to arrivals in 2019. Countries in Europe benefited from significant intra-regional travel, while a strong US dollar boosted outbound travel from the United States to Europe.

Figure 2. International tourist arrivals, selected OECD and partner countries, Source: OECD, 2024





Geopolitical conflicts and tensions are also affecting tourism flows and the wider tourism economy, including Russia's war of aggression against Ukraine and evolving conflicts in the Middle East. International tourism remains below pre-pandemic levels in Finland (by 22.3% at the end of 2023) and other countries neighbouring Russia and Ukraine. The terrorist attacks and the subsequent war have severely impacted Israel's tourism economy, significantly reducing inbound tourism (down 33.9% in 2023). This is affecting service exports and economic growth in the country more broadly (OECD, 2024[2]). Uncertainty about the evolution of these and other geopolitical conflicts and tensions risk impacting tourism in surrounding areas as well as denting traveller confidence more broadly, as safety and security are key conditions for tourism.

Domestic demand helped sustain the sector during the pandemic, and domestic overnight trips recovered to 90.5% of 2019 levels in 2022 among OECD countries. However, its importance and the extent to which domestic tourism is helping to support recovery vary considerably by country.

Challenges to adapt and manage tourism for sustainable outcomes

Looking ahead, tourism demand is expected to remain buoyant as supply and demand imbalances unwind. In the near term, the sector continues to navigate uncertainties, while unchecked longer-term growth, could bring challenges for the sustainability and future of the sector. Geopolitical tensions remain a significant near-term risk, although demand growth could prove stronger than expected if households and firms draw more fully on the savings accumulated during COVID-19 (OECD, 2024[2]). Inflation is falling faster than initially projected, including for energy and food prices, which have a strong impact on transport, accommodation and hospitality costs for tourists. Real incomes are rising in many OECD countries as inflation moderates, and private sector confidence is improving, which may further stimulate tourism demand. Supply and demand imbalances in labour markets are easing, with unemployment remaining at or close to record lows. This should ease the labour shortages faced by tourism businesses, but challenges remain in attracting and building a strong and sustainable workforce.

The strong tourism rebound is resulting in some destinations struggling to manage demand and its impacts on local communities and the environment. This has been exacerbated as supply has struggled to keep pace with demand. In some destinations, these capacity constraints are expected to limit further growth (OECD, 2024[2]). In other destinations, the social licence for tourism is increasingly challenged as tourism exceeds critical thresholds, putting pressure on infrastructure, the environment, and the local community, as well as on other economic sectors and the tourist experience.

Due to its strong local dimension, tourism can play a key role in fostering economic development that creates decent jobs, enhances social cohesion, and contributes to the shared interests of tourists, residents, and businesses. However, the impacts of tourism development are often economically, socially, and environmentally unbalanced. More needs to be done to manage the social impacts of tourism, particularly those caused by unplanned growth, and to maximise the sector's potential to enhance well-being and promote social progress and inclusion, both in traditional and emerging destinations.

As tourism resumes its growth trajectory, some popular tourism destinations are again feeling the pressures from increased visitor numbers on local infrastructure, environment and host communities. This has led to growing calls for more proactive policies and government action to better manage tourism development at all levels of government, as well as for a stronger voice for local communities in the development of tourism. This includes taking action to diversify and diffuse the impacts of tourism both temporally and spatially, and balancing trade-offs to achieve more sustainable outcomes. It also involves anticipating when tourism in a destination could reach or surpass optimal levels, leading to detrimental impacts (OECD, 2024).

Accelerated climate change is impacting tourism, with implications for structural shifts in destinations and travel patterns. Warmer winters are shortening the ski season in mountain destinations, while heatwaves may reduce the attractiveness of destinations during traditional peak periods but encourage visitation at other times. Tourism businesses and destinations are adjusting their offer in response, for example by no longer scheduling hiking tours during periods when temperatures peak, while expanding their offer during traditional shoulder season.



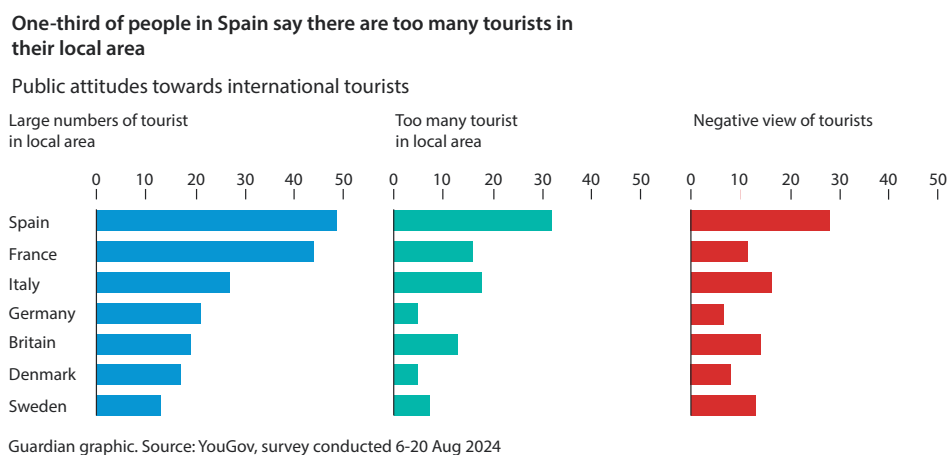
The sector must also play an active role in delivering on climate goals. Wildfires, floods and heatwaves have the potential to directly impact visitors, businesses and local communities, both through the initial shock and from the loss of infrastructure and the time it takes for tourism to recover. The world experienced unprecedented climate change impacts in 2023, and as these climate-related weather events become more extreme, losses are increasing (OECD, 2023). Climate change is also expected to make incidents of severe turbulence more common for air travel.

Technology is changing the nature of work, business operations and service delivery, facilitating the adoption of innovative business models and the shift to more sustainable tourism practices. It is also changing the way tourists plan travel and experience destinations. Digital technologies present not only an opportunity to respond to the evolving needs and desires of travellers, but also a chance to reach new consumers with novel tourism products and services (McKinsey & Company, 2024). The current uptake and use of new technologies vary across countries, sectors and businesses. Small tourism enterprises with low-tech business practices face particular challenges in benefiting from digital opportunities and preventing the gap from widening between them and technology driven, globally connected tourism businesses.

Anti-tourism activism: new or not new discourses?

For many destinations, tourism growth in recent years has been the result of rapid and unplanned growth in visitor numbers, which can negatively affect not only the visitor experience but also the environment and host communities upon which tourism depends. While the economic importance of tourism for destinations shall not be underestimated, overtourism leads to social (e.g. conflicts with local population) and environmental (e.g. pollution) problems. We have witnessed anti-tourism protests sweeping across Europe this summer, with demonstrations taking place in the Netherlands, Greece, and of course, Spain (see Figure 3 and 4 below). In early July, protesters marched through popular tourist areas in the Spanish city of Barcelona spraying unsuspecting visitors with water pistols while chanting, “Tourists, go home.”

Figure 3. Local people’s opinion about the volume of tourists in their local area, Source: YouGov, 2024



Moreover, most recently, thousands protested on the Spanish island of Mallorca, with organisers claiming that the island’s tourism model “impoverishes workers and enriches only a few.”



Figure 4. Anti-tourism protests in Barcelona, Source: CNN Travel, 2024



Anti-tourism activism and the specialisation of social movements in tourism-related struggles are not new phenomena. Historically, grassroots organizations have occasionally mobilised to oppose the construction of tourism infrastructure, often revealing a reality of resource extraction and exploitation. The first of these instances occurred in the late 1990s and 2000s. Fifty years later, the nature of these movements has evolved. They are no longer isolated cases targeting specific infrastructures, limited spaces or environmental struggles. Instead, grassroots organizations have become specialised in addressing the broader social and environmental tensions caused by tourism growth. This activism now encompasses and addresses a complex set of socioeconomic dynamics affecting entire cities, islands, and coastal territories highly dependent on tourism. While most critical discourses have been generally associated with the unmanageable growth of the tourism sector—especially in urban settings, most of the claims and demands for action have been linked to the housing rights, commercial specialisation, privatisation of public space, and fair labour. Accelerated tourism growth has also led to dramatic changes in the commercial landscape and the transformation of residential housing into short-term rental properties. (Milano, Novelli, Russo, 2024). The impacts on housing affordability, visitor economy-oriented businesses, residential displacement and the ‘Airbnbisation’ of the housing market, along with other extra-urban settings, contrary to common narratives of dispersion and empowerment of local communities, have further contributed to overtourism in both central and increasingly peripheral areas (e.g., Cocola-Gant, 2018; Celata & Romano, 2020; Gutiérrez *et al.*, 2017; Valente *et al.*, 2022).

While destinations’ over reliance on tourism has been widely analysed and has become the subject of widespread societal contestation, particularly during the post-pandemic recovery period, the protests and demonstrations in various Mediterranean destinations is symptomatic of a local ‘enough is enough’ sentiment that can no longer be ignored. It is within urban social landscapes, especially their historical cores, that tourism excesses have acquired clear political connotations. A new policy approach, recognising the disruptive agency of tourism growth and supported by radical revisions of governance frameworks is now more necessary than ever (Novy, 2018; Russo & Scarnato, 2018).

Negative impacts of overtourism

Overtourism is a term that carries negative connotations. Associated with a range of environmental, economic and social impacts of tourism, overtourism is almost always seen as a harmful phenomenon. Below is a list of typical issues associated with overtourism (Koščak & O’Rourke, 2023, Haxton & Camacho, 2023):

- Locals resent tourists
- Litter
- Environmental degradation
- Increased pressure on finite resources
- Overuse of public facilities and infrastructure
- Devastating impacts on local flora and fauna



- Gentrification
- Lack of economic control and benefits in the local community
- Changes to society
- Globalisation
- Reduction in authenticity
- Tourist needs prioritised over local needs
- Increases in crime
- Rises in the cost of living in the area

The root causes of overtourism are as complex and diverse as the phenomenon itself. For a systematic analysis, they can be divided into the following categories (EC, 2022):

- External driving forces, including general global developments as well as tourism-specific trends.
- More recent tourism trends, such as the emergence of new source markets and the proliferation of information and communication technologies in tourism;
- These external driving forces lead to tangible effects, such as increasing tourism-induced pressure at the destination level.
- Internal factors within a destination may exacerbate or mitigate tourism pressure.

These factors can be general or tourism specific. The potential impacts of overtourism are likewise diverse, depending on the specific combination of driving forces, pressures and destination characteristics. Impacts can be physical, environmental, (socio-) economic or socio-cultural (including psychological). They can also be differentiated with respect to which stakeholder group is predominantly affected. To this end, there are five main categories of impacts (EC, 2022):

- The degradation of the local infrastructure – such as roads, port facilities, garbage collection or sewage treatment facilities – usually occurs when high numbers of tourists encounter limited local capacities.
- The degradation of the natural environment tends to be more pronounced in rural areas, where ecosystems are often fragile and even relatively low visitor numbers may have negative effects, such as water and air pollution, soil erosion or wildlife disturbance.
- Imbalances in the local economy can occur when tourism becomes predominant in certain areas (“touristification”), pushing out traditional stores or professions and leading to rising prices for real estate or everyday consumer goods.
- Impacts on the social environment become an issue when residents feel psychologically, socially or culturally disturbed by the presence of too many tourists, especially if these tourists behave in an unacceptable way (e.g., by making noise or littering).
- Finally, tourists themselves may be negatively affected by the presence of a large number of other visitors in the same area.

Some recent research (EC, 2022) has shown that unbalanced tourism is a process that evolves uniquely at each destination, despite some clear common mega-trends and drivers. International tourism growth is a key driver of unbalanced tourism developments at most destinations. Secondly, the evolution of social media use contributes to overtourism at specific sites, resulting in these sites becoming hotspots without key management organisations in place to implement rapid and necessary controls. Destination governance was shown to be a decisive factor in the emergence of overtourism. Varying governance levels within a destination can present challenges and impact the management of tourism. In terms of impacts, the most visible effects of overtourism include various types of congestion, such as a concentrated number of visitors or vehicles in a limited geographic space. This includes beaches, parking facilities, queues in front of museums, or ports. The non-visible impacts of unbalanced tourism are more diffuse and include several socio-economic and socio-cultural impacts, such as touristification, increased prices and biophysical impacts throughout the year.



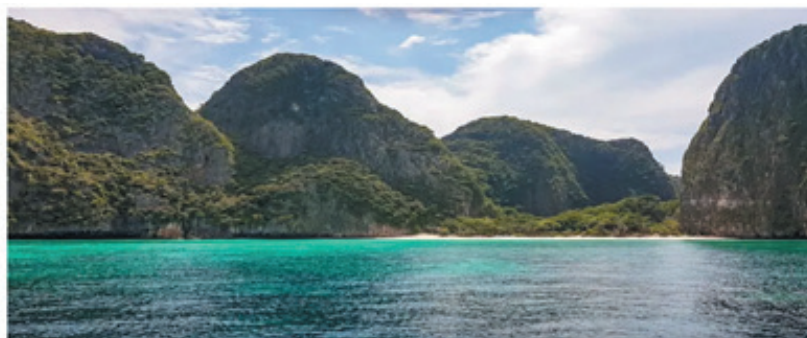
Therefore, how destinations experience unbalanced tourism varies significantly and, in part, relates to the destination type. Nevertheless, many commonalities are observable amongst cities, coasts and islands, rural areas, and mountain destinations (EC, 2022):

- Urban destinations (e.g., Venice, Lucerne, Vienna, Barcelona) experience extremely high tourist densities in certain neighbourhoods, but appear to have more flexibility and local alternate tourism attractions and infrastructure available to implement physical dispersion strategies compared to rural destinations.
- The rural areas researched (e.g., Plitvice Lakes, Regional Park of Monts d’Ardèche, Cliffs of Moher) demonstrate how regions depend on tourism flows, and that the sudden appearance of large crowds at a few attraction points is not easy to manage. Furthermore, rural areas all seem to be confronted with the contradiction of capturing the economic benefits that tourism may bring while offering idyllic rural landscapes and unique attractions. This applies particularly to destinations where protected area management goals to conserve ecological integrity do not always easily align with the goals of providing more tourism infrastructure.
- The coastal and island destinations (e.g., Santorini) all show biophysical fragility, especially in beaches, dunes and places of biodiversity value. Collectively, island destinations have limited geographic space and share challenges with respect to further tourism growth. The absence of neighbouring land destinations makes them unique, as any management solution implemented can be set in a very specific scope, suitable and adapted to a “closed” destination. As a result, island settings provide advantages in monitoring arrivals from outside, while the local movement and management of crowds remains equally comparable to all other destination types.
- The mountain destinations analysed (e.g., Dolomites, Rigi, Bled, Mount Everest) highlight the fragility, both biophysical and socio-cultural, of such areas. These destinations showcase how contemporary visitor masses can easily be channelled even to relatively remote locations, as more and more visitors seek nature experiences at unbalanced tourism growth destinations with “instagrammeable” spots. Similarly, to coastal areas, mountain destinations, particularly within protected areas, are suitable for management approaches aiming at stricter regulations and controls.

Some Overtourism examples

To truly understand the concept of overtourism and its effects on a destination and its people, here are some examples.

Overtourism in Maya Bay



Maya Bay in Thailand was made famous when the book ‘The Beach’ was published, which was later adapted into a movie starring Leonardo DiCaprio. Almost a right of passage for backpackers, this book and movie encouraged thousands of tourists to flock to the secluded bay. Overtourism in Maya Bay caused significant environmental damage, with negative consequences for the local flora, fauna and marine life. In attempt to combat this, the Thai government closed the island to tourists for a period of four months.



Overtourism in Barcelona

Barcelona is home to 1.6million people, yet it welcomes an excessive 32 million tourists each year. These tourists arrive in flocks during school holidays, summer weekends and when cruise ships dock. While this brings significant economic value to some areas of the city, such as Las Ramblas, tourists rarely venture much further, meaning that businesses outside the main tourist hotspots see little benefit. Residents have expressed resentment towards tourists and the tourism industry on many occasions, as evidenced by protests and signs placed around the city.

Overtourism at Macchu Picchu



Macchi Picchu is one of the most well-documented examples of overtourism. This is because it was one of the first tourist attractions to implement restrictions on tourist numbers in an attempt to manage overtourism. Fortunately, there have been reports in the past year or so that these efforts have worked and that the crowds at Macchu Picchu have been significantly reduced - evidence that careful tourism management does work.

Overtourism in Venice



Venice attracts around 20 million tourists each year. On its busiest days, Venice welcomes approximately 120,000 visitors! In comparison, the city has just 55,000 permanent residents. Overtourism in Venice has had a significant impact on the local community - economically, environmentally and socially. Members of the host community are forced to navigate crowds and endure the nuisance of noisy wheellie suitcases and selfie sticks on a daily basis. Many tourists display disrespectful behaviour, such as swimming in the canals, having picnics on the famous bridges and dropping litter. Additionally, numerous boats emit harmful pollutants into the atmosphere each day.



Overtourism in Santorini



There are some concerns that the picturesque island of Santorini has experienced overtourism to such an extent that it is now close to saturation point. Over 5 million overnight tourists visit Santorini each year- an island that spans just 76km². Traffic jams, overcrowding and pollution have become serious issues on the island. There is also evidence of rising water consumption and excessive energy use. The island is striving to combat the problem by placing limits on tourist numbers. Additionally, a new desalination plant, the largest in Greece, has been constructed. There are fears, however, that these measures will not suffice, given the rapid growth in recent years.

Overtourism at Mount Everest



Overtourism at Mount Everest is not only detrimental for the environment and the host community, but also poses significant dangers to climbers. Along with issues such as discarded oxygen canisters, littering, and the erosion of pathways, recent media reports have highlighted climbers queuing in hazardous conditions while ascending and descending the mountain. In fact, there have even been recorded deaths, with overtourism cited as a contributing factor.

Carrying capacity

The concept of overtourism is closely linked to the carrying capacity of a destination (Knezevic *et al.*, 2018). To prevent overtourism, it is essential to have a clear understanding of the local tourism system's carrying capacity (Weber *et al.*, 2017). The UNWTO defines the term as "the maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, and socio-cultural environment and an unacceptable decrease in the quality of visitors' satisfaction" (WTO 1983 in UNWTO *et al.*, 2018, p.14). The concept of carrying capacity predates the term overtourism and can be considered "a precursor to current concerns with overtourism, which emphasises that the number of tourists, and their behaviour can overwhelm the places that they visit, damaging both the tourism resources and the lifestyles of those living in destination areas." (Wall, 2020, p. 1).



Some key questions regarding the concept of carrying capacity remain, such as determining how and when to set limits on tourism, and identifying effective management strategies to successfully balance tourism supply and demand. Simultaneously, new issues and developments are shaping the tourism industry. Examples include the growing pressure from cruise ships and the emergence of higher capacity accommodation facilities (Wall, 2020). Peeters *et al.* (2018, p. 26) summarise that “rapid tourism growth is provoking many discussions on destinations’ carrying capacity and their capacity to handle the overwhelming inflow of visitors versus maintaining a balance with residents’ numbers.” Consequently, carrying capacity remains a highly relevant concept, directly related to the phenomenon of overtourism and its mitigation and prevention.

Social carrying capacity is particularly challenging to measure because it is linked to the psychological characteristics of both tourists and residents at a destination (Weber *et al.*, 2017). At the same time, maintaining a balanced socio-psychological perspective is crucial, as low tolerance towards tourists can negatively affect visitors’ experiences and lead to dissatisfaction. Therefore, effectively managing social capacity can enhance the overall tourist experience (Weber *et al.*, 2017).

Rethinking tourism success – experience of the tourism destination worldwide

With careful tourism planning and management, we can mitigate the negative effects of overtourism or prevent it from occurring altogether. The adoption of sustainable and responsible tourism principles is fundamental to managing overtourism effectively. From a top-down perspective, policies should be implemented to address issues such as overcrowding. Examples include adjusting fees or limiting ticket sales. From a grassroots perspective, tourists can take various actions to help prevent overtourism. These include visiting destinations during off-peak periods or quieter times of the day, exploring less-known destinations, and demonstrating responsible behaviour while travelling. Thus, solutions to overtourism exist, and it can be managed or even avoided entirely with careful planning and implementation. There are already excellent examples of responsible tourism initiatives worldwide. The pressing question for many DMO’s in Europe’s tourism destinations now is: *What can be done to enhance the attractiveness of regions to visitors while supporting a more sustainable and resilient recovery?*

The solution approaches most frequently applied by the different destinations analysed (EC, 2022) can be summarised as follows:

- Laws, regulations and policies: Most destinations have implemented various legally binding rules and regulations to address unbalanced tourism development. These include imposing limits to the construction of new hotels or the numbers of cruise passengers, regulating privately rented accommodation, and setting capacity limits for heavily visited sites. Additionally, pollution control measures for cruise ships are often enforced. Less restrictive policies may incentivise the use of public transport instead of private vehicles.
- Nevertheless, stakeholder cooperation, i.e., collaboration among different interest groups, tourism companies and even visitors, has been established as a prerequisite for developing effective solutions to unbalanced tourism. The participation of residents in policymaking, as well as their consultation, have been identified as a critical success factors.
- New and expanded tourism infrastructure, such as additional parking lots or increased waste collection capacities during peak season are obvious ways to accommodate higher visitor numbers in an orderly manner. Moreover, new infrastructure, along with new tourism offerings or enhanced information campaigns, has been employed to disperse tourists to other parts of a destination. These “deconcentration” strategies and the redirection of visitor flows not only help alleviate the burden on areas with “must-see” attractions, but also enable other areas to benefit economically.
- Digital solutions, particularly the use of big data from mobile technologies and centralised tourism data observatories, are key components in successfully managing unbalanced tourism, as they enable data-driven decision-making. Shared information provides a common ground for stakeholders with differing interests and levels of influence to consider appropriate solutions from their own perspectives. Real-time and up-to-date information provision was frequently highlighted as a viable approach during workshops. Nevertheless, several challenges remain, including the need to purchase datasets from providers. Furthermore, the systematic monitoring of unbalanced tourism using a comprehensive set of key indicators is still underdeveloped in most of the destinations studied. This lack of systematic monitoring contributes to overtourism being perceived as a subjective phenomenon in certain locations.



Recommendations for the regional and the local level

First, it is essential to shift the focus from simply achieving high visitor numbers to delivering socio-economic and environmental benefits. As travellers increasingly look for environmentally friendly and sustainable travel options, adopting a more environmentally and culturally responsible approach can meet this growing demand, while preserving these assets. Furthermore, it provides destinations with a significant advantage to differentiate themselves as sustainable tourism destination.

Finding a balance between environmental, economic and social impacts remains a challenge (Koščak & O'Rourke, 2023). For many destinations, this will require taking steps to diversify the tourism offer and reducing or redistributing demand away from high-profile tourism hubs, both geographically and temporally. For instance, in 2021, due to concerns over the number of cruise ships and tourists visiting the *Balearic Islands in Spain* during peak periods, an agreement was reached to limit the number of cruise ships docking at the Port of Mallorca. By capping the volume of passengers that disembark, typically for short visits, this measure aims to enhance the visitor experience, alleviate the pressure on the city's historic centre, and benefit local residents. Similar strategies have been proposed or implemented in Dubrovnik, Barcelona and Venice to address the challenges of cruise tourism.

In *Argentina*, La Ruta Natural programme organises nature tourism through 17 major territorial routes that span the entire country, each based on the natural, environmental, or geographical identity of its region. The programme also promotes responsible travel through its website, while enhancing infrastructure and improving services to support sustainable tourism. In *Canada*, a “high-value guest” approach is central to Destination Canada's new strategy, which views tourism through the lens of “wealth and well-being”. This approach prioritises deeper, more strategic collaboration with partners to identify higher-value visitors – those who appreciate nature, engage with the locals, are less time-sensitive, and are eager to explore lesser-known areas and engage in cultural exchanges. It targets visitors with a higher propensity for return travel, resulting in greater returns and a higher contribution to GDP.

The following recommendations are directed at tourism and non-tourism stakeholders responsible for regional and municipal policies, planning and management, particularly local governments, destination management organisations and local tourism industry associations (EC, 2022):

- Destinations need to adopt an appropriate definition of overtourism to enable an objective understanding of the phenomenon in their local context.
- Destinations should integrate the risk of overtourism into their broader planning and management frameworks.
- Destinations may consider adopting a framework to address overtourism as a phenomenon beyond traditional economic key performance indicators, enabling a more data-driven and systematic analysis of the sector in a holistic way.
- To achieve this, it is recommended to collect and analyse data systematically and continuously, ensuring relevance, frequency and reliability across the economic, social and environmental facets of tourism.
- Incorporating resident and stakeholder participation in policymaking- such as through surveys- as well as their consultation (e.g., via surveys) helps identify “pain-points” and enhances tourism acceptance in destinations.
- The social dimension needs to be captured to effectively monitor overtourism. This can be achieved through surveys of both residents and visitors, preferably conducted at local and regional levels.
- Steering mechanisms (e.g., awareness campaigns, dynamic pricing and pre-booking systems) may be used to mitigate visitor burdens. These measures can be further enhanced by leveraging big-data to identify and manage tourist hotspots.
- Visitor management systems should be based on real-time and up-to-date information. They can be exercised in different ways, including crowd monitoring, improving infrastructure in heavily visited areas, and employing dispersal strategies by creating additional infrastructure and alternative tourism offers in less visited parts of a destination.



- De-marketing strategies may be used to discourage certain undesirable tourist groups from visiting a destination.
- Systematic capacity building in the context of indicator systems and monitoring is necessary at DMOs to enable the use of comprehensive monitoring systems. In cases where capacities or resources are limited, DMOs may wish to implement reduced sets of indicators, focusing on easily collectible data.
- Effective planning may have to include various regulatory provisions or taxes aimed at mitigating harmful tourist activities. In particular, curtailing individual automobile traffic, one of the most noxious sources of negative overtourism impacts, and shifting traffic flows toward public transportation options is crucial.

Key lessons learned

Researched destinations (EC, 2022) across Europe illustrate how unbalanced tourism growth can develop. The experiences gathered highlight certain similarities, as well as significant differences, in unbalanced tourism patterns. These destinations represent good practices, and many of the specific initiatives and measures implemented can be transferred to other destinations in Europe where tourism may be, or become, unbalanced. Although many destinations have a complex set of solutions to address unbalanced tourism, none represent a case where the issue is fully “solved for good”. Instead, each case highlights a unique context with broad solution approaches that can be adapted to other destinations facing similar challenges.

In summary the cases collectively contribute to the following key lessons (EC, 2022):

- Unbalanced tourism is a process that evolves uniquely at each destination, despite some clear common mega-trends and drivers.
- International tourism growth is a key driver of unbalanced tourism developments at most destinations.
- Unbalanced tourism is often subjectively perceived by local stakeholders, particularly residents, as an undeniable reality, and is influenced by seasonal variations. Summer is the most important season when unbalanced tourism is most visible, even if tourism occurs during other times, and even spreads across seasons.
- The evolution of social media use contributes to unbalanced tourism by turning specific sites into hotspots, often without key management organizations having the necessary control measures in place.
- The most visible impact of unbalanced tourism includes various congestion, such as the concentrated number of visitors or vehicles in limited geographic areas, including beaches, parking lots, museum lines, and ports.
- The non-visible impacts of unbalanced tourism are more diffuse and include several socio-economic impacts, such as touristification, rising prices and biophysical impacts throughout the year. The issue of increasing housing prices was also discussed, as they affect local residents (via out-pricing) as well as (seasonal) employees in the sector, who may not find affordable accommodation due to price increases. Cultural alienation is another factor affecting local residents, as they may lose a sense of belonging due to the increased touristic transformation of their area.
- How destinations experience unbalanced tourism varies significantly and is partly related to the type of destination. Many commonalities are observable among cities, coastal areas, rural regions and mountains.
- The solutions to manage unbalanced tourism need to be multidimensional, as tourism is a complex and dynamic sector. No single solution is suitable for all destinations, as stakeholder values, beliefs and attitudes are key factors in the successful management of unbalanced tourism. Each case offers transferable lessons for other destinations, regardless of the destination type or classification. However, whether a solution approach is appropriate must be decided by the local stakeholders.
- The monitoring of unbalanced tourism is not well advanced, as there is no key set of indicators that allows for cross-destination comparison or an objective understanding of the issues at each destination. This contributes to unbalanced tourism remaining a subjective concept at some destinations. Systematic collection and analysis of relevant information is key to managing unbalanced tourism. This information needs to be made accessible to all stakeholders, including residents of the destinations.



The importance of impact measurement was also confirmed in the coastal workshop, as impacts may vary even within smaller regions (e.g. between municipalities).

- Visitors and residents are key stakeholders to consider when defining appropriate solutions to unbalanced tourism. The participation of residents in policy-making, as well as their consultation (e.g. via surveys), and means for residents to be financially compensated or to take part in benefit-sharing, were identified as success factors.
- Tourism intensity and density are important indicators that need to be a part of the data collection framework of tourism observatories. The case studies have highlighted clear challenges in defining tourism intensity and density due to the lack of statistical frameworks for data collection, including information on day visitors, cruise ships passengers or coach bus passengers. Furthermore, destinations need to clearly define the spatial boundaries for managing tourism; otherwise unbalanced tourism risks continuing to be a subjective issue, making it difficult to define among local stakeholders. It is unlikely that specific intensity or density levels can be defined across destinations. Rather, each destination should define a spectrum of acceptable levels for their tourism activities.

CONCLUSION

The shift in focus towards more sustainable tourism development should lead to a greater awareness of the role of tourism flows in destinations. Diversifying tourism to better manage the movement of visitors, both spatially and temporally, provides opportunities to strengthen destinations, build resilience to future shocks, and optimise economic benefits while balancing environmental and social impacts. Efforts to sustainably disperse visitors and better spread the benefits of tourism both within and across destinations are becoming more common and are increasingly part of the strategic agenda for tourism, as is the integration of tourism into broader national and regional development agendas. The development of a more diverse tourism offer requires investments in tourism and community infrastructure to support increased visitation. Successfully encouraging tourists to visit new destinations can have significant economic and social benefits for local communities, if supported by adequate planning and resources (OECD, 2024).

The focus on balancing tourism flows has brought a renewed emphasis on the concept of carrying capacity in destinations. While there is no clear approach or methodology for determining the carrying capacity of tourism destinations, the sector can learn from the extensive work and experience in managing visitor flows in protected areas. Improved access to data and communication with local communities can also help better understand destination capacities, balance trade-offs, and determine critical thresholds, which may differ for visitors and residents. National stakeholders should work with attractions, destinations, and local governments to better identify the critical thresholds for tourism. Optimising the socio-economic value of tourism requires better planning, improved understanding and management of the trade-offs involved, and engagement with the local community to create a more inclusive sector where the benefits (and costs) are more widely shared. One area of increased focus is measuring tourism acceptance, local sentiment, and the social aspect of tourism. Creating liveable destinations and ensuring that the local population benefits from tourism has become a policy focus for many destinations. In this context, participatory approaches that involve local communities in tourism planning and development decisions can support more balanced outcomes for residents, and in turn lead to greater acceptance of tourism (OECD, 2024).

Recognition of the need for tourism to transition towards more sustainable and resilient models of development has grown in recent years. Coordinated policy action across all levels of government is needed to address structural weaknesses that have impeded the sector in the past, not least to address issues linked with unbalanced tourism development and ensure that jobs, resident well-being, and other benefits from tourism flow to local communities. However, preparing for the future will require accelerating mitigation and adaptation measures so tourism can play its part in the low-carbon transition, as well as continued progress to support digital uptake by businesses, particularly SMEs (OECD, 2024).



Rethinking the tourism system and preparing for future shocks, while addressing long-term priorities and transitioning to more balanced and sustainable models of tourism development, require policymakers to seize new opportunities to deploy transversal approaches that achieve multiple objectives. More granular, timely, and robust evidence is needed to inform policy and business decisions, manage and track progress on potential trade-offs, determine ‘what works’, and identify emerging policy impacts and risks, as well as the costs of inaction.

REFERENCES:

- Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism Management*, 21(1), 97–116.
- Celata, F., & Romano, A. (2020). Overtourism and online short-term rental platforms in Italian cities. *Journal of Sustainable Tourism*, 30(5), 1020–1039. <https://doi.org/10.1080/09669582.2020.1788568>
- Cocola-Gant, A. (2018). Tourism gentrification. In L. Lees & M. Philips (Eds.), *Handbook of gentrification studies* (pp. 281–293). Edward Elgar Publishing.
- CNN Travel, (2024). Available at: <https://edition.cnn.com/2024/07/08/travel/barcelona-tourism-protests-scli-intl/index.html#:~:text=Protesters%20in%20Barcelona%20have%20sprayed%20visitors%20with%20water,with%20slogans%20including%20%E2%80%9CBarcelona%20is%20not%20for%20sale.%E2%80%9D>, retrieved: 290824
- ETC (2020). European Travel Commission: Handbook on Covid -19 recovery strategies for national tourism organisations. ETC & Toposophy Ltd., Brussels, September 2020.
- European Commission, (2022). Unbalanced tourism growth at destination level – root causes, impacts, existing solutions and good practices. Final report, PDF ISBN 978-92-9469-420-1, doi: 10.2826/782120, EA-07-22-856-EN-N
- Gutiérrez, J., García-Palomares, J. C., Romanillos, G., & Salas-Olmedo, M. H. (2017). The eruption of Airbnb in tourist cities: Comparing spatial patterns of hotels and peer-to-peer accommodation in Barcelona. *Tourism Management*, 62, 278–291. 05.003 <https://doi.org/10.1016/j.tourman.2017>
- Haxton, P., Camacho, M. (2023). The return of the tourists: Regions rethinking attractiveness and sustainability, Available at: <https://oecdcoigito.blog/2023/07/04/the-return-of-the-tourists-regions-rethinking-attractiveness-and-sustainability/>, Retrieved: 18.8.2024
- Knezevic, L., Clarke, M., & van der Graaf, A. (2018). *Carrying capacity at sensitive cultural heritage sites*. European Expert Network on Culture and Audiovisual (EENCA).
- Košćak, M., & O'Rourke, T. (2023). *Ethical and Responsible Tourism - Managing Sustainability in Local Tourism* - 2nd edition. London, Routledge.
- McKinsey & Company (2024), *What is the future of travel?*, <https://www.mckinsey.com/featuredinsights/mckinsey-explainers/what-is-the-future-of-travel>.
- Milano, C., Novelli, M., & Russo, A. P. (2024). Anti-tourism activism and the inconvenient truths about mass tourism, touristification and overtourism, *Tourism Geographies*, DOI: 10.1080/14616688.2024.2391388. Available at: <https://doi.org/10.1080/14616688.2024.2391388>, retrieved: 28.8.2024
- Novy, J. (2018). ‘Destination’ Berlin revisited. From (new) tourism towards a pentagon of mobility and place consumption. *Tourism Geographies*, 20(3), 418–442. <https://doi.org/10.1080/14616688.2017.1357142>
- OECD (2023), *The Climate Action Monitor 2023: Providing Information to Monitor Progress Towards Net-Zero*, OECD Publishing, Paris, <https://doi.org/10.1787/60e338a2-en>.
- OECD (2024), *OECD Economic Outlook*, May 2024, OECD Publishing, Paris, <https://www.oecd.org/economic-outlook/may-2024/>.
- OECD (2024), *SME digitalisation in 2024 Managing shocks and transitions. An OECD D4SME Survey*, https://www.oecd.org/content/dam/oecd/en/networks/oecd-digital-for-smes-globalinitiative/FINAL-D4SME-2024-Survey-Policy-Highlights.pdf/_jcr_content/renditions/original./FINAL-D4SME-2024-Survey-Policy-Highlights.pdf.
- Peeters, P., Gössling, S., Klus, J., Milano, C., Novelli, M., Dijkmans, C., Eugelaar, E., Hartman, S., Helsinga, J., Isaac, R., Mitas, O., Moretti, S., Nawun, J., Papp, B., & Postma, A. (2018). *Research for TRAN Committee—Overtourism: Impact and possible policy responses*. European Union. <http://bit.ly/2srgoyg>
- Russo, A. P., & Scarnato, A. (2018). “Barcelona in common”: A new urban regime for the 21st-century tourist city? *Journal of Urban Affairs*, 40(4), 455–474. <https://doi.org/10.1080/07352166.2017.1373023>



- UN Tourism (2024), *Policy Guidance to Support Climate Action by National Tourism Administrations*, UN Tourism, <https://doi.org/10.18111/9789284425365>.
- UN Tourism (2024), *UNWTO World Tourism Barometer and Statistical Annex*, January 2024, <https://doi.org/10.18111/wtobarometereng>.
- UN Tourism (2024), *UNWTO World Tourism Barometer and Statistical Annex*, May 2024, <https://doi.org/10.18111/wtobarometereng>.
- UNWTO, Centre of Expertise Leisure, Tourism & Hospitality, NHTV Breda University of Applied Sciences, & NHL Stenden University of Applied Sciences. (2018). 'Overtour-ism'? *Understanding and managing urban tourism growth beyond perceptions*. UN-WTO. DOI: <https://doi.org/10.18111/9789284420070>
- Valente, R., Russo, A. P., Vermeulen, S., & Milone, F. L. (2022). Tourism pressure as a driver of social inequalities: ABSEM estimation of housing instability in European urban areas. *European Urban and Regional Studies*, 29(3), 332–349. <https://doi.org/10.1177/09697764221078729>
- Wall, G. (2020). From carrying capacity to overtourism: A perspective article. *Tourism Review*, 75(1), 212–215. <https://doi.org/10.1108/TR-08-2019-0356>
- Weber, F., Stettler, J., Priskin, J., Rosenberg-Taufer, B., Ponnappureddy, S., Fux, S., Camp, M.-A., & Barth, Martin. (2017). *Tourism destinations under pressure Challenges and innovative solutions*. Lucerne University of Applied Sciences and Arts Institute of Tourism ITW.

SiTCon

**Singidunum Tourism
Conference - 2024**

CONFERENCE PAPERS



SUSTAINABLE TOURISM: THE ROLE OF GREEN FINANCE IN ENHANCING ENERGY EFFICIENCY IN THE HOSPITALITY INDUSTRY

Danka Milojković*,
Milena Nikolić,
Ana Milenković Anđelković,
Marija Marković Blagojević

Singidunum University,
Belgrade, Serbia

Abstract:

Increasingly important factors in modern sustainable tourism and hotel industry business are green finance and energy efficiency. The subject of this paper is the identification and analysis of the role of green finance in supporting sustainable practices in the tourism and hotel industry with a focus on improving aspects of energy efficiency. The paper used an analytical method to diagnose the research problem, a comparative analysis to compare case studies, and a synthetic method to summarize the results. It identified and analysed case studies of companies in the hospitality industry that used credit lines with a grant through the Green Economy Financing Facility (GEFF) to enable investments in energy-efficient technologies and sustainable practices. In the context of the hotel industry, energy efficiency not only reduces operating costs but also contributes to reducing the carbon footprint, thereby increasing the competitiveness and attractiveness of tourist facilities. This work, based on the analysis of examples of good practice in Armenia, Kyrgyzstan, Morocco, Turkey, Bulgaria, and Croatia, provides recommendations for the integration of green finance into business strategies, emphasizing that a multidisciplinary approach is important for achieving sustainable goals in tourism and hospitality.

Keywords:

case studies, energy efficiency, GEFF, green finance, renewable energy sources.

INTRODUCTION

In an era of increasing focus on environmental protection and reducing energy consumption, developing and implementing sustainable practices in tourism and hospitality has become crucial. The tourism and hospitality sector traditionally consumes significant amounts of energy and natural resources, so it faces the challenge of maintaining a high level of service for its guests while reducing the negative environmental impact. All over the world, numerous hotels and catering facilities recognize the need to use sustainable energy sources and thereby achieve energy efficiency in facilities. Energy-efficient buildings contribute to optimization, reduction of operating costs and carbon dioxide emissions, as well as increasing competitiveness in the market (Fu *et al.*, 2023).

Correspondence:
Danka Milojković

e-mail:
dmilojkovic@singidunum.ac.rs



Case studies from the following countries: Armenia, Kyrgyzstan, Morocco, Turkey, Bulgaria, and Croatia, provide concrete examples of how hotel industry companies have successfully applied various technologies and approaches to improve energy efficiency and use of renewable energy sources with business development support provided by GEF. The GEF is the facility organization of the European Bank for Reconstruction and Development (EBRD), and it is responsible for providing financial resources to support green economy investments for businesses (GEFF, 2024). The mentioned case studies show how investments in solar panels, heat pumps, wastewater treatment systems, and other green innovations result in significant energy savings, reduction of carbon dioxide emissions, and effective return on investment.

In this paper, case studies from the mentioned six countries are analysed in order to show different approaches and results of the introduction of green technologies in the hotel industry, pointing out the key success factors and challenges that hotel companies face on the path of transformational changes towards sustainable business. The goal of the research is to identify good examples from practice, to provide insight into the possibilities of further development of sustainable practices in the hotel industry while respecting the specificities of different regions and types of facilities.

LITERATURE REVIEW

Global strategies to reduce the negative environmental impact include sustainable tourism, a key aspect of strategic action in recent decades. Numerous authors and researchers, such as Mishra & Kannaujia (2023) and Nikolić *et al.*, (2024), wrote about the importance of green finance in improving the energy efficiency of hotels and catering facilities. Investing in projects with a positive impact on the environment or the now popular green financing offers solutions to reduce energy consumption and emissions, while simultaneously improving competitiveness and profitability in tourism and hospitality (Kholijah, 2024).

In addition to financial resources, green finance provides technical and strategic assistance for sustainable practices implementation in the hotel industry (Salami *et al.*, 2024). Green financing helps hotels reduce their dependence on fossil fuels and switch to renewable energy sources by supporting innovative technologies such as the introduction of heat pumps, solar panels, and energy-efficient air conditioning systems. (Rabczak *et al.*, 2024). The mentioned green innovative technologies enable significant energy savings and reduction of operating costs, which contributes to the long-term sustainability and financial stability of hotel companies (Nikolić & Milojković, 2023).

Tourism and hospitality industry faces several challenges even though green financing brings numerous advantages, (Said *et al.*, 2017; Barjaktarović & Knežević, 2021; Milojković *et al.*, 2023): (1) investments in green technologies often require high initial investments, which can be an obstacle for small and medium-sized hotel companies; (2) although there are numerous subsidies and funds, access to the funds can be complicated and consume considerable time and resources to prepare applications; (3) implementation of advanced technologies can be challenging due to the need for training as well as the need to adapt existing systems. However, the benefits of green financing such as long-term savings, improved competitiveness positive environmental impacts, and growing awareness of sustainability among consumers create an additional motive for the introduction of green practices (Sangwan *et al.*, 2023).

Green finance plays a key role in improving the financial sustainability of businesses. Green financing enables the acquisition of innovative green technologies that improve energy efficiency in the hotel industry, contributing at the same time to savings in energy consumption and environmental protection through the reduction of carbon dioxide emissions (Tavitiiman *et al.*, 2024). In the future, greater availability of financial resources and technical support can accelerate the transformation to sustainable tourism, thus contributing to the preservation of the environment and improving the quality of service in the hotel industry (OECD, 2018).



RESEARCH METHODOLOGY

The research was conducted using qualitative methods, with a focus on comparative analysis of examples of good practice and case studies in the field of green finance and energy efficiency in tourism and hospitality with advisory and financial support from GEF. First, a detailed analysis of secondary sources, including relevant literature, reports, and existing studies, was performed to identify key factors and trends in the application of green finance and energy efficiency.

After that, concrete examples of good practice and case studies were selected that demonstrate the successful application of sustainable financial mechanisms and energy-efficient technologies in hotel and tourist facilities. Selection criteria included geographic diversity, different facility types, and specific technological or financial innovations. Data from these case studies were collected by analysing available documentation on GEF (2024). A comparative analysis of the collected data was conducted to identify key success factors, challenges, and potential models that can be replicated in different contexts. Finally, research findings are synthesized in order to draw conclusions and give recommendations for further development and implementation of green finance and energy efficiency in the tourism and hotel industry.

RESULTS AND DISCUSSION

Armenia

Avana Marak Tsapatagh Hotel is a rural retreat near Lake Sevan in Armenia, established by Tufenkian Hospitality LLC in 2002-2003. The hotel offers nature-focused activities, such as swimming, kayaking, cycling, and local food from nearby farms. Initially reliant on grid electricity and diesel, the hotel aimed to reduce environmental impact. With support from the Green Climate Fund and Climate Investment Funds, a US\$ 410,000 investment enabled the installation of a 500 kW photovoltaic power plant. This switch eliminated diesel use, saving 874 MWh/year and reducing CO₂ emissions by 237 tonnes/year, with a 6-year return on investment. (GEFF, 2024a; GEFF, 2024e; Tufenkian Heritage Hotels, 2024)

Wordi Erik LLC, a catering business in Charentsavan, Armenia, was founded in 2009 and offers European and Armenian cuisine. To cut energy costs, the company invested US\$ 20,000 in a solar photovoltaic system, leading to 37 MWh/year in energy savings and a 16-tonne annual CO₂ reduction. The investment, supported by GCF and CIF, is expected to pay off in 7 years. (GEFF, 2024a)

Kyrgyzstan

The Supara Ethnographic Complex is a mountain resort on Chunkurchak Mountain, 40 km from Bishkek, Kyrgyzstan, designed to showcase traditional Kyrgyz nomadic life. Built using natural materials like stone, wood, and straw, the complex hosts about 500 guests annually and offers cultural activities, Kyrgyz games, and events. In 2019, Supara invested US\$ 100,000 in a wastewater treatment plant, improving water purity by 95%. Supported by KyrSEFF, EBRD, and the EU, the project reduced water usage for irrigation by 30% and cut CO₂ emissions by 0.17 tonnes/year, saving 3.26 MWh of energy annually with a 10-year return on investment. (GEFF, 2024f)

Morocco

Joel Gestion is a property management enterprise located in Marrakech, Morocco. This company owns Riads, traditional Moroccan houses that have 2 or more floors and surround a courtyard with a fountain or pool in the middle. Intending to renovate three Riads and make them more energy efficient, Joel Gestion launched a project that involved numerous changes - thermal insulation of the floors and walls, installation of two removable roofs at patios, a heat pump for heating water in the indoor pool, and the Jacuzzi, heat pumps and solar boilers that produce hot water and provide underfloor heating, twelve air conditioners with inverter technology and 334 LED lamps. Project financing was provided by the EU and the EBRD's Southern and Eastern Mediterranean (SEMED) Multi-Donor Account (Australia, Finland, France, Germany, Italy, the Netherlands, Norway, Sweden, Taipei China, and the United Kingdom). By investing 88,934 euros in these changes, the conditions for staying in Riads have been significantly improved, so that they have become much



more attractive to tourists. Energy consumption was reduced by 150 MWh/year, i.e. by 66%, which resulted in large financial savings, so that the invested funds can be returned in 2.4 years. At the same time, it was possible to reduce oil dioxide emissions by 61 tonnes/year. (GEFF, 2024c)

Turkey

Ilayda Hotel is located on the main beach promenade in Kusadasi, Turkey. It has views of the Aegean Sea, the harbour, and Bird Island and access to the beach in the centre of Kusadasi (Ilayda Hotel Kusadasi, 2024). Due to the desire to reduce energy bills and improve the quality of energy supply, the management of this hotel decided to invest funds in the renovation of the hotel's energy-intensive systems - heating, cooling and ventilation systems, and lighting systems. To finance the renovation of these systems, they turned to EU funds and TurSEFF, with whose financial and advisory support they invested 285,163 euros in a heat pump, solar boiler, lighting, and HVAC system for heating, cooling, and air conditioning. The new equipment made it possible to save electricity of 103 MWh/year, and energy savings of 6,091 GJ/year, thanks to which the invested funds will be returned in less than 5 years. The implemented innovations enabled the reduction of carbon dioxide emissions by 436 tonnes/year. (GEFF, 2024b)

Bulgaria

Boutique Hotel Shipkovo is located on Stara Planina in Bulgaria and operates as part of the company Hranitelni Stoki JSC, which is engaged in food packaging, food trade, building rental, and consulting. Hranitelni Stoki JSC built the family Hotel Shipkovo in the village of Shipkovo on Stara Planina, which has ideal conditions for spa treatment. Intending to rationalize energy costs, the management of Hranitelni Stoki JSC turned to the Bulgaria Energy Efficiency and Renewable Energy Credit Line (BEERECL) team. From the funds received from the Kozloduy International Decommissioning Support Fund (KIDSF), administered by the European Bank for Reconstruction and Development (EBRD), Foodstuffs JSC installed a system of heat pumps to provide its own reliable and high-quality heating. With an investment of 64,913 euros, savings of 23,150 euros in energy costs per year were achieved, so that the invested funds are returned in less than 3 years. Changes in the heating system improved the working and maintenance conditions and, due to the use of renewable energy sources, contributed to the reduction of carbon dioxide emissions by 26 tonnes/year and enabled the hotel's energy independence. (GEFF, 2024d)

Croatia

Frigomotors Ltd. was founded in 1990 in Croatia. Today, the headquarters of the company is in Dugopolje. This company offers products for automatic regulation and central monitoring, heating, air conditioning, and ventilation, as well as for industrial refrigeration (Frigomotors, 2024). It is recognizable by the production, installation, and maintenance of HVAC equipment according to the "turnkey" system on an ESCO basis. For the project of building a heat pump using a water-water system for the Babin Kuk hotel near Dubrovnik, the goal of which was to enable the use of waste heat from the existing compressor for heating sanitary water to 60 degrees and compensation for fuel oil consumption, Frigomotors Ltd. addressed the Western Balkans Sustainable Energy Financing Facility (WeBSEFF) team. From the donation of EU funds through this credit line, the replacement of the old heating and cooling system with a new heat pump in the amount of 317,648 euros was financed. The innovation in the heating and cooling system made it possible to reduce the energy costs of this company by 105,442 euros per year, and based on these savings, the investment was repaid in 3 years. Due to the use of renewable energy sources, the implementation of this project reduced carbon dioxide emissions by 334 tonnes/year. (GEFF, 2024g)

The comparative analysis of these case studies covers several key aspects: geographical context, type of investment in renewable energy sources and energy efficiency, achieved energy savings and reduction of carbon dioxide emissions, as well as financial profitability and return on investment. For a more efficient comparison and analysis, the case studies are presented in tabular form (Table 1).



Table 1. Comparative overview of case studies on green financing in the hotel industry.

Hotel company	Investor	Location	Investment	Investment size	Financial results	Energy savings	Electricity savings	Water saving	CO ₂ savings	Impact	Donor
Avana Marak Tsapatagh Hotel	Tufenkian Hospitality LLC	Gegharkunik region Armenia	Installation of photovoltaic panels	US\$ 410,000	Payback in 6 years	-	874 MWh/year	-	257 tonnes/year	Increased cost-efficiency	GCF ¹ & CIF ²
“Supara” Ethnographic Complex	Supara Ethnographic Complex	Chunkurchak Kyrgyzstan	Installation of a water treatment plant	US\$ 100,000	Payback period of 10 years	-	3.26 MWh/year	20,016 m ³ /year	0.17 tons/year	-	EU
Move2 Joel Gestion	Joel Gestion, a property management company	Marrakech Morocco	Thermal insulation, heat pump, solar water heaters, LED	€88,934	2.4 years payback period	-	103 MWh/year	-	61 tonnes/year	Improved living conditions in the buildings	EU NIF, SEMED Multi-Donor Account ³
Ilayda Hotel	Ilayda Hotel	Kusadasi, Turkey	Heat pump, HVAC, lighting, solar water heater	€285,163	Payback period of less than 5 years, energy costs decreased by €60,000/year	6,091 GJ/year	103 MWh/year	-	436 tonnes of CO ₂ /year	-	EU
Boutique Hotel Shipkovo	Hotel Shipkovo Hranitelni Stoki	Stara Planina Bulgaria	Heat pump installation	€64,913	Payback period of 2.8 years; annual cost savings of €23,150; IRR of 39%	-	-	-	26 tonnes/year	387 MWh/year	KIDSF
Babin Kuk Hotel	Frigomotors Ltd.	Dubrovnik Croatia	Replacement of old heating and cooling systems with heat pump-based technology	€317,648	Payback period of 3 years; annual cost savings of €105,442	1,437 MWh/year	-	-	334 tonne/year	1,418 MWh/year	EU

¹ Green Climate Fund

² Climate Investment Funds

³ The EU and the EBRD’s Southern and Eastern Mediterranean (SEMED) Multi-Donor Account. The donors of the SEMED MDA are Australia, Finland, France, Germany, Italy, the Netherlands, Norway, Sweden, Taipei China, and the United Kingdom

Source: Authors’ analysis based on (GEFF, 2024a-g)

Case study analysis according to the geographic context and object type:

Armenia: Avana Marak Tsapatagh Hotel and Vordi Erik LLC are located in different parts of Armenia. Avana Marak Tsapatagh is a rural hotel on the shores of Lake Sevan, while Vordi Erik LLC is a hospitality facility in Charentsavan. Kyrgyzstan: Supara Ethnographic Complex is an ethno-resort on Chunkurchak Mountain, which promotes a nomadic lifestyle. Morocco: Joel Gestion manages Riads in Marrakech, traditional Moroccan houses that have been renovated for energy efficiency. Turkey: Ilayda Hotel in Kusadasi is a hotel located on the coast, focused on energy efficiency through the renovation of energy systems. Bulgaria: Boutique Hotel Shipkovo is located in the rural part of Stara Planina, with a focus on spa treatment. Croatia: Frigomotors Ltd. in Dugopolje has implemented a heating and cooling system in the Babin Kuk hotel near Dubrovnik.

Case study analysis according to the type of investment

Solar energy: Avana Marak Tsapatagh Hotel and Vordi Erik LLC (Armenia) invested in photovoltaic panels to supply solar energy. Water treatment systems: Supara Ethnographic Complex (Kyrgyzstan) has invested in a wastewater treatment plant. Energy efficiency: Joel Gestion (Morocco), Ilayda Hotel (Turkey), Butik Hotel Shipkovo (Bulgaria), and Frigomotors Ltd. (Croatia) have invested in various measures to increase energy efficiency, such as heat pumps, HVAC systems, insulation, and LED lighting.



Case study analysis according to the achieved energy savings

The biggest energy savings: Joel Gestion (Morocco): Savings of 150 MWh/year (66% reduction in energy consumption). Ilayda Hotel (Turkey): Savings of 103 MWh/year and 6,091 GJ/year. Less savings: Wordi Eric LLC (Armenia): Savings of 37 MWh/year. Supara Ethnographic Complex (Kyrgyzstan): Savings of 3.26 MWh/year.

Case study analysis according to the reduction of CO₂ emissions

The biggest emission reduction: Ilayda Hotel (Turkey): Reduction by 436 t/year. Frigomotors Ltd. (Croatia): Reduction by 334 t/year. Less emission reduction: Supara Ethnographic Complex (Kyrgyzstan): Decrease by 0.17 t/year.

Case study analysis according to financial profitability

Quick return on investment: Joel Gestion (Morocco): Return in 2.4 years. Frigomotors Ltd. (Croatia): Return in 3 years. Longer return on investment: Wordi Eric LLC (Armenia): Payback in 7 years. Supara Ethnographic Complex (Kyrgyzstan): Return in 10 years.

Case study analysis according to the key differences and similarities

Regional specificities: projects in different countries show how specific regional needs and resources can be used to improve energy efficiency and sustainability. Diversification of investments: while some projects are focused on direct energy savings (solar, HVAC), others deal with sustainable management of resources such as water (Kyrgyzstan). Financial support: all projects relied on various sources of international financial support, which enabled the implementation of these sustainable initiatives.

CONCLUSIONS

Conclusions from the abovementioned case studies indicate the importance of switching to sustainable practices in the tourism and hospitality sector due to environmental benefits and long-term financial profitability. Projects from different countries indicate how local resources and regional specificities can be used to achieve energy savings, reduce CO₂ emissions, and sustainably manage natural resources such as water. Each of the projects is adapted to the specific geographical and climatic conditions of the country in which it is located. For example, an investment in solar panels in Armenia takes advantage of the abundance of sunny days, while a project in Kyrgyzstan, in addition to energy efficiency, focuses on sustainable water management in rural areas. These studies show that investments in renewable energy sources can be successful worldwide, regardless of differences in regional conditions. Investments are not limited to just one type of technology. While solar panels and water treatment systems are key in some regions, energy efficiency through HVAC systems, heat pumps, and LED lighting is showing significant results in other areas. This variety indicates that sustainability can be achieved in several ways, depending on the needs and possibilities of a particular destination. The implementation of these projects would not be possible without international financial assistance.

All projects used different forms of support, which highlights the importance of the availability of funds for the transition to sustainable practices. It also points to the need for wider access to funding for similar projects in the future. Although the return on investment varies from project to project, the long-term profitability of sustainable investments is obvious. Projects such as those in Morocco and Croatia show a relatively quick return on investment (from 2 to 3 years), while some others, such as the one in Kyrgyzstan, and have a longer return period. However, even those with a longer return on investment bring clear benefits through the reduction of energy costs and CO₂ emissions, which contributes to their attractiveness to potential investors.

These case studies provide valuable guidance not only for the tourism sector but also for other industries. Through strategic planning and investments in renewable energy sources and sustainable systems, companies can significantly contribute to environmental protection, cost reduction, and long-term sustainability. The case studies clearly show that the transition to sustainable practices in tourism and hospitality can bring significant benefits, both economic and environmental. These initiatives not only reduce operating costs and CO₂ emissions but also provide an opportunity to improve the reputation and competitiveness of the industry. These examples can serve as an incentive for other entrepreneurs and regions to explore the possibilities of switching to sustainable practices in their business models.



REFERENCES

- Barjaktarović, D. & Knežević, M. (2021). *Upravljanje kvalitetom u hotelijerstvu*. Beograd: Univerzitet Singidunum. [in Serbian]
- Frigomotors. (2024). Retrieved February 26, 2024, from <https://frigomotors.com/web/>
- Fu, C., Lu, L. & Pirabi, M. (2023). Advancing green finance: a review of sustainable development. *Digital Economy and Sustainable Development*, 1(10). 1007/s44265-023-00020-3
- GEFF. (2024). *Where finance and green technologies meet*. Retrieved February 16, 2024, from <https://ebrdgeff.com/projects/#>
- GEFF. (2024a). *Catering Responds to Increased Costs by Using Solar Energy*. Retrieved February 16, 2024, from <https://ebrdgeff.com/armenia/projects/catering-responds-increased-costs-using-solar-energy/>
- GEFF. (2024b). *Energy efficient hotel in Türkiye*. Retrieved February 23, 2024, from <https://ebrdgeff.com/projects/energy-efficient-hotel-in-turkey/>
- GEFF. (2024c). *Energy efficient hotels in Marrakech*. Retrieved February 16, 2024, from <https://ebrdgeff.com/projects/energy-efficient-hotels-in-marrakech/>
- GEFF. (2024d). *Hotel in the mountains benefits from heat pump heating, Bulgaria*. Retrieved February 23, 2024, from <https://ebrdgeff.com/projects/hotel-in-the-mountains-benefits-from-heat-pump-heating-bulgaria/>
- GEFF. (2024e). *Solar Energy for Sustainable Tourism*. Retrieved February 16, 2024, from <https://ebrdgeff.com/projects/solar-energy-for-sustainable-tourism/>
- GEFF. (2024f). *Supporting Ecotourism and Improving Water Efficiency in Kyrgyzstan*. Retrieved February 16, 2024, from <https://ebrdgeff.com/projects/supporting-ecotourism-and-improving-water-efficiency-in-kyrgyzstan/>
- GEFF. (2024g). *What can an ESCO company offer to a hotel near Dubrovnik?* Retrieved January 22, 2024, from <https://ebrdgeff.com/projects/what-can-an-esco-company-offer-to-a-hotel-near-dubrovnik/>
- Ilayda Hotel Kusadasi. (2024). Retrieved February 23, 2024, from <https://hotelilayda.com/en/about-us/>
- Kholijah, S. (2024). Analysis of Economic and Environmental Benefits of Green Business Practices in the Hospitality and Tourism Sector. *Involvement International Journal of Business*, 1:60-74. 10.62569/ijb.v1i1.7
- Milojković, D. & Eker, B. (2023). Nature conservation-based tourism management. *Review of Socio-Economic Perspectives*, 8(4):17-24. <https://doi.org/10.19275/RSEP166>
- Milojković, D., Milojković, H. & Milojković, K. (2023). The Green Tourism Business Scheme (GTBS). Full Paper. 20th International Conference Man and Working Environment SEMSIE Safety Engineering & Management – Science, Industry, Education, Niš, Serbia, 7-8.12.2023, pp. 71-74. ISBN: 978-86-6093-115-5. COBISS.SR-ID 132040457
- Mishra, K. & Kannaujia, A. (2023). Green Finance: A Powerful Tool for Sustainability. *Social Science Journal for Advanced Research*, 3:1-7. 10.54741/ssjar.3.6.1
- Nikolić, M. & Milojković, D. (2023). The Role of Green Finance in the Management of Sustainable Development in Serbia. Book of Proceedings “Sustainable Development as a Measure of Modern Business Success”, Singidunum University International Scientific Conference FINIZ, Belgrade, pp. 50-55. 10.15308/finiz-2023-50-55
- Nikolić, M., Jemović, M. & Milojković, D. (2024). Utilizing Bank Loans to Enhance the Energy Efficiency of Enterprises in the Western Balkan Countries. *Annals of Spiru Haret University. Economic Series*, 24(1):187-207. <https://doi.org/10.26458/24111>
- OECD. (2018). *Towards investment and financing for sustainable tourism*. OECD Tourism Trends and Policies 2018, OECD Publishing, Paris. <https://doi.org/10.1787/tour-2018-7-en>
- Rabczak, S., Mateichyk, V., Smieszek, M., Nowak, K. & Kolomiets, S. (2024). Evaluating the Energy Efficiency of Combining Heat Pumps and Photovoltaic Panels in Eco-Friendly Housing. *Applied Sciences*, 14. 5575. 10.3390/app14135575.
- Said, D., Youssef, K. & Waheed, H. (2017). Energy efficiency opportunities in Hotels. *Renewable Energy and Sustainable Development*, 3:99-103. 10.21622/resd.2017.03.1.099
- Salami, O., Taiwo, A., Ibem, O. & Ajayi, O. (2024). Integrating Energy-Efficient Systems and Technologies in Hotel Design Strategies in Lagos: Assessing Cost Implications. *African Journal of Environmental Sciences and Renewable Energy*, 15:69-87. 10.62154/mrc8sg85.
- Sangwan, S. & Vyas, R. (2023). Awareness of consumers regarding environmental sustainability and green consumerism. *International Journal of Multidisciplinary Education and Research*, 8(2):31-34. 10.13140/RG.2.2.10536.58882
- Supara Ethno Complex. (2024). Retrieved February 16, 2024, from <https://supara.kg/en/ethno-complex-2/>
- Tufenkian Heritage Hotels. (2024). Avan Marak Tsapatagh Hotel. Retrieved February 16, 2024, from <https://tufenkianheritage.com/>



ANALYSIS OF LABOR PRODUCTIVITY IN THE HOTEL INDUSTRY OF SERBIA

Vesna Filipović^{1*},
Saša Mašić²,
Nikica Radović³

¹Ph.D. Student,
Singidunum University,
Belgrade, Serbia

²The College of Hotel Management,
Belgrade, Serbia

³Singidunum University,
Belgrade, Serbia

Abstract:

Productivity, as a basic indicator of the success of a company's operations, shows the efficient use of labor in the work process. The subject of the research is labor productivity in the hotel industry of Serbia. The work aims to analyze the productivity of work in hotels from a natural and value aspect in 2022 and 2023. The analysis included hotels according to categorization (number of stars), size, and type of hotels. The research included 31 hotels, according to the categorization with three, four, and five stars. The financial data used in this analysis were taken from the financial reports of the observed business entities, on the website of the Agency for Business Registers. The results show the growth of business income per employee in 2023 in nominal terms, and, at the same time, a decrease in real terms. Labor productivity shows an increase in hotels of the five-star category, as well as in small and large hotels.

Keywords:

hotel industry, labor productivity, number of employees, business income.

INTRODUCTION

The main goal of every company, regardless of economic activity, is business success, i.e. achieving maximum profit. Starting from the mathematical reality that profit is the difference between realized income and total expenses in an accepted time interval, it is clear that income and expenses inversely influence the business result. This fact determines the importance of the basic economic principles of business (productivity, economy, profitability).

Productivity, as a basic economic principle of business, can be viewed in a narrower and broader sense. Productivity, in a broader sense, gives equal importance to every input (labor, capital, and land) in the creation of a product (Spasić and Čerović, 2019). In a narrower sense, productivity is equated with labor productivity. Labor productivity represents the relationship between the realized production and the labor invested in that production. The goal of the company is to become as efficient as possible, that is, with as little input (spent workforce) as possible to achieve the greatest possible output (volume of production, volume of turnover, or volume of performed services). Bearing in mind that a large part of the business process in the hotel business depends on engagement and the number of employees, the analysis of productivity in the hotel industry is reduced to the analysis

Correspondence:
Vesna Filipović

e-mail:
vesna.filipovic.23@singimail.rs



of work productivity. According to Spasić and Čerović (2019), numerous factors related to the workforce affect productivity: work experience, employee qualifications, courtesy, motivation, relationships within the collective, teamwork, training, etc., and it is necessary to determine their intensity and measures that will encourage positive and eliminate negative influences. Frequent labor turnover, a lack of quality hospitality staff, a lack of interest in work, and wages that are below average can reduce productivity. It is necessary to determine the intensity of all factors and to propose measures that encourage the growth of labor productivity.

In this regard, the subject of this work is a review of productivity indicators and an analysis of work productivity in hotels in Serbia. Based on the results of measuring productivity of the hotel employees, the optimal number of employees per department can be determined.

LITERATURE REVIEW

One of the biggest challenges in business operations is increasing employee productivity. Numerous authors have dealt with this topic. Stanišić and Radović (2023) indicate that the satisfaction of basic psychological needs and a working environment that creates favorable conditions for work have a positive effect on the work outcomes of employees in the hotel industry. Ognjanović (2016) examined the interdependence of business activities that contribute to the creation of value and business financial and non-financial performance of hotels. The results obtained show that the business activities of human resources management, marketing activities aimed at the efficient use of hotel capacities, and the possibility of innovating basic and additional hotel activities contribute to the growth of employee productivity. Ognjanović *et al.* (2022), investigated the relationship between the productivity of managers in hotels and intellectual capital, as part of the hotel's intangible assets. The results of the research show that investing in human, structural, and consumer capital positively contributes to the productivity of managers. Also, the results indicate that there are no big differences in the level of realized productivity of managers of three-, four-, or five-star hotels. Holjevac *et al.* (2012), examined long-term natural indicators (average number of nights per employee) and value indicators of productivity (total income/operating income/net profit per employee). The results indicate mainly a drop in productivity, which implies the introduction of measures to increase productivity. The same authors emphasize investing in training and education and giving more authority to employees. Since the research showed that hotels with the ISO 9000 certificate have higher productivity than hotels without the certificate, it was pointed out that hotels could contribute to work productivity by implementing a quality management system.

METHODOLOGY

Data from the website of the Agency for Economic Registers (<https://fin.apr.gov.rs/JavnaPretraga>) were taken for the analysis of labor productivity. There are two criteria for choosing a hotel facility: continuity in business in 2022 and 2023, and the fact that their main and only activity is hotel management (activity code 5510 hotels and similar accommodation). In this research, the location/destination is not important, and it can be taken into consideration for some new research.

The previous two years were not taken into consideration because, due to limited movement, health measures, and recommendations during the pandemic, the hotel's business results are devastating, it can even be said that there was no business at all. (Radić *et al.*, 2021). In the defined sample of 31 hotels, the most represented are four-star hotels (61.29%), while the fewest are five-star hotels (9.68%). Hotels categorized with three stars participate with 29.03% in the structure of all hotels. Observed by type, the division of hotels into three spa hotels, six mountain hotels, and twenty-two city hotels was analyzed. Six small, sixteen medium, seven large, and two very large hotel facilities were analyzed (division based on hotel size classification according to Đoković, 2018). To avoid the pitfalls if hotels of different sizes and different numbers of employees have the same influence on the average value, a weighted average was practically determined by giving the cumulative number of employees, cumulative business income, and cumulative net profit. To get a more realistic insight into the movement of productivity, we took into consideration the inflation rate to eliminate the effect of price growth on the results obtained. According to data from the National Bank of Serbia, the average inflation for 2023 was 12.1%. The values of productivity indicators (business income and net profit) were converted into constant prices, 2022 = 100, using the consumer price index as a deflator, according to the following formula:



$$Xi^{SC2022} = \frac{Xi^{TC}}{IPCi^B} \times 100$$

Where Xi^{SC2022} is the value of the indicator in constant prices from 2022, $[[Xi]]^{(TC)}$ is the value of the indicator in current prices, and $[[IPCi]]^B$ is the consumer price index for that year (Mašić, 2024). Then, the base productivity indices in 2023 compared to 2022 were calculated, according to the following formula:

$$I2023^B = \frac{Xi2023}{X2022} \times 100$$

Where $I2023^B$ is the base productivity indices in 2023, $Xi2023$ is the value of the indicators of that year in constant prices, and $X2022$ the value of indicators in the base period (Mašić, 2024).

RESULTS

In the paper, we will look at the labor productivity in the hotel by calculating the ratio of output and input values, from a natural and value aspect. The structural indicators we took into consideration are the number of accommodation units, the number of employees, business income, and net profit. The number of employees of all analyzed hotels in 2023 is higher by 14% compared to the previous year. The total revenues generated in 2023 increased by about 8.35% compared to 2022. Net profit increased by 4.83% in 2023 compared to the previous year. Natural indicators (number of accommodation units per employee) show a tendency to decrease in productivity, as a result of the increase in the number of employees and lower efficiency in 2023. However, one should be careful when interpreting the results, because physical indicators do not give the right picture if other factors are not taken into account. For example, in hotels of lower categories, one worker serves more guests, so we can draw the wrong conclusion that labor productivity is higher in these categories (Čačić, 2013).

Table 1. Indicators of labor productivity of employees in the hotel industry

Years	Total revenue	Total number of employees	Net gain	The revenue per employee	Profit per employee
2022	13,046,155,000	2,537	1,361,346,000	5,142,355.14	536,596.77
2023	15,846,221,000	2,841	1,427,084,000	5,577,691.31	502,317.49

Source: Author's calculation

Value indicators (total business income per employee and net profit per employee) show an increase in productivity by 8.47%, i.e. a decrease in productivity by 6.37% successively. The results show that the total number of employees grew slower than the growth of total business income and contributed to the growth of productivity, but faster than the growth of net profit, thus exerting pressure on productivity reduction (Table 1).

On the other hand, in the work, we had to take into account the instability of prices as an external factor that was expressed in the observed period. The situation changes when we take into account the effects of inflation. Then we note that there was a drop in productivity from the aspect of total business income at the level of the entire analyzed sample of 3.24% in 2023 compared to the previous year. The net profit in 2023 is higher by 4.83%, but a decrease in productivity by 16% compared to 2022 was recorded. The results obtained at the level of the defined sample for the observed period are shown in Table 2.



Table 2. Indicators of labor productivity of employees in the hotel industry

Year	2022.	2023.
Number of accommodation units per employee	1,66	1,48
Base index	100	89
Total business income per employee in constant prices	5,142,355.14	4,975,638.99
Base index	100	97
Net profit per employee in constant prices	536,596.77	448,097.68
Base index	100	84

Source: Author's calculation

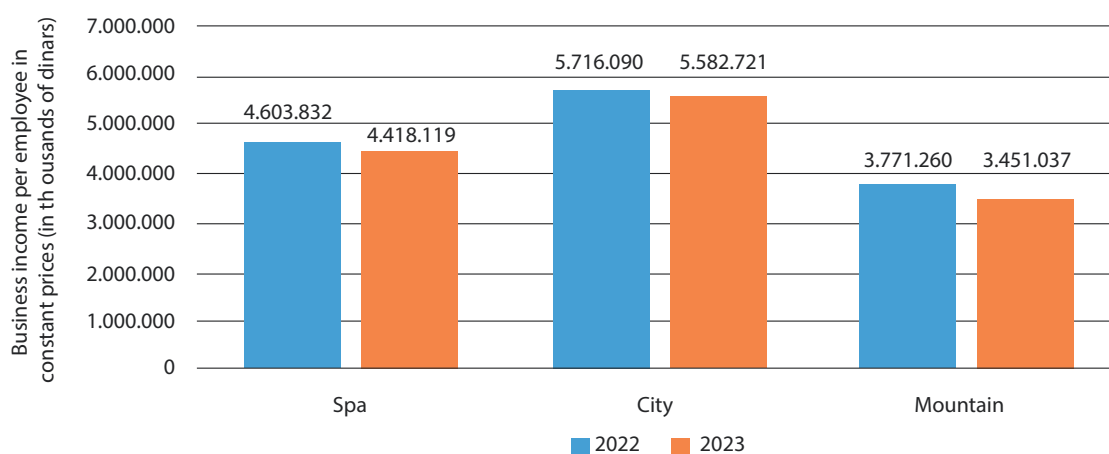
The factors that could contribute to the increase in productivity can be divided into two groups:

- 1) External factors: socio-political system, degree of development of the economy, the growth rate of the social product, state, and development of infrastructure, economic policy, labor legislation, personnel education system, etc.
- 2) Internal factors: Compliance with world hotel standards, modern organization, and planning of work, quality of products and services (TQM), standard hotel system for monitoring work results and business statistics, investment in modern equipment and technology, interpersonal relations, continuous education of managers and hotel staff, internal regulations and rules on rewards, salaries and other personal income, motivation and skills of staff, qualification structure of employees, working conditions, guest satisfaction, staff information system, etc.

Today, artificial intelligence stands out as one of the tools whose use can improve work productivity and business. According to McKinsey Global Institute research, generative artificial intelligence could increase labor productivity by 0.1 to 0.6 percent globally by 2040. (Čačić, 2013)

Čerović and Čomić (2013) acquire three necessary factors for the success of any hotel: location, location, and location. Analyzing the productivity of hotel facilities by type, a negative trend in labor productivity was recorded in 2023 compared to the previous year. The productivity of hotel facilities located in the spa decreased by 4.03 percentage points, while the productivity of hotels located on the mountain decreased by 8.49 percentage points. The highest labor productivity was achieved by hotel facilities located in the city, although it is 2.33 percentage points lower than in 2022. (Figure 1).

Figure 1. Labor productivity observed in relation to the division of hotels by type



Source: Author's calculation

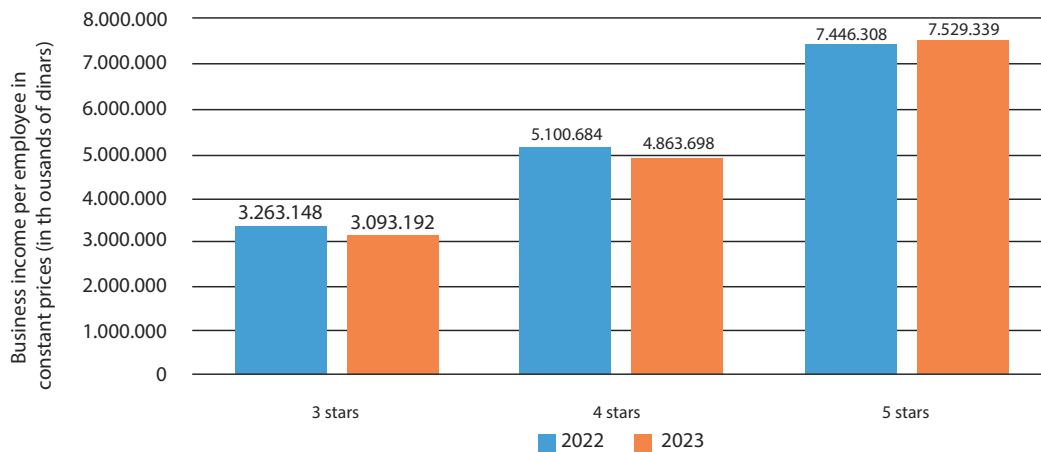


Benchmarking analysis in tourism and hospitality in recent years shows an increased trend in the development of urban tourism. This is especially contributed by the progress of congress tourism, which is mostly realized in cities due to the developed tourist infrastructure. The increasing popularity of Serbia as a destination as a result of destination management and political circumstances in the world has led to an increase in the number of tourists throughout the country, especially in the capital and all major cities of the country.

By researching a sample of 31 hotels about the category to which it belongs, it was determined that three-star hotels experienced the largest drop in business income per employee in 2023 compared to 2022, *i.e.*, 5.21%. The productivity of four-star hotels shows a decrease of 4.65%. Only five-star hotels saw an increase in labor productivity of 1.12% in 2023 compared to the previous year. Observing the analyzed hotels of all categories, the work productivity of hotels categorized with five stars in the same year reaches a value that is half higher than the average. The labor productivity of three-star hotel facilities ranges from 63% to 62% of the average, while the labor productivity of four-star hotels has slightly decreased from 99% to 98% of the average (Figure 2).

Hotels of higher categories have a high level of service quality, are equipped with modern technologies, and require high norms and standards regarding employees. The management of the hotel company must plan the required number and structure of employees in each department by the category of the facility. Greater investment in employee education as an important factor in the success of a hotel facility leads to more productive workers, and Serbia spends below the average of European Union countries. (According to a report by the World Bank and UNICEF, 3.9% of GDP was allocated for education in 2018 from the state budget, which is below the EU average of 4.6%). Aleksić (2024), states that some jobs in hotels will be low-productivity regardless of whether they are performed by a highly qualified person or a person without qualifications (e.g. maid jobs).

Figure 2. Labor productivity observed in relation to the division of hotels by category

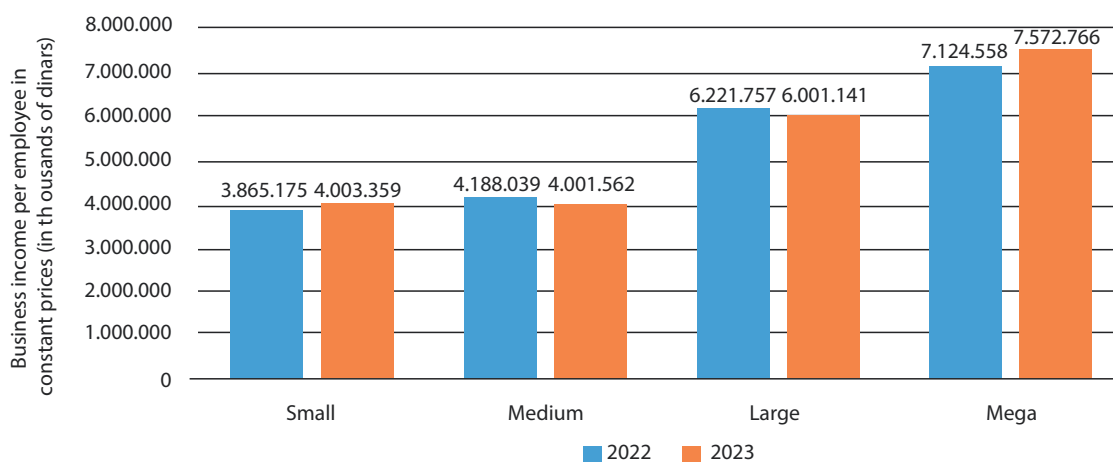


Source: Author's calculation

If we look at hotels according to their size, *i.e.*, hotel capacity, we notice that only small and very large hotels recorded an increase in productivity in 2023 compared to the previous year (Figure 3). In relation to the average of the defined sample in the observed period, business income per employee in small hotels goes from 75.16% to 80.46% of the average, medium-sized hotels recorded a drop from 81.44% to 80.42% of the average, large hotels go from 120.99% to 120.61% of the average, and very large hotels recorded an increase from 138.55% to 152.20% of the average.



Figure 3. Labor productivity in relation to the division of hotels by size



Source: Author's calculation

CONCLUSIONS AND DISCUSSION

The results show that labor productivity measured by total income per employee is nominally higher by 8.47% in 2023 compared to 2022, while the real decrease was 3.24%. It can be seen that five-star hotels recorded an increase in productivity, as well as small and very large hotels. Hotels located in the city show the highest productivity. It is recommended that the management of spa and mountain hotels focus on controlling labor costs, which grew faster than business income, in order to positively affect labor productivity. One of the important internal factors for increasing work productivity is employee training. To increase work productivity and be competitive in the market, the recommendation for the hotel industry is to invest in the development and actively integrate artificial intelligence into its business functions.

The research had several limitations, one of them being the sample size. It was done in April 2024, when financial reports for 2023 were not available for some hotels on the website of the Agency for Economic Registers, and therefore could not be the subject of analysis. Monitoring work productivity is very important for determining the optimal number of employees per department, to increase the success of the hotel business. Data on the number of employees do not distinguish full-time employees from part-time employees, employees by length of service, job department, professional work experience, and level of education. Work productivity depends on numerous financial and non-financial indicators that were not taken into consideration, and which would give a more complete insight into the operations of the observed hotel facilities.

REFERENCES

- Aleksić D. (2024). Može li se napredovati u Srbiji Analiza mobilnosti zaposlenih unutar distribucije zarada, *Ekonomске ideje i praksa*, broj 52, (Is it possible to progress in Serbia Analysis of the mobility of employees within the distribution of wages, *Economic ideas and practice*, number 52), Ekonomski fakultet, Beograd
- Avelini Holjevac I. and Vrtodušić Hrgović A.M. (2012). "Long-Term Analysis Of Labour Productivity In The Croatian Hotel Industry" *Acta Turistica*. Zagreb Vol 24
- Čačić K. (2013). *Poslovanje hotelskih preduzeća*, Univerzitet Singidunum, Beograd
- Čerović S. and Čomić Đ. (2013). *Projektovanje i izgradnja hotela*, Univerzitet Singidunum, Beograd
- Čerović S. and Knežević M. (2019). *Menadžment u hotelijerstvu*, Univerzitet Singidunum, Beograd
- Đurić Z. (2019). *Ekološka održivost poslovanja u hotelijerstvu*, doktorska disertacija, Univerzitet Educons
- Mašić S. (2024). "Elasticity of Demand in Serbian Hotel Industry", International Multidisciplinary Conference "Challenges of Contemporary Higher Education" - CCHE



- Stanišić N. and Radović N. (2023). The influence of psychological needs and work climate on job satisfaction of employees in the hospitality industry, *Ekonomika preduzeća*, Savez ekonomista Srbije, Vol. 7-8, pp. 437 – 44
- Ognjanović J. (2016): “Business success in Serbian hotels viewed through influence of business activities which contribute to the creation of value “, *Megatrend revija*, 13(3):63-82
- Ognjanović J., Mandarić M. and Sekulić D. (2022). „ Intellectual capital and productivity of managers: The case study of hotel industry in Serbia, *БизИнфо* - ISSN 2406-2324. - Vol. 13, no. 1, str. 1-9.
- Radić N., Radić V. and Stevanović M. (2021).”Economic effects of the coronavirus pandemic on tourism and hospitality,” *Megatrend revija*, vol. 18, no. 3, pp. 1-20, 2021, doi: 10.5937/MegRev2103001R.
- Statistički godišnjak Srbije 2023, Republički zavod za statistiku, Beograd
- Statistički godišnjak Srbije 2022, Republički zavod za statistiku, Beograd
- Spasić V. and Čerović S. (2019). *Ekonomsko-finansijska analiza poslovanja preduzeća u hotelijerstvu i turizmu*, Univerzitet Singidunum, Beograd
- Travar D. (2018). Thermal baths tourism management in the Republic of Srpska on the example of Banja Vrućica, *Financing – a scientific magazine for economy*, No: 1/2018

Web pages

- <https://investitor.me/2018/10/22/ricard-branson-vodite-racuna-o-vasim-zaposlenim-pa-ce-i-oni-voditi-racuna-o-vasem-biznisu/> (accessed 07.06.2024)
- <https://fin.apr.gov.rs/JavnaPretraga> (accessed 15.05, 16.05, 17.05, 22.05, 05.06.2024)
- <https://www.nbs.rs/sr/scripts/showcontent/index.html?id=19442&konverzija=yes> (accessed 04.06.2024)
- <https://www.unicef.org/serbia/media/23186/file/Pregled%20javne%20potro%C5%A1nje%20u%20obrazovanju%20u%20Srbiji.pdf> (accessed 07.06.2024)
- <https://forbes.n1info.rs/biznis/produktivnost-opada-sa-velicinom-preduzeca-ucinak-radnika-u-malim-firma-dramaticno-iza-eu/> (accessed 27.05.2024)
- <https://www.linkedin.com/advice/0/how-do-you-measure-staff-productivity-hospitality> (accessed 03.06.2024)
- <https://www.mckinsey.com/finance/news/generative-ai-holds-huge-economic-potential-for-the-global-economy>(accessed 09.06.2024)



THE INFLUENCE OF EMPLOYEES' PERCEPTION ON SERVICE QUALITY AND SUSTAINABLE BUSINESS PRACTICES IN TOURISM AND HOSPITALITY

Milena Turčinović*,
Aleksandra Vujko,
Dušan Mandić

Singidunum University,
Belgrade, Serbia

Abstract:

The paper examined the satisfaction of employees engaged in work activities within enterprises providing tourism services in the areas of Vrnjačka Banja and Sokobanja. The research was conducted through a questionnaire survey. Respondents expressed their satisfaction level with the work they perform and how the enterprise treats its employees. It was concluded that the enterprise plays a crucial role in the level of employee satisfaction achieved. Factors such as how the management structure of the enterprise values employees, their performance, opportunities for advancement provided to employees, and similar aspects, all influence the quality of personnel, motivation, and employee satisfaction. The study confirmed hypothesis H that a high-quality, satisfied, and loyal workforce is a key asset in competitive battles and a fundamental element of business success.

Keywords:

tourism enterprises, human resources, employee satisfaction indicators.

INTRODUCTION

The tourism market, which represents the meeting point of tourist demand and supply, is constantly expanding and evolving (Gajić *et al.*, 2019). Enterprises from other sectors are joining in, broadening and diversifying the offerings, while tourists, as consumers of tourism products, are becoming increasingly demanding (Vujko&Delić-Jović, 2024). Tourists today are more informed and experienced compared to previous years, posing an additional challenge to tourism enterprises to offer attractive and differentiated products to better position themselves in the consumer's mind and in the tourism market (Vanić *et al.*, 2019a).

Tourism products can vary based on additional amenities, competitive pricing, better promotion, and more. However, the factor that retains customers and ensures loyal clientele for enterprises, in most cases, is their employees. This primarily refers to the quality of services provided by employees in tourism and hospitality (Vujko *et al.*, 2022). If employees are satisfied with their work, the services they provide will be at a significantly higher level, and this relationship is mutually reinforcing (Cvijanović *et al.*, 2021). A satisfied worker leads to higher service quality, whereas inadequate recognition and treatment by superiors can result in lower service quality, which tourists keenly perceive (Vunjak *et al.*, 2020).

Correspondence:
Milena Turčinović

e-mail:
mturcinovic@singidunum.ac.rs



A significant challenge faced by enterprises offering tourism and related services is the lack of skilled personnel. This problem was intensified post the COVID-19 pandemic (Chen, 2022). Due to reduced tourism demand and unmet business goals, companies were compelled to take drastic measures, resulting in widespread layoffs and reduced wages, prompting many employees to change professions. The struggle for survival pushed employees to abandon tourism, and according to various studies, only a small number returned even after the economic recovery of the industry.

An analysis of tourism market shows that enterprises often fail to adequately focus on their employees, who are their primary resource. (Vanić *et al.*, 2019b). Employee satisfaction within tourism offerings is crucial for gaining a competitive advantage and achieving profitability for tourism enterprises. Only satisfied and loyal employees can ensure satisfied and loyal customers, which is the ultimate goal of every market-oriented enterprise.

There are numerous ways in which enterprises can contribute to higher employee satisfaction, ranging from material compensation (salaries, bonuses, raise, etc.) to non-material rewards (promotions, opportunities for further training, recognition, etc.). Continuous internal research is essential for identifying and fulfilling employee needs and demands. Human resources have diverse needs, and hence, the same rewards do not motivate everyone uniformly. It is the task of supervisors to identify employee dissatisfaction and address it to minimize negative turnover and retain quality personnel within the enterprise.

Sustainable business practices are the only way to ensure that enterprises operate ethically over the long term. The numerous benefits of sustainable business practices positively impact every segment of a company's operations equally. Enterprises that operate without jeopardizing the environment, local communities, or employee interests are highly regarded by actual and potential consumers, influencing business results and competitiveness in the market. Using resources responsibly generates positive publicity, which holds significant influence in modern business on a company's market position.

The research focuses on enterprises engaged in tourism and hospitality within the territories of Sokobanja and Vrnjačka Banja. These spa destinations were chosen as representative tourism spots in Serbia due to their high level of tourist services, as evidenced by annual visitor numbers in both locations (Cvijanović *et al.*, 2023; Vujko, Bojović, 2023). The study was conducted through a questionnaire survey, which employees could complete on-site or online, depending on their preferences and capabilities. The study started with the initial hypothesis H that a high-quality, satisfied, and loyal employee is the main advantage in competitive battles and a fundamental element of business success.

It was concluded that employees are existential resources for enterprises, ensuring their successful operations, but also requiring constant investment and improvement to sustain the enterprise in the market.

METHODOLOGY

The research is part of a larger research endeavour aimed at writing a master's thesis. Employees engaged in work activities in hotels, tourist agencies, tourist organizations, and other enterprises participating in the overall tourism offerings of the destinations were surveyed. A total of 162 respondents in Vrnjačka Banja and 42 in Sokobanja were included. Field research was conducted in April, using the "personal contact" method where researchers interacted directly with the employees. The survey utilized a questionnaire containing basic questions and inquiries regarding the degree of employee satisfaction. Additionally, the survey included questions about the employee's contributions and overall job satisfaction. Employees were expected to respond clearly and precisely to enable conclusions and propose solutions if problems were identified.

The territorial scope of the study encompassed employees from Vrnjačka Banja and Sokobanja.

The study commenced with the initial hypothesis H that a high-quality, satisfied, and loyal employee represents the primary advantage in competitive battles and a fundamental element of enterprise success.

Sub-hypothesis h1: The enterprise positively impacts employee satisfaction if it correctly identifies their unmet needs. Sub-hypothesis h2: A satisfied employee has no intention of turnover.



Vrnjačka Banja is located in central Serbia, approximately 200 km south of Belgrade. It is well-connected to all parts of Serbia and surrounded by good local roads that lead to its forested mountainous hinterland. The area includes high mountains such as Kopaonik (2017m), Željin (1785m), Stolovi (1376m), and nearby Goč (1216m). Vrnjačka Banja boasts a long tradition as a spa resort. The Romans built their spa and recuperation facility, AQUAE ORCINAE, around the Vrnjačka warm mineral spring between the 2nd and 4th century. The wider Vrnjačka Banja area is Serbia’s richest and most interesting tourist region, featuring significant medieval Serbian cultural monuments, especially monasteries with monumental frescoes protected as UNESCO World Cultural Heritage sites. Vrnjačka Banja offers accommodation with over 15,000 beds, including approximately 4,500 in hotels, guesthouses, and apartment complexes, 850 beds in health centres, and around 10,000 in private homes (not all categorized). High-category hotels in Vrnjačka Banja offer covered pools, conference halls, and sports facilities.

Sokobanja is located at 43° and 63’ N latitude and 21° and 87’ E longitude, in the central part of south-eastern Serbia, at an average altitude of 400 meters. It lies in its own valley, surrounded by a ring of medium-high mountains: Ozren (1174m) to the south, Rtanj (1560m) to the north, Devica (1116m) to the southeast, Slemen (1099m) and Krstatac (1069m) to the east, and Bukovik (894m) and Rožanj (897m) to the west. Sokobanja is 30 km away from the E-75 highway and railway mainline. Besides its picturesque landscapes, Sokobanja boasts the longest tourist tradition in Serbia, hospitable locals, thermal springs, clean air, gourmet specialties, and the sounds of the accordion. What distinguishes Sokobanja from other tourist destinations is its rich and unique nature—numerous mountains, dense forests, rivers, lakes, caves, oxygen-rich air, and negative ions, rightfully earning it the title “Green Heart of Serbia.” Sokobanja offers hotels and numerous apartments providing accommodation services, alongside numerous rural households offering both lodging and meals to tourists.

RESULTS AND DISCUSSION

Based on the data from Table 1, the respondents were categorized by gender. More than half of the respondents were female, while 30.9% were male.

Table 1 . Gender

Gender	Frequency	Percent	Total
Male	63	30,9	30,9
Female	141	69,1	69,1
Total	15	49	64

Source: Authors’ analysis

Upon reviewing Table 2, it can be concluded that the majority of respondents have between 5 and 15 years of tenure in the company, indicating that employees are familiar with the business and corporate policies of the company. Their opinions serve as a valid indicator of employee satisfaction among those engaged in work activities in the surveyed areas.

Table 2. Years of experience in the company

Number of years	Frequency	Percent
Less than five years	62	30,4
From 5 to 15 years	93	45,6
More than 16 years	49	24,0
Total	204	100

Source: Authors’ analysis



Table 3 presents the data regarding the territorial scope of the research. The study was conducted in the areas of Sokobanja and Vrnjačka Banja, with 120 more respondents compared to the previously mentioned region.

Table 3. Place of employment

Workplace	Frequency	Percent
Vrnjačka Banja	42	20,6
Sokobanja	162	79,4
Total	204	100

Source: Authors' analysis

Based on the data presented in Table 4, employees conducting their activities in Sokobanja-based enterprises are more satisfied with advancement opportunities within their company compared to the percentage of surveyed employees in enterprises located in Vrnjačka Banja. Based on these results, it can be concluded that despite the larger-scale enterprises in Vrnjačka Banja, their employees are not highly satisfied with the opportunities provided to them. Categorization of enterprises does not guarantee sustainable working conditions, although it should be different. Young professionals seeking ideal positions that offer them complete satisfaction will not stay in a company that does not provide opportunities for further development and advancement, leading to turnover of potential high-quality talent and loyal employees. All of these factors impact the overall image of the destination. Internal recruitment of personnel is one way for a company to secure quality human resources without additional investments, thereby increasing employee satisfaction, which in turn affects their performance and contributes to overall company success.

Table 4. The possibility for advancement

How satisfied are you with the possibility of advancement?	Workplace		Total
	Sokobanja	Vrnjačka Banja	
I have no opinion	6	1	7
Satisfied	21	112	113
Very satisfied	15	49	64
Total	42	162	204

Source: Authors' analysis

Upon examining Table 5, it can be concluded that the surveyed employees are predominantly satisfied with their workplace and the positions they hold. In the areas of Vrnjačka Banja and Sokobanja, where the influx of foreign tourists is increasing and where job opportunities for the local population are greater compared to previous periods when spa tourism was less developed, numerous positions are opening up, and opportunities for advancement should be guaranteed. Guaranteed employment following completion of higher formal education in smaller towns ensures that businesses operate sustainably. Sokobanja is a destination that requires investment and development in tourism to support the natural riches of this area for adequate growth and development of the tourist destination. Young employees without prospects, lacking guaranteed advancement and professional development, are forced to migrate to larger cities, leaving positions vacant or filled by inadequately skilled personnel. This significantly impacts the overall picture and satisfaction of employees who remain in businesses and stay in the same positions for extended periods.



Table 5. Job satisfaction

Are you satisfied with the workplace and with the position you hold?	Workplace		Total
	Sokobanja	Vrnjačka Banja	
I have no opinion	33	100	133
Satisfied	9	62	71
Very satisfied	42	62	204
Total	42	162	204

Source: Authors' analysis

Based on the data presented in Table 6, the most significant factor influencing employee satisfaction is the recognition of business results and employee ambitions. Previous research suggests that employees are largely dependent on rewards and punishments for their performance, which greatly impacts their motivation levels, turnover intentions, and local migration rates. Only employees who feel that their efforts are valued in a fair and just manner tend to strive for better results and performance, thereby enhancing the company's competitiveness in the market. Equally crucial to employee satisfaction is a positive and constructive work atmosphere and recognition of their contributions. Interpersonal relationships with colleagues, as well as the relationship between superiors and subordinates, are some of the internal factors that can have positive or negative effects on employees. Therefore, it is essential that every employee is treated fairly and equally, with the same opportunities for advancement or setbacks based on their performance. The data from Table 6 and Table 7 confirm the hypothesis h1, highlighting the importance of ongoing research into employees' satisfied and dissatisfied needs. To further motivate employees and increase their satisfaction levels, it is crucial to clearly define and recognize their needs to compensate for any deficiencies and maintain satisfied and high-quality employees. This approach would help achieve the business goal of having loyal human resources that are difficult to replicate in competitive market battles. When the company has good and satisfied employees the expenses are lower, which is good for every company, because the company can invest more money in advancement. Every good manager knows what his employees need and that is the path a manager takes if he or she wants a company to have good and high – quality employees, which is confirmed in the table 6.

Table 6. Factors affecting the leave of employee satisfaction

Factors that have a decisive importance for job satisfaction	Workplace		Total
	Sokobanja	Vrnjačka Banja	
A good manager, leader	12	6	18
Positive and constructive atmosphere at work	5	15	20
Understanding by authorities	3	15	18
Appreciation of business results and ambition employees	17	66	83
Opportunity for advancement at work	1	23	24
Evaluation of work	3	17	20
Stimulation and motivation in the form of rewards and support	1	20	21
Total	42	62	204

Source: Authors' analysis



Upon examining Table 7, it can be concluded that according to the respondents, the best way for a company to retain quality employees is through promotion. The human resource planning process is deemed the most crucial business process within a company, significantly influencing the establishment of its business policies. Frequent staff recruitment, preferably through internal recruitment, allows employees to continuously develop, learn, contribute their ideas, and thereby enhance overall business operations. Based on the data obtained, financial incentives play the smallest role in preventing turnover. However, this element should not be overlooked, as the diversity among employees reflects a variety of needs, desires, and capabilities. It is the company's responsibility to recognize and take appropriate action in response.

Table 7. Ways of retaining quality employees

How can a company retain quality employees?	Workplace		Total
	Sokobanja	Vrnjačka Banja	
Finances	12	6	18
Appreciation opinions	5	15	20
Understanding by authorities	3	15	18
Evaluating works	17	66	83
Improving	1	23	24
Total	42	62	204

Source: Authors' analysis

Based on the data presented in Table 8, it can be concluded that employees are mostly satisfied or very satisfied with their company's operations. If a company operates profitably and sustains itself in a growing tourism market where competition is increasing, employees consciously contribute to the development of spa tourism by ensuring high-quality satisfaction of tourist needs. Without satisfied employees, a company cannot elevate its operations or sustainably operate. Employees who are satisfied with business outcomes and have a clear vision of their career path within the same company are the main strength and key asset in competitive battles for the company's survival in the market.

Table 8. Assessment of the company's operations

How would you rate the performance of your company?	Workplace		Total
	Sokobanja	Vrnjačka Banja	
I have no opinion	5	3	8
Satisfied	29	90	119
Very satisfied	8	69	77
Total	42	162	204

Source: Authors' analysis

Table 9 shows that 98% of the respondents envision themselves continuing to perform business activities in the same company in the foreseeable future. The satisfactory business policy of the company is evidenced by the data indicating a lack of intention among employees to fluctuate and perform business tasks in competing companies. A loyal employee is directly interdependent with satisfied customers who ensure the secure achievement of set business goals. The data from Table 5 and Table 9 confirm sub-hypothesis h2, which indicates the interdependence between employee satisfaction levels and their intention to leave the company. If an employee is satisfied with working conditions, performance outcomes, and opportunities provided as part of the company, the chances of them leaving the company are minimal or non-existent. When the employees have all that they need in a company, and when they can contribute to the quality of life, they never want to abandon the company and the company has loyalty and high – quality human resources, which are striving for the better results.



Table 9. The employee’s perception of further employment

Do you see yourself in the same company in the following period?	Workplace		Total
	Sokobanja	Vrnjačka Banja	
Yes	40	160	200
Do you see yourself in the same company in the following period?	2	2	4
Total	42	162	204

Source: Authors’ analysis

Hypothesis H, stating that a quality, satisfied, and loyal employee represents the main asset in competitive battles and a fundamental element of business success, is confirmed by the conducted research.

CONCLUSION

This study clearly emphasizes the crucial role of human resources in the operations of companies, particularly in tourism-related enterprises, whose business relies on people and their skills. An employee can be loyal and of high quality only when he or she is satisfied and motivated, receiving respect and recognition from their colleagues and superiors, with their performance adequately rewarded.

The company’s role in cultivating quality employees is pivotal, as there are numerous ways in which the management structure can influence employee satisfaction, motivation, creativity, and loyalty. In a constantly expanding tourism market with high competitiveness, only companies with a skilled workforce can achieve and maintain a competitive edge. It is crucial for companies to understand that retaining quality employees is far more significant than constantly initiating new human resource management processes that involve hiring and training new personnel. This confirms hypothesis H that a satisfied employee is a prerequisite for successful business operations.

Listening to employees is a business strategy that guarantees successful operations for the company. Understanding and recognizing their needs and desires can facilitate the company in choosing individualized ways to motivate its human resources. Since all employees are unique and differ from each other, continuous employee research is essential.

To ensure sustainable business practices, it is crucial to manage human resources, the main assets of the company, as well as other resources utilized in its operations. Sustainable operations not only support and enhance a company’s reputation in the market but also open opportunities for international business beyond borders, given the growing awareness of sustainable business practices and corporate sustainable development.

This research investigated the satisfaction levels of employees engaged in business activities in tourism and hospitality enterprises in Vrnjacka Banja and Sokobanja. The study validates the existing knowledge regarding the impacts of various internal and external factors on employee satisfaction. The research results highlight factors which contribute to employee motivation, creativity, loyalty, and their perspectives on further business development.

It is important to note that the research has certain limitations; primarily, it was conducted in-person, giving employees the choice to complete the questionnaire either online or on-site. Future research could be conducted remotely to mitigate concerns about biased responses due to fear or other factors.

The findings of this research can serve as a foundation for further studies examining employee satisfaction levels and factors directly impacting them.



REFERENCES

- Chen, Y., Zhang, Z., & Wang, T. (2022). Dire straits: How tourists on the diamond princess cruise endured the covid-19 crisis. *Tourism Management*, 91, 104503. DOI: 10.1016/j.tourman.2022.104503
- Cvijanović, D., Vujko, A., & Bojović, R. (2023). Development parameters of spa tourism as a complementary offer of rural tourism. In *International Scientific Conference EKOM 2023: "Current social-economic challenges of development of Countries in contemporary conditions"*, 9-10.11.2023 (pp. 459-471). Kosovska Mitrovica, Faculty of Economics, University in Priština. ISBN 978-86-81392-03-4.
- Cvijanović, D., Vujko, A., & Delić-Jović, M. (2021): Standardisation of services as a basis for quality in hotel industry. In *International Scientific Conference EKOM 2021: "Importance of the Mini-Schengen for the EuroIntegration of the Western Balkans"*, 12-13.11.2021 (pp. 349-358). Univerzitet u Prištini, Ekonomskifakultet, Kosovska Mitrovica. ISBN 978-86-80127-99-6
- Gajić, T., Penić, M., Vujko, A., & Petrović, M. (2019): Development Perspectives of Rural Tourism Policy – a Comparative Study of Rural Tourism Competitiveness Based on Perceptions of Tourism Workers in Slovenia and Serbia. *Eastern European Countryside*, 24(1), 144-154. DOI:10.2478/eec-2018-0007
- Gajić, T., Vujko, A., Tretiakova, N.T., Petrović, M., Radovanović, M., & Vuković, D. (2019). Evaluation of service quality and development of rural tourism – (Serbia) Case Study. *DETUROPE: The Central European Journal of Tourism and Regional Development*, 11(2), 4-22. DOI: 10.32725/det.2019.012
- Vanić, T., Stamenković, I., Vujko, A., & Gajić, T. (2019b). The impact of demographic characteristics on job satisfaction of employees in hospitality industry city of Novi Sad. In *The contemporary trends in tourism and hospitality – CTTH: "Get ready for i-generation"*, 12-13.09.2019. (pp. 86-98). Department for Geography, Tourism and Hotel Management, Novi Sad. ISBN 978-86-7031-523-5
- Vanić, T., Stamenković, I., Vujko, A., Gajić, T., Delić-Jović, M. (2019a): The role of organizational justification in the relationships of leaders and futures (lmx) in the service sector. *Geojournal of tourism and geosites*, 27(4), 1296-1306. DOI: 10.30892/gtg.27415-434
- Vujko, A., & Bojović, R. (2023). Spa tourism as a development driver of rural destination. In *VIII International Scientific Conference in the field of Tourism and Hotel Management "Managing the future by learning from the past – contemporary trends in tourism and hospitality"* SITCON 2023, 19.10.2023. (pp. 96-102). Singidunum University, Belgrade. ISBN: 978-86-7912-810-2, pp.96-102
- Vujko, A., & Delić-Jović, M. (2024). Special forms of tourism in the function of sustainable development of rural destinations. Faculty of Toiros and Hotel Management, University of Business Studies. Banja Luka. ISBN 978-99955-95-36-4, str.176, COBISS.SR-ID 140204289
- Vujko, A., Vuković, D., Demirović-Bajrami, D., Zečević-Stanojević, O., & Zečević, L. (2022): The nexus between employee engagement and performance management process – Fruška Gora National Park (Serbia) Case Study. *Sustainability*, 14(18). 11489. DOI: 10.3390/su141811489
- Vunjak, M.N., Vujko, A., Dragosavac, M., & Antonijević, N.T. (2020): Descriptive statistics in corporate management and employee engagement in rural destinations. *Economic of Agriculture* 67(4), 1087-1101. DOI: 10.5937/ekoPolj2004087V



THE VIEWS OF THE LOCAL COMMUNITY ON THE IMPACT OF (SPA) TOURISM DEVELOPMENT ON THE ENVIRONMENT OF SOKOBANJA

Martina Arsić^{1*},
Aleksandra Vujko²,
Aleksa Panić²

¹Ph.D. Student,
Singidunum University,
Belgrade, Serbia

²Singidunum University,
Belgrade, Serbia

Abstract:

The paper deals with the assessment of the impact of tourism in Sokobanja on environmental indicators such as noise, ecosystem degradation, loss of aesthetic values, air and soil pollution. Solving social challenges and human well-being can be achieved through sustainable management and restoration of ecosystems. The paper presents the results obtained by surveying the local population. Through the analysis of respondents' opinions, negative impacts on environmental indicators were determined, which in the future may lead to unwanted effects on the quality of life of the local population. Based on all the above-mentioned, it can be concluded that the development of spa tourism directly affects the state of the environment and represents a potential risk of devastation of biodiversity, and that spa tourism should be developed in accordance with the benefits for the local community. Further development of Sokobanja tourism should be based on creating a balance between tourism development and environmental protection as a solution to the problem of sustainability.

Keywords:

sustainable development, ecological indicators, spa tourism, Sokobanja.

INTRODUCTION

The end of the last century saw concerns regarding environmental degradation being raised for the first time and the implementation of sustainable development being mentioned as the main challenge. The search for a balance between the goals of the economy and the environment is addressed in the theory of sustainable - economic development that meets human needs without undermining the global ecosystem and depleting essential resources (Harris JM, 2009). After the COVID pandemic, the search for a destination that, in addition to an active vacation, would provide a stay in nature, in the fresh air, with local gastronomic specialties, has opened up opportunities for the development of many destinations that prior did not have a large number of visitors both from domestic and foreign tourists. Sokobanja is a destination that faced a lot of pressure, unwilling to accept the newly created situation, without a pre-prepared plan on how to successfully respond to tourist demand while at the same time managing to protect the environment. The large number of tourists who visited Sokobanja during and after the COVID-19 outbreak, thus attracting many investors, led to great pressure on anthropogenic and natural

Correspondence:
Martina Arsić

e-mail:
apanic@singidunum.ac.rs



tourism values, as well as on the exploitation of construction land. For tourism to properly contribute to overall development, it needs to be planned and managed in a way that contributes to the quality of life of the local population and the protection of the natural and cultural environment. (Popescu, 2016). The term “sustainable development” was first used in 1987. United Nations report entitled *Our Common Future* (Giddens, 2007).

The phrase sustainable future is not new. It was used by the authors Sarre, Smith and Morris in 1991, before the first United Nations Conference on Environment and Development in Rio (Morpeth, Yan, 2015). Sustainable development would thus mean an ideal growth that relies on recycling physical resources, without exhausting them, with minimal environmental pollution (Ahmadi *et al.*, 2018). For tourism to be sustainable, it is necessary to establish a balance between economic, ecological and social indicators of development that is, take care of environmental protection, and improve the quality of life and economic development (Nunkoo *et al.*, 2020). Through the National Sustainable Development Strategy of the Republic of Serbia, pollution, waste generation, pressure on natural resources, ecosystem and habitat are listed as negative impacts of tourism. Thus, we can classify tourism as an activity that has a harmful impact on the environment like any other industry. Modern spa and wellness tourism should contribute to sustainable development and be integrated into the natural, cultural and human environment (Arsic *et al.*, 2024). A condition for the proper management of tourism is that the sustainability of the resources on which it depends must be guaranteed (Szromek, Polok, 2022). Three forms of sustainability are important for the development of sustainability in tourism: economic, social and ecological. All three indicators must be considered in order for us to have a true image of sustainability of tourism. A destination is more competitive if the principles of sustainable tourism are implemented, thus creating a path to long-term business. In the development strategy of the Republic of Serbia, Sokobanja was placed in the eighth place on the list of priority tourist destinations. Today, numerous criteria, principles and indicators of sustainable tourism are available, from global ones (UNWTO) to those that can be used at the destination (GSTC) or those that are used for the benefit of local communities (Planet Happiness). Local population and ecosystems are indirect participants in tourism and form an integral part of the tourism product in addition to those direct participants such as consumers, decision makers and service providers. Sustainable tourism represents a development model that will bring indicators of sustainable development in balance with the satisfied users of tourism services - tourists (Germanovich *et al.*, 2020). In the opinion of Chen *et al.* (2023), sustainable tourism allows meeting the tourist needs of modern tourists without jeopardizing the resources necessary to meet future tourists' needs.

This paper investigates the impact of environmental indicators on the development of tourism in Sokobanja, such as soil and air pollution, noise, ecosystem degradation and loss of aesthetic values. The well-being of the local community implies supporting a higher quality of life of the local population, while avoiding any form of social and environmental degradation or exploitation (Maksin, Pucar, Milijic, Korac, 2011). The objective of this paper is to analyze the sustainability of tourism in Sokobanja by analyzing selected environmental indicators. In addition, by analyzing ecological indicators, we can evaluate the impact on the future development of tourism in Sokobanja. The purpose of this research is to assess the impact of tourism activity on nature, air and ecosystem through the analysis of ecological indicators. The analysis of the selected indicators can contribute to establishing monitoring with the aim of improving the natural resources and attractions of Sokobanja as a tourist destination.

The subject of the research represents the spa destination of Sokobanja. The starting hypothesis H is that Sokobanja is a tourist destination developed on the principles of ecologically sustainable tourism, where such development does not jeopardize the ecosystem and aesthetic values, which affects the quality of life of the local population. It was concluded that ecological unsustainability was indicated by the development of tourism in Sokobanja and that it left negative consequences on the ecological and visual identity of the destination, with a tendency to affect the life of the local population.



METHODOLOGY

The local population of Sokobanja and its surroundings participated in the research, a total of 234 respondents. Environmental indicators of sustainable tourism development were used in the research as parameters for measuring the impact of tourism development on the quality of life of the local population. The following variables were used: Ecosystem degradation, Loss of aesthetic values, Noise pollution, Land pollution, Air pollution. Respondents were expected to rank the mentioned influences that certain attitudes have on their lives, using a five-point Likert scale (Likert, 1967), from negative to positive. In order to compare the answers in relation to the gender of the respondents, the Pearson Chi-Square test was used. For statistically significant differences in answers, those with a value of p less than 0.05 are considered. With higher values, it can be stated that there is no statistical significance in relation to the gender of the respondents.

Sokobanja is a spa center with 187-year-old tradition of tourism in Serbia. The first steps in developing tourism in Sokobanja were taken on April 1, 1834, when Prince Milos issued an order on the adoption of a plan for the construction of the first public bath, the first of its kind in Serbian spas (Denda, Stojanovic 2017). In 1835, under his order the healing water of Sokobanja was sent to Vienna for analysis. Due to its healing properties, it has been compared to the waters in Bad Gastein and Pfeffer spa (Nikolic, Stankovic 2008). In the period from 1933 to 1939, Sokobanja was visited by a significant number of guests, and it ranked second among spa centers in Serbia at the time. During the development of spa tourism, Sokobanja was visited by many prominent Serbian personalities, such as Branislav Nusic, Ivo Andric, Isidora Sekulic, Dobrica Eric, Mesa Selimovic, Stevan Sremac, Desanka Maksimovic and others. Although the reason for their visit was treatment, they found inspiration for many literary works in the spa. Sokobanja is located in a basin between the Morava and Timok basins, with which it is connected by the regional road Knjazevac - Sokobanja - Aleksinac. The favorable traffic and geographical position of Sokobanja is contributed by the distance from the E75 highway of only 30 km. The area of Sokobanja encompasses archeological, monumental and ethnographic tourist sights significant for the development of tourism.

The most significant anthropogenic motifs are Sokograd, the remains of the Trebic archaeological site, the Amam bath, the Monastery of St. Archangel, Residence of Prince Milos, Latin City, Seselac Cave. The development of tourism in Sokobanja was favored by the presence of a large number of thermal mineral springs, the climate, the mountainous environment of Rtanj and Ozren, as well as the very position of the location in the basin. Canyons, caves, Bovan lake and Vrmazan lake, Moravica river, make up the value of this destination and the base of tourism development in this area, i.e. its primary tourist resource. Thermal mineral springs occur along the Moravica river and at the foot of Ozren and Devica mountains. The temperature varies from 22-46.5° C. The six locations of those springs were turned into modern baths. Some of the thermal springs are the Park bath, the Preobrazenje spring, Banjica I and Banjica II, Lemon spa and springs in the village of Josanica. The thermal mineral water in Sokobanja is used for medical purposes, it is suitable for drinking, inhalation and bathing. It is used for the treatment of many diseases as well as for their prevention. The springs of Sokobanja belong to the group of mineral and thermal waters of karst areas. They are characterized by increased mineralization and increased radioactivity, which gives them special balneological significance (Protic, 1995). On the territory of the municipality of Sokobanja, the protected area of Ozren meadow, the area of outstanding features "Lepterijska - Sokograd", the nature monument "Big and small Ripaljka" and the special nature reserve Rtanj, have been registered. Ripaljka is a waterfall on the Gradasnica river located on Ozren mountain.

RESULTS AND DISCUSSION

For the purposes of the research, a survey was conducted on a sample of 234 respondents, in which both men and women were equally represented, as shown in TABLE I. The local population of Sokobanja was surveyed. Of these, 119 (50.9%) were male and 115 (49.1%) female. The variables referred to the local population's opinion on environmental indicators such as noise, soil and air pollution, ecosystem degradation and loss of aesthetic values. The questions were related to whether there were changes and whether any of these environmental indicators worsened with the development of tourism in Sokobanja. The Pearson Chi-Square Test was used as one of the procedures for analyzing the obtained data. This test searched for correlation when it comes to differences in responses between male and female respondents. The following tables will show the results obtained from the responses to the questions related to the research.



Table 1. Gender

		Frequency	Percent
Valid	Male	119	50.9
	Female	115	49.1
	Total	234	100.0

Source: Author's calculation

Table 2. Eco system degradation

		Ecosystem degradation		Total
		Worse	No change	
Gender	Male	41	78	119
	Female	84	31	115
Total		125	109	234

Source: Author's calculation

Table 3. Pearson chi-square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	35,000 ^a	1	0.000

Source: Author's calculation

From the given tables, we can conclude that there are different opinions about the degradation of the ecosystem in Sokobanja, and that the male respondents do not think that there has been a deterioration, in contrast to the female gender, who are of the opposite opinion. When we look at the opinions of all the respondents, we come to the conclusion that 53% of the respondents believe that the development of tourism has influenced the degradation of the ecosystem in Sokobanja (TABLE II.). From the results obtained with the Pearson Chi-Square Test (TABLE III.), we can see that there is a statistically significant difference in the responses in relation to the gender of the respondents. The female gender believes that the ecosystem in Sokobanja is deteriorating.

Table 4. Loss of aesthetic values

		Loss of aesthetic values, especially during the summer			Total
		Much worse	Worse	No change	
Gender	Male	33	60	26	119
	Female	9	52	54	115
Total		42	112	80	234

Source: Author's calculation

Table 5. Pearson chi-square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24,024 ^a	2	0.000

Source: Author's calculation



Based on the given tables and questions about the loss of aesthetic values in Sokobanja, mostly during the summer season, the respondents gave their responses in relation to three variables. Of all those surveyed, 18% believe that there has been significant deterioration, 48% also believe that aesthetic values are lost with more tourists present during the season, while 34% believe that such negative changes do not occur. When we look at the total number of respondents, we conclude that as many as 66% of respondents notice negative changes in the examined environmental indicator (TABLE IV.). The Pearson Chi-Square Test shows that there are significant differences in responses between male and female respondents. In this case, the men believe that the state of aesthetic values deteriorates during the summer season in Sokobanja (TABLE V.).

Table 6. Noise pollution

		Noise pollution			Total
		Much worse	Worse	No change	
Gender	Male	0	52	67	119
	Female	2	65	48	115
Total		2	117	115	234

Source: Author's calculation

Table 7. Pearson chi-square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6,517 ^a	2	0.038

Source: Author's calculation

Given that the residents of Sokobanja had similar responses to the question related to noise, with the Pearson Chi-Square Test it was established that there were statistically significant differences in the responses in relation to the gender of the respondents (TABLE VII.). There is a higher percentage of women who believe that the noise level has worsened. Also, as can be seen in TABLE VI., the opinion of the respondents is divided in relation to the deterioration of the environmental indicator, where 51% believe that there are changes compared to 49% who think that there is no deterioration when it comes to the creation of higher noise levels at the destination. This research result tells us that the local population is exposed to an unwanted sound level.

Table 8. Land pollution

		Land pollution			Total
		Much worse	Worse	No change	
Gender	Male	4	77	38	119
	Female	0	42	73	115
Total		4	119	111	234

Source: Author's calculation

Table 9. Pearson chi-square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25,269 ^a	2	0.000

Source: Author's calculation



Based on TABLE VIII., we can see that 53% of the respondents are of the opinion that soil pollution has occurred, while 47% are those who believe that no such changes have occurred. The Pearson Chi-Square Test (TABLE IX.) shows that there are differences in the responses of male and female respondents. The male respondents are of the opinion that the quality of the soil has significantly worsened, compared to majority of the female respondents, who believe that there are no significant changes.

Table 10. Air pollution

		Worse	No change	Total
Gender	Male	47	72	119
	Female	60	55	115
Total		107	127	234

Source: Author's calculation

Table 11. Pearson chi-square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.788 ^a	1	0.052

Source: Author's calculation

In TABLE X., we see the values that were obtained by summarizing the responses of those surveyed about the state of air pollution in Sokobanja. Out of 234 respondents, 107 are of the opinion that air quality has deteriorated, while 127 respondents do not hold such an opinion. Approximately 46% are of the opinion that the development of tourism in Sokobanja has had a negative impact on air quality, in contrast to 54% of respondents who believe that there have been no changes. By looking at TABLE XI., we can see that there is no significant difference between the responses of male and female respondents, given that $p=0.052$.

CONCLUSION

By analyzing the obtained data, it can be concluded that the biggest deterioration changes are observed in the ecosystem and aesthetic values of Sokobanja. The female gender has negative opinions when it comes to the ecosystem and noise, while the male gender gave negative responses regarding aesthetic values and land pollution. Women attach more importance to the appearance of nature and are sensitive to noise, which is mainly caused by a greater number of traffic and motor vehicles. The opinions of both genders about the air quality in Sokobanja are divided. Therefore, initial hypothesis H that Sokobanja is a tourist destination whose tourism development does not jeopardize the natural environment, cannot be confirmed, and there is no indication that it is being developed in accordance with the principles of ecologically sustainable tourism. Protecting natural resources, preserving cultural and natural assets, and spreading awareness of the benefits of sustainability are just some of the ways to overcome real obstacles (Turčinović *et al.*, 2024). Sustainability of tourism means creating jobs for the local community and ensuring local participation in planning and decision – making processes (Minciu *et al.*, 2010). This research should contribute to the education of the population and employees in tourism to meet the criteria of sustainable tourism according to the given indicators. Tourism can improve the quality of life through improved infrastructure, intercultural understanding and local value assessment of people, their culture, their heritage and traditions (Tigu, 2012). Future research should be related to the analysis and constant monitoring of the impact of tourism on sustainability indicators. It is necessary to pay attention to ecology and sustainable development because only a clean and orderly environment will significantly contribute to the development of tourism and will have positive effects on the local population. Sokobanja should base further development of tourism on the principles of sustainable development. Through sustainable development, the ecological and economic aspects of tourism should be reconciled, i.e. mass tourism



should be replaced by sustainable tourism that would be oriented towards quality instead of quantity and, in this way, the positive economic effects will be maintained while simultaneously preserving the environment (Vujovic, Cvijanovic, Stetic 2012). Development of sustainable tourism as a result has the rise of the standard of living of the local population, i.e., the rise of income (Huo *et al.*, 2023). A high standard of living for the local population implies improvement in the living conditions overall for the local community. A harmonious relationship between economic progress and the environment, which ensures the preservation of natural wealth for future generations, represents the sustainable development of a destination. Simply put, sustainable tourism is the smart disposal of tourist resources, from cultural values to natural resources. If Sokobanja as a tourist destination develops on such principles, it will create a competitive advantage over similar tourist centers in Serbia.

REFERENCES

- Ahmadi, M., Khodadadi, M., & Shahabi, H. (2018). *Planning for Ecotourism in the Protected Area of Manesht and Ghelarang, Ilam Province, Iran*, Journal of Quality Assurance in Hospitality & Tourism, 19(2), 243-268.
- Arsić M., Vujko A., Knežević M., Development Perspectives of Wellness and Spa Tourism in the context of the tourism business sustainability, Sustainability, Vol. 16, No. 20, pp. 1 - 20, Oct, 2024
- Chen, J., Huang, Y., Wu, E. Q., Ip, R., Wang, K. (2023). *How does the rural tourism experience affect green consumption in terms of memorable rural-based tourism experiences, connectedness to nature and environmental awareness*, Journal of Hospitality and Tourism Management 54, 166-177.
- Denda S. & Stojanovic J. (2017). *The Position of Sokobanja on the Tourist Market of Serbia*, Business Economics - Magazine for Business Economics, Entrepreneurship and Finance
- Germanovich, A. G., Vasilieva, O. N., Ordynskaya, M. E., Allanina, L. M., Gorokhova, A. E. (2020). *Impact of tourism on sustainable development of rural areas: International experience*, Journal of Environmental Management & Tourism 11(4 (44)), 965-972.
- Giddens E. (2007). *Sociology*, Faculty of Economics, Belgrade
- Harris J.M. (2009). *Economics of Environment and Natural Resources*, Data Status, Belgrade
- Huo, M., Shao, Y., Li, M., Li, Z. (2023). *Residents' participation in rural tourism and interpersonal trust in tourists: The mediating role of residents' perceptions of tourism impacts* Ting-ting Huo, Feng Yuan, Tourism Management 54, 457-471.
- Likert, R. (1967). "The Method of Constructing an Attitude Scale". In Readings in Attitude Theory and Measurement, M. Fishbein, (ed.). pp. 90-95. New York: Wiley
- Maksim M., Pucar M., Korac M., & Milijic S. (2011). *Sustainable Development of Tourism in the European Union and Serbia*, Institute of Architecture and Urbanism of Serbia, Belgrade
- Mincio, Rodica, Delia Popescu, Michaela Padurean, Remus Hornoiu & Andrea Baltaretu. (2010). *Comercializarea vacantelor in ariile naturale protejate - forma a dezvoltării durabile în turism* Amfiteatru Economic. 27, 87-100. Retrieved from: <http://www.amfiteatruconomic.ro/>.
- Morpeth D. Nigel, & Yan Hongliang. (2015). *Planning for Tourism*, Cabi tourism texts, UK
- Nikolic, Lj., & Stankovic, S. (2008). *Sokobanja 1837-2007*, Soko Banja: Organization for Tourism, Culture and Sport
- Nunkoo, R., Seetanah, B., Jaffur, Z. R. K., Moraghen, P. G. W., Sannasse, R. V. (2020). *Tourism and economic growth: A meta-regression analysis*, Journal of Travel Research 59(3), 404-423.
- Popescu J. (2016). *Management of the Tourist Destination*, Singidunum University, Belgrade
- Protic D. (1995). *Mineral and Thermal Waters of Serbia*, Geoinstitut, Belgrade
- Szromek, R.A., Polok, G. (2022). A Business Model for Spa Tourism Enterprises: Transformation in a Period of Sustainable Change and Humanitarian Crisis. Journal of Open Innovation: Technology, Market, and Complexity, 8(2), 72, <https://doi.org/10.3390/joitmc8020072>
- Tigu, Gabriela. (2012). *New Challenges for Tourism Destination Management in Romania, Strategies for Tourism Industry - Micro and Macro Perspectives*. Ed. Dr. Murat Kasimoglu
- Turčinović M., Vujko A., Knežević M. (2024). *Basic Directions and Possibilities of Sustainable Development of Tourism from the Aspect of Economic Indicators of Sustainability - Mountains Case Study*, TURIZAM Volume 28, Issue 298-111.
- Vujovic S., Cvijanovic D., & Stetic S. (2012). *Destination Concept of Tourism Development*, Institute of Agricultural Economics, Belgrade



CITY BRANDING AND INCENTIVE TRAVEL: EVOLVING RESEARCH TRENDS

Milica Filipović*

Ph.D. Student,
Singidunum University,
Belgrade, Serbia

Abstract:

Incentive travel plays a pivotal role in the strategic branding of cities as MICE (Meetings, Incentives, Conferences, and Exhibitions) destinations. By promoting unique and high-value experiences, incentive travel motivates and rewards employees for achieving specific business goals while simultaneously driving the development of destinations. This paper examines 25 academic papers and articles on city branding and incentive travel, tracing the evolution of research and literature from 2000 to the present. Initially, studies focused on the motivational and economic benefits of incentive travel for city branding. However, recent research has shifted towards exploring its role in enhancing city brands and creating distinctive destination experiences. Scholars such as Kavaratzis and Ashworth (2005) have emphasized the importance of cultural and social elements in city branding.

The COVID-19 pandemic and advancements in artificial intelligence (AI) have significantly shaped the incentive travel market, introducing new trends such as immersive and memorable experiences that transcend traditional travel, the growing appeal of lesser-known destinations, heightened awareness of sustainable travel options, and the integration of AI in city branding, including personalized travel experiences (Tussyadiah & Miller, 2019). By analyzing current literature, this paper offers insights into the evolving research directions on city branding and the use of incentive travel as a branding tool, concluding with suggestions for future research avenues.

Keywords:

incentive travel, city branding, mice tourism, research.

INTRODUCTION

In an increasingly globalized and competitive world, city branding can contribute significantly to the development of tourism and, consequently, the economy (Anttiroiko, 2014). City branding extends beyond simple marketing—it presents a city not only as a destination for visits, living, and work but as a unique product distinguished by its cultural, natural, and other assets aimed at attracting visitors. One of the innovative strategies in city branding is the use of incentive travel, a component of a specific form of tourism known as MICE (Meetings, Incentives, Conferences, and Exhibitions). The concept of MICE, or MI (Meetings Industry), was formalized in 2006 through a collaborative decision by the International Congress & Convention Association (ICCA), Meeting Professionals International (MPI), Reeds Travel Exhibitions, and the World Tourism Organization (UNWTO) to stand-

Correspondence:
Milica Filipović

e-mail:
milica.travel@gmail.com



ardize terminology and strengthen the sector's image (Smagina, 2017). According to the Society for Incentive Travel Excellence (SITE), "incentive travel is a global management tool that uses an exceptional travel experience to motivate and/or recognize participants for increased levels of performance in support of organizational goals" (SITE Global, n.d.). Unlike other forms of tourism, incentive travel combines luxury, exclusivity, and personalized services with unique cultural, recreational, and business experiences, enhancing a city's prestige and fostering economic growth. Over recent years, the MICE industry has experienced substantial transformations, adapting to new market dynamics and shifting consumer preferences influenced by global events. In response to these changes, suppliers have recognized the need to enhance their incentive travel services, employing increasingly creative strategies to add value (Gračan, Sotošek, & Šerić, 2018). Destinations have adapted their offerings accordingly, and research studies have also evolved. A report published by Allied Market Research in 2022 estimated that the incentive travel market was valued at \$42,014.5 million in 2021 and is projected to reach \$216,746.9 million by 2031. The growth of the incentive travel market underscores its potential as a strategic tool for urban development. Despite numerous studies on city branding, there remains a lack of research on the role of incentive travel and its impact on city branding. Therefore, this comprehensive review aims to systematize existing knowledge and provide insights into integrating incentive travel with city branding.

LITERATURE REVIEW

City branding has evolved into a crucial element in the global competition among cities and has become a significant development strategy (Wan, F., Li, J., 2024). As the tourist market continuously adapts to global economic, political, natural, and other changes, as well as shifts in consumer demands, the focus of academic research has similarly evolved. Initially centered on general strategies for promoting urban areas, the research has shifted toward more specialized approaches, such as the use of incentive travel as a tool to enhance a city's brand image (Richards, G., Palmer, R., 2010). This literature review examines these changes in research by analyzing 25 academic papers on the branding of cities as tourist destinations. It places particular emphasis on the role of motivational travel as a branding tool and distinguishes the impact of incentive travel from other forms of tourism on destination branding.

Evolution of research in city branding and incentive travel

Research related to city branding and motivational travel has evolved between 2000 and 2024, reflecting the global influences of globalization, technological advancements, and shifts in tourist needs and demands. Scholars such as Kavaratzis and Ashworth (2005) laid the foundations for city branding by focusing on creating a unique city image that distinguishes cities from one another. Meanwhile, Blain, Levy, and Ritchie (2005) highlighted that programs designed for corporate clients can increase the visibility and prestige of destinations in the global market. Prior to these developments, Davidson (2003) recognized the potential of incentive travel, as part of MICE, to stimulate economic benefits for cities.

Over time, the focus shifted from creating a unique city image to developing branding strategies that emphasize creating unforgettable experiences for visitors—experiences that evoke positive emotions and foster loyalty (Hudson & Ritchie, 2009). This approach prioritizes personal, memorable experiences over standardized ones (Gračan, Sotošek, & Šerić, 2018).

During this period, studies also began to emphasize the cultural dimension of city branding. Ozer claims that "cities with unique cultural attractions can easily be branded, as they offer distinct experiences to visitors," further stating that "local historical sites, stories, and legends create an unforgettable and romantic experience for tourists, leaving a lasting impression." The varying expectations of tourists are key to the success of incentive programs, a theory consistently reinforced by researchers in the field. Richards and Palmer (2010) also address this, noting that the choice of incentive destinations has evolved over time, shifting from entertainment hubs like Las Vegas and Orlando to culturally rich cities such as Barcelona and Cape Town, which use incentive travel to showcase local culture and authenticity.



Research in both city branding and incentive travel has evolved in recent years, driven by technological advances, the COVID-19 pandemic, and increasing demands for sustainability and inclusivity.

The evolution of digital technologies has transformed how cities promote themselves and design incentive travel programs. Buhalis and Amaranggana (2015) emphasized the growing importance of smart tourism technologies and AI-powered data analytics in personalizing travel experiences before, during, and after trips. They also noted that cities can now use data to analyze visitor behavior and preferences, enabling more efficient marketing. Lopez de Avila (2015) defines a smart tourism destination as an innovative place built on state-of-the-art technology, ensuring sustainable development, accessibility, and an enhanced quality of experience for both visitors and residents.

Digital platforms have become essential for branding and promotion, enabling cities to use social media, virtual tours, and augmented reality (AR) to engage visitors. Christou, Sigala, and Gretzel (2012) state that social media is fundamentally changing how travelers search for, find, and trust tourist destinations. They also highlighted that social media platforms have emerged as powerful tools for destination marketing and visitor engagement, allowing tourism organizations to reach global audiences in innovative ways.

While innovations in tourism can be roughly predicted, global events are unpredictable and can fundamentally alter the tourism landscape. The COVID-19 pandemic is a prime example, as it halted tourism movements and forced destinations to adapt their strategies. Gossling, Scott, and Hall (2020) explored how cities quickly adapted their brand narratives to focus on health, safety, and flexibility. This period saw the rise of hybrid events, combining in-person and virtual components to continue attracting business while minimizing travel risks. In the post-pandemic period, destinations needed to align their promotional strategies with the “new normal,” rebranding themselves as safe and adaptable to restore traveler confidence. Another consequence of the pandemic was the increase in domestic travel. Gyimothy, Braun, and Zenker (2022) studied the impact of boosting domestic tourism and the resulting shift in visitor composition at homeland destinations. The post-pandemic tourism landscape shows a decline in overseas guests, with a simultaneous rise in domestic visitor numbers. Nevertheless, tourism remains highly adaptable and recovers quickly from global disruptions.

Another shift in research is driven by the growing global concern for environmental sustainability, as well as inclusivity in tourism. Dodds and Butler (2019) highlighted how cities now brand themselves as sustainable destinations, focusing on reducing the carbon footprint of travel by promoting eco-friendly transportation, green venues, and sustainable travel packages. This trend aligns with the increased demand from corporate clients for incentive programs that prioritize nature conservation. Positioning and branding a destination as environmentally conscious and committed to sustainability can positively influence corporate clients when choosing an incentive destination.

Differences between influence of incentive travel and other forms of tourism on destination

Although both incentive travel and other forms of tourism offer significant benefits to destinations, their impacts differ. On one hand, the economic impact is notable because the spending of incentive travelers is considerably higher than that of leisure tourists (Davidson, Cope, 2003). Incentive travelers typically stay in higher-quality hotels, use better transportation, engage in exclusive experiences, and can be valuable promoters of a destination. On the other hand, mass tourism attracts larger numbers of tourists but generates lower levels of consumption. Another important observation is that incentive travel can help reduce tourism seasonality. Unlike leisure tourism, which primarily occurs during peak tourist seasons, incentive tourism can support the development of destinations throughout the year. This has a positive effect on the local economy and employment in the tourism and hospitality sectors (Fenich, 2012). According to Getz and Page (2016), destinations that incorporate incentive travel into their branding strategies can position themselves in the market as offering superior experiences, quality services, and facilities suitable for business events, all while emphasizing their cultural, natural, and other unique characteristics. Leisure tourism, though also important for city branding, does not achieve the same exclusivity effect in the market. Given the focus on exclusivity and premium experiences, incentive travel can influence the development of higher-quality tourist infrastructure, in contrast to mass tourism, which emphasizes accessibility and caters to the average tourist’s budget.



The role of incentive travel in city branding - challenges and opportunities

Incentive travel can play a significant role in branding a destination and positioning it in the market as a desirable location for both business and leisure tourism. As previously mentioned, incentive travel programs include corporate clients, who can be influential promoters of the destination. The cities chosen for incentive travel programs are often perceived as modern and cosmopolitan (Davidson and Rogers, 2006). These, along with other advantages of integrating incentive travel into city branding strategies, were highlighted earlier in the paper through the analysis of various studies and researchers. However, there are challenges that may arise in this field. One significant challenge is managing the environmental impact. Backen (2019) emphasizes the need for cities to consider environmental sustainability in their tourism offerings. Therefore, cities must align incentive programs with sustainable practices. Skinner (2021) notes that there can sometimes be a mismatch between the brand identity a destination is trying to create and the image that is perceived by tourists. This can be a challenge in promoting an incentive destination, given that incentive programs are tailored for corporate groups, offering unique experiences that individual tourists may not have access to when visiting the destination. For the successful branding of an incentive destination, it is essential to consider all opportunities and challenges. Future research could focus on developing tools to help destinations effectively address these challenges when creating branding strategies, while also making the most of available opportunities. Opportunities and challenges, and future research can be focused on tools that will help the destination adequately respond to all challenges when creating a branding strategy, and, on the other hand, to use the opportunities in the right way.

METHODOLOGY

The methodology used in this research was a systematic approach to conducting a comprehensive review of the literature on city branding through incentive travel. The methodology included several stages, such as literature research, data extraction, and analysis. The literature search involved searching for relevant sources across academic databases, including Google Scholar, ScienceDirect, Emerald Insight, and Taylor & Francis Online, using keywords such as “incentive travel,” “city branding,” and others. The search was limited to publications from 2000 to 2024. Once the relevant literature was identified, data extraction was carried out to organize key information from each study. The data was then analyzed using qualitative synthesis methods, enabling the identification of key themes, trends, and gaps in the literature. methodology used in this reasearch was a systematic approach to conducting a comprehensive review of literature on the topic of city branding using incentive travel. The methodology included several stages such as literature reasearch, data extraction, and analysis. Literature search included search for relevant literature across academic databases, including Google Scolar, Science direct, Emerald insight, Taylor&Francis online, by using keywords such as „incentive travel“, „city branding“ and others. The search was restricted by publication date, from 2000 to 2024. When the relevant literature was identified, data extraction was done to put in order key information from each study. The data was analyzed using qualitative synthesis methods, allowing for the identification of key themes, trends, and gaps in the literature.

RESULTS

The literature review on city branding and incentive travel reveals several key findings. First, research has evolved over the years from viewing incentive travel primarily as a corporate marketing tool to integrating it into city branding strategies. The personalized nature of incentive travel can enhance and strengthen a city’s brand by showcasing its cultural richness and natural beauty. This shift in research, which examines city branding and incentive travel both separately and in relation to one another, is driven not only by changes in the tourist market but also by global changes—economic, political, medical, digital, and others.

Another important observation that destinations can leverage for better market positioning is the distinction between incentive travel and other types of tourism, particularly in offering an exclusive, high-quality experience for participants and groups. Unlike mass tourism, incentive travel allows cities to target specific groups and attract influential visitors who can further promote the city.



The research highlights that the role of incentive travel is to differentiate a city from its competitors. However, incentive travel programs must align with the city's identity and branding strategy to avoid creating an unrealistic image of the destination.

CONCLUSIONS AND DISCUSSION

The conclusion of the literature review is that incentive travel is and can be a crucial tool for branding cities or reinforcing their brand, especially because it enables cities to offer unique experiences to tourists and opens the door to new destinations not covered by mass or other forms of tourism. Today, tourists have different expectations; they seek unique experiences, stronger connections with destinations and local communities, and opportunities to engage in the everyday lives of locals.

With the advancements in the digital world and artificial intelligence, cities can leverage these trends to brand and position themselves, attracting new tourists, particularly from the younger population. Certainly, the branding strategy must ensure that cities remain adaptable to new trends in the tourism market and integrate sustainable development into their strategies. Likewise, incentive travel program organizers should follow these same trends.

In the author's opinion, based on the literature analyzed, future research in both city branding and incentive travel should place greater focus on sustainability and environmental responsibility. Future studies could explore strategies for attracting sustainability-conscious corporations for incentive programs, how to achieve community engagement through incentive programs, and how cultural tourism and creative industries can contribute to the branding strategy of incentive destinations.

REFERENCES

- Anas, M. S., Maddiah, N. A., Eizamly, N. U. E. N., Aisyah, N., & Wee, S. H. (2020). Key success factors toward MICE industry: A systematic literature review. *Faculty of Hotel and Tourism Management, Universiti Teknologi Mara, Malaysia*.
- Anttiroiko, A. (2014). City branding as a response to global intercity competition. *Growth and Change*, 45(3), 309-327. <https://doi.org/10.1111/grow.12085>
- Becken, S. (2019). Decarbonizing tourism: Mission impossible? *Tourism Recreation Research*, 44, 1-20. <https://doi.org/10.1080/02508281.2019.1598042>
- Buhalis, D., & Amaranggana, A. (2015). Smart tourism destinations: Enhancing tourism experience through personalization of services. In I. Tussyadiah & A. Inversini (Eds.), *Information and Communication Technologies in Tourism 2015* (pp. 377-389). Springer. https://doi.org/10.1007/978-3-319-14343-9_28
- Blain, C., Levy, S. E., & Ritchie, J. R. B. (2005). Destination branding: Insights and practices from destination management organizations. *Journal of Travel Research*, 43(4), 328-338. <https://doi.org/10.1177/0047287505274646>
- Christou, E., Sigala, M., & Gretzel, U. (2012). Social media in travel, tourism, and hospitality: Theory, practice, and cases. Ashgate Publishing Ltd. <https://doi.org/10.4324/9781315609515>
- Davidson, R. (2003). Adding pleasure to business: Convention and incentive travel. *Journal of Convention & Exhibition Management*, 5(1), 29-39. https://doi.org/10.1300/J143v05n01_03
- Davidson, R., & Cope, B. (2003). *Business travel: Conferences, incentive travel, exhibitions, corporate hospitality, and corporate travel*. FT Prentice Hall.
- Davidson, R., & Rogers, T. (2003). *Marketing destinations and venues for conferences, conventions, and business events*. Routledge.
- Dodds, R., & Butler, R. W. (2019). The phenomena of overtourism: A review. *International Journal of Tourism Cities*, ahead-of-print. <https://doi.org/10.1108/IJTC-06-2019-0090>
- Fenich, G. G. (2018). *Meetings, expositions, events, and conventions: An introduction to the industry* (5th ed.). Pearson.
- Getz, D., & Page, S. J. (2015). Progress and prospects for event tourism research. *Tourism Management*, 52, 593-603. <https://doi.org/10.1016/j.tourman.2015.03.007>
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemic, tourism, and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1-20. <https://doi.org/10.1080/09669582.2020.1758708>



- Gyimothy, S., Braun, E., & Zenker, S. (2022). Travel-at-home: Paradoxical effects of a pandemic threat on domestic tourism. *Tourism Management*, 93, 104613. <https://doi.org/10.1016/j.tourman.2022.104613>
- Gračan, D., Sotošek, M., & Šerić, N. (2018). Changing trends in incentive travel. *Biennial International Congress. Tourism & Hospitality Industry*, Opatija. <https://doi.org/10.5555/20193386864>
- Hudson, S., & Ritchie, J. R. B. (2009). Branding a memorable destination experience: The case of “Brand Canada”. *International Journal of Travel Research*, 11(2), 217-226. <https://doi.org/10.1002/jtr.720>
- Kavaratzis, M. (2004). From city marketing to city branding: Towards a theoretical framework for developing city brands. *Place Branding*, 1(1), 58-73. <https://doi.org/10.1057/palgrave.pb.5990005>
- Kavaratzis, M., & Ashworth, G. J. (2005). City branding: An effective assertion of identity or a transitory marketing trick? *Tijdschrift voor Economische en Sociale Geografie*, 96(5), 506-514. <https://doi.org/10.1057/palgrave.pb.5990056>
- Lopez de Avila, A. (2015). Smart destinations: XXI Century tourism. Paper presented at the *ENTER2015 Conference on Information and Communication Technologies in Tourism*, Lugano, Switzerland.
- Ozer, S. U. (2017). The role of culture in city branding. In *Advertising and Branding: Concepts, Methodologies, Tools, and Applications* (pp. 1453-1467). IGI Global. <https://doi.org/10.4018/978-1-5225-1793-1.ch052>
- Richards, G., & Palmer, R. (2010). *Eventful cities: Cultural management and urban revitalisation*. Routledge. <https://doi.org/10.4324/9780080940960>
- Sood, D., Sajnani, M., & Gautam, P. (2021). The role of destination image in incentive travel: A review and discussion. *Tourism Innovations*, 11(2), 13-26.
- Skinner, H. (2021). Place branding – The challenges of getting it right: Coping with success and rebuilding from crises. *Tourism & Hospitality*, 2(1), 1-10. <https://doi.org/10.3390/tourhosp2010010>
- Smagina, N. (2017). The internationalization of the Meetings-, Incentives-, Conventions-, and Exhibitions- (MICE) industry: Its influences on the actors in the tourism business activity. *Journal of Economic Management*, 27(6), 56-67. <https://doi.org/10.22367/jem.2017.27.06>
- Tussyadiah, I. P., & Miller, G. (2019). The role of smart technologies in tourism: An integrative review. *Journal of Hospitality and Tourism Technology*, 10(2), 157-175. <https://doi.org/10.1080/02508281.2022.2027203>
- Wan, F., & Li, J. (2024). Navigating the digital age: City branding in the era of social media and digital transformation. *Journal of the Knowledge Economy*, 15(3), 25-41. <https://doi.org/10.1007/s13132-024-01795-2>
- Website Global. (n.d.). Incentive travel market. Retrieved December 2024, from <https://www.siteglobal.com>
- Allied Market Research. (2024). Incentive travel market. Retrieved December 2024, from <https://www.allied-marketresearch.com/incentive-travel-market-A16858>



GLAMPING – CREATIVE ACCOMMODATION TREND AS A FACTOR OF RURAL DESTINATION DEVELOPMENT

Katarina Bjelić*,
Aleksandra Vujko
Dušan Borovčanin

Singidunum University,
Belgrade, Serbia

Abstract:

The initial hypothesis of this work was that glamping as a creative form of accommodation could be a factor in the rural development of a destination. Glamorous camping offers guests unique experience, through respect for sustainable tourism development. The research presented two glamping destinations in Serbia, Lala Vineyard in Sremska Mitrovica and Buzzoffski Cabins in Sremski Karlovci, their authentic offer being in untouched natural landscapes. Also, for the purpose of the paper, a survey was conducted in Sremska Mitrovica and Sremski Karlovci, to which 228 respondents responded. The responses of the research participants confirmed the importance of glamping for the rural development of the destination, meaning that this type of accommodation fully meets the requirements of tourists.

Keywords:

glamping, rural tourism, Lala Vineyard, Buzzoffski Cabins.

INTRODUCTION

Camping in the 21st century is marked by new trends in the development of accommodation, primarily a new demand that combines the desire to stay in nature, but in the comfort and luxury of accommodation. The popularity of glamping, especially among younger generations, is driving the transformation of classic camping into glamping. In recent years, glamping encourages investors and hoteliers to look for new ways to transform campsites into a luxury type of accommodation capacity and to choose glamping as a competitive strategy for further development on the market with its differentiated product. Often referred to as “nature on a silver plate” or “a place where nature and luxury intertwine”, glamping marks a new chapter in tourism sector, offering an opportunity to form the best achievements of hotel industry and camping and combining outdoor living with authentic additional content (Milohnić *et al.*, 2019).

In Europe, this type of tourist trip counted 373 million overnight stays, according to Eurostat data from 2017. For some countries, such as Slovenia and Croatia, it is an important tourism product. It is important to emphasize that it is necessary to implement applications in the glamping industry, as well as introduce numerous activities, which will improve this form of selective tourism, because it has great potential to make the destination competitive through innovation and

Correspondence:
Katarina Bjelić

e-mail:
katarina.bjelic.19@singimail.rs



sustainable development of the destination. Changes in the European camping market are reflected in the changing camping styles and the implementation of new business models. Seasonality and innovation are becoming key challenges in the tourism sector. Hoteliers and other participants in the provision of tourist services are constantly making efforts to overcome the problem of seasonality with various methods and additional contents, and glamping is becoming an increasingly better solution to this problem with its creative offer (Cvelić-Bonifačić *et al.*, 2017).

Glamping is a combination of the words “glamorous” and “camping”, which means that glamping is actually luxury camping or 5-star camping. This type of tourist travel implies the introduction of modern and innovative forms of accommodation facilities, which will provide comfort and rest in the natural environment for its visitors. Also, glamping can be defined as a type of camping, which is more comfortable and luxurious than traditional camping, combining luxury and nature, comfort and responsible behavior towards natural landscapes (Vrtodušić Hrgović *et al.*, 2018). The feature of these accommodation facilities is uniqueness, exclusivity and high-quality service. Glamping provides an “escape from the city”, the modern fast pace of life, offering a vacation in nature, a stay filled with various activities, tasting local products and numerous other opportunities.

Compared to other forms of accommodation, glamping contributes to the competitiveness of camping destinations. In a competitive tourism environment, staying in nature is a necessary trip that is chosen by tourists from urban areas, who have desire and need to spend more time in nature, because of the urban lifestyle (Cvelić-Bonifačić *et al.*, 2017). For such visitors, the money allocated for the trip is not an obstacle, but free time, which they can use for vacation. Bearing in mind that after the corona pandemic, “working from home” became more and more common and such a trend persists, modern glam accommodation offers such an opportunity for business tourists with its modernly equipped accommodation units.

In accordance with the current trends in tourism demand, modern camping is becoming the lifestyle of the modern camping guest. According to Vrtodušić Hrgović and colleagues, the trend of adapting this form of selective tourism, known as glamping, is directly related to innovative and new accommodation facilities in camping, which brings together hotel industry and camping. This form of accommodation raises the quality of hotel service to a higher level, providing creative service to useful offers (Vrtodušić Hrgović *et al.*, 2018).

According to Sakáčová, the characteristics of glamping are: (Sakáčová, 2013)

- 1) Untouched natural areas
- 2) Luxury
- 3) High quality service
- 4) Active vacation
- 5) Wellness
- 6) The need for an innovative product
- 7) Rural tourism
- 8) Ecologically sustainable business
- 9) Lower price of accommodation compared to hotels
- 10) Local gastronomy

Modern times, with a changed perception of the environment and a developed awareness about the importance of ecologically sustainable business practices, herald a great comeback of camping, but in a glamorous way. Glamping offers its guests the opportunity to live in nature, but in a modern, comfortable way. Fans of green vacations, of which there are more and more, are happy to choose this form of tourism, expecting an authentic offer and a vacation in nature (Milohnić *et al.*, 2019).



METHODOLOGY

Considering that this concept of accommodation capacity has not yet been developed in Serbia, it is important to emphasize that there are two destinations in Serbia where this model of accommodation exists - Lala Vineyard in Sremski Karlovci and Buzzoffski in Zasavica.

Features of Lala Vineyard glamping resort in Sremski Karlovci

Fruška gora is the most dominant orographic unit in Vojvodina. It is located in the northern part of Srem, between two rivers, the Sava and the Danube. This mountain range is 80 km long and mostly stretches in the west-east direction. Its highest peak is Crveni Čot (539 m). This mountainous area covers 500 square kilometers. Because of its exceptional natural beauty, historical monuments, many monasteries, which is why it is also known as the Serbian Holy Mountain, and because of a great number of wild animals and plant species, it was declared a national park in December 1960. The area of the national park covers 25,520 ha in the central part of Fruška Gora. In addition to the national park, there are other protected areas such as the Special Nature Reserve Koviljsko-Petrovaradinski rit, the Begečka Jama Nature Park, the Nature Monument - Beočinska Beach, the Island of Love and the Dunavac Natural and Geomorphological Monument and many other contents (Medić *et al.*, 2012).

Lala Vineyard represents the first luxury glamping destination, located near Sremski Karlovci, not far from the Danube River, surrounded by forest areas of Fruška Gora and vineyards, where tourists have the opportunity to take a break from the urban lifestyle.

This glamping accommodation offers guests unique experience, which combines comfort and natural surroundings, with modernly equipped tents, rustically designed interior, adapted to different preferences and needs of tourists. The tents are elegantly furnished with private terraces and modern bathrooms with views of the vineyards and surrounding landscape.

Tourists also have the opportunity to complete their stay by visiting the Fruškogorski monasteries, riding a bicycle, canoeing or kayaking on the Danube River, picnicking in nature, visiting Sremski Karlovci or the Petrovaradin Fortress and Novi Sad. Lala Winery stands out as a desirable destination due to its ability to provide tourists with an enriched and dynamic stay, providing a variety of activities such as wine tastings, vineyard tours and cultural tours. This integrative approach not only complements the visitors' experience but also ensures that they will not lack content during their stay.

Figure 1. Lala Vineyard



Source: <https://selo.rs/o/lala-vineyard-glamping-resort>

Buzzoffski Cabins - glamping destination in the Special Nature Reserve in Zasavica

The special nature reserve Zasavica is located in the southern part of the province of Vojvodina. It covers an area of 671 ha, and the protected zone on an area of 1150 ha in the territory of the municipalities of Sremska Mitrovica and Bogatić. The area of Zasavica is the remnant of a once large marshy area in the Sava and Danube basin. In 2012, it was proposed to expand the boundaries of the protected area, on a total area of 1128 ha, with a protected zone of 3462 ha (Stojanović *et al.*, 2021).



SRP Zasavica is an area of international importance, considering that it is included in the following lists: Ramsar area, IBA (important area for birds), IPA (important plant area), PBA (Prime Butterfly Area), as one of 4 such in Vojvodina, an area of the Emerald Network of Special Importance for Conservation (ASCI), due to the presence of wetland, forest and meadow habitats of the Pannonian landscape, which are a priority for conservation and a proposed Natura 2000 conservation with 23 types of recorded flora of the conservation area. Due to its preservation and accessibility, it is extremely suitable for the development of ecotourism (Stojanović *et al.*, 2021).

The glamping destination Buzzoffski is located in the Zasavica Special Nature Reserve, offering a respite from the noise of the fast-paced life in the former swamp area, now a meadow expanse, filled with friendly animals, such as horses, donkeys, cattle and many other species. This glamping experience is situated in the very center of the reserve, where the cabins are placed, with respect to all the standards of the concept of sustainable tourism development. Their policy is designed to spread awareness among their guests about the importance of preserving the natural environment, which is very important for achieving the goal of protecting the natural environment.

Buzzoffski contains 4 booths, named “Mirka”, “Mozak na pašu”, “Mikrokosmos” and “Moram da ne moram”. The cabins are suitable for solo travelers, families or groups of friends. The cottages are comfortably and glamorously equipped for a longer stay at the destination, created for hedonists and guests who need a digital detox and a break from everyday duties. This accommodation does not disturb the natural environment, but blends into it, which means that nature and the cabins are one.

The philosophy of the Buzzoffski accommodation concept is that tourists pack only the necessary things and indulge in the enjoyment of nature, which is key to a psycho-physical vacation. The business policy of this glamping destination is to provide its visitors with a stress-free vacation, staying in nature, exploring the reserve, but also creative and productive activities. “The time has come to slow down and switch off in order to preserve ourselves and return to the true values of life.” It’s time for a change, and there is salvation in nature,” is the motto of Buzzoffski accommodation.

Figure 2. Buzzoffski Cabins



Source: <https://www.buzzoffski.com/>

RESULTS AND DISCUSSION

The survey results include a total of 228 responses from respondents from Sremski Karlovci and Sremska Mitrovica.

The respondents’ answers shown in Table 1 refer to their familiarity with the glamping accommodation concept. According to the survey, the respondents from Sremski Karlovci and Sremska Mitrovica had the opportunity to hear about this form of accommodation, given that 139 answers, i.e., 61% answered affirmatively. On the other hand, 48 respondents (21.1%) were not familiar with this concept, whereas 41 answers (18.0%) expressed uncertainty or lack of information. Based on the answers of the respondents who stated that they were familiar with the concept of glamping accommodation, we can conclude that the majority are informed about the new form of accommodation.



Table 1. Familiarity of respondents with the glamping accommodation concept

Do you know what the glamping concept of accom-modation means?		
Valid	Frequency	Percent
Yes	139	61,0
No	48	21,1
Not certain	41	18,0
Total	228	100,0

Source: Author's

Table 2 shows the answers of the respondents on whether they had the opportunity to stay in glamping accommodation facilities. The answers of respondents who stayed in this accommodation dominate, i.e., 132 answers (57.9%), whereas 55 respondents (24.1%) answered negatively. The option “not sure” was chosen by 41 respondents (18%). Judging by the answers in Table 2, a significant number of the respondents had the opportunity to stay in glamping accommodation, which is very important for further analysis of the survey.

Table 2. Respondents' participation in glamping accommodation

Have you ever stayed in glamping accommodation?		
Valid	Frequency	Percent
Yes	132	57,9
No	55	24,1
Not certain	41	18,0
Total	228	100,0

Source: Author's

The respondents had the opportunity to share their opinion on the most important factors that influence the choice of vacation accommodation. The most important factor in the respondents' decision was the natural environment, which was chosen by 125 respondents (54.8%), followed by comfort and luxury 51 answers (22.4%). A factor that also affected the choice of accommodation was the affordable price for 28 respondents (12.3%), while 24 residents of Sremska Mitrovica and Sremski Karlovci (10.5%) had other reasons when choosing accommodation. The responses from Table 2 confirm the importance of the natural environment when choosing accommodation, which means that such destinations have great potential in fulfilling the preferences of tourists.

Table 3. Main factor when choosing accommodation

What factors would you cite as the most important when choosing a vacation rental?		
Valid	Frequency	Percent
Nature	125	54,8
Comfort and luxury	51	22,4
Affordable price	28	12,3
Other	24	10,5
Total	228	100,0

Source: Author's.



Table 4 provides an insight into the respondents' answers as to how often they choose rural holiday destinations. The participants in the research stated that they occasionally decided to spend their holidays in rural areas (99 responses, 43.4%), but the responses of respondents who often chose such destinations also dominated (97 responses, 42.5%). On the other hand, 32 respondents (14.0%) did not prefer to stay in rural destinations. The results from Table 4 claim that tourists want to stay in a natural environment, in rural destinations, in order to take a break from the urban lifestyle.

Table 4. Frequency of choosing rural vacation destinations

How often do you choose rural holiday destinations		
Valid	Frequency	Percent
Often	97	42,5
Occasionally	99	43,4
Never	32	14,0
Total	228	100,0

Source: Author's

With their answers, respondents shared their opinion about the impact of glamping on attracting tourists to rural destinations in table 5. Out of a total of 228 responses, 120 respondents (52.6%) were of the opinion that glamping was an authentic form of accommodation, which can have a favorable effect on attracting tourists, while 48 respondents (21.1%) claimed that it could not have a significant influence on the promotion of the destination. 26.3%, i.e., 60 respondents were not sure or were not informed if glamping could attract visitors to rural destinations. These results indicate that the majority share the opinion that glamorous camping can have a positive effect on promoting the destination in the form of attracting tourists.

Table 5. Respondents' opinion on the impact of glamping on attracting tourists to rural destinations

Do you think glamping can attract more tourists to rural destinations?		
Valid	Frequency	Percent
Yes	120	52,6
No	48	21,1
I don't know	60	26,3
Total	228	100,0

Source: Author's.

Table 6 provides insight into respondents' preferences when choosing traditional or glamping accommodation when staying in a rural destination. Respondents' responses show that the majority chose glamping facilities (136 responses, 59.6%), which means that a great number of respondents are environmentally conscious, while 52 respondents (22.8%) chose the traditional type of accommodation. When answering, respondents chose the option "I have no opinion" (40 answers, 17.5%) indicating that they have other preferences when choosing vacation accommodation.



Table 6. Responses of respondents who prefer traditional or glamping accommodation

Would you rather stay in traditional or glamping accommodation when staying in rural destinations?		
Valid	Frequency	Percent
Glamping	136	59,6
Traditional accomodation	52	22,8
No opininion	40	17,5
Total	228	100,0

Source: Author's

The data from Table 7 provide an insight into how much money the respondents were willing to spend for a night in glamping accommodation. The option of less than 50 euros per night was chosen by 217 respondents (95.2%), 50-100 euros per night by 9 respondents (3.9%), whereas only 2 respondents (0.9%) were ready to set aside more than 100 euros per night. Such results may indicate a lack of information among respondents, because glamping offers luxury accommodation with many accompanying facilities, which justifies the higher prices of this type of accommodation. A small number of respondents are ready to spend more money, which indicates that they are better informed about the features of glamping.

Table 7. Responses of respondents on what they prefer: traditional or glamping accommodation

How much would you be willing to pay for a night in glamping accommodation?		
Valid	Frequency	Percent
less than 50 euros per night	217	95,2
50-100 euros per night	9	3,9
more than 100 euros per night	2	0,9
Total	228	100,0

Source: Author's.

Table 8 shows the results of respondents' answers when selecting the most significant factors that influence their final decision to stay in rural destinations. The location was the most important factor in the decision to stay at the destination, as claimed by 116 respondents (50.9%). The original and authentic design of accommodation was also a significant factor for 35 respondents (15.4%), accompanying activities and nature were chosen by 35 respondents (15.4%), while the comfort of accommodation influenced the decision of 21 respondents (9.2%).

Table 8. Responses of respondents on what they prefer: traditional or glamping accommodation

What aspects of glamping accommodation are most important to you?		
Valid	Frequency	Percent
Location	116	50,9
Original accommodation design	35	15,4
Diverse offer of activities in nature	35	15,4
Comfort of accommodation	21	9,2
Other	21	9,2
Total	228	100,0

Source: Author's.



The results from Table 9 represent the decisive factors for the respondents' decision to stay in glamping accommodation. Judging by 123 respondents' answers (53.9%), ecological principles and sustainability had a great influence on the decision to stay in glamping accommodation, meaning that a great number of respondents have developed awareness of the importance of preserving the natural environment. Also, this data confirms the fact that tourism can influence the spread of awareness about the importance of business sustainability, both on tourism industry stakeholders, as well as on tourists and other users of services. Authentic experience was also an important factor in the respondent's decision, as claimed by 42 respondents (18.4%), a diverse offer of accompanying content and activities was chosen by 36 respondents (15.8%) and a location in nature by 13 respondents (5.7%). Also, 13 respondents (5.7%) had other reasons that influenced the decision to stay in glamping accommodation.

Table 9. Factors influencing respondents' decision to stay in glamping accommodation

What factors would be decisive for you to decide to stay in glamping accommodation?		
Valid	Frequency	Percent
Ecological standards and sustainability	123	53,9
Autentic experience	42	18,4
Offer of activities and content	36	15,8
Location in nature	14	6,1
Other	13	5,7
Total	228	100,0

Source: Author's

Table 10 provides an insight into respondents' views on the sustainability of glamping accommodation compared to traditional hotel accommodation. Out of a total of 228 responses, 137 (60.1%) believed that glamping accommodation respected the concept of sustainable development of tourism, which also emphasized the respondents' developed awareness of the importance of preserving the natural environment, as well as good information about the characteristics of this form of accommodation. On the other hand, 54 respondents (23.7%) believed that glamping did not respect sustainability standards. 37 respondents, i.e.16.2%, chose the option "I'm not sure" which indicated their lack of information.

Table 10. Respondents' views on the sustainability of glamping accommodation compared to traditional hotel accommodation

Do you think glamping is a more sustainable form of accommodation than traditional hotel accommodation?		
Valid	Frequency	Percent
Yes	137	60,1
No	54	23,7
I don't know	37	16,2
Total	228	100,0

Source: Author's



CONCLUSION

The research presents the concept of glamping, a modern form of accommodation, which respects the standards of sustainable tourism development, spreading awareness of the importance of preserving the natural environment among service users. Also presented are the characteristics of two glamping destinations in Serbia, Lala Vineyard in Sremski Karlovci and Buzzoffski Cabin in Sremska Mitrovica, which attract many tourists with their authentic offer.

Lala Vineyard and Buzzoffski Cabin represent a form of accommodation that combines the comfort of traditional accommodation with nature. Luxury tents and modernly equipped cabins offer a unique and authentic experience to its visitors far from the urban lifestyle, which is one of the factors that influence the decision of tourists to stay in this type of accommodation. With its innovative interior design, which fits into the natural environment, in private and isolated parts of the destination, it allows guests to fully experience nature. Applying environmentally friendly practices, they do not have a negative impact on the natural environment, which is of great importance. Glamping is a popular type of accommodation, which is chosen by an increasing number of tourists with the desire to stay in an untouched natural environment, but also to explore the destination on a deeper level.

A survey involving 228 respondents showed that many were familiar with the concept of glamping. Respondents wanted a unique stay in a preserved natural environment in rural destinations. The fast lifestyle in urban areas brought about a desire among tourists for rest and peace in the countryside, where nature and luxury are intertwined. Respondents expressed their desire for an active stay in nature, with a lot of accompanying content in accommodation that respected the concept of sustainable development. Glamping fully meets the preferences of tourists as a relatively new form of accommodation.

Glamping is becoming an increasingly popular option among travellers, challenging traditional hotel accommodations. This type of accommodation offers an authentic and specific experience to its users and attracts many tourists who choose environmentally friendly forms of accommodation. Glamping can serve as a good example of business practices for all other accommodation providers, especially when it comes to renewable energy use, recycling, use of local resources. Through the introduction of such standards, accommodation facilities can work together and contribute to preservation of the environment, while providing quality service to their guests.

REFERENCES

- Cvelić-Bonifačić, J., Milohnić, I., & Cerović, Z. (2017). Glamping–creative accommodation in camping resorts: insights and opportunities. *Tourism in Southern and Eastern Europe...*, 4, 101-114
- Hrgović, A. M. V., Bonifačić, J. C., & Licul, I. (2018). Glamping–new outdoor accommodation. *Economic thought and practice*, 2, 621-639 <https://www.buzzoffski.com/> (visited on: 18.06.2024)
- Medić, S., Gagić, S., Jovičić, A., & Erdeji, I. (2012). Possibilities for Improvement of Rural Tourism in Fruška Gora. *Journal of Settlements and Spatial Planning*, 1, 167-175
- Milohnić, I., Bonifačić, J. C., & Licul, I. (2019). Transformation of camping into glamping–trends and perspectives. *Tourism in Southern and Eastern Europe...*, 5, 457-473
- Sakáčová, K. L. (2013). Glamping-Nature served on silver platter. Aalborg University
- Stojanović, V., Milić, D., Obradović, S., Vanovac, J., & Radišić, D. (2021). The role of ecotourism in community development: The case of the Zasavica Special Nature Reserve, Serbia. *Acta Geographica Slovenica*, 61(2), 171-186



TRANSIT TOURISM IN SERBIA - PREDISPOSITION AND DEVELOPMENT

Branko Vranešević^{1*},
Miroslav Knežević²

¹Ph.D. Student,
Singidunum University,
Belgrade, Serbia

²Singidunum University,
Belgrade, Serbia

Abstract:

Transit tourism, as a specific form of tourism, refers to the passage of tourists through a country without a longer stay, but with the potential to significantly contribute to revenue. The Republic of Serbia, thanks to its favorable geographic location on key European transport corridors, possesses significant potential for the development of transit tourism. This paper explores the possibilities for developing transit tourism in Serbia, focusing on the cities of Belgrade, Užice, and Vranje, which are situated on Corridors X and XI. Using the Analytical Hierarchy Process (AHP), the preferences of transit tourists were examined based on cultural, natural, and gastronomic tours, with surveys conducted among four demographic groups. The results show that Belgrade has the highest potential, while Užice and Vranje have similar opportunities but face challenges such as insufficient promotion and a lack of accommodation capacity. The paper highlights the untapped potential of transit tourism in Serbia and provides a basis for further development strategies that could enhance its attractiveness.

Keywords:

transit tourism, international traffic, Serbia, Belgrade, Užice, Vranje.

INTRODUCTION

In the past few years, changes in consumer behavior in the tourism sector have been notable, mainly due to increasing feelings of uncertainty and fear. Tourists are now considering uncertainties such as health risks, political instability, and environmental changes when choosing to travel. Uncertainty in tourism involves unforeseeable and unmanageable elements that may have adverse effects on a journey, leading to discomfort, financial setback, or potential harm (Zenker & Kock, 2020). Tourists' travel choices are heavily influenced by how they perceive risk, which is closely connected to the consequences of uncertainties.

Transit tourism, as a specific form of tourism, refers to traveling through a certain territory or country without a prolonged stay. Although it is not the primary goal of travel, transit tourism can significantly contribute to the revenue of countries located at major transportation hubs (McKercher and Tang, 2004). Tourists in transit often use services such as accommodation, catering and other content designed for short-term stays. The Republic of Serbia, owing to its favorable geographic position at the crossroads of European routes, possesses significant potential for the development of transit tourism, primarily due to its well-developed road networks and key transit corridors.

Correspondence:
Branko Vranešević

e-mail:
branko.vranesevic.23@singimail.rs



Several major European transport corridors, such as Corridor X, which connects Central Europe with Greece and Turkey, and Corridor XI, which links Romania with Montenegro, pass through Serbia. These routes make Serbia an attractive transit point for millions of tourists who pass through the country each year. This paper explores the predispositions and opportunities for developing transit tourism in Serbia, with a particular focus on three cities situated on major corridors: Belgrade, Užice, and Vranje. Each of these cities has a specific role in transit tourism, and by analyzing their characteristics, the main advantages and challenges of this type of tourism will be identified.

LITERATURE REVIEW

Serbia's main advantage in transit tourism is its well-developed road network. Ristova and Dimitrov (2019) defining the concept of transit tourism, means a set of terms and phenomena which appear as a complex reflection of all relevant factors related to the movement of tourists through certain places, regions or countries towards their particular tourist destination, where their retention with a certain goal ranges from a few minutes to one or more nights. Studies like those of Timothy and Saarinen (2013) suggest that countries located at key transportation hubs can significantly benefit from this type of tourism, but it is crucial to develop appropriate services and facilities. Research by Kanwal *et al.* (2020) emphasizes the importance of improving infrastructure and services along highways—such as gas stations, restaurants, and accommodation facilities. Cities like Belgrade offer opportunities for brief stopovers, while Vranje and Užice attract travelers due to local gastronomy and natural beauty. Although often seen as less profitable compared to destination tourism, transit tourism can make a significant economic contribution to local communities (Radović, 2015). According to Slak Valek (2015), transit tourists spend on basic needs such as fuel, food, and accommodation, and by properly developing the offer, it is possible to increase their spending and length of stay. Insufficient promotion of local attractions, lack of service standardization, and occasional traffic congestion are the main challenges. Jovanović & Dragičević (2016) highlight the need for greater investment in tourism along highways to increase visitor numbers and revenues from transit tourists. Increasing the economic benefits of transit tourism can be achieved through better promotion, the development of specialized tourism packages for passing travelers, and investments in sustainable infrastructure. Ristova and Angelkova (2015) research makes an attempt for acquaint with the importance of the tourist need and wishes of transit tourists and their contribution for the development of hotel industry. Hospitality is one of the principal sectors in the tourism industry, it is important to show that the hotel offer is made exactly from the potentials of the certain area for developing selective types of tourism which the research Ristova and Angelkova (2015) showed. The research of Iliev, D. (2019) questions: Whether the pan-European transport corridors have an adequate transport infrastructure and a quality hospitality service that satisfies the needs of transit tourists and can they be considered as axes for tourism development? Are there potential transit destinations along the pan-European transport corridors that could affect the development of tourism and the dynamics of the tourism system?

Works like that of Vujić (2017) point to the importance of marketing and better informing tourists at key transit points. Additionally, there is potential for further growth of transit tourism through better targeting of travelers, improving the offer along highways, and developing sustainable tourism practices. Pavlović (2020) suggests investing in green infrastructure and improving services for passing tourists to increase their spending and retention. Recent research has applied the Analytic Hierarchy Process (AHP) method to evaluate key factors influencing the development of transit tourism in Serbia. The AHP model was applied to gather expert opinions and create a structured decision-making framework for improving transit tourism offerings. This method has been praised for its ability to integrate multiple criteria and provide a clear ranking of factors (Saaty, 1980).

From all the previously mentioned literature, we come to the conclusion that transit tourism of the Republic of Serbia needs to meet several key points, goals, in order to be economically profitable for all destinations that want to join transit tourism and improve it, and these are: accessibility, diversity of offer, accommodation capacities, orientation to this type of tourism.



So we come to the main hypothesis that, thanks to the strategy of the Republic of Serbia to develop road infrastructure in this regard, transit tourism has an excellent predisposition and perspective, whether we look at it macro at the level of the state of Serbia, or if we look at it micro at the level of a destination located on one of the road routes, corridors, that with minimal effort and investment, excellent economic effects can be achieved.

MATERIALS AND METHODS

Serbia’s geographic position in Europe makes it a transit country between Eastern and Western, as well as Northern and Southern Europe. The main travel routes, such as Corridors X and XI, as well as local express roads passing near major city centers, play a key role in the development of transit tourism. The improvement of transportation infrastructure represents a prerequisite for the development of other specific characteristics of each city, highlighting all the advantages that may be of interest to potential tourists.

Belgrade, as the capital of Serbia, serves as the main hub for all types of transportation (Nikola Tesla Airport, the main railway and road hub, as well as the rivers Danube and Sava). The capital city can always offer a variety of attractions, such as cultural, religious, adventure, sports, and other types of tours.

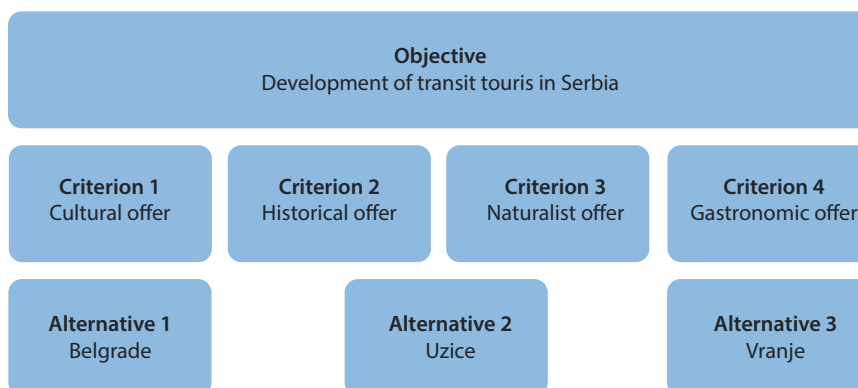
The city of Užice, located in the Zlatibor District, along with mountain centers such as Tara and Zlatibor, can also offer a wide range of activities for all age groups, as well as for tourists with different preferences. Tourists traveling to Montenegro often stop in Užice for a short break.

Vranje, situated in the Pčinja District in southeastern Serbia, is a transit point where tourists make a stop on their way to Greece and Turkey. The proximity of Vranjska Banja and Vlasina Lake makes this destination one of the more important ones in Serbia.

The use of the Analytical Hierarchy Process (AHP), a structured method for organizing and analyzing complex decisions, can be applied to achieve the objective presented to the respondents, providing information on the preferences of transit tourists and thus guiding strategic decisions in each city (Crouch and Ritchie, 2005; Lai and Vinh, 2013). Developed by T.C. Saaty in the 1970s, AHP has become popular in various fields, including management, economics, engineering, and ecology. AHP method, as a multi-criteria decision analysis (MCDA), can provide an adequate evaluation of data based on a large number of experts opinions and offer a reliable source to verify a new model (Velasquez and Hester 2013). To apply the AHP technique, a Delphi questionnaire was designed based on a list of the most effective criteria, sub-criteria, and indices of ecotourism development collected through data gathering, articles and documents.

For a detailed analysis, it is necessary to define the objective, then the criteria based on which the objective will be achieved, and finally, rank the alternatives offered to transit tourists, as shown in Figure 1.:

Figure 1. Development of transit tourism Criteria and Alternatives





RESULTS AND DISCUSSION

Survey was conducted one season across three alternative cities, focusing on gathering insights from diverse respondent groups. The respondents evaluated various elements in pairs, first in relation to the overall goal and subsequently in comparison to the specific criteria established for the alternatives.

The survey of four respondent groups was conducted during the summer season in each of the alternative cities. Respondents evaluated elements in pairs at a given level concerning elements at a higher level. In the three-level hierarchy presented in this paper, criteria were first compared relative to the goal, and then the alternatives were evaluated against the criteria. In applying the AHP method, elements are compared semantically or numerically as defined by Saaty's rating scale, shown in Table 1. This scale ranges from 1 to 9, where 1 indicates equal importance and 9 signifies extreme importance of one element over another (Saaty, 1980). The comparisons made by respondents were essential for establishing priority rankings among the alternatives.

Table 1. Saaty's rating scale for pairwise element comparison

Ratings	Significance of element i compared to j
1	Equal importance of element i and j
3	Moderate dominance of element i over j
5	Strong dominance of element i over j
7	Very strong dominance of element i over j
9	Absolute dominance of element i over j
2,4,6,8	Intermediate values

Source: Saaty (1980)

Variations among respondent groups highlighted differing preferences. For example, younger respondents prioritized entertainment and social activities, while older respondents placed more emphasis on safety and health services. These insights reflect the research of McKercher & Du Cros (2002), which suggests that demographic factors significantly influence travel preferences and behavior, necessitating a segmented approach to tourism marketing.

According to the summarized results, Belgrade emerged as the city that would attract the most respondents, followed by Užice and lastly, Vranje. It should be noted that while there are slight differences between Belgrade and Užice, the differences between Užice and Vranje are almost negligible.

Moreover, analyses like this must consider all the advantages and challenges each of these three destinations face. Advantages can be reflected not only through the strategic geographical location and developed transportation infrastructure but also through the potential for short-term stays and the diversity of offerings. Challenges primarily include insufficient promotion, which is a major drawback for destinations such as Užice and Vranje, as well as underdeveloped tourism infrastructure and an inadequate number of accommodation options for short-term stays.

The findings suggest that while the the general goal of improving tourism in these cities is shared among the respondent groups, individual preferences significantly influence their evaluations. The prioritization of criteria such as accessibility aligns with trends in modern tourism, where convenience plays a critical role in destination choice (Dwyer & Kim, 2003). Moreover, the differentiation among respondent groups indicates that tailored marketing strategies may be necessary to effectively engage diverse demographics (Chang and Katrichis, 2016).



CONCLUSION

The template is designed so that author affiliations are not repeated each time for multiple authors of the same affiliation. Please keep your affiliations as succinct as possible (for example, do not differentiate among departments of the same organization). The use of the AHP method in this research provides valuable insights into the factors that attract transit tourists to Belgrade, Užice, and Vranje. Through this structured approach, it is clear that transit tourism in Serbia holds significant untapped potential for growth. A more detailed analysis reveals that transit tourism could play a crucial role in diversifying Serbia's tourism offerings, particularly by appealing to travelers seeking brief yet memorable experiences while in transit.

This research highlights that strategic development of specific tourism products tailored to transit tourists—such as quick-access attractions, comfortable and affordable accommodations, and efficient transportation links—could increase Serbia's appeal as a transit destination. As past studies have shown, such targeted offerings increase the probability of tourists passing through will extend their stay or return in the future. For instance, short cultural excursions, dining experiences featuring local cuisine, or scenic viewpoints conveniently located along transit routes could be key in transforming transient stops into impactful experiences.

The analysis underscores the importance of addressing the promotional and infrastructural challenges faced by destinations like Užice and Vranje. By investing in targeted marketing and improving accommodations tailored to short-stay visitors, these cities could strengthen their competitive position in the transit tourism sector. Improving accessibility and visibility through promotional efforts would enable these cities to attract more transit visitors, thereby stimulating local economies.

The findings from this research serve as a foundation for developing future strategies aimed at fostering sustainable growth in Serbia's transit tourism sector. Sustainable practices, such as promoting eco-friendly transport options and preserving cultural sites, should be central to these strategies, ensuring that tourism growth benefits local communities without compromising natural and cultural resources (Ritchie and Crouch, 2003).

In summary, this research demonstrates that a focused and strategic approach to transit tourism in Serbia could not only increase the country's attractiveness to transit tourists but also contribute to sustainable tourism growth, ultimately positioning Serbia as a prominent transit destination in the region.

REFERENCES

- Crouch, G. I., & Ritchie, J. B. (2005). Application of the analytic hierarchy process to tourism choice and decision making: A review and illustration applied to destination competitiveness. *Tourism Analysis*, 10(1), 17-25. DOI: 10.3727/1083542054547930
- Dwyer, L., & Kim, C. (2003). Destination competitiveness: Determinants and indicators. *Current Issues in Tourism*, 6(5), 369-414. DOI: 10.1080/13683500308667962
- Slak Valek, N. (2015). Tourism expenditure according to mode of transportation: A comparative study between 2009 and 2012. *Journal of Tourism, Heritage & Services Marketing*, 1(1), 3-9. DOI: 10.5281/zenodo.376250
- Chang, W. J., & Katrichis, J. M. (2016). A literature review of tourism management (1990–2013): a content analysis perspective. *Current Issues in Tourism*, 19(8), 791-823. <https://doi.org/10.1080/13683500.2016.1167177>
- Iliev, D. (2019). Transport infrastructure quality and service along Pan-European corridors. *European Transport Review*, 18(3), 92-110.
- Jovanović, S., & Dragičević, V. (2016). The need for greater investment in tourism along highways. *Journal of Tourism Development*, 14(2), 76-90.
- Lai, W. H., & Vinh, N. Q. (2013). An application of AHP approach to investigate tourism promotional effectiveness. *Tourism and Hospitality Management*, 19(1.), 1-22. DOI: 10.20867/thm.19.1.1
- McKercher, B., & Du Cros, H. (2002). *Cultural tourism: The partnership between tourism and cultural heritage management*. Routledge.
- McKercher, B., & Tang, E. (2004). The challenges of developing transit tourism. *Asia Pacific Journal of Tourism Research*, 9(2), 151–160. DOI: 10.1080/1094166042000233685



- Pavlović, D. (2020). Investments in green infrastructure and service improvement for passing tourists. *Sustainable Tourism Management Journal*, 19(2), 44-59.
- Kanwal, S., Rasheed, M. I., Pitafi, A. H., Pitafi, A., & Ren, M. (2020). Road and transport infrastructure development and community support for tourism: The role of perceived benefits, and community satisfaction. *Tourism Management*, 77, 104014. DOI: 10.1016/j.tourman.2019.104014
- Radović, S. (2015). Economic contribution of transit tourism to local communities. *Economic Journal of Tourism Studies*, 11(1), 33-47.
- Ristova, C., & Angelkova, T. (2015). Connection between transit tourist needs and hotel industry development. *Hospitality and Tourism Quarterly*, 9(2), 58-74.
- Ristova, C., & Dimitrov, N. (2019). Defining the concept of transit tourism. *Tourism Research Journal*, 12(2), 45-58.
- Ritchie, J. B., & Crouch, G. I. (2003). *The competitive destination: A sustainable tourism perspective*. Cabi.
- Saaty, T. L. (1980). The analytic hierarchy process, New York: Mcgrew hill. *International, Translated to Russian, Portugueses and Chinese, Revised edition, Paperback (1996, 2000), Pittsburgh: RWS Publications*, 9, 19-22.
- Timothy, D. J., & Saarinen, J. (2013). Cross-border co-operation and tourism in Europe. *Trends in European tourism planning and organisation*, 60, 64. DOI: 10.21832/9781845414122-009
- Velasquez, M., & Hester, P. T. (2013). The role of AHP as a multi-criteria decision analysis tool. *Decision Analysis Journal*, 21(3), 77-95.
- Vujić, N. (2017). The importance of marketing and informing tourists at key transit points. *Marketing & Tourism Studies*, 7(1), 22-36.



ENHANCING TOURIST EXPERIENCE AND ENGAGEMENT THROUGH AI-DRIVEN REAL-TIME OBJECT DETECTION AND INTERACTIVE MOBILE APPLICATION

Marko Mihajlović¹,
Angelina Njeguš^{2*}

¹Ph.D. Student,
Singidunum University,
Belgrade, Serbia

²Singidunum University,
Belgrade, Serbia

Abstract:

Artificial intelligence has the potential to revolutionize the tourism industry, particularly by enhancing tourist experiences and providing valuable insights into tourist behavior. Our research identified a significant opportunity to enhance tourist satisfaction and engagement and enable advanced visitor analytics through an AI-powered real-time object detection system. In this study, we propose an AI-driven mobile application to address the gap in the digital infrastructure in Serbia by facilitating the real-time detection of tourist points of interest (PoI), allowing users to upload images instead of performing text searches. The uploaded images are analyzed by an AI system using the YOLO model trained on a customized dataset created specifically for this purpose. When a PoI is recognized, relevant information is displayed on the user's mobile phone in their preferred language, using advanced AI translation tools. This paper outlines how such a system not only enhances the overall tourist experience by delivering instant and pertinent information, but also provides tourism organizations with advanced analytics on visitor behavior, improved customer interaction capabilities, and enhanced promotional opportunities for lesser-known attractions and local businesses. Moreover, this study explores how the proposed application aligns directly with the tourism development strategy of Serbia and the UNDP recommendations, aiming to enhance digital infrastructure and support sustainable tourism initiatives across the country.

Keywords:

AI-driven Tourism, Real-time object detection, Visitor Behavior Analytics, Interactive Mobile Application.

INTRODUCTION

Tourists often find themselves at attractions with limited knowledge and without the means to easily perform detailed text searches to gain more information. Additionally, tourist organizations frequently lack robust tools for effectively tracking tourist behaviors and routes. Real-time information exchange, facilitated by information and communication technologies, is crucial for tourists to make informed decisions, and for service providers to offer timely and personalized services. The ability to access updated on-go information supports a seamless travel experience from planning and booking to navigating destinations (Verhun, 2022). However, the lack of accessible information can lead to various challenges. Tourists may face difficulties such as language barriers and navigation problems, which can result in a less satisfactory

Correspondence:
Angelina Njeguš

e-mail:
anjegus@singidunum.ac.rs



travel experience (Kumar *et al.*, 2021). For tourist organizations, the lack of real-time data can hinder their ability to understand and respond to tourists' preferences and movement patterns, potentially leading to inefficient resource allocation and missed opportunities for targeted marketing (Lee *et al.*, 2019). The significance of real-time information in tourism is underscored by the role of digital technologies in enhancing travel efficiency and experience (Gupta *et al.*, 2024).

Therefore, this paper presents a new proposal for tackling these challenges using sophisticated artificial intelligence technologies. The core of this solution revolves around the adoption of the YOLO model, an advanced convolutional neural network recognized for its effectiveness in analyzing images and detecting objects in real time. We propose the development of a mobile application based on the YOLO model that leverages its capabilities to provide tourists with instant recognition of points of interest. This application enables users to receive immediate and pertinent information about the landmarks they encounter, thereby enhancing their travel experience through real-time insights and contextual data. In this study, we created a specialized dataset specifically tailored for tourist attractions. This dataset serves as a proof-of-concept for our application. Tourists use their mobile phones to capture pictures of the environment, which are then used as input to identify various tourist attractions within the visual frame.

Tourism organizations and agencies can utilize this application as an effective tool for acquiring a comprehensive knowledge of tourist behavior. By examining the data derived from user engagement with the application, these entities can enhance their understanding of visitor patterns, inclinations, and attractions, leading to informed strategic decision-making and efficient resource distribution. The capacity to monitor and assess tourist itineraries and activities immediately enables a more adaptable management of tourism flows, potentially improving overall visitor satisfaction. Additionally, the application provides enhanced promotional opportunities for lesser-known attractions and local businesses, helping diversify tourist activities and boost local economies. Furthermore, the app offers educational opportunities by providing rich contextual information about destinations, which can deepen visitors' understanding and appreciation of cultural, historical, and natural sites, thus enriching the overall travel experience.

This study advances modern tourism strategies by evaluating YOLO models for real-time detection of tourist points of interest (PoI), demonstrating the selected model's high accuracy and practical application. We developed a specialized dataset to enhance the model's adaptability in recognizing emerging PoIs. The resulting mobile app uses this model to identify tourist spots and deliver information in the user's preferred language, while also collecting visitor behavior analytics. These insights can drive personalized tourism experiences and strategic development, particularly in enhancing tourism strategies in Serbia to meet global tourism demands.

The remainder of this paper is organized as follows. Related Work offers a review of pertinent studies that have served as the foundation for the present research. The methods section presents the proposed methodology, including assessments of YOLO models and custom dataset development. In the Discussion section, we evaluate the effectiveness of the selected YOLO model, trained on our proof-of-concept dataset, through experimental results, and assess its accuracy and usability. We also explored potential improvements and obstacles to implementation, in addition to identifying areas for future research. Finally, the Conclusion summarizes the key findings and contributions of our research.

RELATED WORK

Existing real-time solutions and technologies in tourism-related AI applications for tourist spot detection are multifaceted and incorporate various AI systems and applications. AI has been instrumental in enhancing the experience of travelers by facilitating the identification of destination points (Jamaluddin & Rahmat, 2023). These technologies include personalization and recommender systems that leverage big data and machine learning algorithms to suggest tourist spots to travellers based on their preferences (Bulchand-Gidumal, 2022). In addition, AI-powered search and booking engines, which rank high in adoption susceptibility, are pivotal in helping tourists discover and plan visits to attractions (Huang *et al.*, 2022). The recent literature indicates a growing interest in the development of applications that assist in the real-time identification of tourist points of interest. These applications leverage various technological advancements, including Ambient Geographic Information, deep learning, and Mobile GIS technology, to enhance the experience of tourists by providing them with immediate and relevant information about attractions (Celardo *et al.*, 2023) (Zhang *et al.*, 2021) (Dai, 2013).



Interestingly, while some approaches focus on analyzing user-generated content to inform tourists and industry stakeholders (Celardo *et al.*, 2023), others emphasize the use of image recognition algorithms to identify locations and personalize recommendations (Chen *et al.*, 2021) (Zhang *et al.*, 2021). Additionally, the application of these technologies extends beyond tourism, as demonstrated by the use of RGB-D sensors for natural landmark recognition in mobile robotics (Souto *et al.*, 2017). Moreover, the integration of conversational recommender systems into tourism reflects an innovative direction for facilitating user interaction and preference determination (Auliarahman *et al.*, 2021). For instance, the integration of artificial intelligence (AI) in systems within museums allows for the analysis of visitor behavior, providing data that can help optimize exhibition layouts and monitor attendance (Dyk *et al.*, 2023). In the context of smart cities and urban development, GeoAI can process large volumes of geospatial data, potentially including visitor movements, to optimize urban planning and management (Hosen *et al.*, 2023).

Real-time object detection using AI models includes methods such as the Single Shot MultiBox Detector (SSD) and Region-based Convolutional Neural Networks (Faster R-CNN). These models are known for their accuracy and use of anchor boxes, feature pyramid networks, and non-maximum suppression to achieve a balance between precision and processing speed (Alsharabi, 2023). The You Only Look Once (YOLO) algorithm, on the other hand, is recognized for its speed and ability to process the entire image simultaneously, predicting bounding boxes and class probabilities for multiple objects, which is particularly advantageous in time-sensitive applications (Lakhotiya *et al.*, 2023) (Lavanya & Pande, 2023). YOLO's ability to process images in a single evaluation makes it well-suited for applications in which immediate object recognition is crucial, such as identifying landmarks or points of interest in a tourism context. In addition, continuous improvements in YOLO architecture, such as the introduction of YOLOv5 with a feature pyramid network and anchor boxes, suggest ongoing enhancements in accuracy and speed (Lakhotiya *et al.*, 2023). The convergence of user-generated content analysis, image processing, and real-time data retrieval technologies represents a significant step in the development of applications for the real-time identification of tourist points of interest. These applications not only promise to improve the tourist experience by providing instant access to information but also offer valuable insights for the tourism industry to tailor services and marketing strategies effectively (Chary, 2023) (Lavanya & Pande, 2023) (Lee & Hwang, 2022) (Guan, 2023). The continued development and application of AI in tourism are expected to further refine and enhance the detection and promotion of tourist spots, offering travelers more tailored and efficient planning tools (Any *et al.*, 2024) (Xiong & Zhang, 2024).

Despite extensive discussions on object detection technologies and their applications across various sectors, there remains a notable deficiency in studies that specifically focus on integrating these technologies into the tourism industry, particularly for enhancing image-based search capabilities to recognize tourist points of interest. Therefore, we propose this application as a potential solution to bridge this gap by leveraging the advanced capabilities of the YOLO object detection technology. This approach aims to enhance visitor experiences and provide valuable insights into tourist behavior by enabling the real-time, accurate identification of tourist attractions. The immediate availability of contextual and relevant information directly influences tourist satisfaction by enabling more informed and enriched experiences and allowing tourists to interact with their environment in a more meaningful manner (Pawlak, 2023). Additionally, tourism businesses benefit from the ability to dynamically manage resources and respond to tourist needs in real time, which can lead to improved service delivery and increased operational efficiency (Gupta *et al.*, 2024) (Lee *et al.*, 2019) (Verhun, 2022). The absence of such real-time capabilities highlights critical gaps in current tourism infrastructure, underscoring the need for continued investment in digital technologies. Therefore, investing in systems that provide real-time information and data analysis represents a compelling opportunity for the tourism industry to evolve and adapt to the expectations of modern travelers, ensuring that destinations remain competitive and capable of delivering exceptional experiences.



METHODS

YOLO Models

The You Only Look Once (YOLO) model, originally developed using the Darknet framework, is a series of AI models designed for efficient real-time object detection. This series uses convolutional neural networks (CNNs) that enable the system to detect objects by looking only once at the image, which is a significant improvement over traditional models that require separate proposal and classification steps (Lavanya & Pande, 2023). The YOLO model operates by dividing the image into a grid and predicting the bounding boxes and the probabilities of each grid cell. A single neural network predicts multiple bounding boxes per grid cell and assigns class probabilities to these bounding boxes. This unified approach enables the model to achieve remarkable speed and accuracy, making it particularly suitable for applications that require real-time processing.

Since its inception, the YOLO model has evolved through several iterations, each improving upon the previous model in terms of accuracy, speed and capability to handle different object sizes and complexities:

- YOLOv1 to YOLOv3: These early versions pioneered real-time object detection capabilities, with YOLOv1 establishing the framework but struggling with localization errors and recall. YOLOv2 improves the precision and recall by introducing anchor boxes, thereby enhancing the detection of smaller objects. YOLOv3 further refines this approach using multiscale predictions.
- YOLOv4 made substantial gains in both speed and accuracy by incorporating new technologies such as CSP and MiSH activation, enhancing contextual understanding essential for complex scenes.
- YOLOv5, developed in PyTorch, offers the best in terms of integration ease and operational efficiency. It also optimizes the balance between speed and accuracy, making it particularly effective for real-time applications that require rapid and reliable performance.
- YOLOv6 to YOLOv8: These later versions of the YOLO model series present advanced improvements in accuracy and detection speeds. However, they pose challenges in practical implementation, owing to their increased complexity and higher computational demands.

After evaluating various models for object detection and conducting experiments with different YOLO models, YOLOv5, specifically the YOLOv5m variant, emerged as the most suitable for our application because of several factors. YOLOv5 provides a balance between speed and accuracy with substantial improvements in processing speed, making it suitable for applications requiring efficient real-time object detection without significant resource expenditure. It is built on a PyTorch framework, which simplifies model training and deployment compared with its predecessors. The YOLOv5 model offers various scaled versions from small to large, allowing it to be tailored according to the computational resources and accuracy requirements. Through extensive experimentation, YOLOv5m was selected because of its optimal balance of performance and efficiency. This version demonstrated a superior capability in handling real-time processing demands while maintaining high detection accuracy, making it the preferred choice for our project objectives. This adaptability makes it ideal for server-side processing in which images uploaded by tourists can be analyzed efficiently without overloading mobile devices. PyTorch makes the codebase more accessible and easier to modify for specific needs, which is critical for adapting the model to recognize diverse tourist attractions across different environments.

Another advantage of YOLOv5 is its ability to effectively apply learning from natural image data across various domains. It can be trained to identify various categories, making it adaptable to diverse tourist attractions including natural landmarks, sculptures, and historical buildings. However, running advanced AI models typically requires significant computational resources, which can be costly, especially when scaled to handle multiple simultaneous users across various geographic locations. The computational cost increases further when the application needs to process high-resolution images in real-time, which is often necessary for accurate object detection in diverse environments. Furthermore, keeping the AI model effective and relevant requires continuous updates. This could involve retraining the model periodically with new data, a process that can be resource-intensive. Implementing transfer learning strategies can help alleviate some of these challenges



by allowing the model to adapt better to new types of data or environments. However, it is important to manage the process carefully to prevent any degradation in the performance of the model in previously learned scenarios.

The experiments were conducted on Google Colab utilizing its robust cloud-based platform to ensure consistent computational performance and accessibility. The Colab notebook, which provides a comprehensive environment for running and experimenting with the code, details the setup and execution of our experiments, can be accessed through the following link: https://colab.research.google.com/drive/1pYpC648QIfuA2bPoK98u_ndPiQtzQWl-. This notebook includes all necessary dependencies, pre-configured settings and step-by-step instructions to help you explore and replicate the findings of this study. The results and further analysis of these experiments are discussed in the Discussion section of our paper. This setup allowed us to systematically evaluate the performance and applicability of the YOLOv5m model under controlled conditions by leveraging Google Colab's powerful GPUs to effectively simulate real-world usage scenarios.

Custom Dataset

Creating a high-quality dataset is essential for effectively training the YOLO model to identify the tourist points of interest. This section discusses the process of creating such a dataset, which involves data collection, annotation and preprocessing. Tools, such as RoboFlow, can be used to streamline these processes. The initial step in creating a dataset for identifying tourist POIs is to gather a diverse range of images depicting the various POIs in which the application is to be used. This process involves ensuring geographic diversity by including images of POIs from different locations, which helps to ensure the effectiveness of the model across diverse regions. It is also important to collect images captured at different times of the day and under varied weather conditions because this variety makes the model resistant to changes in lighting and weather. Finally, it is essential for the dataset to contain images captured from various angles and distances from each POI, allowing the model to recognize them from any standpoint. Images can be obtained from open datasets available online, partnerships with tourism boards or agencies, crowdsourced contributions by volunteers, or by hiring professional photographers specifically tasked with capturing distinct POIs.

Once the images have been obtained, the subsequent task involves adding descriptive labels, which help to train the YOLO model. RoboFlow offers a user-friendly platform for annotating images and uses various tools to streamline the process. Each image was labelled by creating bounding boxes around the points of interest. It is essential to ensure that these boxes tightly enclose the object to enhance model accuracy. Furthermore, each bounding box is assigned a label corresponding to the POI, and it is crucial to maintain consistency in the labelling, particularly when similar POIs appear in different images. Before training the YOLO model, it is essential to preprocess the images to improve the efficiency and performance of the learning process. In our experiments, we implemented specific preprocessing steps to enhance the efficiency and accuracy of the YOLO model. Images were first auto-oriented and resized to 640×640 pixels to reduce the file size and quicken training. The contrast was auto-adjusted using Contrast Stretching, which optimized the pixel intensity for better edge detection. To further enhance the diversity of the dataset and improve model robustness, specific image augmentations were applied during preprocessing. Horizontal flipping was used to make the model insensitive to the subject orientation. The brightness was adjusted by 20% to make the model more resilient to variations in lighting and camera settings, which helps maintain the detection accuracy under different environmental conditions. Additionally, we applied 20% hue augmentation by randomly adjusting the colours in each image. This augmentation makes the model less sensitive to colour variations, enhancing its robustness and reducing its sensitivity to minor discrepancies in image capture conditions.

The dataset used in our experiments was created using Roboflow tools, an advanced platform designed for building and optimizing machine-learning datasets. This tailored dataset is publicly available to facilitate further research and development in the field. It can be accessed via the following URL address: <https://universe.roboflow.com/serbia-tourist-points-of-interest/tourist-points-of-interest/dataset/5>. This resource includes all preprocessing and augmentation configurations applied, ensuring that others can replicate our setup or extend the dataset with additional annotations and modifications.



Real-Time Object Detection

The first step involves resizing the captured image to meet the input requirements of the YOLO model. Once processed, the YOLO model was used to analyze the PoI images using a trained neural network to compute their locations and assess probabilities. When a PoI is identified, the relevant information is retrieved from the backend database or API. This database was populated with data during the initial dataset creation and could be updated periodically with new findings or corrections. The final stage includes presenting the retrieved information on the user's device, which may consist of a PoI name, brief description, historical facts, and links to more detailed content in a format that is easy to understand and often enhanced with multimedia elements, such as images, audio descriptions, or augmented reality overlays.

The dataset must be updated regularly to include new attractions or changes in existing attractions. This process involves continuous data collection, annotation and validation to ensure the high quality and relevance of the data, which can be both time-consuming and expensive. Maintaining an updated database that provides detailed and accurate information about the recognized points of interest is crucial. This database must store information and efficiently handle dynamic updates. Challenges include ensuring data consistency, managing data redundancy and securing the database against potential breaches while providing fast access to the information for real-time application needs. When the system encounters an image it cannot initially recognize, this provides an opportunity not just for technical improvement but also for enriching the tourist's experience. Once an image is added to the system, tourist organizations can notify visitors who initially encounter an unrecognized point. This process also opens avenues for tourist organizations to offer additional products or services. By linking notifications about the recognized image to offers for commercial products, souvenirs, or promotions of other tourist spots, organizations can capitalize on increased engagement to boost local commerce. Such targeted suggestions not only improve the tourist experience but also support local businesses, creating a symbiotic relationship that benefits all stakeholders involved.

Multilanguage Support

We propose integrating multilanguage support to enhance the utility and accessibility of the application further. This feature can cater to international tourists by providing information in their preferred language, thereby broadening the reach and usability of the application. To achieve this, we propose implementing multilanguage support using advanced AI translation tools, such as Google's real-time text translator. The integration of Google's real-time text translator will allow the application to instantly translate text related to points of interest (PoIs) into a variety of languages. This feature first detects the user's language preference, either through explicit user selection or by automatically detecting the language settings of the user's device. Once the preferred language is identified, all text outputs, including descriptions of PoIs, historical facts and navigational instructions, are translated in real-time. The use of an AI-powered translation tool ensures that translations are not only swift but also contextually accurate, enhancing the user's understanding and engagement. This approach leverages ongoing advancements in natural language processing (NLP) technologies, which have significantly improved in terms of accuracy and speed owing to continuous updates and training on diverse language datasets. Incorporating multilanguage support in this manner would not only make the application more user-friendly for a global audience but also increase its educational value by making information accessible in multiple languages. Moreover, this feature supports inclusivity and promotes wider adoption of the application among tourists from various linguistic backgrounds, making the touring experience more enjoyable and informative.

DISCUSSION

The YOLOv5m model, employing pre-trained COCO weights, underwent training for 100 epochs. Leveraging these pre-trained weights facilitated faster convergence, enhanced accuracy and robust feature extraction capabilities in our experiments. Our dataset introduces new classes into the model through transfer learning. The benefits of using transfer learning with pre-trained weights include significantly reduced training time



and the need for less training data to achieve high precision, making it a practical strategy for adapting deep learning models to specialized tasks. This medium-sized model configuration utilizes a deeper and wider architecture than the smaller YOLOv5s, incorporates 212 layers and approximately 20.86 million parameters, and operates at a computational complexity of 47.9 GFLOPs. Upon validation, the model demonstrated excellent performance metrics: a precision of 0.948 indicated that 94.8% of the model's predictions were accurate, whereas a recall rate of 0.905 confirmed that the model successfully identified nearly all relevant objects within the dataset. The model achieved a mean Average Precision of 0.957 at 50% Intersection over Union (IoU) and a Mean Average Precision of 0.653 from 50% to 95% IoU, indicating how well the model performs under increasingly strict criteria for matching the predicted bounding boxes with the ground truth. This confirms that the YOLOv5m configuration was selected for its optimal balance between speed and accuracy, making it particularly suitable for scenarios demanding real-time performance without significantly compromising the quality of detections. The trained model showed excellent performance on the validation dataset, with high precision and recall. The high mAP scores indicate that the model is very accurate at detecting the classes on which it has been trained, although the mAP50-95 suggests some potential room for improvement under more stringent IoU thresholds. This could be addressed by further tuning the model, augmenting the training dataset, or adjusting the IoU thresholds for evaluation.

The tourism industry is increasingly embracing the integration of intelligent tourism applications with burgeoning research focusing on the potential of these technologies. Employing visual sensors alongside artificial intelligence, computer vision and machine learning offers reliable and autonomous solutions that can significantly enhance smart tourism in various aspects. Within this context, our use case specifically explores the enhancement of tourist engagement and experience by leveraging real-time information about points of interest. Through the development of this system, Serbia can enhance its tourism infrastructure that directly supports the "Tourism Development Strategy". To maximize the utility and educational value of the application, the system should be capable of recognizing a wide array of objects that enrich the tourist experience. This includes various architectural structures and landmarks ranging from iconic statues and historical buildings to modern government buildings and sports stadiums, enhancing both urban and historical tours. Additionally, it should identify specific artwork, sculptures and historical artefacts, making it an indispensable educational resource within museums by delivering rich contextual information directly to visitors' mobile devices. Moreover, to support eco-tourism, the system should also be equipped to identify natural landmarks, such as mountains, lakes and parks, offering an interactive guide to nature lovers and adventurers exploring natural wonder.

This application offers a multifaceted platform that significantly benefits tourists, tourist organizations and overall engagement. For tourists, it provides a seamless, enriched experience by enabling easy recognition of points of interest, guided tours, interactive museum visits and real-time information on nearby attractions and local businesses. The inclusion of features like personalized routes, voice descriptions and educational tools transforms the app into a personal tour guide, enhancing convenience and learning while promoting a deeper connection with the destination. For tourist organizations, the app serves as a powerful tool for managing visitor flow, promoting lesser-known attractions and gathering valuable analytics on tourist behaviour. This data can be used to optimize city planning, improve marketing strategies and drive sustainable tourism initiatives. Increased engagement is driven by the app's ability to offer interactive and customizable experiences, such as virtual field trips, gamified learning and real-time notifications. The app's potential to integrate with smart city infrastructure further enhances its utility, making it not only a guide for tourists but also a resource for urban development and cultural preservation. Overall, this application fosters a more informed, enjoyable and sustainable tourism experience, benefiting both users and the broader tourism ecosystem.

As we look towards future developments in AI-driven tourism applications, several promising research avenues have emerged that could further enhance the efficacy and impact of these technologies. Future research into dynamic guidance systems that recommend new points of interest based on the locations a tourist has already visited could significantly enhance personalized travel experiences. Such research could explore various data sources and modelling techniques to refine the recommendation accuracy, such as integrating real-time data from social media and other platforms to capture current events or special exhibits. By providing dynamic guidance, the application aligns with the strategy's goals of promoting lesser-known sites and distributing tourist traffic more evenly, thus aiding in reducing seasonality and boosting local economies. There



is also the potential for future research to examine the economic impact of such applications on local businesses and communities. Understanding how AI-driven tourist applications influence spending patterns and visitor footfall can provide valuable insights for local economies. This study could also explore how targeted recommendations and promotions within the application could drive traffic to lesser-known attractions and businesses, thereby promoting a more sustainable and inclusive tourism industry.

This comprehensive support for the strategy's objectives demonstrates how technology can be leveraged to meet broader economic, cultural and educational goals, making its application a vital tool in the evolution and growth of Serbia's tourism sector. The UNDP has recognized sustainable tourism as a significant opportunity for development in Serbia, emphasizing the need to integrate sustainability into the tourism sector to benefit the local economy and align with global sustainability goals. These efforts include enhancing educational programs, improving digital and business skills among local entrepreneurs and promoting tourism outside large urban centers. Our application supports these initiatives, thereby aligning with UNDP's sustainable tourism strategies.

CONCLUSION

Tourists often face significant challenges owing to a lack of readily available information about their destination spots. This gap in accessible, timely and detailed information can hinder their ability to fully engage with and appreciate the attractions they visit, potentially leading to a less-satisfying overall experience. The absence of an insightful context regarding cultural, historical, or natural spots can leave visitors with unanswered questions and unfulfilled expectations, particularly in areas where signage is minimal or only available in a local language. In this study, we explored a real-time object detection application aimed at enhancing the tourist experience by providing instant, accurate information about points of interest. After evaluating various AI models, we selected YOLOv5m (Jocher, 2020) because of its suitability based on the balance of speed, accuracy and ease of integration, providing a substantial increase in detection capability over YOLOv5s, which is designed for ultrafast processing but at the cost of lower accuracy. Compared to larger variants such as YOLOv5l or YOLOv5x, YOLOv5m offers a more balanced approach, ensuring that it remains sufficiently computationally efficient for use in environments with moderate hardware capabilities. This makes YOLOv5m an ideal choice for applications that require a good trade-off between speed and detailed detection, such as in moderate surveillance systems, consumer-grade hardware applications, or when there is a need to detect objects with reasonable accuracy in near real-time. This suitability was further confirmed by our experiments, which demonstrated the effectiveness of the model under these specific conditions.

This study outlines a comprehensive methodology for the application of mobile tourist information systems, employing a robust method based on the AI model for detection and a custom dataset specifically tailored for this purpose. This integrated approach ensures that tourists receive real-time relevant data that enhance their visiting experience, demonstrating the effectiveness of combining advanced AI technology with user-centered design in the development of tourism-oriented applications. We also examined the potential enhancements for the app, such as personalized recommendations that tailor the tourist experience based on individual preferences and past behaviors. Other suggested features include interactive learning tools for museums and historical sites and integration with local tourism and business promotions to support local economies. The challenges and limitations of implementing such a system are also discussed, including computational demands and the need for continuous updates and maintenance to ensure the effectiveness of the application. We detail how tourist organizations could benefit significantly from the deployment of this technology, particularly in regions like Serbia, where comprehensive visitor analytics are not currently available. From an educational perspective, the application empowers tourist organizations to deliver enriched content directly to visitors' mobile devices, facilitating a more interactive and engaging learning experience at cultural, historical and natural sites. Moreover, the application can be utilized to promote local businesses, eco-tourism and general tourist attractions, thereby effectively expanding the economic benefits of tourism. Highlighting lesser-known and eco-friendly options may help diversify tourist activities and distribute tourist traffic more evenly. Although there are challenges to overcome, the potential benefits of this AI-driven real-time object detection application for the tourism industry are substantial, offering a transformative approach to rethinking



strategies for modern tourism. By enhancing visitor experiences through personalized, real-time information delivery and facilitating data-driven insights into tourist behavior, this technology has the potential to reshape how destinations are marketed, managed and explored, driving innovation and sustainable growth within the sector.

REFERENCES

- Alsharabi, N. (2023). Real-Time Object Detection Overview: Advancements, Challenges, and Applications. *Amran University Journal*, 3(6), 12. <https://doi.org/10.59145/jaust.v3i6.73>
- Any, B., Four, S., & Tariazela, C. (2024). Technology Integration in Tourism Management: Enhancing the Visitor Experience. *Startupreneur Business Digital (SABDA Journal)*, 3(1), 81–88. <https://doi.org/10.33050/sabda.v3i1.508>
- Auliarahman, R. M., Baizal, Z. K. A., & Ikhsan, N. (2021). Conversational Recommender Systems Based on Criticism for Tourist Attractions using TF-IDF. *JURNAL MEDIA INFORMATIKA BUDIDARMA*, 5(4), 1242.
- Bulchand-Gidumal, J. (2022). Impact of Artificial Intelligence in Travel, Tourism, and Hospitality. In *Handbook of e-Tourism* (pp. 1943–1962). Springer International Publishing. https://doi.org/10.1007/978-3-030-48652-5_110
- Celardo, L., Misuraca, M., & Spano, M. (2023). Georeferencing sentiment scores to map and explore tourist points of interest. *5th International Conference on Advanced Research Methods and Analytics (CARMA 2023)*, 115–122.
- Chary, P. S. (2023). Real Time Object Detection Using YOLOv4. *International Journal for Research in Applied Science and Engineering Technology*, 11(12), 1375–1379. <https://doi.org/10.22214/ijraset.2023.57602>
- Chen, Y.-C., Yu, K.-M., Kao, T.-H., & Hsieh, H.-L. (2021). Deep learning based real-time tourist spots detection and recognition mechanism. *Science Progress*, 104(3_suppl), 003685042110442. <https://doi.org/10.1177/00368504211044228>
- Dai, J. P. (2013). Research of Tourist Attractions Real-Time Query System Based on Mobile GIS. *Advanced Materials Research*, 756–759, 1948–1952. <https://doi.org/10.4028/www.scientific.net/AMR.756-759.1948>
- Dyk, T., Viskupič, M., Dražanský, M., & Macek, I. (2023). Significance of Museum Visitor Behavior Analysis. *Muzeum Muzejní a Vlastivedná Práce*, 62(1), 8–11. <https://doi.org/10.37520/mmvp.2024.003>
- Guan, Z. (2023). Real time object recognition based on YOLO model. *Theoretical and Natural Science*, 28(1), 137–143.
- Gupta, J., Srivastava, S., & Asrani, D. . K. (2024). E-TOURISM: A TOURIST SATISFACTION OF ONLINE TRAVEL PURCHASING. *International Journal of Innovative Research in Computer Science and Technology (IJIRCST)*, 140–144.
- Hosen, B., Rahaman, M., Kumar, S., Sagar, L., & Akhtar, Md. N. (2023). LEVERAGING ARTIFICIAL INTELLIGENCE AND BIG DATA FOR ADVANCED SPATIAL ANALYTICS AND DECISION SUPPORT SYSTEMS IN GEOGRAPHY. *Malaysian Applied Geography*, 1(2), 62–67. <https://doi.org/10.26480/magg.02.2023.62.67>
- Huang, A., Chao, Y., de la Mora Velasco, E., Bilgihan, A., & Wei, W. (2022). When artificial intelligence meets the hospitality and tourism industry: an assessment framework to inform theory and management. *Journal of Hospitality and Tourism Insights*, 5(5), 1080–1100. <https://doi.org/10.1108/JHTI-01-2021-0021>
- Jamaluddin, Z., & Rahmat, A. K. (2023). Artificial Intelligence Technology in Travel, Tourism and Hospitality: Current and Future Developments. In *Technology Application in Aviation, Tourism and Hospitality* (pp. 169–177). Springer Nature Singapore. https://doi.org/10.1007/978-981-19-6619-4_12
- Jocher, G. (2020). *Ultralytics YOLOv5*. <https://doi.org/10.5281/zenodo.3908559>
- Kumar, R. R., Said Al Shekaili, R. S., Al-Sulaimi, B. D. S., & Sulaiman Al-Alawi, R. K. (2021). An Evaluation of Tourism Attributes related to Satisfaction and Challenges by Foreign Tourists in Sultanate of Oman. *International Business Research*, 14(8), 55. <https://doi.org/10.5539/ibr.v14n8p55>
- Lakhotiya, R., Chavan, M., Divate, S., & Pande, S. (2023). Image Detection and Real Time Object Detection. *International Journal for Research in Applied Science and Engineering Technology*, 11(5), 2785–2790.
- Lavanya, G., & Pande, S. D. (2023). Enhancing Real-time Object Detection with YOLO Algorithm. *EAI Endorsed Transactions on Internet of Things*, 10. <https://doi.org/10.4108/eetiot.4541>
- Lee, J., & Hwang, K. (2022). YOLO with adaptive frame control for real-time object detection applications. *Multimedia Tools and Applications*, 81(25), 36375–36396. <https://doi.org/10.1007/s11042-021-11480-0>



- Lee, J., Kang, Y., Kim, N., Kim, D., & Park, Y. (2019). Analysis of Travel Patterns of Seoul Tourists by Trajectory Data Mining. *Abstracts of the ICA*, 1, 1–2. <https://doi.org/10.5194/ica-abs-1-209-2019>
- Pawlak, K. (2023). City tourism application functionality from the perspective of tourist experience and technology acceptance models. *Scientific Papers of Silesian University of Technology. Organization and Management Series*, 2023(174), 131–152.
- Souto, L., Castro, A., Gonçalves, L., & Nascimento, T. (2017). Stairs and Doors Recognition as Natural Landmarks Based on Clouds of 3D Edge-Points from RGB-D Sensors for Mobile Robot Localization. *Sensors*, 17(8), 1824.
- Verhun, A. (2022). Digital Tools for the Development of the Hospitality and Tourism Industry in the Context of a Digitized Economy. *Economic Affairs*, 67(4s). <https://doi.org/10.46852/0424-2513.4s.2022.20>
- Xiong, S., & Zhang, T. (2024). Enhancing tourist loyalty through location-based service apps: Exploring the roles of digital literacy, perceived ease of use, perceived autonomy, virtual-content congruency, and tourist engagement. *PLOS ONE*, 19(1), e0294244. <https://doi.org/10.1371/journal.pone.0294244>
- Zhang, Q., Liu, Y., Liu, L., Lu, S., Feng, Y., & Yu, X. (2021). Location Identification and Personalized Recommendation of Tourist Attractions Based on Image Processing. *Traitement Du Signal*, 38(1), 197–205. <https://doi.org/10.18280/ts.380121>



THE TOURIST GUIDE PROFESSION IN THE TECHNOLOGY ERA: POTENTIAL BENEFITS AND CHALLENGES

Jovana Miljković^{1*},
Željko Anđelković²,
Tatjana Pivac¹,
Marija Bratić²

¹University of Novi Sad, Faculty of Natural Sciences, Department of Geography, Tourism and Hotel Management, Novi Sad, Serbia

²University of Niš, Faculty of Natural Sciences, Department of Geography, Niš, Serbia

Abstract:

Abstract - In the era of rapid technological advancement, the tourism industry is experiencing significant growth, primarily driven by developments in information technology. These advancements have made it easier to access destination information, streamlined booking processes, and enhanced navigation. However, the impact of these technological advancements on the profession of tourist guides remains a critical area of inquiry. This paper examines the dual role of technology in this field: as a tool that can enhance the preparation and delivery of tours for guides, and, on the other hand, thanks to technology, tourists can avoid using the services of tourist guides altogether. This study aims to clarify the effects of technological progress on the tourist guide profession, exploring both the opportunities and challenges, with the main hypothesis being “The increasing reliance on technology in the tourist guide profession will lead to a transformation in the role of guides, shifting their focus from traditional information delivery to curating personalized, immersive experiences that leverage digital tools.” A comprehensive review of existing literature shows that while technology supports the use of guides in group travel settings, there is a continued demand for personalized and interactive experiences that guides provide during solo trips.

Keywords:

tourist guides, information technologies, smart tourism, digital transformation, professional challenges.

INTRODUCTION

New technologies have significantly affected the tourism industry and influenced the changes in recent years. This impact can be presented as both positive and negative. The increased number of tourists who travel daily and reserve transportation, accommodation, restaurants, and additional activities reflects economic strengthening. It increases the number of jobs, resulting in socioeconomic improvement (Khan *et al.*, 2020), representing the positive impact of technology. Positive impacts stand out to a greater extent. On the other hand, negative impacts can be over-tourism, negative feelings of the local population, hostile behavior towards tourists, loss of culture and tradition, and endangerment of the goods that make up the tourist offer (Tse & Tung, 2022). The literature shows that numerous researchers have recently explored the negative impacts of technology and how to reduce them (Cai *et al.*, 2020; Khan *et al.*, 2020; Fan *et al.*, 2022; İnan

Correspondence:
Jovana Miljković

e-mail:
miljkovic.jovana.95@gmail.com



et al., 2024). The negative impact of technology is evident in the increasing number of people experiencing anxiety when they are unable to use their mobile phones. This has led to the emergence of “digital-free tourism,” which encourages travelers to withhold using their mobile phones (Egger *et al.*, 2020).

Tourist guides have been integral to the tourism industry for centuries, and technology has greatly influenced this profession. Technology allows tourist guides to prepare for a tour more easily - they can access numerous pieces of information more quickly, use maps to find their way around the destination more efficiently and prepare for a destination they are guiding for the first time using various applications and videos (Şengöz, 2022). What represents a potential threat to this profession is that today, tourists rely heavily on technology during their travels. They generally do not need to hire a private tourist guide if they organize their trip independently or without the mediation of a travel agency, as technology saves time for tourists during their decision-making process (Azis *et al.*, 2020). Travel agencies still hire tourist guides as their representatives during trips to facilitate their tourists' stay in many ways and to ensure a certain level of security (Alrawadieh *et al.*, 2020). This way, tourists have someone they can rely on during their trip and worry less about operational matters (Lee *et al.*, 2021).

This paper aims to recognize and analyze the importance of new technologies in the tourist guide profession and the advantages and threats to the profession through a literature review. It aims to determine the extent to which technologies affect guides and the future of this profession.

LITERATURE REVIEW

Information technologies have affected all segments of human life, and traveling is no exception. Depending on people's interests, technology can assist in choosing a destination, planning a trip, and providing support during the trip (Singh & Srivastava, 2019). The technology is used by both users and providers of tourism services, simplifying many processes in the tourism industry (Vij & Rizwan, 2022). Using technology, service providers such as transport companies, accommodation facilities, destination and localities managers, and other employees at tourist destinations can reach a higher number of potential tourists more easily than before. In addition, all business processes are significantly accelerated thanks to technology and the Internet, making achieving positive effects easier, especially thanks to algorithms that can offer tourists a personalized experience based on their previous searches (Renjith *et al.*, 2020). Some luxury hotels improve their business operations using artificial intelligence (AI) to analyze existing guest data. Based on this data, the hotel personalizes the guest's experience and increases the satisfaction of the stay. Personalization methods include loyalty programs, tailored recommendations, and customized rooms based on guest behavior. (Al-Hyari *et al.*, 2023).

Tourist guides play a vital role in the tourism industry. Due to their direct interaction with guests, they are often the destination's primary representative (Nejmeddin, 2020). Therefore, it is essential to explore how new technologies are shaping the profession of tourist guides and identify the advantages and threats posed by these advancements.

Technology has greatly influenced tourist guides in recent years, both positively and negatively. The positive impact appears in the form of easy and quick access to an extensive amount of information, easier connections with other guides who can be helpful during the destination preparation process, as well as the promotion of their services on applications and social networks, thanks to which they can get in touch with potential users of their services (Banerjee & Chua, 2020; Shidende, 2020). Unfortunately, there is also a negative impact. The most significant threat is the potential impact of various information and audio guides which could reduce the demand for professional guides (De La Harpe & Sevenhuysen, 2020). However, many guides believe that applications and audio guides are not a significant threat to their profession as there will always be people who do not want to travel and explore the destination independently, who will want to use the services of a travel agency, and who appreciate the human influence and emotion provided by tourist guides (Podsukhina *et al.*, 2022).

Audio guides are used in many destinations and localities today. The advantage of an audio guide is that tourists can use the application at their own pace without rushing after the group (Ponsignon & Derbaix, 2020). In museums, modern technology and mobile applications should enable more freedom and flexibility for users over the information they like to have and what they wish to see by not imposing any conditions (Fonseka, 2022).



Another advantage of audio guides is that localities are trying to make audio guides available in many different languages, which is more difficult for guides as human beings. The negative aspect of using an audio guide is that there is usually no opportunity to ask questions or engage in discussions, which limits the ability to obtain more detailed information of particular interest to tourists. This conclusion was drawn from in-depth interviews with 15 users of the audio guide application (Podsukhina *et al.*, 2022). In addition, the audio guide provides each tourist with the same information without possibly adapting it to their needs and interests. There is always a possibility of outdated information or technical glitches, presenting an ongoing challenge for developers (Şen & Demir, 2023). Many locations offer both options - hiring a guide or using an audio guide. This is important because it adapts the site's offer to visitors' different interests and wishes to create the best possible impression. By creating a positive impact through experiences, word-of-mouth promotion or online reviews will be boosted (Nanggong & Mohammad, 2020; Safitri & Rahayu, 2024).

The researchers explore this topic from several points of view – the viewpoint of service users, tourist guides, destination management organizations, and online reviews. Opinions and experiences vary, with most coming down to the personal preferences of service users (Pan *et al.*, 2021). These authors conducted an online survey to gather information about the decision-making process for choosing a future travel destination. They analyzed a valid sample of 756 respondents, focusing on the destination image and its impact on this process. As each traveler is an individual, he can make final decisions, which is a very complex process. Therefore, it can be said that there is no unique solution to this problem.

METHODS

The authors carried out a desk research study featuring a comprehensive literature review to examine the impact of technological advancements on the tourist guide profession. The literature review involved academic literature on the influence of technology on tourist guides. Extensive secondary data were collected from journals and conference papers to achieve the aim of this analysis.

The reviews started with the definition of the research question that, for this study, is defined as follows:

RQ: How does the development of information technology alter the traditional roles of tourist guides and the experiences they offer to tourists?

The answer to this question provides insight into the impact of new technologies on the tourist guide profession through a review of various research studies by different authors, presenting advantages and threats to the profession.

RESULTS

Khatri (2019) indicates that information technologies are completely changing all tourism industry segments - from basic to strategic ones. Information technologies are widely used during all organizational and innovation processes. Competition within the industry provokes further development, which is why it is believed that technology will progress even faster in the future.

Tourist guides recognize the potential of technology to facilitate their business, including promoting their services and preparing tours. This insight was gathered in 2018, through an online survey of 55 tourist guides, along with 10 in-depth interviews, all of whom live and work in Europe (Navalón-García & Mínguez, 2021). However, they believe that nowadays, it is much easier and faster to review an extensive quantity of information compared to the time before the Internet (Şengöz, 2022). Many experienced tourist guides recognize the benefits of technology (Carvahlo, 2021), as they remember having to rely on physical maps and books for information, but now they use online maps and websites for quick access to information. Despite this, technology can fail unexpectedly, and it is not good to be completely reliant on it (Holmes, 2023). In some types of tourism, such as gastronomy, it is not enough to search for information in written literature (books or magazines), as a detailed acquaintance with local gastronomy is necessary (Ülkü & Göktaş, 2022). Indeed, the need to use written literature is highlighted, but it is believed that technology can serve as a reminder and quick search



for forgotten or incomplete information. For example, if the guide does not immediately have an answer to the question, he can say that he will check and answer as soon as possible (Düz, 2023). These results were obtained from the author's research, which included 13 semi-structured interviews with tour guides from Turkey, who had encountered the aforementioned situations. Technology allows him to search for specific information quickly. If a guide does not provide an answer to a guest, it can create a negative impression and lead to a loss of credibility. This is especially true for young and inexperienced guides, as shown by research conducted through interviews with 47 tourist guides from Scotland (Rihova & Alexander, 2024). Technology allows guides to search for specific information quickly. At the same time, this process was much more difficult because it would be necessary to know where to search for information, and there is a high probability that the guide does not have that source with them. Today, all information is available in a few clicks (Alam & Mohanty, 2023).

Based on all of the above, the answer to the posed research question indicates that technology has made it possible to change the role of tourist guides positively because they can prepare for a destination more easily and quickly. Although today, anyone can access information online or read in a book, someone needs to bring that word to life and provide an unforgettable experience for visitors (Demir & Demir, 2022). Also, if the guide works as a local tourist guide, they can learn more quickly about the culture of their guests, based on which they can provide them with a personalized service without making a mistake through something that can potentially be inappropriate in the culture of their guests (Van Sang, 2020). Local tourist guides can offer their services through websites and various applications, leading to more potential service users (Shidende, 2020). Many of the impacts of technology on the profession of guides are positive. However, there are also some negative ones - such as the reduced use of their services due to the availability of apps and audio guides (De La Harpe & Sevenhuysen, 2020). Although there are numerous positive and negative influences, the employment of a tourist guide depends on the personal preferences and habits of the tourists (Syakier & Hanafiah, 2022), because if they decide to buy a travel package from an agency, the guide will travel with them (Avci, 2020), while for individual trips they may or may not use services of a local tourist guide at the destination (Kromidha *et al.*, 2023). The advancement of technology has affected all sectors of the tourism industry. Tourist guides and agencies should work together to improve their skills and collectively distinguish themselves in the market to stand out among competitors (Inan *et al.*, 2024).

CONCLUSIONS AND DISCUSSION

A literature review reveals significant differences in user attitudes towards tourist services and the utilization of technology for tourism purposes. Technology has permeated all stages of travel experience—preparation, execution, and post-trip. This conclusion comes from a thorough bibliometric analysis conducted in April 2019, in which the authors analyzed scientific papers published in English from 2011 to 2019 (Soliman *et al.*, 2021). Technological tools enable access to necessary information that makes it easier to choose a destination during the preparation phase. Furthermore, technological advancements have simplified the booking processes for transportation, accommodation, and additional activities. For instance, individuals seeking to travel through a travel agency can now access comprehensive information online from the comfort of their homes on multiple agencies' websites, preventing the need for in-person visits, which was previously necessary to gather adequate and complete information, even though many travel agencies need to improve their websites (Eusébio *et al.*, 2020). During the travel phase, technology allows tourists to access real-time updates, book attraction tickets, and make restaurant reservations, thereby avoiding issues such as long lines and crowds. This advancement allows tourists to focus more on enjoying their destination with an exciting and seamless travel experience (Pai *et al.*, 2020). When choosing travel services, such as hiring a local tourist guide or using a travel agency offer, tourists can delegate these logistical concerns, leading to a more relaxed and enjoyable experience, being a part of mass tourism (Kusumaningrum & Wachyuni, 2020). Post-trip, it can be helpful for other tourists to provide feedback through electronic Word-of-mouth, whether positive or negative. Positive reviews can highlight satisfactory experiences, while negative feedback serves as a cautionary note for future travelers, helping them make informed decisions and reducing potential post-travel dissatisfaction. These insights are supported by results obtained from interviews with 21 recent travelers (Liu *et al.*, 2020). This feedback benefits both individual travelers and contributes to the travel community's collective knowledge and experience, as well as a useful tool for companies to improve their customer targeting (Tapanainen *et al.*, 2021).



Tourist guides play a critical role throughout the travel experience, particularly for those choosing agencies' offers or local guide services. Guides not only simplify travel organization and enhance relaxation but also offer personalized interactions customized to the group's needs. This personalized approach significantly contributes to the overall satisfaction and impressions of tourists. In general, a lack of personalization can lead to negative feelings, reduce loyalty, and drive tourists to competitors (Tomczyk *et al.*, 2022). Professional tourist guides should have sufficient knowledge about the destination and the ability to explain it in the language of the guest's choice as the representative of the local community (Safitri & Rahayu, 2024). The primary advantage of a tourist guide over technological solutions lies in the human element and personalized attention, which technology alone cannot replicate (Carvalho, 2021).

ACKNOWLEDGMENT

The research was supported by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia (Ev. no. 451-03-23/2023-01).

REFERENCES

- Alam, A., & Mohanty, A. (2023). Learning on the Move: A Pedagogical Framework for State-of-the-Art Mobile Learning. In *International Conference on Data Management, Analytics & Innovation* (pp. 735-748). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-99-1414-2_52
- Al-Hyari, H. S. A., Al-Smadi, H. M., & Weshah, S. R. (2023). The impact of artificial intelligence (AI) on guest satisfaction in hotel management: An empirical study of luxury hotels. *Geo Journal of Tourism and Geosites*, 48, 810-819. <https://doi.org/10.30892/gtg.482spl15-1081>
- Alrawadieh, Z., Cetin, G., Dincer, M. Z., & Istanbulu Dincer, F. (2020). The impact of emotional dissonance on quality of work life and life satisfaction of tour guides. *The Service Industries Journal*, 40(1-2), 50-64. <https://doi.org/10.1080/02642069.2019.1590554>
- Avcı, E. (2020). The Evaluation of the Perceptions of Tourists Participated in A Package Tour within the Scope of Tourist Guide Performance. *Journal of Tourism & Gastronomy Studies*, 8(1), 17-28. DOI: 10.21325/jotags.2020.533
- Azis, N., Amin, M., Chan, S., & Aprilia, C. (2020). How smart tourism technologies affect tourist destination loyalty. *Journal of hospitality and tourism technology*, 11(4), 603-625. <https://doi.org/10.1108/JHTT-01-2020-0005>
- Banerjee, S., & Chua, A. Y. (2020). How alluring is the online profile of tour guides? *Annals of Tourism Research*, 81, 102887. <https://doi.org/10.1016/j.annals.2020.102887>
- Cai, W., McKenna, B., & Waizenegger, L. (2020). Turning it off: Emotions in digital-free travel. *Journal of Travel Research*, 59(5), 909-927.
- Carvalho, I. (2021). Portuguese tourist guides and the digital age. *International Journal of Tour Guiding Research*, 2(1), 6.
- De La Harpe, M., & Sevenhuysen, K. (2020). New technologies in the field of tourist guiding: Threat or tool? *Journal of Tourismology*, 6(1), 13-33. <https://doi.org/10.26650/jot.2020.6.1.0009>
- Demir, Ş., & Demir, M. (2022). Evaluation of digital tour guide technology and applications by professional tourist guides. *Scientific Collection «InterConf»*, (135), 51-61.
- Düz, B. (2023). What might they ask? Tourists' questions are directed to tour guides due to their information-giver role. *Journal of Tourism Leisure and Hospitality*, 5(1), 42-52. <https://doi.org/10.48119/toleho.1292447>
- Egger, I., Lei, S. I., & Wassler, P. (2020). Digital free tourism—An exploratory study of tourist motivations. *Tourism Management*, 79, 104098.
- Eusébio, C., Silveiro, A., & Teixeira, L. (2020). Website accessibility of travel agents: An evaluation using web diagnostic tools. *Journal of accessibility and design for all: JACCES*, 10(2), 180-208.
- Fan, X., Jiang, X., & Deng, N. (2022). Immersive technology: A meta-analysis of augmented/virtual reality applications and their impact on tourism experience. *Tourism Management*, 91, 104534. <https://doi.org/10.1016/j.tourman.2022.104534>



- Fonseka, K. I. D. (2022). Museum Guide Mobile Applications Development: An Examination based on Literature. *Social Sciences*, 4(2), 47-55.
- Holmes, S. (2023). A New Museum Experience: Survival and Best Practices. Art 895 Research Papers. 14. <https://openspaces.unk.edu/art-etd-895/14>
- Inan, R., Ciki, K. D., & Vergul, A. M. (2024). Comparing Professional Problems of Travel Agencies and Tourist Guides Operating in Istanbul. *Prace i Studia Geograficzne*, 69(2), 89-104. DOI:10.48128/pisg/2024-69.2-06.
- Khan, N., Hassan, A. U., Fahad, S., & Naushad, M. (2020). Factors affecting the tourism industry and its impacts on the global economy of the world. Available at SSRN 3559353. <https://dx.doi.org/10.2139/ssrn.3559353>
- Khatri, I. (2019). Information technology in tourism & hospitality industry: A review of ten years' publications. *Journal of Tourism and Hospitality Education*, 9, 74-87.
- Kromidha, E., Gannon, M., & Taheri, B. (2023). A profile-based approach to understanding social exchange: Authentic tour-guiding in the sharing economy. *Journal of Travel Research*, 62(2), 324-344. <https://doi.org/10.1177/00472875211062616>
- Kusumaningrum, D. A., & Wachyuni, S. S. (2020). The shifting trends in traveling after the COVID-19 pandemic. *Int. J. Tour. Hosp. Rev*, 7, 31-40. <https://doi.org/10.18510/ijthr.2020.724>
- Lee, L. W., Boon, E., & McCarthy, I. P. (2021). Does getting along matter? Tourist-tourist rapport in guided group activities. *Tourism Management*, 87, 104381. <https://doi.org/10.1016/j.tourman.2021.104381>



PROMOTION OF THE TOURIST PRODUCT USING PRESENTATION ON THE INTERNET AND SOCIAL NETWORKS IN THE FUNCTION OF IMPROVING THE OFFER OF THE CITY OF KOTOR

Milena Bogdanović^{1*},
Nikica Radović²

¹Ph.D. Student,
Singidunum University,
Belgrade, Serbia

²Singidunum University,
Belgrade, Serbia

Abstract:

The significance of utilizing the Internet and social media networks for promoting tourist destinations and presenting tourist products on these platforms, which are nowadays central sources of information, is immense. In addition to becoming easily available, they are both a cheap and powerful tool through which information and target market can be reached very quickly and easily, compared to the traditional marketing tools. Their application is not constrained by time or location, either on the supply side or the demand side. At the same time, they enable social interaction of the users, in which social media networks are leading, because they provide space for the exchange of opinions, experiences, content, as well as for personal contact in real time, which ultimately increases overall satisfaction with a tourist product or service. Destination management organizations and providers of tourist services, leverage the Internet and social media networks to disseminate basic information about their offerings. Since this is often a tourist's first encounter with a destination, it is crucial that the presentation features attractive and high-quality content, serving as an additional incentive for a visit. The aim of this research is to examine the extent to which local self-government and cultural institutions from the area of Kotor use modern information and communication technologies, especially the Internet and social media networks, for the purpose of promoting the overall tourist product. In this regard, the analysis of the content presented on the official websites and social network profiles of certain institutions of Kotor was conducted. The results of the research indicate that promotion on these digital channels is undervalued, as evidenced by a lack of information, limited content, and an inadequate overall visual experience.

Keywords:

internet, social media, Kotor, promotion, tourist product.

INTRODUCTION

The Internet and social networks, in today's era of globalization and digitalization, represent the most widespread and accessible means of information and communication worldwide. In addition to information and communication, they play a significant role in the promotion and sales of products and services, as well as in creating an image and gaining a reputation in any market, especially in the tourist market.

The turning point in the increase in the use of information and communication technologies (ICT) appears to have been caused by the COVID-19 pandemic and a series of circumstances that encouraged these changes.

Correspondence:
Milena Bogdanović

e-mail:
milena.bogdanovic.23@singidunum.ac.rs



This is supported by the fact that at the end of 2023, almost 5.4 billion people, i.e. 67% of the world's population, used the Internet (ITU, 2024), out of which as many as 5.07 billion people, i.e. 62.6% of the world's population, used the same technology including social networks simultaneously (Petrosyan and STATISTA, 2024). Comparatively, in 2018, the number of Internet users was 3.7 billion, representing 49% of the global population. This shows significant growth of nearly 2 billion users in just five years (ITU, 2024). This growth has particularly affected tourism, because their expansion and rapid development led to changes in the functioning of the tourist market on a global level. New destinations are now easily discovered and positioned on the market much faster than before, so the competition has increased significantly. There have been significant changes in the needs, interests and especially the possibilities of a modern tourist, who now uses ICT in all stages of the trip: before, during and after the trip (Knežević *et al.*, 2017), because their application and use are no longer limited by time or place, neither on the supply side nor on the demand side. Modern consumer no longer accepts the limitations in the process of finding out information, but rather enjoys broad, immediate access to all relevant data. This implies not only specific information about the product or service, but also previous user-experiences, the possibility of exchanging opinions and content, and also a certain interaction with service providers. On the other hand, sellers and service providers now have a vast platform for presenting their offerings as well as marketing and promoting products and services to target markets, in a faster, easier and cheaper way than before.

The current Tourism Development Strategy of Montenegro for the period 2022-2025 recognizes the importance of introducing innovations in the field of information technologies as essential for the development of tourism, and among other things, emphasizes the importance of the tourist product digitalization for the purposes of promoting and positioning destinations in the new markets, as well as for the improvement of their positions on already existing markets through marketing quality content on digital communication channels. In this regard, a special strategic operational goal refers to destination marketing and branding, which involves presenting the destination in a new, different way and in accordance with trends, using integrated marketing communications (Ministarstvo ekonomskog razvoja, 2022). The research objective is to assess the extent to which local public institutions and cultural entities in the municipality of Kotor prioritize showcasing their tourism offerings online and through social media, capitalizing on the promotional advantages of these platforms. Accordingly, this study will analyze the websites and social media content from five public institutions of local self-government and culture from Kotor: Municipality of Kotor, Tourism Organisation of Kotor, PI Cultural Center "Nikola Đurković" Kotor, Maritime Museum of Montenegro Kotor and MPI Museum of Kotor.

LITERATURE REVIEW

The emergence of the Internet has caused a revolution in most branches of business. Many studies indicate that perhaps the most significant changes have occurred in tourism, as the operations of tourist companies and the functioning of the tourist market in general have changed fundamentally, with the advent of new communication technologies that now generate new business principles. This was particularly reflected in the approach to the application of marketing activities and especially in advertising. Traditional methods of advertising are no longer so applicable, given the changes in consumer behavior that are reflected in their needs, opportunities and interests, i.e. in the increase of their power on the market, the provided possibility of choice but also the exchange of information and experiences, both with sellers and with other users. The consumer uses IKT, primarily for information and communication, which are in constant correlation. In this regard, advertising (promotion) is a form of communication between the seller and the consumer, with the aim of providing accurate information and establishing two-way communication in order to encourage sales and to satisfy needs on the one hand and to make a profit on the other (Popesku and Gajić, 2020).

The Internet and social media represent digital interactive media: the Internet as a global platform for accessing information, various databases and for establishing communication between the seller and the buyer, and social media as advanced platforms for two-way communication that enable the target group not only to search for information but also to publish it, share, exchange and create new one based on experience. In this regard, there are the following types of social media: search websites (e.g. Google, Wikipedia, etc.), social networks (e.g. Facebook, Instagram, LinkedIn), blogs and microblogs (e.g. Twitter), content sharing media (e.g. YouTube, Vimeo, Pinterest) and internet forums and communities (Arens and Weingold, 2018) (Gajić, 2019).



The importance of the Internet for tourism is primarily reflected in its 24/7 availability, allowing continuous access from anywhere in the world. It also supports global transactions and reservations, sales of tourist services (e.g. admission tickets, airline tickets, accommodation, etc.), contains detailed information on prices and availability (which is updated every couple of seconds), generates customer information that is stored in a database which is later used for analysis purposes of creating new offers, but also contains multimedia content as an additional incentive for purchasing the service (Middleton *et al.*, 2009).

The role of promotion in tourism is particularly expressed in the decision-making process of the modern tourist when purchasing a product or requesting a service, who now uses ICT in all phases of the trip: before the trip, during the trip and after the trip. In this regard, in the travel-planning phase, the majority of the time is spent on researching data and gathering information about the availability of the destination, available contents, pricing policy and previous user-experience (Knežević *et al.*, 2017). A key role in this phase is played by the websites (as the starting point of any research) of the potential destination - destination management organizations and cultural institutions (museums, galleries, tourist sites). In today's world, a destination's online presence is not only important but essential, as it represents the first point of contact between a potential tourist and the destination. This interaction creates an impression that can motivate a visit. Consequently, the website must be easy to use, visually attractive and, above all, contain useful information and links to other related important websites (Kotler *et al.*, 2017). They should also be available in multiple languages and connected to social media platforms, which significantly influences the desire to visit a particular destination. Social networks function on the principle of posting posts, in the form of text, images, videos and sharing content. The mentioned tools can have a positive effect on the tourist and be an incentive for additional searches for information in this phase of a trip (Minazzi, 2015) (Ćamilović, 2018). The performance of social networks is set in such a way that up-to-date and constant interaction is necessary, all with the aim of better visibility and presentation of content to end-users. Both websites and social networks have the possibility of using various tools for, above all, improving the position on search engines and better visibility of pages and posts to a significant extent, if the possibility of SEO optimization (Search Engine Optimization) and Facebook ads manager functions are used, which represent paid types of advertising on the Internet and social networks (Facebook, Instagram, etc.).

The intensive use of ICT is noticeable both during and after the trip. During the trip, tourists primarily use mobile devices to search for additional information about local sites and points of interest. Also, various mobile applications are used with the aim to reduce search time, make the stay easier by providing special and useful information, as well as reduce costs during the trip itself (e.g. serving as a substitute for a tourist guide), but also share current impressions of the destination (e.g. photos, videos, stories, etc.) on social networks. After the trip, the tourist continues to share the acquired impressions, but also to evaluate the quality of the content and all segments of the trip, especially through social networks and certain sites for experience sharing. Therefore, it is essential that websites are optimized for mobile devices, but also that the destination management organizations, i.e. cultural institutions, think about improving their offer in the direction of developing specific mobile applications in the places where this is possible and applicable (Ćamilović, 2018).

All of the above represents a form of promotion which greatly affects the overall image of the destination. In general, both platforms play a role in creating the image of a destination and creating its reputation on the tourist market (Ćamilović, 2018). Regardless of whether the consumer will make a positive decision to purchase the service, the ultimate goal of the entire process of communication with consumers is to influence their attitudes and behaviors in all the stages of the journey (Popesku and Gajić, 2020).

Finally, it is worth noting data on the most-used communication channels between September and November 2023. During this period, the most popular platform globally was Google with an astonishing average of 175 billion visits per month. It was followed by YouTube with 113 billion visits, and the social network Facebook, with an average of 18.1 billion monthly visits (Bianchi and STATISTA, 2024). Also, research on daily Internet usage reveals that the average individual spends approximately 151 minutes (2 hours and 31 minutes) per day on Internet activities (Dixon and STATISTA, 2024).



METHODOLOGY

The main goal of this research was to determine the extent to which local public institutions in the municipality of Kotor utilize modern information technologies, including the Internet and social networks, to promote and present the destination's tourism product globally. Accordingly, a study was conducted among five relevant institutions from the municipality of Kotor, one of which has a management role in the destination and another that plays a role in implementing development policies within its scope. These institutions include: the Municipality of Kotor, the Tourism Organization of Kotor, the PI Cultural center "Nikola Đurković" Kotor, the Maritime Museum of Montenegro, and the MPI Museum of Kotor. The research was conducted in two phases, from July 29th to August 15th.

In the first (main) phase of the research, the focus was on identifying how many institutions have an official website and social media accounts, how engaged they were on these platforms, the type of content they posted and whether they offered online services. In the second (additional) phase of the research, the study examined whether these five institutions monitor websites and social media visits to optimize their content and whether they use paid advertising to increase visibility. The research methodology involved data collection and analysis through synthesis and descriptive methods, utilizing information from websites and social media accounts of the institutions, as well as additional questionnaire conducted among the aforementioned institutions.

The research is guided by the following question: Does the implementation of promotional activities, in the form of presentation and advertising on the Internet and social networks, improve the city's offerings and enhance overall tourist satisfaction?

RESULTS

At the outset, it was determined that all five institutions have a website and active user accounts on several social networks. Content posting varies in quantity and quality, depending on the institution and the platform on which it is posted. Among social networks, Facebook and Instagram are the most widely used, while YouTube, Tik Tok and the LinkedIn business network are used to a lesser extent. Most pages have thousands of followers, especially the Tourism Organization of Kotor. However, not all institutions monitor visits or analyze their audience engagement. Below is an analysis of the website and social network accounts, with all data collected through this research presented for each institution individually.

The Municipality of Kotor – This institution was included in the study due to its dual role as the administrative authority of the city and as the founding body for the Tourism Organization, the Cultural Center and the MPI Museums of Kotor. When visiting the website through an Internet browser, the site prominently lists the name "Kotor" at the very top, above references to all the aforementioned institutions. This is not unusual, even though it is an administrative domain, as the site also provides information about the city, various events, and contact details for cultural institutions. The website features a section with basic information about the city in several primary languages, including English. Furthermore, the Municipality disseminates information across four social media platforms: Facebook, Instagram, Tik Tok and YouTube. However, only the Facebook and Instagram accounts are updated regularly, with daily posts featuring concise text and audiovisual content or multimedia shared from various sources. The account attracts thousands of followers, especially the Tourism Organization's accounts (Table 1). According to the additional survey conducted in this research, it was found that the institution employs a person to manage its website and accounts on social networks, to maintain a database of visits to them and also to use the services of paid online advertising, however only on social networks (Table 2).

Tourism Organization Kotor - This is a destination management organization of the municipality of Kotor. The conducted research determined that for the purposes of presentation of their activities and in general for the presentation of the destination's offer, they use both the website and social networks. Search engine results for the keyword "Kotor" show that the website of this organization is listed only after several privately sponsored websites and the Municipality of Kotor's website which means that they are not currently using paid search engine advertising. However, during the observed research period, it became apparent that the website was undergoing a redesign and had not been updated for over a year, which might explain the lack



of advertised presence on search engines. The current website’s homepage features videos highlighting key city attractions and activities, but without any audio coverage. Only selected activities offer details about usage, timing or location. It is also noted that there is no direct purchase link for event tickets, nor are services available in languages other than English. The extent of use of social networks is higher and better compared to the website, so audiovisual content, information about events and information about the activities carried out by the organization can be seen on the Facebook profile almost every day. As can be seen in Table 1, this profile is followed by more than 12,000 thousand people, making it the most-followed public institution account in the municipality of Kotor on this platform. The organization also promotes its content on social networks such as Instagram, LinkedIn and YouTube. Content is updated daily in the form of time-limited “story” announcements, while other announcements, created in the form of short videos showcasing attractions or events, often without accompanying text, are posted less frequently. The Instagram account has an impressive following of 21,000 thousand people, representing the largest municipality-based account on the Instagram social network. Additionally, the number of followers on other social networks is detailed in Table 1. Through extensive survey research, it was found that the organization has a separate sector that deals with destination marketing which handles the collection and analysis of the site visit database, as well as that they take advantage of paid advertising on the Internet (this service is currently inactive) and social networks. These results are presented in Table 2.

Table 1. Presence on Social Networks of Institutions / Organizations

	FACEBOOK		INSTAGRAM	YOUTUBE	TIK TOK	LINKEDIN
	page like	page followers	page followers	posts	subscribers	followers
MUNICIPALITY OF KOTOR	6,413	7,453	4,819	70	62	81
TOURISM ORGANISATION OF KOTOR	9,312	12,338	21,000	718	/	/
CULTURAL CENTER	4,621	4,999	3,138	1,828	83	/
MARITIME MUSEUM	543	612	1,003	161	/	/
MPI MUSEUMS	1,656	1.656	2,385	530	/	/

Source: Author’s Work

PI Cultural Center “Nikola Đurković” Kotor - the activity of the institution basically includes organizing cultural and art events, theater performances, festivals, traditional manifestations, literary evenings, art exhibitions and other cultural contents. Research found that the organization has a website but also profiles on social networks. However, the website hasn’t been updated for a long time, so it doesn’t provide timely information about current programs and events. It is noticeable that this web page has a more modern look, however, the contents are not adequately placed and there are difficulties in the page functionality. In this regard, in order to reach users of the abovementioned content offered by the institution, social networks Facebook and Instagram are mostly used as a means of information. The number of followers is high on both networks, which can be concluded from Table 1. Announcements are posted on a daily basis, mostly in the form of photos with accompanying texts or sharing content from related institutions of the city. It is important to note that the Cultural Center does not provide the option of online ticket purchase for its events, however, they give the option to book tickets by calling their official phone number. On the basis of the conducted additional survey research, it was determined that the institution has a special sector that deals with marketing and maintaining a website and profile on social networks, however, it does not maintain a database of visits on the mentioned platforms and does not use the possibility of paid advertising on any platform.



Table 2. Short Questionnaire about Digital Marketing in Institutions of Kotor Municipality

	MUNICIPALITY OF KOTOR	TOURISM ORGANISATION	CULTURAL CENTER	MARITIME MUSEUM	MPI MUSE-UMS
1. Marketing sector?	✓	✓	✓	✗	✗
2. Web site and social network administrator?	✓	✓	✓	✓	✗
3. Active web page?	✓	✓	✓	✓	✓
4. Active profiles on social net-works?	✓	✓	✓	✓	✓
5. Which social networks are active?	FB, IG, TT, YT	FB, IG, LINK, YT	FB, IG, YT	FB, IG	FB, IG
6. Records of visits to the website or social networks and a data-base of the same?	✓ ^{1*}	✓	✗	✗	✓ [*]

Source: Author's Work¹

The Maritime Museum of Montenegro Kotor - It is a treasury of rich cultural heritage from the Boka Kotorska area that is more than 120 years old, in addition to numerous cultural and historical monuments for which the city is famous, is a must-see place to visit for lovers of history and culture. The museum exhibits include a bronze table in relief, old geographical maps and plans, paintings by prominent painters, weapons and tools, ship models, historical records and other objects and testimonies of the history of the people of Boka Kotorska. Like the aforementioned institutions, the Maritime Museum also has a website and accounts on social networks. The website has a modern look, with the presentation of all content in the form of photos with accompanying text. It contains a section that offers the possibility of a virtual visit to the museum and also several online photo exhibitions. Opening hours information is provided but not updated and ticket price information is also provided, however, also without the possibility of online purchase. The social networks Facebook and Instagram, which they use to interact with visitors, are active, but with a small number of followers, the smallest of all examined institutions as can be seen in Table 1. Announcements are posted every couple of days, in the form of photos with accompanying text, most often about interesting things from the history of the people from these areas whose heritage is preserved in the museum. Additional survey research established that the Maritime Museum does not have a marketing sector, but on the other hand, they hire an agency that administers social networks and uploads content on their behalf. It was also established that the institution does not use the possibility of paid advertising on any online platform.

MPI Museums – This is a group of the city's cultural institutions that include museums and galleries, spread over several locations in the municipality of Kotor. These institutions preserve testimonies of prehistoric and ancient times, archaeological sites, mosaics and works of art from these areas. It is the only public institution in the area of Kotor whose content is available in several foreign languages. The website has a modern look, it is user-friendly and provides all the necessary information about the content it offers. Opening hours and ticket prices are clearly indicated, however, this institution does not offer the option to buy tickets online. Facebook and Instagram are the only social networks used to present their content, primarily through short posts that combine text and photos, with special emphasis on promoting the "Let's Take Cultural Heritage" campaign. The campaign highlights the promotion of souvenirs that the institution makes and sells, which are replicas of jewelry and decorative items inspired by the exhibits and the cultural heritage of Kotor. Buying these souvenirs is only possible in institutions and localities, meaning that online purchases are not available. Additional survey research found that the institution uses the option of paid advertising on social networks, however, it does not use this option for the Internet platform.

¹ The institution uses the possibility of paid advertising only on social networks



CONCLUSION AND DISCUSSION

This research concludes that all the institutions analyzed use websites and social networks (primarily Facebook and Instagram) to present their content, but to an insufficient extent. This is reflected mainly in the quality and quantity of posts and the planned information, which, in some cases, are not clear or adequately presented on the website. Additionally, the audience that does not speak English is not being reached. It is particularly noticeable that the website of the key institution for presenting the city of Kotor, Tourism Organization, is still under construction. Therefore, it doesn't provide sufficient and accurate information, nor does it adequately promote the content that the destination offers. It is important to note that none of the sites analyzed offer the option of online ticket purchase for museums, galleries, or tourist sites. On some sites, the information about their working hours is incomplete. Furthermore, no institution uses the possibility of paid advertising on internet platforms or SEO optimization of content. Even the Tourist Organization does not utilize these options; research indicates that only private local businesses use them. When examining social networks, it was found that the Kotor Tourist Organization has over 30,000 followers on both networks combined, while institutions like museums have only about 1,000 followers. One reason for the smaller following lies in the fact that institutions do not use the possibility of paid advertising on digital platforms, which has been proven to increase visibility of their pages. The other reason is that they do not follow the "rules" of posting on social media, which require daily posting and alignment with current trends in a specific format. Previously, a good photograph of attractions was sufficient, but now trendy short video clips, accompanied by audio subtitles, are essential. Earlier research showed that 67% of the global population uses the Internet, and currently, 62% use social media, with platforms like Google, YouTube, and Facebook each having hundreds of millions of visits per month. This leads to the conclusion that there is a strong foundation for using these marketing tools on digital platforms to enhance the city's offering through investment in digital technology development. This would significantly improve the overall satisfaction with the tourist offer, as well as create the potential to increase the number of returning visitors and the selection of services offered. Satisfaction with the destination, influenced by the ease of travel and choice of services, can significantly impact the decision to revisit a destination or recommend it to someone else, thus highlighting the importance of creating a destination's image.

Destination management organizations or tourism service providers, if they aim to be present in the market and survive, must improve their offer in a way to digitalize it to the extent possible. This primarily refers to the presentation of their offer on all digital platforms that are trending in interactions with consumers at all stages of travel and the adjustment to their needs using various digital tools available today (creation of applications, QR codes, virtual tours, etc.). How an online presentation of content that is supposed to represent a destination through these platforms is of paramount importance, thus, the quality of content that can be found and presented is potentially crucial when making a decision to visit. The content presentation needs to be continuous, almost daily, to increase visibility to a broader audience, attractive and interesting, adapted to the current trends in digital marketing, all with the purpose of motivating potential tourists to make a positive decision about visiting. It is also necessary to follow trends in the development of information technology, which enables tourists to purchase products and services online, the suitability of content for mobile devices and the diversity of content, all with the aim of increasing the overall satisfaction of users. With this in mind, the key factor for gaining competitiveness in the market and creating a destination image is an adequate marketing strategy development with a contemporary approach and implementing promotional activities on the internet and social networks with a special focus on online image.

Based on everything stated above, in future research, it is necessary to deepen this topic and examine whether there are marketing and development strategies of the mentioned institutions that include the development of ICT as the current Strategy for the development of tourism in Montenegro suggests, which use all these promotional activities and how effective they are in yielding results.



REFERENCES

- Ćamilović, D. (2018). *Informaciono – komunikacione tehnologije u službi kulturnog turizma*. Sitcon 2018: Kultura, nasleđe i razvoj turizma, zbornik radova, (p.193-199) DOI: 10.15308/Sitcon-2018-193-199. Beograd: Univerzitet Singidunum..
- Gajic, J. (2019). *Advertajzing*. Beograd: Univerzitet Singidunum.
- ITU – International Telecommunication Union Report: *Individuals using internet from 2005 to 2023*. Retrieved July 30th, 2024., from <https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx> .
- Knežević, M., Borovčanin, D., Džamić, V. and Radojević, T. (2017). *Značaj društvenih mreža u promociji Srpskih manastira*. Sitcon 2017: Verski turizam i savremeno turističko tržište, zbornik radova, (p.140-146) DOI:10.15308/Sitcon-2017-140-147. Beograd, Univerzitet Singidunum.
- Kotler, P., Bowen, T.J., Makens, C. J. and Baloglu, S., (2017). *Marketing for hospitality and tourism*, (7th ed.). England: Pearson Education Limited .
- Middleton T.C.V., Fyall A., Morgan M. and Ranchhod A., (2009). *Marketing in travel and tourism*, (4th ed.). United Kingdom: Elsevier Ltd.
- Minazzi, R. (2015). *Social Media Marketing in Tourism and Hospitality*. Switzerland: Springer International Publishing.
- Ministarstvo ekonomskog razvoja Crne Gore, Vlada Crne Gore (2022): *Strategija razvoja turizma Crne Gore 2022-2025*, (pp.117-120), Podgorica. Retrieved July 1st, 2024., from <https://www.gov.me/dokumenta/db71ea87-f50f-4aca-98ae-91d8af502816> .
- Popesku, J. and Gajić, J., (2020). *Marketing u turizmu i hotelijerstvu*. Beograd: Univerzitet Singidunum.

Web sites:

- Petrosyan, A./STATISTA (2024, May). *Number of internet and social media users worldwide as of April 2024*. Retrieved August 1st, 2024., from <https://www.statista.com/statistics/617136/digital-population-worldwide/> .
- Bianchi, T./STATISTA (2024, May). *Most popular websites worldwide as of November 2023, by total visits*. Retrieved August 15th, 2024., from <https://www.statista.com/statistics/1201880/most-visited-websites-worldwide/> .
- Dixon, J.S./STATISTA (2024, April). *Daily time spent on social networking by internet users worldwide from 2012 to 2024*. Retrieved August 15th, 2024., from <https://www.statista.com/statistics/433871/daily-social-media-usage-worldwide/> .
- Opština Kotor (Municipality of Kotor) – official website. Retrieved August 5th, 2024., from <https://www.kotor.me/>.
- Turistička organizacija Kotor (Tourism organisation of Kotor) – official website. Retrieved August 5th, 2024., from <https://kotor.travel/> .
- JU Kulturni centar “Nikola Đurković” Kotor (PI Cultural centre “Nikola Đurković” Kotor) – official website. Retrieved August 7th, 2024, from <https://kckotor.me/>.
- Pomorski muzej Crne Gore Kotor (Maritime museum of Montenegro Kotor) – official website. Retrieved August 5th, 2024., from <http://museummaritimum.com/mnewordpress/> .
- OJU Muzeji Kotor (MPI Museums of Kotor) – official website. Retrieved August 5th, from <https://muzejikotor.me/en/mpi-muzeji-kotor/> .



MEASURING SATISFACTION OF TOURISTS WITH DENTAL SERVICES IN KVARNER REGION

Romina Alkier¹,
Jasmina Okičić²,
Vedran Milojica^{1*}

¹Faculty of Tourism and Hospitality
Management, University in Rijeka,
Opatija, Croatia

²Faculty of Economics, University in Tuzla,
Tuzla, Bosnia and Herzegovina

Abstract:

The purpose of this paper is to determine the current state of dental tourism in Kvarner region through measuring their satisfaction with dental services. Relevant scientific literature was analyzed with the goal of addressing the relevance of measuring satisfaction of tourists with dental services. Empirical research was conducted on the respondents who used services of dental clinics in Kvarner region. A structured questionnaire with closed questions was distributed physically in dental clinics, and online. A total of 125 dental tourists participated in the research. Findings indicate a high level of satisfaction with quality of dental service, cultural proximity, quality of information, price, and supporting services. Based on the findings developmental activities for further improvement were proposed.

Keywords:

dental tourism, satisfaction, dental services, Kvarner region.

INTRODUCTION

Millions of tourists travel to other countries to use various medical services. Most common reasons are ability to get a particular procedure or treatment cheaper and of better quality than in their homeland, and from medical experts who speak tourist's language and share their culture. Also, they might be interested in using medical procedures that are not approved in their homeland. The most common medical tourism services imply cosmetic surgery, fertility treatments, cancer treatments, transplantations, and dental services (CDC U.S. Centres for Disease Control and Prevention, n.d.). Dental services, as part of medical tourist offer belongs among the most preferred services, for which the demand is rising. The data published by Statista indicate that dental services are second most wanted in the plethora of medical tourism services (Statista, 2024). Many countries worldwide are developing dental tourism and are focused on providing high-quality dental care with affordable prices to tourists. Poland offers cheaper prices for dental services in relation to numerous Western countries. Numerous clinics and hospitals have an accreditation from respected international bodies ensuring high quality standards of dental care.

Correspondence:
Vedran Milojica

e-mail:
vedran.milojica@gmail.com



The most famous Polish destinations of dental tourism are Krakow and Warsaw. In Poland tourists can save up to 50% of the amount they would pay for dental services in private dental practices in the United States and United Kingdom. Thailand is famous for its world leading dental clinics. Dental specialists attended school and trained abroad before returning to their homeland and financing the opening of their own clinics. Some of these clinics have a JCI accreditation meaning they offer top quality services including dental services under sedation for patients who are afraid of major dental procedures. Turkey is another dental tourism destination that is visited by Eastern and Western tourists who prefer to use low cost and high-quality dental procedures in diverse cosmetic and orthodontic dental clinics. Medical tourism, and dental tourism has been recognized as relevant for the Turkish economy, and Turkish government is investing efforts in developing and promoting it. Dental specialists are world famous for their medical training abroad as well. Ministry of Health also contributes to its successful development through introduction of certifications, this way ensuring all dental service providers healthy experiences for dental tourists. Dubai is also becoming more and more famous for its dental tourism offer, considering that people from United Kingdom, Germany, United States, Austria and Switzerland travel there for dental procedures conducted by top qualified dentists. Some of the most successful dental clinics have opened in Dubai to provide their services to tourists who visit Dubai; e) Mexico is visited significantly by Americans for dental services due to them being cheaper. Croatia is a famous health tourist destination which has been developing medical tourism offer, and in particular dental tourism. Due to growing number of dental clinics, it is offering cheaper dental services in comparison to other destinations. Healthcare services in Croatia operate under European Union law which guarantees safety for tourists who are in search of high quality, reliable and safe dental services (MTM Editorial Team, 2024). In order to be able to satisfy dental tourist's needs, attention needs to be paid to the provision good quality medical (dental) services and ensuring maximum satisfaction of patients, in order to stimulate them to become loyal users of dental services, and to recommend it to others.

Dental clinics in Kvarner, and especially in Istria and Rijeka were among the first ones to recognize the potential of attracting patients from the rapidly developing Italian tourist market. They started conducting marketing activities in the late nineties in Northern Italy. Good traffic connections, and affordable prices resulted in successful attraction of tourists motivated by dental services. Some dental clinics are doing their business quite successfully due to the following reasons: a) they have never compromised the quality of their work, as well as the used medical materials; b) attention is placed on dental professional's knowledge and experience; and c) Kvarner is rich in tourist infrastructure. This way tourists can use the accommodation, and so much more. Croatia's accession to the European Union also contributed significantly to its dental tourism development. Dental clinics started developing due to the increasing number of foreign patients, as more available funds were intended for investments into buying more contemporary equipment and education of dental professionals. This resulted in Croatia, and Kvarner as its region, becoming more recognizable and profiled as a high-quality and low-cost center of Croatian dental tourism (Total Croatia Dental, n.d.). In order to maintain this success, dental clinics management needs to focus on improving their dental service offer and quality, measure the level of satisfaction of dental tourists, and based on the findings make the necessary improvements. The purpose of this paper is to determine the level of satisfaction of tourists who visit the Kvarner region due to its dental tourism offer and discuss potential improvements.

THEORETICAL BACKGROUND

Satisfaction represents a precondition of loyalty of medical service users (Ferreira *et al.*, 2023; Alibrandi *et al.*, 2023; Mammadov & Gasanov, 2017). Patient satisfaction represents the extent to which they are satisfied with the health care services provided by their health care providers. Patient satisfaction represents one of the most significant factors based on which it is possible to determine the achieved success of a particular health care facility (Manzoor *et al.* 2019). Satisfaction of patients with healthcare services are in focus of modern scientific research studies (Kim *et al.*, 2008; Ziapour *et al.*, 2016). Patients approach medical service providers with particular needs, and expectations that those will be met. In order to be able to satisfy them, primary focus needs to be placed on ensuring top quality of medical service, satisfying patient's needs to the full, and if possible, to surpass them (Ferreira *et al.*, 2023). This is in accordance with the research of Berkowitz *et al.* (2021) who state



that satisfaction of patients may be influenced by multiple factors, like their expectations of care (every patient approaches medical professional with expectation of experiencing top quality medical service), communication with the medical staff (patient must feel relaxed and trusting when talking to the doctor and other staff members), responsiveness of a doctor and other staff members (all the responses provided need to be based on knowledge, professionalism, understanding, and trust), cleanliness (during the medical procedure, and in the medical facility in general), ability of proper pain management (all medical services should be provided with minimum of pain, or completely painless), and timely responses on phone calls (setting up the appointments for a consult, delivering the test results when necessary, providing necessary information).

Dental tourism is one of the most developed elements of medical tourism in the world, registering a significant growth (Oltean *et al.*, 2020). According to the American Dental Association, it is defined „as the act of travelling to another country for the purpose of obtaining dental treatment“. Dental tourists usually choose to travel abroad for dental services due to the cheaper prices, better level of quality in comparison to the offer of domestic dental clinics, avoiding long waiting for services in domestic dental clinics that are covered by the health insurance, or simply because some dental specialists do not offer specific dental services that tourists are searching for. Other elements of the tourist offer may also be taken into consideration in their decision-making process, and especially if their mind the destination is profiled as renowned and an attractive one (Demonja & Uglješić, 2020; American Dental Association (Resolution 28H-2008) 2009). Tourist destinations must have more value than just appropriate location for the patient, in order to be considered a dental tourist destination. The value of a dental service stimulates the satisfaction of dental tourists. Dental tourists are in search for high-quality dental services, which is the main motive when choosing a particular dental clinic, and a dental destination. By quality of dental care, it is considered how dentists and other medical staff members in dental clinics provide care for their patients. Dental services need to be provided in an effective and safe manner. In order to achieve this, medical staff of the dental clinic need to uphold the accreditation standards. Providing good quality dental services represents the key for preserving the existing, as well as attracting new international patients. This is the reason why dental service providers are focused on creating value for their patients, in order to enable them to have top experiences, and make them feel satisfied. However, in order to make them feel satisfied, it is necessary to fulfill and surpass their expectencies. (Živković & Brdar, 2018; Chillimuntha *et al.*, 2024; Zoltan & Maggi, 2010). In order to be able to achieve this success, it is important to measure the level of satisfaction of dental tourists and make necessary improvements in accordance with the research results. So far research published on dental tourism is still rather scarce in relation to medical tourism in general. Papers are mostly focused on determining dental tourist's satisfaction with dental services, and the effect of their satisfaction on their revisit intention. Jaapar *et al.* (2017) conducted empirical research on inbound tourists from Europe, New Zealand, Australia, Southeast Asia and other countries. Their idea was to determine what is the precise profile of dental tourists, their motives for visiting a destination, and level of satisfaction. They have determined that quality of dental services, provision of good quality information about dental tourist offer, cultural similarities, ability to reduce costs, and provision of supporting services all contribute to dental tourist's satisfaction. The focus of Kesar & Mikulić's (2017) exploratory research was on determining the attitudes of dental tourists in terms of their satisfaction and dissatisfaction with attributes of dental tourist offer in the city of Zagreb. Their findings revealed that their satisfaction or dissatisfaction are determined mostly by the attributes like quality of product/services as well and professionalism and competence of dental clinic staff. On the other hand, attributes like appointment schedule, availability of information, and prices of dental service have proven to have a relatively weak influence on patient's level of satisfaction. Akbar *et al.* (2022) analyzed the influence of quality of dental services, access to information about the offer of dental services, and possibility of saving costs on dental tourist's satisfaction. The satisfaction with the offer can be considered satisfactory since a significant number of attributes were marked with a mark above 4,00, respectively a high mark. The following attributes were marked with a high level of satisfaction: possibility of selection of a preferred dentist (which indicates the loyalty to the professional), quality of registration system, decoration and design of the dental clinic, patient's waiting time before being provided with the dental service, quality of equipment used for dental treatments, communication with dental tourists (provision of information about the dental services, information available in the waiting room), medical staff (their hospitality, dentists' professional behavior, thorough dental assessment, explanation of the potential choices in terms of dental treatments, answering patient's questions, provided explanations regarding the treatment costs prior the



actual treatment, provision of health advices, upholding of the scheduled appointment of the dental treatment, dentist’s competencies and qualifications), hygiene (of the dental procedure, sanitary facilities, and clinic in general), transportation services to the dental clinic, noise management, sense of safety during the stay in the dental clinic, provision of facilities for disabled, dental treatment costs, overall satisfaction of the dental treatment, etc. Only two attributes were marked with a moderate mark (overcrowding in the dental clinic, and facilities provided by Bali Health Tourism Assembly). Youssef Abouzied (2022) conducted the assessment of the influence of dental centres in promotion of dental tourist offer in Egypt. Attention was paid to satisfaction of tourists who visit Egypt for its dental services. A high level of satisfaction with dental services was determined in the study (patient’s sense of warmth when interacting with the dental centre, suitability of price of dental services and booking experience, quality of service provided by the sales service, accuracy of services provided and employees, marketing and promotion activities, and implementation of contemporary technology in dental services). Performance of employees in dental centres was also marked with a high mark (sense of appreciation during the interaction with the employees, employee experience in presentation of dental services and dealing with dental patients, employee attractiveness and clear way of communicating, time management and skills of persuasion, employee’s knowledge about dental services and use of positive language, interaction with patients in function of increasing their loyalty, sense of appreciation when a patient complains and employee’s interest in solving the problem). Research (Lwin *et al.*, 2021; Saub *et al.*, 2019; Akbar *et al.*, 2020; Ramos & Cuamea, 2023) has also proven that tourist’s satisfaction with dental services significantly influences their revisit intention in the future. Findings like these have a significant relevance in further planning of developmental activities and improving the current state of dental tourist offer of a destination. The state of dental tourist offer in Kvarner region is unexplored, which justifies undertaking of the empirical research. Based on that, the authors propose the following research question: *How satisfied are dental tourists with the dental tourist offer of Kvarner?*

METHODOLOGY

Authors conducted empirical research to determine the level of satisfaction of tourists with dental services in the Kvarner region. A structured questionnaire with closed questions was used, and statements were prepared based on the research of Ramos and Cuamea (2023). A five-point Likert scale was used asking the respondents to mark their level of agreement with the offered statements. The questionnaire was distributed physically in dental clinics in Kvarner region, and online by using Google docs forms sent through e-mail by dental clinics personnel to their patients, and through social networks. The participation was voluntary, and anonymity was entirely preserved. A purposive sampling technique was applied, and a total of 125 respondents participated in the research in the period from May until September 2024. The collected data was analysed using the statistical package SPSS, and methods of descriptive statistics were implemented.

FINDINGS AND DISCUSSION

Following the authors will present the results of the empirical research. Table 1 represents the sociodemographic characteristics of the respondents.

Table 1. Sample description

Characteristic	Frequency	%
<i>Respondent's sex</i>		
Male	58	46.4
Female	67	53.6
<i>Age category</i>		
Age category: 25-34	21	16.8



Characteristic	Frequency	%
<i>Age category</i>		
Age category: 35-44	51	40.8
Age category: 45-64	30	24.0
Age category: 65+	23	18.4
<i>Marital status</i>		
Unmarried/single	13	10.4
Married	67	53.6
Separated/Divorced	7	5.6
Domestic partnership	37	29.6
Widowed/Widower	1	0.8
<i>Education</i>		
Senior middle school or less	2	1.6
Undergraduate	23	18.4
Graduate and above	88	70.4
Technical secondary school	12	9.6
<i>Household income (in Euros)</i>		
500,00 to 1,000	1	0.8
1,001 to 1,500	2	1.6
1,501 to 2,000	19	15.2
2,001 to 2,500	45	36.0
2,501 to 3,000	44	35.2
3,001 to 3,500	11	8.8
3,501 +	3	2.4
<i>Employment status</i>		
Employee	62	49.6
Retired	29	23.2
Self-employed	33	26.4
Student	1	0.8
Total	125	100

Source: Author's research

Within the sample prevail female respondents (53,6%), while there were 46,4% male respondents. None of the respondents chose the option of not expressing their gender. According to the age category, 40,8% of the respondents belong to the age group 35-44, followed by the ones in the age group 45-64 (24,0%), 65 and more (18,4%), and finally 25-34 (16,8%). In terms of their marital status, 53,6% of the respondents are married, 29,6% live in a domestic partnership, 10,4% are unmarried or single, 5,6% are separated or divorced, and 0,8% are widowed. The majority of the respondents have a graduate degree or more (70,4%), 18,4% have an undergraduate degree, 9,6% have a technical secondary school diploma, while only 1,6% have a senior middle school diploma or less. In terms of the monthly household income, 36,0% of the respondents belong to the monthly income group 2,001 to 2,500€, followed by the groups 2,501 to 3,000€ (35,2%), 1,501 to 2,000€ (15,2%), 3,001 to 3,500€ (8,8%), 3,501€ and more (2,4%), 1,001 to 1,500€ (1,6%), and 500,00 to 1,000€ (0,8%). A total of 49,6%



of the respondents are employed, 26,4% self-employed, 23,2% retired and 0,8% students. According to the country of origin, respondents were mainly from Italy (43.2%), followed by Slovenia (34.4%), Croatia (17.6%), Austria (3.2%) and Turkey (0.8%).

Table 2. Satisfaction with quality of dental service

	N	Minimum	Maximum	Mean	Std. Deviation
Personalized care	125	4	5	4.76	.429
Dental clinic with a certification/ accreditation scheme	125	3	5	4.75	.452
Qualified and competent dental profession-als	125	3	5	4.73	.482
High quality/standard of dental care	125	3	5	4.66	.491
Variety of payment methods: insur-ance/debit/credit card	125	3	5	4.62	.518
Variety of dental specialist services	125	3	5	4.59	.510
Cleanliness and sanitation of the facilities	125	3	5	4.52	.533
Use of high technology for dental care	125	2	5	4.34	.671
Valid N (listwise)	125				

Source: Authors' research

Results from table 2 indicate a high level of satisfaction with the quality of dental services, since all of the arithmetic means are above 4,00. The highest mark was registered for personalized care (AM=4.76), followed by dental clinics being certified respectively having an accreditation scheme (AM=4,75), qualifications and competency of dental professionals (AM=4,73), high quality and standard of provided dental care (AM=4,66), variety of payment methods (AM=4,62), variety of dental specialist services (AM=4,59), cleanliness and sanitation of the facilities (AM=4,52), and use of high technology for dental care (AM=4,34).

Table 3. Satisfaction with cultural proximity

	N	Minimum	Maximum	Mean	Std. Deviation
Communication using the language that I am familiar with	125	2	5	4.50	.630
Geographical proximity (i.e. not far from the tourist's country)	125	2	5	4.10	.745
Familiarity with the city	125	2	5	4.00	.833
Family/relatives/friends place of residence	125	1	5	3.97	.803
Valid N (listwise)	125				

Source: Authors' research

The results for cultural proximity show that the highest level of satisfaction has been expressed with re-sonpondent's ability to communicate in the language that they are familiar with (AM=4,50), followed by the geographical proximity to the respondent's country of residence (AM=4,10), familiarity with the city (as a tourist destination) (AM=4,00), and family/relatives/friends place of residence (AM=3,97).



Table 4. Satisfaction with quality information

	N	Minimum	Maximum	Mean	Std. Deviation
Communicate/consult with dental providers via the internet/telephone	125	2	5	4.60	.568
Availability of information on dental clinics offering dental care	125	3	5	4.58	.543
Word-of-mouth (i.e. recommendations from relatives/friends)	125	2	5	4.53	.547
Patient testimonial (i.e. good reviews on the internet, social media, Web pages, etc.)	125	2	5	4.50	.617
Valid N (listwise)	125				

Source: Authors' research

Quality of information is of significant importance, and in particular in the decision-making process when choosing a dental clinic, and a destination. The respondents expressed the highest level of satisfaction with communicate/consult with dental providers via the internet and/or telephone (AM=4,60), followed by the availability of information on dental clinics offering dental care (AM=4,58), word-of-mouth (i.e. recommendations from relatives/friends) (AM=4,53), and patient testimonial (i.e. good reviews on the internet, social media, Web pages, etc.) (AM=4,50).

Table 5. Satisfaction with price

	N	Minimum	Maximum	Mean	Std. Deviation
Affordable dental care (lower prices compared to my city of residence)	125	3	5	4.67	.535
Quality ratio price	125	2	5	4.62	.577
Valid N (listwise)	125				

Source: Authors' research

Prices of dental services represent one of the most important reasons for choosing a dental clinic and a dental destination. The AM for affordable dental care (lower prices compared to my city of residence) was 4,67, while for quality ratio price it was 4,62.

Table 6. Satisfaction with supporting services

	N	Minimum	Maximum	Mean	Std. Deviation
Tourist facilities and attractions (restaurants, museums, etc.)	125	2	5	4.29	.579
Transport service/connectivity	125	2	5	4.19	.605
Easy access to the city	125	2	5	4.18	.559
Valid N (listwise)	125				

Source: Authors' research

In terms of the supporting services, the highest mark was given for Tourist facilities and attractions (restaurants, museums, etc.) (AM=4,29), followed by the transport service/connectivity (AM=4.19), and easy access to the city (AM=4,18).



DISCUSSION AND CONCLUSION

The paper analyzes the relevance of measuring the level of satisfaction on the example of dental tourists in the Kvarner region. Analysis of the theoretical findings indicates that dental tourism is developing significantly. Dental tourists choose to travel more and more due to the cheaper and better-quality dental services abroad. Kvarner region has been registering growth of dental tourism development over the years, however, as previously stated, no empirical research has been conducted in order to determine its current state. *Quality of medical (dental) services* represents a precondition of tourist's satisfaction and loyalty (Akbar, *et al.*, 2020; Chillimuntha *et al.*, 2024; Zoltan & Maggi, 2010; Jaapar *et al.*, 2017; Kesar & Mikulić, 2017). The results of empirical research have shown a high level of satisfaction among dental tourists who choose to visit the Kvarner region for its dental service. The results of satisfaction indicate that dental service providers are investing significantly in quality and diversity of their dental service, obtaining contemporary technologies used for the purpose of providing dental services, and employment of top-quality dental professionals. Dental providers with the best qualifications and competencies will be able to provide the highest level of quality and standard of dental care to their patients. Cultural proximity indicates how similar cultures are among two or more countries (Takayama, 2013). Cultural proximity is extremely relevant in tourist's behaviour and perceptions, in the sense that the greater the similarity of the perceived culture of a particular destination, the greater the possibility for them to choose it for their holiday (Guan *et al.*, 2022). Our results have shown that dental tourists have expressed the highest level of satisfaction the ability of communicating in a familiar language, which significantly contributes to their entire positive experience and reduces any possibility of potential misunderstanding. Geographical proximity can also be a significant factor in dental tourist's decision-making process. Some tourists can spare an extremely limited amount of time for dental procedures, or maybe they are not interested in traveling to a far away destination. They also might prefer to choose a destination based on how they feel familiar with the characteristics of its offer, or if they have friends and family there who they might visit along the way. This is the reason why they might be more prone to choose dental destinations in their vicinity. *Quality of information* (their clarity and appropriateness) represents a precondition of tourists being able to make an informed decision on whether a particular dental procedure is right for them, and based on that knowledge decide to visit a destination. Medical (dental) services are intangible prior to the purchase, which means that dental service providers need to provide detailed and correct information about the dental tourist offer in order to earn their patient's trust. Online reviews also represent an important source of information and can contribute to the positive decision-making (Runnels & Carrera, 2012; Moslehifar *et al.*, 2016; de la Hoz-Correa *et al.*, 2018; Ahani *et al.*, 2021). High level of satisfaction with quality of information in our study indicates that dental service providers are focused on establishing excellent communication and provision of consults with (potential) patients online and by telephone, providing detailed and quality information, as well as the insight into the online reviews of patients who used their services. Forsyth & Dwyer (2009) emphasize that competitiveness of *prices* represents one of the most important components in achieving destination's competitiveness on the tourist market, considering that studies (Zoltan & Maggi, 2010; Papakoca & Petrovski, 2021; Chongthanavanit, 2018) have proven their importance in the decision-making process. Satisfaction with the prices was also expressed as high which means that dental services provided are affordable for them, respectively they are lower in relation to the prices in their place of residence, and that the quality of dental services provided justifies the price they were charged for. *Supporting services* contribute to the overall experience of dental tourists as well, despite not being the primary motive of visit (Jaapar *et al.*, 2017; Vengesayi *et al.*, 2013; Robustin *et al.*, 2020). Dental tourists have expressed high level of satisfaction with them which means that they are interested in exploring them and spending additional funds.

In order to maintain this positive trend, dental service providers propose the following: a) monitoring the changes on the dental tourist market and well as the the motives of the dental tourists who choose to visit Kvarner, and make the necessary changes in terms of improving quality of dental tourist offer; b) employ top-quality dentists and invest in expansion of their knowledge and competencies; and c) conduct appropriate promotional activities. In terms of the limitations of this research, the authors emphasize the small statistical sample. They will continue collecting the data, based on which it will be possible to make more general conclusions.



ACKNOWLEDGMENT

This paper presents the results of research conducted as part of the scientific research project initiative of the University of Rijeka (ZIP UNIRI) under the title “*Perception of Kvarner as a tourist destination for beauty and health*“, (project code ZIP-UNIRI-116-3-23). The project is financed by the University of Rijeka.

REFERENCES

- Ahani, A., Nilashi, M., Zogaan, W.A., Samad, S., Aljehane, N.O., Alhargan, A., Mohd, S., Hossein Ahmadi, H., & Sanzogni, L. (2021). Evaluating medical travelers' satisfaction through online review analysis. *Journal of Hospitality and Tourism Management*, (48), 519-537. DOI: 10.1016/j.jhtm.2021.08.005
- Akbar, F.H., Krishnan, V., Yusoh, M.P., Senin, M.S., Ismail, A.F., & Abbas, M.S. (2022). Dental Tourism in Bali Province, Indonesia. *NeuroQuantology*, 20(1), 340-347. DOI: 10.14704/nq.2022.20.1.NQ22301
- Akbar, F.H., Pasiga, B.D., Samad, R., Rivai, F., Abdullah, A.Z., Awang, A.H., Pasinringi, S.A., Irwandy, L.M.S., & Pratiwi, D. (2020). The Relationship between Service Quality, Culture Similarity to Satisfaction and Loyalty of Medical (Dental) Tourism. *Systematic Reviews in Pharmacy*, 11(8), 21-32. DOI: 10.31838/srp.2020.12.4
- Alibrandi, A., Gitto, L., Limosani, M., & Mustica, P.F. (2023). Patient satisfaction and quality of hospital care. *Evaluation and Program Planning*, (97), 1-7. DOI: 10.1016/j.evalprogplan.2023.102251
- American Dental Association (Resolution 28H-2008) (2009). *Statement of the ADA Council on Ethics, Bylaws and Judicial Affairs on Dental Tourism - Ethical Obligations of Dentists*. Retrieved September 21, 2024, from https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/about/principles/cebja-statements-and-white-papers/statement_ethics_dental_tourism_2009.pdf?rev=c5f6724515354a8195c29937c05aca69&hash=C1BC64711A058FC7AAADB32D90F902B4
- Berkowitz, R., Vu, J., Brummett, C., Waljee, J., Englesbe, M., & Howard, R. The Impact of Complications and Pain on Patient Satisfaction. *Annals of Surgery*, 273(6), 1127-1134. DOI: 10.1097/SLA.0000000000003621
- CDC U.S. Centres for Disease Control and Prevention (n.d.). *Medical Tourism: Travel to Another Country for Medical Care*. September 21, 2024, from <https://wwwnc.cdc.gov/travel/page/medical-tourism>
- Chillimuntha, A.K., Sriakolli, E., & Sharma, S. (2024). Accreditation of Healthcare Institutions: Assuring Quality services for Medical Tourism in India. In B. Chaudhary, D. Bhatia, M. Patel, S. Singh, S. Sharma (Eds.), *Medical Tourism in Developing Countries A contemporary approach* (pp. 229-243). Springer. DOI: 10.1007/978-981-99-8909-6
- Chongthanavanit, P. (2018). Factors Influencing the Use of Dental Services by Foreign Tourists in Thailand. *Asian Journal for Public Opinion Research*, 5(2), 63-83. DOI: 10.15206/ajpor.2018.5.2.63
- de la Hoz-Correa, A., & Muñoz-Leiva, F. (2018). The role of information sources and image on the intention to visit a medical tourism destination: a cross-cultural analysis. *Journal of Travel & Tourism Marketing*, 36(2), 204-219. DOI: 10.1080/10548408.2018.1507865
- Demonja, D. & Uglješić, N. (2020). Dental Tourism and Business Risks: The Example of the Republic of Croatia. *Interdisciplinary Description of Complex Systems*, 18(4), 425-445. DOI: 10.7906/indecs.18.4.3
- Ferreira D.C., Vieira, I., Pedro, M.I., Caldas, P., Varela, M. (2023). Patient Satisfaction with Healthcare Services and the Techniques Used for its Assessment: A Systematic Literature Review and a Bibliometric Analysis. *Healthcare (Basel)*, 11(5), 639. DOI: 10.3390/healthcare11050639.
- Forsyth, P., & Dwyer, L. (2009). Tourism Price Competitiveness. In J. Blanke & T. Chiesa (Eds.), *The Travel & Tourism Competitiveness Report 2009 Managing in a Time of Turbulence*. Retrieved September 21, 2024 from <https://www.hospitalitynet.org/file/152003764.pdf>
- Guan, J., Chan, J.H., Bi, J., & Qi, X. (2022). Cultural proximity, destination familiarity and tourists' sense of away-from-home (SAFH). *Journal of Destination Marketing & Management*, (23), 1-12. DOI: 10.1016/j.jdmm.2021.100670
- Jaapar, M., Musa, G., Moghavvemi, S. & Saub, R. (2017). Dental tourism: Examining tourist profiles, motivation and satisfaction. *Tourism Management*, (61), 538-552. DOI: 10.1016/j.tourman.2017.02.023
- Kesar, O. & Mikulić, J. (2017). Medical Tourist Satisfaction and Dissatisfaction with Dental Care Services: An Exploratory Case Study. In 4th International Scientific Conference ToSEE - Tourism in Southern and Eastern Europe 2017 Tourism and Creative Industries: Trends and Challenges, 4-6 May 2017 (pp. 243-258). Opatija: Faculty of Tourism and Hospitality Management, University in Rijeka.



- Kim, Y. K., Cho, C. H., Ahn, S. K., Goh, I. H., & Kim, H. J. (2008). A study on medical services quality and its influence upon value of care and patient satisfaction – Focusing upon outpatients in a large-sized hospital. *Total Quality Management & Business Excellence*, 19(11), 1155–1171. DOI: 10.1080/14783360802323594
- Lwin, H.N.N., Punnakitikashem, P. & Thananusak, T. (2021). The level and determinants of international patient satisfaction with dental tourism in Bangkok, Thailand. *Cogent Business & Management*, 8(1), 1–16. DOI: 10.1080/23311975.2021.1898316
- Mammadov, A. and Gasanov, R. (2017) Research on a Relationship between Patient Satisfaction and Medical Services in State Health Organizations. *American Journal of Industrial and Business Management*, (7), 1255-1266. DOI: 10.4236/ajibm.2017.711089.
- Manzoor F, Wei L, Hussain A, Asif M, Shah SIA. Patient Satisfaction with Health Care Services; An Application of Physician's Behavior as a Moderator. *International Journal of Environmental Research and Public Health*, 16(18), 3318. DOI: 10.3390/ijerph16183318.
- Moslehifar, M.A., Ibrahim, N.A., & Sandaran, S.C. (2016). Assessing the Quality of Trust Features on Website Content of Top Hospitals for Medical Tourism Consumers. *Malaysian Journal of Communication Jilid*, 32(1), 472-493. DOI: 10.17576/JKMJC-2016-3201-22
- MTM Editorial Team (2024). *Top Dental Tourism Destinations in 2024. Medical Travel Market*. Retrieved September 21, 2024, from <https://medicaltravelmarket.com/news/top-dental-tourism-destinations-worldwide>
- Oltean F.D., Gabor, M.R., Stăncioiu, A-F, Kardos, M., Kiss, M., Marinescu, R.C. (2020). Aspects of Marketing in Dental Tourism—Factor of Sustainable Development in Romania. *Sustainability*, 12(10), 4320. DOI: 10.3390/su12104320
- Papakoca, K., & Petrovski, M. (2021). Dental Tourism - Our Perspectives. *Knowledge - International Journal*, 48(3), 479–482.
- Ramos, K. & Cuamea, O. (2023). Dental tourism: factors influencing travelers' revisit intention to the Mexican border. *International Journal of Tourism Cities*, 9(3), 806–831. DOI: 10.1108/IJTC-03-2023-0046
- Robustin, T.P., Sularso, R.A., Suroso, I. & Yulisetiari, D. (2020). Contribution of Tourism Products in Creating Satisfying Quality of Tourism Services and Tourist Loyalty. *Journal of Environmental Management and Tourism*, 10(6), 1382-1391. doi: DOI: 10.14505//jemt.v10.6(38).21.
- Runnels, V. & Carrera, P.M. (2012). Why do patients engage in medical tourism?. *Maturitas*, 73(4), 300-304. DOI: 10.1016/j.maturitas.2012.08.011
- Saub, R., Jaapar, M., Musa, G. & Moghavvemi, S. (2019). Dental Tourists' Satisfaction and Loyalty Intention with Dental Care Services in Malaysia. *Malaysian Dental Journal*, (1), 1–23.
- Statista (2024). *Share of medical tourism worldwide as of 2023, by medical procedure*. Retrieved September 21, 2024, from <https://www.statista.com/statistics/1414337/share-medical-tourism-worldwide-by-medical-procedure/>
- Takayama, P. B. (2013). Effects of the Concept of Cultural Distance on the International Trade of “Telenovelas”. *Journal of the Japan Society of Social Science on Latin America*, (47), 61-78. DOI: 10.50978/laronshu.47.0_61
- Total Croatia Dental (n.d.). *Growth of Dental Tourism in Istria-Kvarner Region*. Retrieved September 21, 2024, from <https://www.total-croatia-dental.com/en/news/growth-of-dental-tourism-in-istria-kvarner-region/>
- Vengesayi, S., Mavondo, F. & Reisinger, Y. (2013). Tourism Destination Competitiveness: The Impact of Destination Resources, Support Services and Human Factors. *Journal of Tourism*, XIV(1), 79-108.
- Youssef, A. F. (2022). Assessing the role of dental centres in stimulating dental tourism in Egypt. *Research Journal of the Faculty of Tourism and Hotels Mansoura University*, 11(2), 95–146. DOI: 10.21608/mkaf.2022.254032
- Ziapour, A., Khatony, A., Jafari, F., & Kianipour, N. (2016). Patient Satisfaction with Medical Services provided by a Hospital in Kermanshah- Iran. *Acta Medica Mediterranea*, (32), 959-965.
- Živković, R. & Brdar, I. (2018). *Behaviour and protection of consumers in tourism*. Belgrade: Singidunum University
- Zoltan, J. & Maggi, R. (2010). What is Tourism in Dental Tourism?. In *Health, Wellness and Tourism: healthy tourists, healthy business? Travel and Tourism Association Europe 2010 Annual Conference Proceedings*, 1-3, September 2010 (pp. 424 – 440). Hungary, Budapest: Travel and Tourism Association Europe.



DOES UNCERTAINTY CHANGE TOURIST CHOICES? THE IMPACT OF FEAR ON GUEST DECISION-MAKING

Dušan Mandić^{1*},
Ilija Savić¹,
Mirjana Delić Jović²,
Biljana Rađenović Kozić²,
Andrea Horvath³

¹Singidunum University,
Belgrade, Serbia

²University of Business Studies,
Banja Luka, Bosnia and Herzegovina

³University of Pécs,
Pécs, Hungary

Abstract:

In a more complex tourism environment, uncertainty greatly affects tourists' decision-making, especially when choosing accommodations. This study examines how perceived risk and fear of the unknown impact guest behavior within the hotel sector. The research highlights the importance of affordability and convenience in uncertain situations by identifying pragmatic aspects like location and cost as the main considerations when choosing a hotel, based on data from a population that is primarily younger, female, and highly educated. Different tourists have different risk tolerances; some want innovation and adventure, while many favor familiarity and reliability. Booking urgency is driven by social factors, particularly FOMO, which emphasizes the efficacy of urgency-based marketing. This paper seeks to give hoteliers insights on adapting their offerings to meet evolving consumer expectations by examining the psychological and practical aspects of fear in decision-making. Emphasizing strategic methods such as open communication, adaptable booking policies, and trust-building efforts, is key to cultivating guest loyalty and ensuring strength in an unpredictable market. In the end, this study adds to the expanding understanding of consumer behavior in hospitality, with practical benefits for the industry's future.

Keywords:

tourist behavior, hotel guest, perceived risk, decision-making.

INTRODUCTION

In the past few years, changes in consumer behavior in the tourism sector have been notable, mainly due to increasing feelings of uncertainty and fear. Tourists are now considering uncertainties such as health risks, political instability, and environmental changes when choosing to travel. Uncertainty in tourism involves unforeseeable and unmanageable elements that may have adverse effects on a journey, leading to discomfort, financial setback, or potential harm (Zenker & Kock, 2020). Tourists' travel choices are heavily influenced by how they perceive risk, which is closely connected to the consequences of uncertainties.

Fear and perception of risk are closely related emotions that have a major impact on decision-making. Fear is related to decreased risky decision-making and increased risk estimation, with greater effects when risk tasks use tangible outcomes and clinically anxious participants (Wake *et al.*, 2020). For example, the fear of terrorism, natural

Correspondence:
Dušan Mandić

e-mail:
dmandic@singidunum.ac.rs



disasters, or pandemics may prevent tourists from going to specific locations, even if the chances of facing these risks are low (Kassem & Ganepola, 2023). During the COVID-19 pandemic, tourists were heavily influenced by uncertain health and safety concerns, leading many to choose familiar, safer destinations (Zenker & Kock, 2020).

The influence of emotions on decision-making has been extensively recorded. As indicated by Ma *et al.* (2020), fear increases the perception of danger, resulting in more cautious decisions. Tourists who feel more scared or unsure may choose to visit places they see as safer, even if these places are not as exciting or new as riskier alternatives (Loewenstein *et al.*, 2001). This conduct is in accordance with the wider psychological framework that proposes people are driven to prevent loss or negative occurrences, especially in ambiguous circumstances (Roehl & Fesenmaier, 1992).

Additionally, studies show that fear and uncertainty not only affect the selection of a destination but also the nature of the travel experience. Travelers may prefer to visit places with more lenient cancellation policies or enhanced health measures in order to reduce their perceived risks (Quintal *et al.*, 2010). This change is particularly evident in the realm of eco-friendly or responsible tourism, as travelers take into account the environmental consequences and possible personal hazards in their destination choices (Fauzi *et al.*, 2024).

LITERATURE REVIEW

Risk perception is a fundamental concept in understanding how tourists assess potential threats during travel. Research suggests that tourists tend to evaluate risks not only based on factual information but also through emotional and subjective lenses (Schiffman & Wisenblit, 2019). According to Roehl & Fesenmaier (1992), tourists' risk perceptions are often influenced by past experiences, media reports, and personal predispositions, which can lead to the avoidance of certain destinations perceived as unsafe, even if objective risk levels are low. This concept of risk as a subjective, emotional response is further explored by Loewenstein *et al.* (2001), who argue that feelings of fear and anxiety can distort risk assessments, leading to overly cautious decisions.

Studies on risk perception in tourism emphasize that tourists often differentiate between various types of risks, including physical, financial, social, and psychological risks (Quintal *et al.*, 2010; Najjar & Rather, 2023). For example, physical risks, such as the threat of disease or natural disasters, may cause tourists to avoid specific regions, while social or psychological risks, such as the fear of encountering different cultures or unfamiliar environments, may affect destination choices (Roehl & Fesenmaier, 1992; Najjar & Rather, 2023). These insights have significant implications for tourism marketers and destination managers, who must address these perceptions in their strategies.

Emotions play a critical role in how individuals respond to uncertainty. According to the "Risk as Feelings" hypothesis proposed by Loewenstein *et al.* (2001), decisions under uncertainty are often driven by immediate emotional reactions rather than calculated, rational assessments. Fear is particularly relevant in this context, as it tends to amplify perceived risks and discourage risky behaviors, such as traveling to destinations with higher perceived dangers. Lerner & Keltner (2001) further elaborate on this by showing that fear leads individuals to overestimate risks, while other emotions, such as anger, might lead to risk underestimation.

In tourism, these emotional responses can be observed in travelers' reactions to health-related risks. For instance, during the COVID-19 pandemic, tourists' fear of contracting the virus significantly altered travel patterns. Research by Zenker & Kock (2020) highlights how the uncertainty surrounding the pandemic led to a drastic decline in international tourism, as travelers preferred to stay within their home countries or opt for destinations perceived as safe.

The COVID-19 pandemic provides a contemporary lens through which to examine the impact of uncertainty on tourist decision-making. The pandemic created unprecedented levels of uncertainty in the global travel industry, with tourists facing potential health risks, frequent changes in government regulations, and uncertain travel policies. Gössling *et al.* (2020) argue that the pandemic not only reshaped tourists' risk perceptions but also highlighted the importance of flexible travel arrangements, such as free cancellations and insurance options, as critical factors influencing travel decisions.



Tourists' responses to the pandemic demonstrate how fear and uncertainty can lead to the avoidance of international travel altogether, with many opting for local tourism or destinations with stringent safety protocols (Zenker & Kock, 2020). This behavior is consistent with the findings of Quintal *et al.* (2010), who suggest that tourists are more likely to avoid destinations where uncertainty regarding health, safety, or political stability is high. Additionally, tourism businesses need to manage uncertainty effectively by enhancing their communication strategies and providing clear, reliable information to reduce tourists' fear (Sigala, 2024).

The perception of risk and uncertainty in tourism also varies across different cultural contexts. For example, research has shown that tourists from individualistic cultures, such as those in Western countries, may exhibit different risk aversion behaviors compared to tourists from collectivist cultures, where social and community-oriented factors influence decision-making (Reisinger & Mavondo, 2005). These cultural differences suggest that tourism marketers need to tailor their risk communication and marketing strategies to address the specific concerns and preferences of different demographic groups. Kozak *et al.* (2007) conducted a comparative study on risk perception among tourists from different regions and found that cultural background significantly influences how risks are assessed and managed. For instance, Asian tourists were more likely to consider social and health risks when choosing a destination, while European tourists placed more emphasis on political risks and personal safety.

The theory of planned behavior (Ajzen, 2020) has been widely applied to understand how uncertainty influences decision-making in tourism. This theory posits that behavioral intentions are shaped by attitudes, subjective norms, and perceived behavioral control, all of which are influenced by the level of uncertainty a tourist perceives. Quintal *et al.* (2010) used this framework to demonstrate how higher levels of perceived uncertainty reduce tourists' confidence in their ability to make safe travel decisions, ultimately leading to more conservative choices.

Moreover, adaptive decision-making theories suggest that when faced with high levels of uncertainty, tourists may adopt heuristic approaches or rely on trusted sources of information, such as reviews, recommendations, or travel advisors, to reduce perceived risks (Decrop, 2023). This highlights the importance of trust and transparency in tourism marketing, especially in times of crisis. Hotels and other tourism businesses should utilize social media word-of-mouth marketing and emotional connections to boost consumers' goodwill, trust, and purchasing intention (Bin, 2023).

METHODOLOGY

This study adopts a mixed-methods approach, combining both quantitative and qualitative data to achieve a comprehensive understanding of the impact of uncertainty and fear on tourist decision-making. A mixed-methods approach allows for the triangulation of data, enhancing the validity and reliability of the findings by integrating numerical data with more in-depth, interpretative insights (Creswell & Creswell, 2017). The study targets international tourists who travel at least once a year, specifically focusing on those who have experienced uncertainty or fear in relation to their travel choices. This will allow for an exploration of how different demographic factors may influence tourists' perceptions of risk and uncertainty (Bryman, 2016). A structured online survey will be used to collect quantitative data on tourists' experiences with uncertainty and fear when making travel decisions. The primary data was collected using a structured online questionnaire, distributed to potential respondents via social media platforms and email. The survey will be designed using established scales from previous research on risk perception and tourism behavior, ensuring that the questions are both reliable and valid. The research will be focused on perceived risk, fear and emotional response and travel decision making.



RESULTS

The study included 109 respondents from Serbia during September 2024. The research was conducted through a survey of tourists. Questionnaires were distributed via email and private communication channels. Table 1 provides a clear demographic profile of the respondents, revealing important insights into the composition of the sample and its potential implications for understanding tourist decision-making under uncertainty. The sample is mainly female (73.4%), indicating that the results might represent a viewpoint that leans towards women's methods of decision-making. Given the potential differences in how fear and uncertainty influence behavior between genders, this imbalance should be acknowledged as a limitation when generalizing the results.

The age distribution is seriously biased toward younger age groups, as most respondents' ages range from 18 to 35 years. More than half of respondents (51.4%) are between 18-25 years old, the second largest group being those between 26-35 years (45.9%), and only 2.8% of the sample are those aged 35 and above. This stress on younger age groups can be an indication of their higher demand for tourism or greater willingness to participate in questionnaires. While this fact contributes to the high participation rates among respondents, on the other hand, this means that the study mainly characterizes the attitudes and behavior of young travelers who may behave differently than elderly groups when responding to uncertainty, at least in terms of the level of risk tolerance and adaptability.

The sample has a high level of education, with 26.6% having a master's degree and 45.9% having a bachelor's degree. This suggests that the respondents are probably going to approach decision-making with a certain amount of analytical skill, which may affect how they respond to uncertainty and fear in a tourism environment. Because educated people are dominant, the results may indicate a more thoughtful or informed decision-making process rather than the impulsive or less thoughtful responses that could be typical of other groups.

Given that 19.3% of respondents make less than €500 per month and almost half (48.6%) make between €500 and €1000 per month, the income distribution further characterizes the sample as primarily low- to middle-income, particularly when compared to the average salary in the Republic of Serbia. This suggests that financial constraints might play a significant role in how the respondents perceive and respond to uncertainty. Lower-income travelers may be more risk-averse, carefully weighing the potential consequences of their decisions in fear-inducing situations, particularly when financial stakes are higher. This implies that respondents' perceptions and reactions to uncertainty may be significantly influenced by their financial situation. Tourists with lower incomes might be more risk averse and carefully consider the possible outcomes of their choices in situations that make them anxious, especially when the stakes are higher financially.

Table 1. Sample description

Characteristic	Frequency	%
<i>Respondent's sex</i>		
Male	29	26,6
Female	80	73,4
<i>Age category</i>		
Age category: bellow 18	0	0
Age category: 18-25	56	51,4
Age category: 26-35	50	45,9
Age category: 35+	3	2,8
<i>Education</i>		24,0
High school	26	23,9
Bachelor's degree	50	45,9
Master's degree	29	26,6



Characteristic	Frequency	%
<i>Education</i>		24.0
PhD degree	1	0,9
Other	3	2,8
<i>Monthly income (in €)</i>		29.6
<500	21	19,3
500-1000	53	48,6
1001-1500	26	23,9
1501-2000	5	4,6
>2000	4	3,7
Total	100	100

Source: Author’s research

Fig. 1 offers a useful overview of the main factors influencing tourists’ choices of accommodation. Every aspect, shown as a percentage, shows how much importance travelers put on particular qualities, exposing not only their preferences but also the deeper challenges and priorities that influence their decisions. Participants were asked to select up to three most important factors when choosing hotel accommodation.

Accessibility is still crucial, as evidenced by the fact that location (95%) is the most important factor. Tourists frequently place great importance on being close to tourist destinations, transit hubs, or business areas, whether they are there for business or pleasure. This result corresponds with Valentin *et al.* (2019), who point out that a hotel’s competitive edge is greatly increased by a prime location. Many visitors consider location as a key factor in determining accessibility and the general convenience of their trip, which aligns closely with more general travel objectives.

Closely following, price (92%) highlights the financial considerations that weigh heavily on decisions. Price comes in second (92%) and emphasizes how important money is when making decisions. Value-conscious tourists check prices across different booking sites to make sure their spending is in line with the benefits they believe they are receiving. Kamins *at al.* (2009) findings that price transparency and promotional offers frequently act as crucial motivators are confirmed by the focus on affordability. In a time when technology makes cost comparison easier, hotels that find a balance between competitive prices and high-quality offerings stand to earn loyalty.

The influence of recommendations from friends and family (48%) and guest reviews (52%), respectively, illustrates the social components of trust and reliability in decision-making. Reviews serve as a guide for navigating choices in a crowded market because they are frequently seen as objective representations of prior visitor experiences. According to Chen *et al.* (2022) individual recommendations can convey a level of reliability that internet reviews may not always guarantee. Both elements emphasize how group knowledge may reduce uncertainty and validate decisions.

Service quality (36%), website reliability (27%), and online hotel details (24%), although not as highly ranked, demonstrate the crucial role that digital engagement plays in influencing perceptions. Clear, precise, and aesthetically pleasing online content can close knowledge gaps and allay concerns about misrepresentation, according to Guzzo *et al.* (2022). Trustworthy booking platforms, in particular, serve as safeguards against fraud, fostering confidence among travelers wary of potential pitfalls.

The analysis of these findings reveals that hotel selection is a complex decision shaped by both pragmatic factors (such as location and cost) and psychological influences (including trust and social validation). The interaction of these components emphasizes the complex nature of travel planning, where logical assessment is frequently moderated by emotions. The chart also illustrates a wider trend in tourism: an increasing dependence on digital tools and platforms to reduce risks and uncertainties. In the end, this data provides a framework for hospitality providers seeking to attract and retain guests. By comprehending and addressing these priorities, hotels can develop customized strategies—spanning dynamic pricing models, better service services, and transparent digital communication—that align with tourists’ transforming expectations.



Figure 1. Factors Influencing Hotel Choice

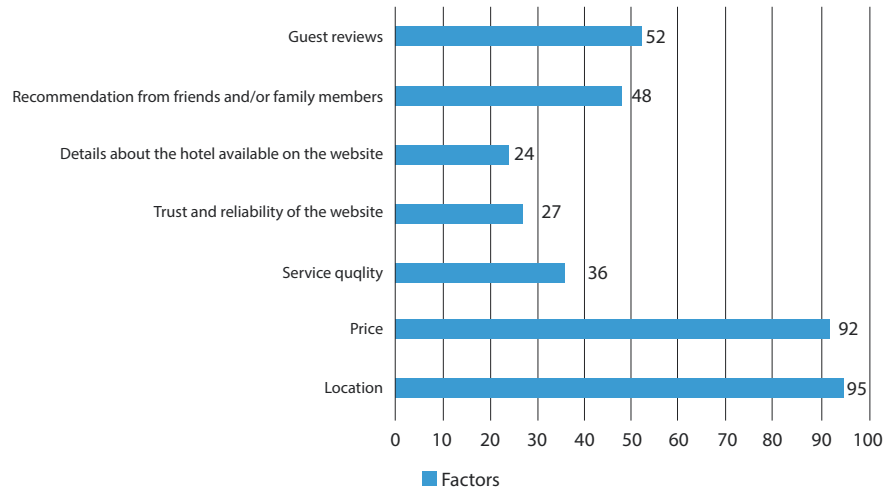


Fig. 2 provides an in-depth analysis of how tourists make decisions by highlighting the different risk preferences of tourists while choosing accommodation. Most of the respondents (52) said they prefer safe solutions that nevertheless allow some degree of originality. This decision implies a moderate level of risk tolerance, as tourists look for a balance between the thrill of adventure and the certainty of safety. This kind of behavior is related to psychological theories of risk management in leisure travel, where people balance the possible drawbacks of uncertainty against the perceived advantages of novelty. These results are consistent with research by Reisinger and Mavondo (2005), which highlights how travel decisions are frequently influenced by the interaction between safety and novelty.

Interestingly, 28 of respondents actively avoid clear of risk and uncertainty, highlighting a significant number of tourists who prefer tried-and-true and reliable options. Past bad experiences or elevated risk perceptions during periods characterized by global instability, including pandemics, natural disasters, or instability in politics, may have an impact on this behavior. Well-regarded and highly recommended hotels are probably quite appealing to this group.

On the other hand, a small minority (5) often accepts major risk-taking in their hotel choices, whereas 24 percent appreciate risks. This niche market may consist of thrill-seekers or seasoned travelers who perceive danger as a key part of their experience. Previous studies, such as those by Timothy *et al.* (2022), suggest that younger travelers and individuals with a higher tolerance for uncertainty often gravitate toward unique, unconventional accommodations that promise authentic experiences.

Figure 2. Risk-taking approaches in hotel selection

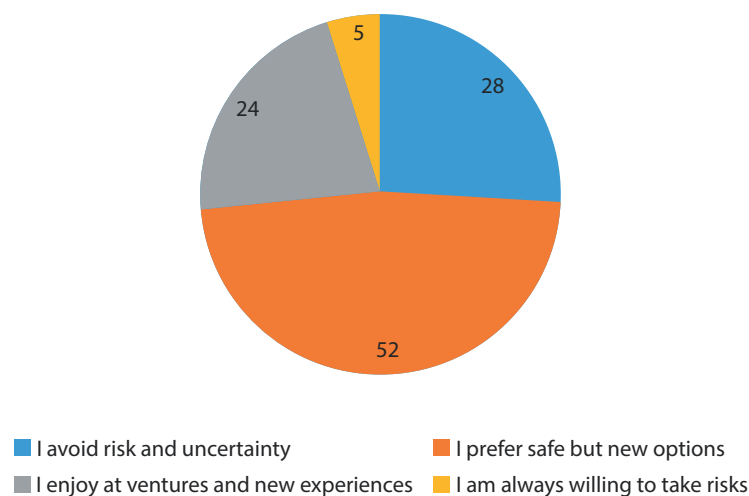


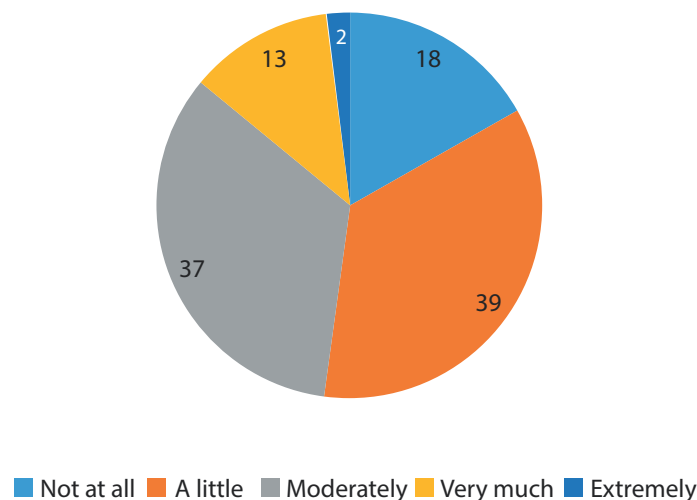


Fig. 3 illustrates the pervasive influence of the psychological phenomenon known as FOMO (Fear of missing out) in shaping hotel booking behaviors. To varying degrees, a significant percentage of respondents say they have experienced FOMO. Specifically, 39% feel it “a little,” 37% “moderately,” and 13% “very much.” This trend highlights the powerful role of scarcity-driven marketing tactics in influencing tourist behavior. Messaging such as “Only 2 rooms left!” or “Last chance to book at this rate” capitalizes on FOMO by creating a sense of urgency and exclusivity. Hayran *et al.* (2020) have documented how these strategies drive immediate decision-making by tapping into consumers’ fears of losing access to desirable opportunities.

Interestingly, 18% of participants say they experience FOMO “extremely,” indicating a heightened sensitivity to social comparison and outside influences. Social media likely amplifies this effect, as aspirational travel content showcases exclusive destinations, compelling viewers to replicate similar experiences. Only 2% of respondents, on the other hand, say they have no FOMO at all. This category might be made up of people who make decisions very independently or who use social media less frequently, which is where FOMO-related triggers are frequently seen.

According to the research, FOMO is a powerful motivation when it comes to choosing a destination, especially when there is uncertainty. By using this knowledge, marketers and hoteliers can create ads that highlight exclusive deals or one-of-a-kind experiences, appealing to the psychological tendencies of tourists.

Figure 3. Fear of missing out while hotel booking



Detailed view of the factors that influence travelers when selecting hotels is available in the Fig. 4, revealing a complex interplay of informational, social, and economic considerations. The most influential factor is reliance on comments and reviews, with 70% of respondents citing this as a primary consideration. This is in accordance with plenty of research on electronic word-of-mouth (eWOM), which emphasizes how important user-generated information is for building trust and lowering perceived risks (Khwaja *et al.*, 2020). Travelers can use online reviews as a useful form of social proof to assess lodgings by reading about prior visitors’ experiences.

Furthermore, 63% of respondents highlight that extensive research is necessary before making a decision. This emphasizes how crucial detailed explanations and openness are to hotel marketing. Detailed photos, amenity lists, and clear cancellation policies are crucial in addressing travelers’ informational needs, particularly when they are unfamiliar with their destination.

Another significant factor is value for money, as 62% of respondents said cost-effectiveness was important. Strong price sensitivity is demonstrated by this research, indicating the significance of competitive pricing and perceived value in influencing customer loyalty and happiness (Lin *et al.*, 2022; Gonen *et al.*, 2024). Travelers on a limited budget tend to prefer hotels that find a balance between price and quality.

Social factors also come into play; according to 36% of respondents, friends and family have a big influence on their choices. This number shows that personal networks are still important, especially for tourists looking for suggestions or reassurance, even though it is lower than dependence on reviews. In contrast, promotional



campaigns have a minimal impact (9%), suggesting that traditional advertising methods may be less effective compared to peer-driven or review-based channels. Finally, only 7% of respondents claim to make decisions independently, highlighting the social and informational dependencies characteristic of modern travel planning.

Figure 4. Factors influencing hotel decision-making

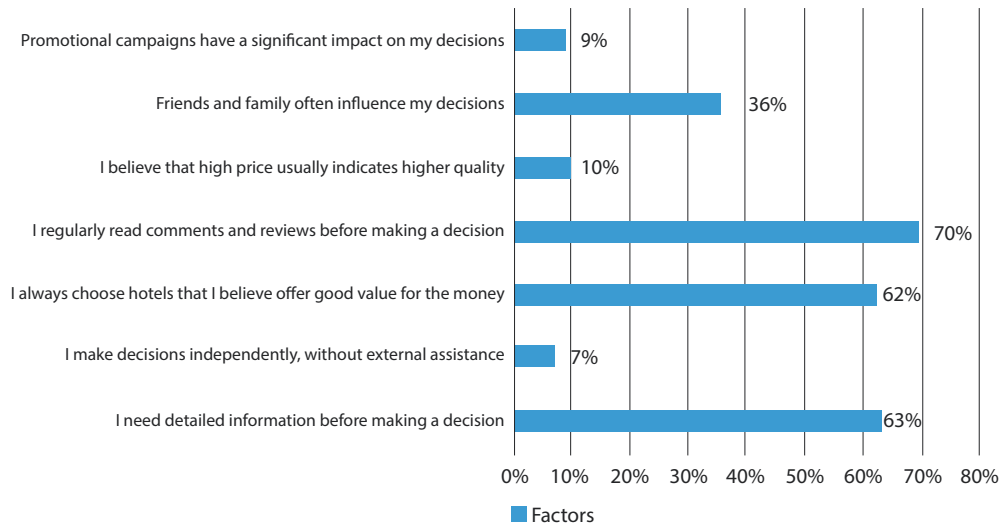


Fig. 5 illustrates the time individuals spend while researching accommodation options before deciding. Most of the respondents (41%) spend 1-2 hours on this activity, followed by 25% who invest 2-4 hours, 18% who spend more than 4 hours, and only 10% who spend less than 1 hour.

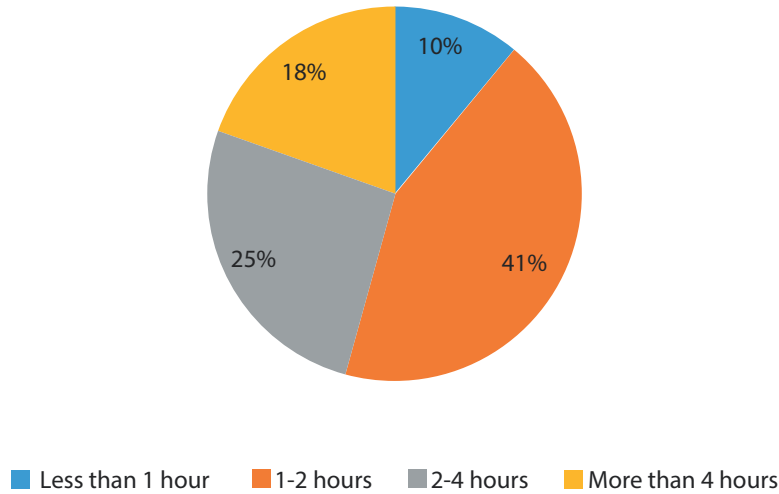
The distribution shows that most tourists take their time while researching accommodation, spending at least one to four hours making sure their selections are appropriate and of high quality. Given that tourists aim to reduce risks like poor quality service, unstated expenses, or undesirable locations, this trend implies that uncertainty plays a critical role in decision-making. According to research, visitors spend more time obtaining information because they are afraid of making incorrect choices. This tendency is further supported by research by Mihai *et al.* (2023), which highlights the function of information overload and its connection to anxiety related to decision-making.

People who spend more than four hours (18%) may be people who are making longer travel plans or who are very concerned about the quality of their accommodation. However, the 10% who spend less than an hour might include those who travel frequently or who rely on reliable websites or recommendations, which could decrease their perception that they need to do an extensive amount of research. Simplified booking systems or loyalty programs that ease decision-making and reduce related stress are frequently helpful to these people.

Furthermore, the majority of tourists fall into the 1-2 hour category, which indicates that they need to find a balance between time efficiency and the necessity for in-depth study. For faster decision-making, this group may rely on star ratings, internet reviews, or visual content like images and videos. These habits have been significantly influenced by the increasing dependence on digital platforms, which allow users to quickly select and compare options (Sharmin *et al.*, 2021). This research emphasizes how crucial it is for digital information to be clear and accessible in order to lower uncertainty and boost user confidence.



Figure 5. Time spent on accommodation research

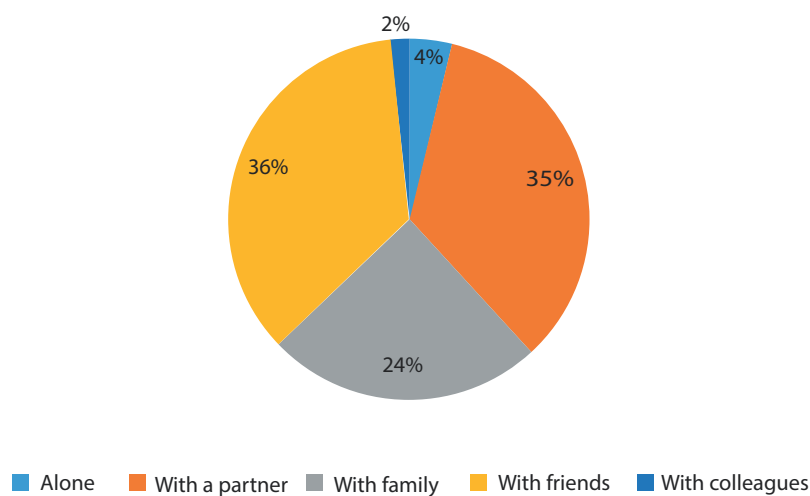


Traveling with friends or partners is preferred by 71% of respondents, highlighting the social component of travel and how shared experiences improve an entire trip (Fig. 6). This decision can also be related to lowering risk because going with trusted individuals can help to reduce the anxiety that comes with visiting new places. Group travel reduces individual stress associated with uncertainty by promoting a sense of security and collaborative decision-making (Lin *et al.*, 2022).

Despite being significant (24%), family travel may be driven by a variety of factors, including the desire to spend quality time together or to accommodate the preferences of the kids. But there are planning complications as well, which may put off some people. Schedule alignment, meeting a range of demands, and paying for larger groups are just a few of the challenges that families frequently encounter, which makes the process more complex.

At only 4 percent, solo travel shows its niche appeal, maybe because of the perceived risks or lack of shared responsibility. But some groups, including young adults looking for independence or self-discovery, are likewise becoming more and more interested in traveling alone. The low percentage might show that people prefer traveling with others rather than avoiding solo trips entirely. Likewise, the 2% who travel with colleagues are likely to reflect business trips, where the main purpose restricts options and flexibility.

Figure 6. Usual travel partners





CONCLUSION AND DISCUSSION

This study provides valuable insights into how fear and uncertainty influence tourist decision-making. The analysis of responses from a predominantly female, younger, and highly educated sample reveals several key factors shaping travel behavior. The most important factors influencing hotel selection are pragmatic factors like location and cost, which reflects passengers' preference for affordability and ease in ambiguous circumstances. Mechanisms to build trust, such as recommendations, guest reviews, and detailed internet information, emphasize the value of transparency and reliability in reducing decision-making anxiety.

The results show that different tourists have different risk preferences. A significant number of people are risk averse and value familiarity and dependability over innovation, even though the majority prefer a balance between the two. A smaller group, on the other hand, welcomes mystery in their decisions and looks for adventure. This variance highlights the complexity of tourist behavior, where decisions are influenced by a combination of psychological considerations, prior experiences, and financial limitations. Furthermore, the high level of FOMO (fear of missing out) highlights how social impacts and urgency-driven marketing can speed up booking decisions, especially for tourists who use technological devices.

Respondents spend a lot of time looking into accommodation alternatives on digital platforms, which is important to the decision-making process. The need for hotels to make improvements in their digital presence can be seen by the increasing dependence on online evaluations, images, and clear information. Ensuring accurate, visually appealing, and trustworthy content can significantly enhance confidence and attract hesitant travelers.

With the majority of respondents choosing to travel with friends or partners, the social component of travel also stands out as an important consideration. In order to decrease the uncertainty about new places, this choice shows a reliance on shared decision-making and support from one another. Due to heightened risk perceptions or a preference for group experiences, solo travel is still a niche choice.

Practically speaking, the hospitality sector will be significantly impacted by these findings. To serve a variety of traveler demographics, hotels should prioritize competitive pricing, clever location positioning, and individualized marketing. While risk-tolerant tourists could be attracted to unusual and risky offerings, risk-averse people place an importance on guarantees of safety, cleanliness, and dependability. As long as they remain transparent and credible, marketing methods that use FOMO-driven messaging can successfully draw in travelers who are anxious about travel decision-making.

Despite its contributions, the study acknowledges several limitations. The demographic makeup of the sample, which is primarily younger, female, and educated, might not accurately reflect the general tourist population. To capture differing behaviors and preferences across age groups, income levels, and cultural contexts, future research should involve a wider range of people.

In an increasingly uncertain world, the tourism and hospitality industries may better meet the demands of contemporary tourists by addressing these insights, which will increase overall guest pleasure, build trust, and reduce uncertainty.



REFERENCES

- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human behavior and emerging technologies*, 2(4), 314-324. DOI: 10.1002/hbe2.195
- Bin, S. (2023). Social network emotional marketing influence model of consumers' purchase behavior. *Sustainability*, 15(6), 5001. DOI: 10.3390/su15065001
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Chen, T., Samaranyake, P., Cen, X., Qi, M., & Lan, Y. C. (2022). The impact of online reviews on consumers' purchasing decisions: Evidence from an eye-tracking study. *Frontiers in Psychology*, 13, 865702. DOI: 10.3389/fpsyg.2022.865702
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Decrop, A. (2023). Decision-Making – Tourist. In: Jafari, J., Xiao, H. (eds) *Encyclopedia of Tourism*. Springer, Cham. DOI: 10.1007/978-3-319-01669-6_48-2
- Fauzi, M. A., Hanafiah, M. H., & Kunjuraman, V. (2024). Tourists' intention to visit green hotels: building on the theory of planned behaviour and the value-belief-norm theory. *Journal of Tourism Futures*, 10(2), 255-276. DOI 10.1108/JTF-01-2022-0008
- Gonen, L. D., Tavor, T., & Spiegel, U. (2024). Unlocking Market Potential: Strategic Consumer Segmentation and Dynamic Pricing for Balancing Loyalty and Deal Seeking. *Mathematics*, 12(21), 3364. DOI: 10.3390/math12213364
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of sustainable tourism*, 29(1), 1-20. DOI: 10.1080/09669582.2020.1758708
- Guzzo, T., Ferri, F., & Grifoni, P. (2022). What factors make online travel reviews credible? The consumers' credibility perception-CONCEPT model. *Societies*, 12(2), 50. DOI: 10.3390/soc12020050
- Hayran, C., Anik, L., & Gürhan-Canli, Z. (2020). A threat to loyalty: Fear of missing out (FOMO) leads to reluctance to repeat current experiences. *PLoS One*, 15(4). DOI: 10.1371/journal.pone.0232318
- Kamins, M. A., Folkes, V. S., & Fedorikhin, A. (2009). Promotional bundles and consumers' price judgments: when the best things in life are not free. *Journal of Consumer Research*, 36(4), 660-670. DOI: 10.1086/599806
- Kassem, R., & Ganepola, C. (2023). Tourists' Travel Motivations During Crises: Lessons from the COVID-19 Pandemic. In *COVID-19, Tourist Destinations and Prospects for Recovery: Volume One: A Global Perspective* (pp. 137-156). Cham: Springer International Publishing. DOI: 10.1007/978-3-031-22257-3_8
- Khwaja, M. G., Mahmood, S., & Zaman, U. (2020). Examining the effects of eWOM, trust inclination, and information adoption on purchase intentions in an accelerated digital marketing context. *Information*, 11(10), 478. DOI: 10.3390/info11100478
- Kozak, M., Crotts, J. C., & Law, R. (2007). The impact of the perception of risk on international travellers. *International Journal of Tourism Research*, 9(4), 233-242. DOI: 10.1002/jtr.607
- Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of personality and social psychology*, 81(1), 146. DOI: 0.1037//0022-3514.81.1.146
- Lin, T. T., Yeh, Y. Q., & Hsu, S. Y. (2022). Analysis of the Effects of Perceived Value, Price Sensitivity, Word-of-Mouth, and Customer Satisfaction on Repurchase Intentions of Safety Shoes under the Consideration of Sustainability. *Sustainability*, 14(24), 16546. DOI: 10.3390/su142416546
- Loewenstein, G. F., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as Feelings. *Psychological Bulletin*, 127(2), 267-286. DOI: 10.1037/0033-2909.127.2.267
- Ma, H., Chiu, Y. H., Tian, X., Zhang, J., & Guo, Q. (2020). Safety or travel: Which is more important? The impact of disaster events on tourism. *Sustainability*, 12(7), 3038. DOI: 10.3390/su12073038
- Mihai, V. C., Dumitras, D. E., Oroian, C., Chiciudean, G. O., Arion, F. H., & Mureşan, I. C. (2023). Exploring the factors involved in tourists' decision-making and determinants of length of stay. *Administrative Sciences*, 13(10), 215. DOI: 10.3390/admsci13100215
- Najar, A. H., & Rather, A. H. (2023). Assessing the relationship of perceived risks with destination image and destination loyalty: a tourist's perspective visiting volatile destinations. *Journal of Hospitality and Tourism Insights*, 6(3), 1357-1379. DOI: 10.1108/JHTI-03-2022-0100
- Quintal, V. A., Lee, J. A., & Soutar, G. N. (2010). Risk, uncertainty and the theory of planned behavior: A tourism example. *Tourism management*, 31(6), 797-805. DOI: 10.1016/j.tourman.2009.08.006



- Reisinger, Y., & Mavondo, F. (2005). Travel anxiety and intentions to travel internationally: Implications of travel risk perception. *Journal of travel research*, 43(3), 212-225. DOI: 10.1177/00472875042720
- Roehl, W. S., & Fesenmaier, D. R. (1992). Risk perceptions and pleasure travel: An exploratory analysis. *Journal of Travel research*, 30(4), 17-26. DOI: 10.1177/004728759203000403
- Schiffman, L. G., & Wisenblit, J. (2019). *Consumer behavior*. Pearson.
- Sharmin, F., Sultan, M. T., Wang, D., Badulescu, A., & Li, B. (2021). Cultural dimensions and social media empowerment in digital era: travel-related continuance usage intention. *Sustainability*, 13(19), 10820.
- Sigala, M. (2024). Social Media and Crisis Communication: Managing or Creating a Crisis? Lessons Learnt from Hotel Amarilis. In *Case Based Research in Tourism, Travel, and Hospitality: Rethinking Theory and Practice* (pp. 61-82). Singapore: Springer Nature Singapore. DOI: 10.1007/978-981-97-1891-7_4
- Timothy, D. J., Michalkó, G., & Irimiás, A. (2022). Unconventional tourist mobility: A geography-oriented theoretical framework. *Sustainability*, 14(11), 6494. DOI: 10.3390/su14116494
- Valentin, M., & O'Neill, J. W. (2019). The value of location for urban hotels. *Cornell Hospitality Quarterly*, 60(1), 5-24. DOI: 10.1177/1938965518777725
- Wake, S., Wormwood, J., & Satpute, A. B. (2020). The influence of fear on risk taking: a meta-analysis. *Cognition and Emotion*, 34(6), 1143-1159. DOI: 10.1080/02699931.2020.1731428.
- Zenker, S., & Kock, F. (2020). The coronavirus pandemic—A critical discussion of a tourism research agenda. *Tourism management*, 81, 104164. DOI: 10.1016/j.tourman.2020.104164



CONSUMER PERCEPTIONS OF AI-GENERATED CONTENT VERSUS HUMAN CREATIVITY IN TOURISM MARKETING

Milica Milovanović¹,
Angelina Njeguš^{2*}

¹Master student,
Singidunum University,
Belgrade, Serbia

²Singidunum University,
Belgrade, Serbia

Abstract:

This research focuses on whether generative artificial intelligence (AI) can replace human creativity in creating tourism marketing content. Previous studies have highlighted the limitations of AI in this context, noting the lack of intuitive and emotional engagement that humans naturally incorporate. This study proposes an analysis of consumer perceptions towards the creativity and preferences of content created by AI compared to human creators. The methodology relies on a quantitative approach through surveys measuring attitudes and consumer preferences. Key results indicate that although AI can effectively create content, it cannot fully replace human creativity, and consumers generally prefer content created by humans. These findings contribute to a deeper understanding of AI's role in creative industries and the possibilities for its further development.

Keywords:

generative artificial intelligence, human creativity, tourism marketing, consumer perceptions, content preferences.

INTRODUCTION

The rise of generative artificial intelligence (GAI) has revolutionised various industries, including marketing, by offering new ways to create content with speed and precision. As GAI technologies continue to progress, they are increasingly used to design marketing materials, particularly in sectors such as tourism, where engaging content is vital for attracting and retaining customers. Despite the efficiency and innovation that GAI offers, questions have arisen about its ability to replicate the nuanced creativity of human-generated content, which often draws on emotional intelligence, cultural understanding, and personal experience.

In tourism marketing, the quality of content plays a crucial role in influencing consumer behaviour. Marketers must not only provide information but also capture the essence of a destination, evoke emotions, and connect with potential travellers on a personal level. These elements of human creativity may pose a challenge for artificial intelligence (AI) in general, which typically relies on patterns and data rather than intuitive thinking. As AI continues to evolve, an important question emerges: Can AI-generated content compete with, or surpass, human-generated content's creativity in this highly competitive field?

Correspondence:
Angelina Njeguš

e-mail:
anjegus@singidunum.ac.rs



This study seeks to explore consumer perceptions of AI-generated content versus human-created content in the context of tourism marketing. Specifically, it aims to investigate whether consumers view GAI as a viable alternative to human creativity, and to what extent they prefer one over the other. Through quantitative research methods, this paper examines key factors influencing consumer preferences and attitudes, contributing to a broader understanding of the role AI can play in creative industries.

LITERATURE REVIEW

According to Marr (2024), the term artificial intelligence (AI) refers to computer algorithms that can efficiently simulate human cognitive processes such as learning, decision-making, and problem-solving. According to the same author, generative artificial intelligence (GAI) represents a revolutionary subdomain of artificial intelligence (AI) that is capable of creating new content based on patterns and structures it has learned from existing data. Generative AI models, often powered by deep learning architectures like Generative Adversarial Networks (GANs) or transformer models, are designed to generate new, creative content, such as text, images, audio, or even videos, and music (Lv, 2023). They learn from large datasets and can produce content that mimics or builds upon the characteristics of the data they were trained on.

Therefore, generative artificial intelligence (GAI) does not simulate human cognitive processes like a traditional AI model but rather simulates human creativity. GAI should represent a balance between human creativity and machine intelligence, which emphasises the importance of collaboration between human creativity and generative artificial intelligence, instead of relying solely on generative artificial intelligence.

Marr (2024) draws a parallel between the GAI operations and the methods through which individuals learn to draw. Initially, learners observe numerous artworks and attempt to replicate them. After multiple replications, they are equipped to create original works, utilising their creativity informed by their prior experiences with existing images. GAI has developed from the domain of AI which mainly focuses on machine learning algorithms. Presently, the principles of machine learning underpin most of all implementations of artificial intelligence. Popular GAI tools include platforms for text generation such as ChatGPT, BingAI, and Bard, and for image creation such as DALL-E 2, Midjourney, and many others. These technologies are used in various fields such as content creation, design, and entertainment, as well as in complex problem-solving applications.

Zhou and Lee (2024) investigate the intersection of GAI and human creativity, focusing on text-to-image systems like DALL-E and Midjourney. Their research shows that GAI significantly increases creative productivity, with a 50% rise in output and more favourable evaluations from peers over time. However, the study also reveals a decline in average content novelty, suggesting that while AI improves productivity, it may lead to a more homogeneous creative output. Importantly, the study emphasises that GAI cannot fully replace human creativity; instead, humans must guide and filter AI-generated content to maintain originality. The concept of “generative synesthesia,” which blends human ideation with AI-generated productivity, underlines the importance of human control in the creative process.

In tourism marketing, where consumer perceptions of creativity and authenticity are critical, AI can assist with routine tasks while leaving more strategic and emotionally resonant content to human creators. AI’s ability to inspire and augment human creativity, by sharing ideas and facilitating the storytelling process, positions it not as a replacement for human ingenuity but as a tool for enhancing creative output. (Wu *et al.*, 2021).

When applied to marketing functions in the hospitality industry, GAI can use travel history, consumption preferences, and social media content to create personalised recommendations for travellers, generate descriptions of destinations and hotel properties, and even create virtual tours of hotels and attractions (Lalli, 2023), simultaneously creating value for firms and consumers.

GAI helps tourism businesses analyse big data to provide hyper-personalised content, improving customer engagement and loyalty. For example, companies can tailor travel recommendations based on previous purchases and preferences, offering a more personalised experience for travellers (Dwivedi *et al.*, 2024; Borji, 2022). Additionally, GAI is being used to optimize operations, reducing repetitive tasks like data entry, and allowing staff to focus on more creative and value-added activities, thereby boosting overall productivity (Dwivedi *et al.*, 2024). However, there are challenges, such as ethical concerns, the need for data privacy, and ensuring that these systems align with sustainable tourism goals (Frontiers Research, 2023).



Moreover, generative AI, particularly tools like ChatGPT, is seen as a disruptive force in the tourism and hospitality sectors. According to Gursoy *et al.* (2023), these AI tools can transform how customers search for information, make travel decisions, and interact with businesses. ChatGPT's ability to process natural language and provide personalised responses means it can significantly enhance customer service. However, this innovation also brings challenges, such as over-reliance on automated systems and the need for businesses to integrate these technologies thoughtfully to maintain a balance between automation and the human touch (Gursoy *et al.*, 2023).

GAI can assist in generating a first draft of marketing content or responses to customer feedback, while human employees can vet, enhance, and personalise this content, leading to a more synergistic output (Dogru *et al.*, 2023). ChatGPT can design a marketing strategy, including the creative part (e.g., logo, blog post), and all the aspects of the marketing mix. It selected the communication and distribution channels suited to a 5-star hotel in the centre of Lisbon. It presented suggestions for a price strategy and recommended a sales approach. Therefore, marketing managers might be able to use ChatGPT as a starting point in their search when developing marketing strategies. (Almeida & Ivanov, 2024).

Bakpayev *et al.* (2020) examine the role of AI in creating emotion-oriented versus cognitive-oriented advertisements. They conclude that while AI-generated content can be highly effective for rational or utilitarian appeals, it is less successful in creating emotional content. This finding suggests that while AI can handle certain aspects of tourism marketing, such as informational content, human creativity is crucial for producing content with emotional resonance.

One of the most impactful outcomes of GAI in the hospitality and tourism industry is expected to be hyper-personalization on the demand side. GAI can help businesses create personalised marketing content at scale to enhance booking experiences and marketing communication. (Dogru *et al.*, 2023) While GAI can offer personalised recommendations and real-time responses, there is a risk that the information put forth by GAI can be incorrect, outdated, or biased, which can result in value co-destruction for both the firm and the customer. (Dogru *et al.*, 2023). The participants agreed with the potential benefits of using GAI in hospitality and tourism marketing, with competitive advantage and innovation impact being the most agreed-upon statements. (Khan & Khan, 2024).

METHODOLOGY

This study investigates consumer perceptions of AI-generated versus human-created content in tourism and hospitality marketing, with a focus on creativity and content preferences. Research hypotheses are:

- H1. AI cannot completely replace human creativity in marketing content creation.
- H2. Consumers prefer marketing content created by humans over AI-generated content.

Study variables include socio-demographic variables such as age, gender, and education level, which are used to explore demographic differences in perceptions of AI- and human-generated content. Dispositional variables cover attitudes toward AI, measured through specific questions about respondents' views on AI-generated content. Content preference refers to consumers' choices between AI-generated and human-created content, collected via direct survey responses. Creativity perception is measured on a Likert scale from 1 to 5.

Variables and relationships are as follows: The independent variable is the content creation method (AI vs. human-generated). The dependent variables are the perception of creativity and content preference. Attitudes toward AI act as intervening variables that may influence consumer preferences. Control variables, such as demographics, are used to manage external influences on the findings.

A quantitative research approach was employed using an online survey distributed via Google Forms. The survey includes Likert scale questions, multiple-choice items, and open-ended questions. Respondents were shown examples of AI-generated and human-created marketing content to provide informed responses (Fig. 1). Both descriptive and inferential statistical methods will be applied to analyse the data. Data was collected using a standardised online questionnaire, allowing for efficient and accurate gathering of quantitative data.



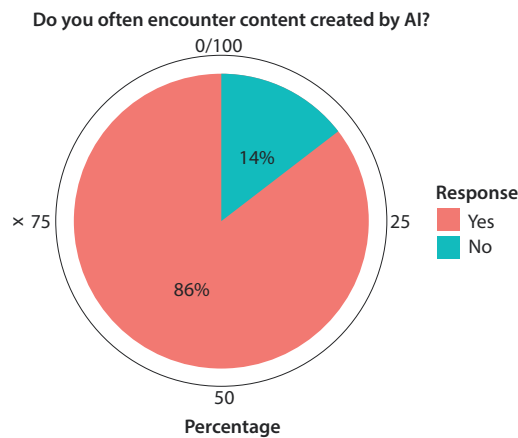
Figure 1. AI-generated content (left) and human-generated content (right)



RESULTS ANALYSIS

The respondents were surveyed via Google Forms, which enabled easy distribution of the survey, quick response collection, and automated data processing. The survey was designed to be intuitive and easy to understand, with clear and concise questions to minimize the potential for confusion or misunderstanding. The respondents are adults who use the internet and have experience with online shopping, making them relevant for assessing marketing content. The respondents were chosen using a random stratified sample from an online user database, ensuring that the sample adequately reflects the population in terms of demographic characteristics such as age, gender, and geographic location. Fig. 2. illustrates that 86% of respondents indicated they frequently encounter AI-generated content, while 14% do not. This shows that while AI-generated content is prevalent, it still does not seem to influence the preference for human creativity.

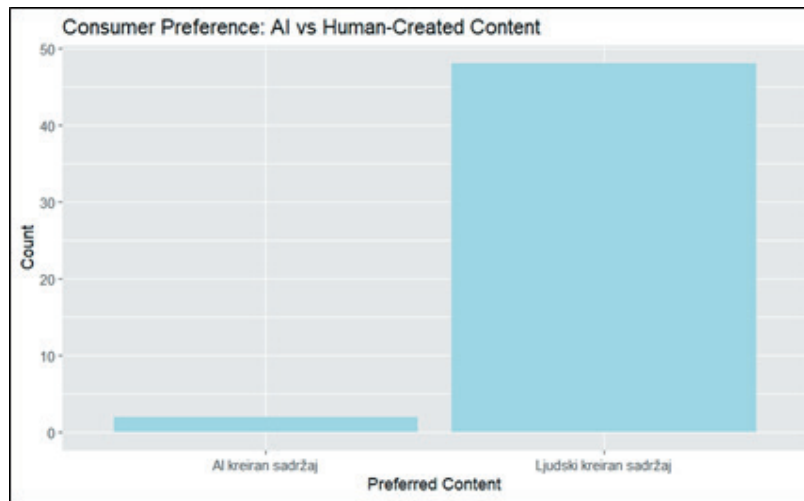
Figure 2. Encountering AI-Generated Content



The bar graph (Fig. 3) illustrates a clear consumer preference for human-created content over AI-generated content. Out of the respondents, the overwhelming majority preferred content created by humans, with nearly 50 consumers favouring human content compared to a very small number who chose AI-generated content. This finding supports the hypothesis that AI cannot fully replace human creativity, as most consumers show a strong preference for human-generated marketing content.

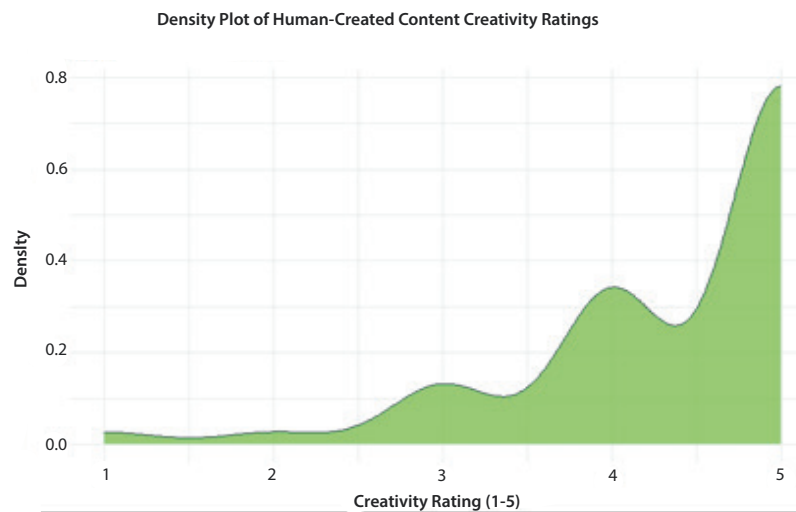


Figure 3. Consumer Preference: AI vs Human-Created Content



In contrast, the density plot of human-created content (Fig. 4) shows a peak at the highest creativity rating (5). This distribution suggests that consumers overwhelmingly view human-created content as highly creative, reinforcing the notion that human creativity is valued much more than AI in content creation.

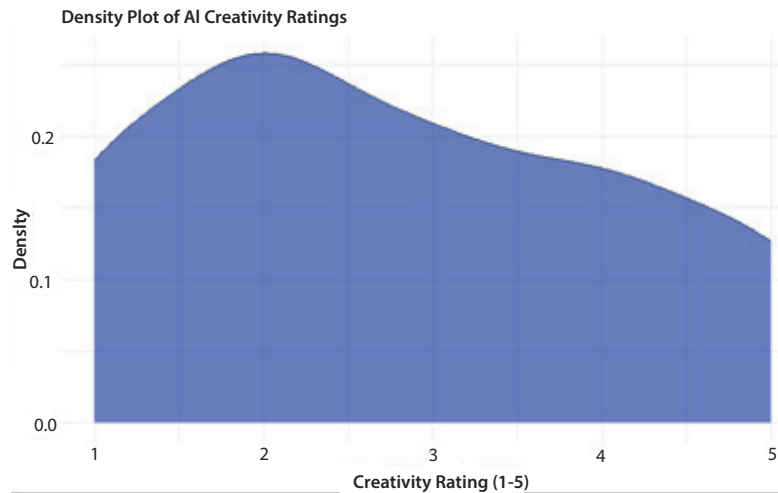
Figure 4. Density Plot of Human-Created Content Creativity Ratings



The density plot of AI creativity ratings (Fig. 5) indicates that most respondents rated AI creativity in the mid to lower range. The highest density is seen at a rating of 3, suggesting a general perception of AI creativity as average, with relatively fewer people rating it as very creative (5) or not creative (1).

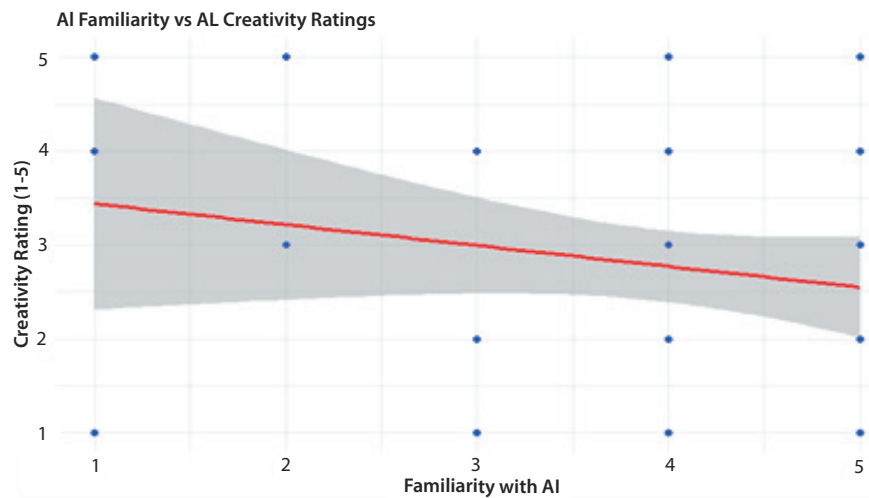


Figure 5. Density Plot of AI Creativity Ratings



The scatter plot (Fig. 6) with a trend line showing a negative correlation between familiarity with AI technologies and the creativity rating given to AI-generated content. As familiarity with AI increases, the perceived creativity of AI content tends to decrease slightly. This suggests that consumers who are more familiar with AI are more critical of its creative potential.

Figure 6. AI Familiarity vs AI Creativity Rating



The comments collected from consumers regarding their preferences between human and AI-generated content reveal several recurring themes, both in favour of human creativity and AI-driven designs. A majority of the comments reflect a strong preference for human-created content due to its perceived uniqueness and emotional depth. Respondents emphasized that human creativity has a certain “weight” and “warmth” that AI lacks. One respondent remarked that human-created content has weight, emotion, strength, and warmth. This sentiment is echoed by several others who pointed out that human-generated designs feel more personalised and emotional, while AI content can sometimes appear generic.

Many participants also believe that human creativity is inherently more innovative and less likely to rely on pre-existing patterns or plagiarism, as one comment highlights, “AI cannot create new things, it lacks creativity and only plagiarises”. Additionally, the quality and precision of human-generated content were often cited, with respondents praising how human content is better written and conveys the intended message more clearly. One user noted, “Human-created content conveys the message entirely”. This suggests that accuracy in communication and the ability to convey emotion are key reasons for the preference toward human-created content.



On the other hand, a smaller group of respondents praised AI-generated designs for their cleanliness and orderliness. Several comments pointed out that AI-created content tends to have a more polished aesthetic, with fonts and colour schemes being more harmonious. As one person noted, “AI is more organised, the fonts and colours are more harmonious”. Some participants also recognised the efficiency of AI, stating that while AI can quickly generate aesthetically pleasing content, it is best used as a tool to assist humans in the creative process. One user commented, “I believe AI should be used as a tool to assist in content creation”. This indicates that there is a place for AI in creative industries, but many believe it should complement human efforts rather than replace them entirely.

A few respondents discussed the potential for balance between human and AI-generated content, recognizing the strengths of both. While AI offers speed and precision in design, human content brings emotional engagement and creativity. One respondent summarised this by stating, “While AI can quickly create aesthetically pleasing and acceptable designs, a human can better convey emotion”. Some users also raised concerns about the implications of fully adopting AI for creative work, expressing that it might lead to a decline in human creativity and result in job losses. This aligns with the comment: “By accepting AI, jobs are lost”. The mean difference of -1.62 suggests that, on average, human-generated content was rated 1.62 points higher on a 5-point creativity scale compared to AI-generated content. The 95% confidence interval (-2.10, -1.14) further confirms that this difference is both statistically and practically significant, meaning consumers consistently perceive human-generated content as more creative than AI-generated content. Additionally, the correlation analysis between the familiarity with AI technologies and the perceived creativity of AI-generated content showed a weak negative correlation ($r = -0.18$). This suggests that as familiarity with AI increases, the perception of AI-generated content as creative slightly decreases, though this relationship is relatively weak and may not be of great practical importance.

The paired t-test (Table 1) shows a significant difference in creativity ratings, with human-generated content being consistently rated higher than AI-generated content. This suggests that, while AI can produce technically sophisticated content, it struggles to capture the intuitive and emotionally resonant aspects that humans inherently integrate into their creations. Interestingly, the weak negative correlation between familiarity with AI and the perceived creativity of AI-generated content implies that as individuals become more familiar with AI, they may start to recognise its limitations. This could suggest that consumers who are more aware of AI’s current capabilities tend to be more critical of its creative output, further emphasising the gap between human and AI creativity.

Table 1. Paired t-test results

Test	Paired t-test values	
	Value	p-value
Paired t-test (Creativity AI vs Human)	-6.73	1.712e-08

These results align with the hypothesis that AI, despite its technological capabilities, struggles to match the human touch when it comes to creativity in content creation, particularly in fields like tourism marketing, where emotional and intuitive engagement is crucial.

CONCLUSION

The findings of this study contribute to the growing conversation on the role of generative artificial intelligence (GAI) in marketing, particularly within the tourism and hospitality industry. Despite the rapid advancements of AI technologies, the results indicate that human creativity still holds a distinct advantage when it comes to consumer perceptions of creativity. AI’s reliance on data and patterns restricts its ability to innovate beyond its programming, whereas human creators can draw from personal experiences, emotions, and cultural understanding—key elements in tourism marketing that resonate with consumers. According to research results, consumers show a clear preference for human-created content over AI-generated content.



This indicates that in industries like tourism and hospitality, where emotional connection and personal experience play key roles in influencing consumer behaviour, human creativity is still more valued. This preference may be due to the more personalised and less “mechanical” nature of human-generated content, which feels more authentic and less formulaic.

REFERENCES

- Almeida, S., & Ivanov, S. (2024). Generative AI in hotel marketing – A reality check. *Tourism: An International Interdisciplinary Journal*, 72(3), 422-455. DOI:10.37741/t.72.3.10
- Bakpayev, M., Baek, T., Esch, P., & Yoon, S. (2020). Programmatic creative: AI can think but it cannot feel. *Australasian Marketing Journal*, 30, 90 - 95. DOI:10.1016/j.ausmj.2020.04.002.
- Dogru, T., Line, N., Mody, M., Hanks, L., Abbott, J., Acikgoz, F., Assaf, A., Bakir, S., Berbekova, A., Bilgihan, A., Dalton, A., Erkmen, E., Geronasso, M., Gomez, D., Graves, S., Iskender, A., Ivanov, S., Kizildag, M., Lee, M., ... Zhang, T. (2023). Generative Artificial Intelligence in the Hospitality and Tourism Industry: Developing a Framework for Future Research. *Journal of Hospitality & Tourism Research*, 1-19. DOI:10.1177/10963480231188663.
- Dwivedi, Y.K., Pandey, N., Currie, W., & Micu, A. (2024). Leveraging ChatGPT and other generative artificial intelligence (AI)-based applications in the hospitality and tourism industry: practices, challenges and research agenda. *International Journal of Contemporary Hospitality Management*, 36(1), 1-12. DOI:10.1108/IJCHM-05-2023-0686
- Frontiers Research (2023). Generative AI: Applications and Implications for Tourism and Hospitality Industry. Frontiers Research Topic. <https://www.frontiersin.org>
- Gursoy, D., Li, Y., & Song, H. (2023). ChatGPT and the hospitality and tourism industry: an overview of current trends and future research directions. *Journal of Hospitality Marketing & Management*, 32, 579 - 592. DOI:10.1080/19368623.2023.2211993.
- Khan, U., & Khan, K. A. (2024). Generative artificial intelligence (GAI) in hospitality and tourism marketing: Perceptions, risks, benefits, and policy implications. *Journal of Global Hospitality and Tourism*, 3(1), 62–77. DOI:10.5038/2771-5957.3.1.1046
- Lalli, M. (2023). ChatGPT & Co: The revolution of generative AI and big data and the future of the tourism sector. *Data Driven Destinations*. <https://datadrivendestinations.com/2023/01/chatgpt-co-the-revolution-of-generative-ai-and-big-data-and-the-future-of-the-tourism-sector/>
- Lv, Z. (2023). Generative artificial intelligence in the metaverse era. *Cognitive Robotics*, 3, 208–217. DOI:10.1016/j.cogr.2023.06.001
- Marr, B. (2024). *Generative AI in Practice: 100+ Amazing Ways Generative Artificial Intelligence is Changing Business and Society*. United Kingdom: Wiley.
- Wu, Z., Ji, D., Yu, K., Zeng, X., Wu, D., & Shidujaman, M. (2021). AI creativity and the human-AI co-creation model. In M. Kurosu (Ed.), *HCI 2021: Human-computer interaction* (pp. 171–190). Springer. DOI:10.1007/978-3-030-78462-1_13
- Zhou, E., & Lee, D. (2024). Generative artificial intelligence, human creativity, and art. *PNAS Nexus*, 3(3), 1-8. DOI:10.1093/pnasnexus/pgae052



INNOVATIONS IN TOURISM: THE ROLE AND CHALLENGES OF IMMERSIVE SPACES

Kristina Nikolić*

Ph.D. Student,
Singidunum University,
Belgrade, Serbia

Abstract:

In the modern tourism industry environment, immersive spaces represent a revolutionary concept that transforms the way visitors experience and interact with destinations. This paper focuses on analyzing the application of immersive technologies, including virtual reality (VR) and augmented reality (AR), with the aim of creating unique and engaging experiences for tourists. Through the analysis of existing literature, we explore how immersive spaces not only enhance visitors' emotional connection with the content but also stimulate their creativity and exploratory spirit. The paper highlights the key advantages that immersive spaces bring to tourist destinations, including a significant increase in visitor engagement and the creation of differentiated offerings that can attract a broader audience. Additionally, we consider the challenges faced by this technology, such as high implementation costs and the need for technical training of staff. We conclude that, with the right implementation strategy and continuous evaluation, immersive spaces have the potential to drastically improve the tourism offering and enrich visitor experiences, thereby opening up new opportunities for innovation in tourism. This paper not only provides insight into future research directions but also presents examples of best practices for tourism operators aiming to integrate immersive technologies into their offerings to achieve a competitive advantage in the market.

Keywords:

Virtual reality (VR), Augmented reality (AR), Immersive technologies, Immersive intelligence.

INTRODUCTION

Immersive spaces represent an innovative concept that utilizes modern technologies, such as virtual reality (VR) and augmented reality (AR), to create interactive experiences allowing users to fully immerse themselves into the new environments. These technologies significantly change how information is presented to users (Milgram and Kishino, 1994) and open new opportunities for education, promotion and entertainment in the tourism industry, helping destinations stand out in a competitive market.

The development of immersive spaces is crucial in light of changing visitor expectations, as they seek unique and unforgettable experiences. In the era of digitalization and rapid technological changes, the tourism sector must adapt to meet the needs of modern travelers.

Correspondence:
Kristina Nikolić

e-mail:
kristina.stepanic@gmail.com



These experiences not only increase visitor engagement but also strengthen their emotional connection to the destination, potentially leading to repeat visits and provide with further recommendations (Huang and Liao, 2015).

Modern technologies allow users to experience destinations in exciting ways. For example, VR can simulate travel to exotic locations, while AR enhances real locations with interactive content and information. This combination significantly enhances the user experience, making it more interactive and personalized (Guttentag, 2010). However, challenges in implementing immersive spaces include technological infrastructure, costs, and staff training, which can impact the success of these initiatives (Youssef *et al.*, 2023). This paper focuses on defining immersive spaces, their application in tourism, implementation challenges, and how strategic integration of these technologies can enhance the tourism offering.

LITERATURE REVIEW

The tourism industry is undergoing a significant transformation with the advent of immersive technologies. Early work by Scagliarini *et al.* (2001) demonstrated the potential of VR for enhancing understanding and engagement at cultural heritage sites like Pompeii. Additionally, Milgram & Kishino's (1994) taxonomy of mixed reality visual displays provided a foundational framework for understanding the spectrum of immersive technologies and their potential applications. Guttentag (2010) provided an early exploration of virtual reality, highlighting its potential for destination marketing, virtual tours, and enhancing tourist experiences. Research indicates that immersive technologies have a positive impact on tourist experiences, particularly in enhancing enjoyment, engagement, and perceived value. Flavián *et al.* (2019) expanded the range by examining the impact of virtual, augmented, and mixed reality on customer experience across various sectors, including tourism. Fan *et al.* (2022) conducted a meta-analysis that revealed these beneficial effects. Zeng *et al.* (2020) found that VR experiences combined with online reviews significantly influenced hotel booking decisions. Moreover, Kang (2020) highlighted the potential of VR to stimulate impulsive travel desires by providing immersive previews of destinations. Immersive technologies serve as powerful tools for preserving and experiencing cultural heritage. Jung & tom Dieck (2017) explored the use of AR, VR, and 3D printing for co-creating valuable visitor experiences at cultural heritage sites. Rateb *et al.* (2020) showcased the use of immersive VR for exploring ancient Egypt's Giza Plateau, providing tourists with engaging and informative experiences. Furthermore, Youssef *et al.* (2023) demonstrated the potential of AR for virtually reconstructing heritage sites in Luxor, thereby enhancing accessibility and understanding of sites. The application of immersive technologies extends into destination marketing and information delivery. Sasaki & Yamamoto (2019) presented a sightseeing support system utilizing AR and pictograms to enhance navigation and information access for tourists in urban areas. Additionally, Zhang (2020) explored the use of gamified AR travel guides to improve user experience and engagement in city tourism.

Understanding how immersive experiences can influence tourist behavior and decision-making is essential. Huang & Liao (2015) investigated the acceptance of AR interactive technology, highlighting the moderating role of cognitive innovativeness in user adoption. Yoon & Uysal (2005) examined the relationship between motivation, satisfaction, and destination loyalty, laying the groundwork for understanding how such experiences can contribute to repeat visitation. Lampropoulos (2023) explored the intersection of augmented reality and artificial intelligence in creating immersive intelligent tutoring systems, suggesting potential applications for enhancing tourist learning and engagement at cultural heritage sites.

Despite the immense potential, the widespread adoption of immersive technologies in tourism faces challenges. Sousa *et al.* (2024) identified barriers to implementing VR for tourism managers, including cost, technological expertise, and resistance to change. Shehade & Stylianou-Lambert (2020) explored the experiences of museum professionals incorporating VR, emphasizing the need for careful planning and consideration of visitor needs. Duan *et al.* (2019) discussed the role of artificial intelligence in tourism decision-making, highlighting the importance of addressing ethical concerns and ensuring data privacy. Ionescu & Sârbu (2024) explored the impact of smart technologies on the tourism industry, emphasizing the need for sustainable and responsible development. Additionally, Sustacha *et al.* (2023) conducted a meta-analysis on technology's role in enhancing tourist experiences in smart destinations, suggesting future research directions for optimizing



the integration of immersive technologies. Beyond the immediate tourist experience, researchers have also examined the broader impacts of tourism development on residents. Godovykh & Ridderstaat (2020) investigated the long-term effects of tourism arrivals on residents' health, while Godovykh *et al.* (2023) explored the impact of tourism on residents' happiness, emphasizing the importance of sustainable tourism practices. Much of the existing research has focused on general tourist demographics, often overlooking the experiences of diverse populations, including older adults, individuals with disabilities, and non-tech-savvy users. Future research should investigate how different user groups interact with immersive technologies, ensuring that these tools are inclusive and enhance the experience for all.

Immersive technologies hold immense potential for revolutionizing the tourism industry by offering tourists engaging and enriching experiences. However, addressing challenges related to cost, accessibility, and ethical considerations is crucial for successful implementation. Future research should focus on user experience design, accessibility for diverse populations, and the long-term impacts of immersive technologies on tourist behavior and destination sustainability.

METHODOLOGY

This article aims to explain how the application of immersive spaces in tourism can enable destinations to achieve a strategic market position. To gather data, we analyzed academic literature and research reports related to immersive technologies and their application in the tourism sector. For the purposes of this research, data were collected from journals, conference papers, and other available relevant sources. The search results were limited exclusively to works written in English, opening additional space for future research in other languages.

IMMERSIVE SPACE TECHNOLOGIES AND BEST PRACTICES

Immersive space technologies enable users to connect with content in ways that surpass traditional interaction methods and can increase the quality of visitors' experience of a destination (Zeng *et al.*, 2020). Immersive intelligence combines Artificial Intelligence (AI) and Immersive technologies and has the potential to greatly improve experiences. Immersive technologies provide engaging, interactive and motivating mixed reality environments while AI offers personalized experiences (Lampropoulos, 2023). By utilizing AI's ability to analyze visitor preferences and behaviors it is possible to create personalized itineraries, while Immersive technologies enhance experiences by adding real-time insights and deepens tourist's understanding of cultural heritage through interactive learning and visualizations at historical locations. AI plays a big role in enhancing Immersive Intelligence by enabling personalization, real-time interaction, adaptive storytelling, and contextual awareness. Its ability to analyze data and learn from user interactions allows creation of more engaging and relevant experiences. As AI technology continues to evolve, its integration with immersive environments will likely lead to even more innovative applications. We focus on virtual reality (VR) and augmented reality (AR) and their application in the tourism sector.

Virtual reality (VR) uses computer simulations to create three-dimensional environments that users can explore and interact with, mimicking the real world. Users typically use equipment like VR headset or sensor gloves to fully immerse in the digital environment, manipulating objects, hearing sounds, feeling vibrations, and more. In the tourism industry, VR is used to simulate journeys and experiences that might be difficult or costly to achieve. It offers the ability to provide new experiences and information to individuals, unrestricted by time and space. It seamlessly integrates the digital realm with our physical environment, allowing people to encounter distant or even imaginary objects as if they were right in front of them. Users can explore these objects from any angle, resulting in a rich and immersive experience that brings to life what was once only a fabrication of our imagination (Kang, 2020). For example, many museums and galleries offer virtual tours that allow visitors to explore artworks or historical sites from the comfort of their homes (Guttentag, 2010).



Augmented reality (AR) enriches the real world with digital content visible through smartphones, tablets, or specialized glasses. AR allows users to see digital information overlaid on physical objects, creating a richer and more interactive experience. In tourism, AR is often used to provide additional information about landmarks, such as historical facts or interactive guides, enhancing visitor experiences (Fan *et al.*, 2022). For example, some tourist destinations use AR applications that let users scan QR codes near landmarks to receive more information or visualize historical events.

We will present several examples of tourist destinations that have successfully implemented immersive spaces. These examples illustrate how technologies like virtual reality (VR) and augmented reality (AR) can transform visitor experiences, expand tourism offerings, and positively impact the local economy.

Immersive spaces in museums are revolutionizing visitor experiences through the use of virtual reality (VR). For instance, the San Diego Museum of Art employs VR technology to allow visitors to “peek” into the artistic processes of renowned artists. This innovative approach enhances visitor engagement by providing immersive storytelling experiences and enabling users to be transported to inaccessible locations or specific moments in history. As a result, the emotional and internal engagement with museum collections is heightened, moving beyond the traditional interpretation of artworks through written text (Shehade and Stylianou-Lambert, 2020). Similarly, Egyptian museums have adopted VR tours that enable visitors to explore ancient tombs and pyramids without the need for physical presence. These virtual tours have gained popularity, especially among individuals who are unable to travel to Egypt, thereby increasing global interest in Egyptian culture and history. Studies indicate a significant rise in online interactions and interest in educational content related to these virtual experiences (Rateb *et al.*, 2020).

Immersive spaces at historical sites are exemplified by the “Casa del Centenario” in Pompeii, where virtual models developed from reconstructive hypotheses by archaeologists can be experienced on-site. Visitors can engage with these models on mobile tablets as well as on high-performance display stations, which are controlled via the tablets. This system allows for immediate comparison between the current environment and its original state by enabling simultaneous viewing of two synchronized virtual reconstructions. Moreover, intuitive navigation within these virtual worlds is enhanced by the tablet’s sensitivity to rotation, enriching the overall user experience (Scagliarini *et al.*, 2001).

Immersive Spaces in cities are illustrated by Japan’s smart cities, which utilize object-recognition augmented reality (AR) to enhance the sightseeing experience. By pointing a mobile information terminal at actual landmarks or their images, users can recognize these spots and access related information displayed on the screen. Additionally, users have the option to switch between object-recognition AR and location-based AR (Sasaki and Yamamoto, 2019). Another example is “Unlocking Porto,” an app designed for the city of Porto that offers a unique experience through a location-based game. Users embark on a narrative journey that guides them to the city’s main attractions, following a path enriched with augmented reality elements. Throughout the game, players can engage in various mini-games, which further enhance their exploration and interaction with the city (Zhang, 2020).

Examples of successful implementation of immersive spaces in tourism demonstrate how integrating VR and AR technologies can significantly enrich visitor experiences, enhance engagement, and contribute to the local economy. These practices provide important lessons for future projects in the tourism sector.

DISCUSSION AND RESULTS

Given that consumers today increasingly seek personalized experiences, it is essential to understand how immersive spaces fit into the broader context of tourism strategies. In addition to the benefits they bring, such as enhancing emotional connections and increasing satisfaction, there are also several challenges that need to be addressed. This section of the paper will focus on analyzing the research results and discussing how tourism operators can overcome obstacles on the path to integrating these innovative solutions. Through this analysis, the aim is to provide insight into the opportunities that immersive spaces offer, as well as the strategies needed for their successful implementation.



Immersive spaces represent a revolutionary approach in tourism, allowing tourists to fully immerse themselves in unique experiences that transcend traditional forms of tourism. One of the key trends in tourism is the growing popularity of personalized experiences. Tourists today increasingly seek unique and tailored offerings that reflect their personal interests and preferences. Travelers prefer destinations that utilize technology to provide personalized recommendations based on their previous experiences and searches, and travel agencies can use it to collect and analyze data to help develop better services and offerings (Sustacha *et al.* 2023). For instance, smart devices can provide real-time information about local events or attractions, as well as recommendations based on the user's current location. This type of interaction can significantly enrich the travel experience and make it more efficient (Ionescu and Sârbu, 2024). Tourists are actively involved in creating their adventures, which can lead to positive reviews and recommendations, as well as a greater emotional connection to the destination (Yoon and Uysal, 2005). This personalization not only enhances the experience but also strengthens the reputation of destinations as places that offer unique and unforgettable adventures, significantly contributing to the promotion of the destination and its visibility in a competitive market. Furthermore, immersive spaces help destinations stand out in a crowded market. In a world of ever-increasing competition, the ability to offer innovative and interactive experiences becomes crucial. Destinations that successfully integrate immersive experiences into their offerings can attract a larger number of visitors and achieve higher levels of satisfaction and loyalty (Flavián *et al.*, 2019). Increased engagement, emotional connections, and the ability to create unforgettable experiences contribute to the rising popularity of immersive experiences in the tourism industry.

Despite the numerous advantages that immersive spaces offer in tourism, their implementation faces various challenges. The most significant issues include high technology costs, technical barriers and the need for staff training. These challenges can complicate the adoption of immersive technologies, especially for smaller destinations or businesses with limited resources (Sousa *et al.*, 2024). High technology costs represent one of the main factors that can slow down the introduction of immersive experiences. Acquiring and maintaining advanced devices such as VR headsets and augmented reality software are often beyond the budgets of smaller tourism operators. To overcome this problem, it is important to consider strategies such as partnerships with technology firms that can help reduce costs and provide necessary technical support, as well as developing smaller pilot projects that can test the application of immersive technologies and user reactions before larger investments and broader implementation. Technical barriers, such as internet connectivity issues and the availability of necessary infrastructure, can also complicate the implementation of immersive spaces. In rural or less developed areas, the lack of adequate technology can pose a significant challenge, necessitating investment in infrastructure such as high-speed internet and technological devices. Developing local capacities and training staff to use new technologies become key steps toward successful implementation (Godovykh *et al.*, 2023). Workers must be trained to work with new technologies, as well as to interact with visitors in a way that enhances their experience. Investing in training and education can significantly improve service quality and visitor satisfaction, as well as contribute to the overall well-being of locals in the long term (Godovykh and Ridderstaat, 2020). Involving local residents in creating content to be displayed through AI technologies has proven to be a significant factor in reducing locals' animosity toward innovation. It is also important to emphasize the significance of continuously collecting feedback from visitors after using immersive experiences, as this can help identify areas for improvement and adjust offerings. Although immersive spaces offer significant advantages in tourism, the challenges in their implementation are real and require careful planning and strategies to overcome. Partnerships with technology companies and the development of local capacities represent key steps in addressing these obstacles.

CONCLUSION

Immersive spaces, through the application of technologies such as virtual and augmented reality, represent a significant shift in how tourists experience destinations. In a world where travelers increasingly seek personalized and unforgettable experiences, immersive spaces offer innovative solutions that can meet these demands. Based on the analysis of literature and best practice examples, we can conclude that these technologies are crucial for the future of the tourism industry.



Through interactive elements, tourists can explore and learn in ways that exceed traditional methods. AI systems are increasingly becoming a core part of digital systems, significantly influencing how people make decisions (Duan *et al.*, 2019). These spaces not only enhance traveler satisfaction but also encourage repeat visits and positive recommendations. Consumer data analysis enables the creation of customized itineraries, contributing to increased user satisfaction and loyalty. In addition to enriching visitor experiences, immersive spaces play a key role in differentiating tourist destinations in a crowded market. Through innovative technologies, destinations can offer unique attractions that appeal to a broader audience and stimulate a higher number of visits. These technological solutions help create more efficient and satisfying user experiences, which are critical for long-term competitiveness in the market.

Moreover, building communities around immersive experiences and encouraging information exchange among users further strengthens the connections between service providers and users. Organizing workshops and events plays an important role in building long-term brand support, ensuring continuous growth and development of the destination. The implementation of immersive technologies also opens doors to new opportunities in exploration and education. For instance, virtual tours and AR applications can provide deeper insights into the cultural and historical aspects of destinations, promoting greater understanding and respect for local culture. This is especially important in the context of sustainable tourism, where the goal is not only to attract visitors but also to preserve and promote local heritage (Jung and tom Dieck, 2017).

Immersive spaces represent an important advancement for the tourism industry, enabling destinations to adapt to modern traveler expectations. Through careful implementation and continuous evaluation of visitor experiences, these technologies can significantly enhance the tourism offering and contribute to sustainable development. Investing in infrastructure and staff training, as well as involving the local population, can greatly improve service quality and support the sustainable development of tourism. In this way, immersive spaces have the potential to redefine tourism offerings, creating unique and unforgettable adventures for visitors while simultaneously contributing to the economic development of local communities.

REFERENCES

- Duan, Y., Edwards, J. S., & Dwivedi, Y. K. (2019). Artificial intelligence for decision making in the era of Big Data: Evolution, challenges, and research agenda. *International Journal of Information Management*, 48, 63-71. DOI: 10.1016/j.ijinfomgt.2019.01.021
- Fan, X., Jiang, X., & Deng, N. (2022). Immersive technology: A meta-analysis of augmented/virtual reality applications and their impact on tourism experience. *Tourism Management*, 91, 104534. DOI: 10.1016/j.tourman.2022.104534
- Flavián, C., Ibáñez-Sánchez, S., & Orús, C. (2019). The impact of virtual, augmented and mixed reality technologies on the customer experience. *Journal of Business Research*, 100, 547-560. DOI: 10.1016/j.jbusres.2018.10.050
- Godovykh, M., & Ridderstaat, J. (2020). Health outcomes of tourism development: A longitudinal study of the impact of tourism arrivals on residents' health. *Journal of Destination Marketing & Management*, 17, 100462. DOI: 10.1016/j.jdmm.2020.100462
- Godovykh, M., Ridderstaat, J., & Fyall, A. (2023). The well-being impacts of tourism: Long-term and short-term effects of tourism development on residents' happiness. *Tourism Economics*, 29(1), 137-156. DOI: 10.1177/13548166211041227
- Guttentag, D. (2010). Virtual reality: Applications and implications for tourism. *Tourism Management*, 31(6), 637-651. DOI: 10.1016/j.tourman.2009.07.003
- Huang, T. L., & Liao, S. (2015). A model of acceptance of augmented-reality interactive technology: The moderating role of cognitive innovativeness. *Electronic Commerce Research*, 15(2), 269-295. DOI: 10.1007/s10660-014-9163-2
- Ionescu, A.-M., & Sârbu, F. (2024). Exploring the impact of smart technologies on the tourism industry. *Sustainability*, 16, 3318. DOI: 10.3390/su16083318
- Jung, T.H., & tom Dieck, M.C. (2017). Augmented reality, virtual reality and 3D printing for the co-creation of value for the visitor experience at cultural heritage places. *Journal of Place Management and Development*, 10(2), 140-151. DOI: /10.1108/JPM-D-07-2016-0045



- Kang, H. (2020). Impact of VR on impulsive desire for a destination. *Journal of Hospitality and Tourism Management*, 42, 244-255. DOI: 10.1016/j.jhtm.2020.02.003
- Lampropoulos, G. (2023). Augmented reality and artificial intelligence in education: Toward immersive intelligent tutoring systems. In V. Geroimenko (Ed.), *Augmented reality and artificial intelligence* (pp. 137-146). *Springer Series on Cultural Computing*. Springer. https://doi.org/10.1007/978-3-031-27166-3_8
- Milgram, P., & Kishino, F. (1994). A taxonomy of mixed reality visual displays. *IEICE Transactions on Information Systems*, E77-D(12), 1321-1329.
- Rateb, D., Hosny, H., Haikal, F., & Azab, N. (2020). Using immersive virtual reality in ancient Egypt's Giza plateau. In *ICT for an inclusive world* (pp. 509-525). Springer. DOI: 10.1007/978-3-030-34269-2_35
- Sasaki, R., & Yamamoto, K. (2019). A sightseeing support system using augmented reality and pictograms within urban tourist areas in Japan. *ISPRS International Journal of Geo-Information*, 8(9), 381. DOI: 10.3390/ijgi8090381
- Scagliarini, D., Coralini, A., Vecchietti, E., Cinotti, T. S., Roffia, L., Galasso, S., ... & Sforza, F. (2001, November). Exciting understanding in Pompeii through on-site parallel interaction with dual time virtual models. In *Proceedings of the 2001 Conference on Virtual reality, archeology, and cultural heritage* (pp. 83-90). DOI: 10.1145/584993.585007
- Shehade, M., & Stylianou-Lambert, T. (2020). Virtual reality in museums: Exploring the experiences of museum professionals. *Applied Sciences*, 10(11), 4031. DOI: 10.3390/app10114031
- Sousa, N., Alén, E., Losada, N., & Melo, M. (2024). Breaking barriers: Unveiling challenges of introducing virtual reality for managers in the tourism industry. *Tourism and Hospitality Management*, 30(2), 269-282. DOI: 10.20867/thm.30.2.10
- Sustacha, I., Baños-Pino, J. F., & Del Valle, E. (2023). The role of technology in enhancing the tourism experience in smart destinations: A meta-analysis. *Journal of Destination Marketing & Management*, 30, 100817. DOI: 10.1016/j.jdmm.2023.100817
- Yoon, Y., & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. *Tourism Management*, 26(1), 45-56. DOI: 10.1016/j.tourman.2003.08.016
- Youssef, F., Gamal, A., & Ibrahim, H. (2023). Virtual reconstruction of heritage sites in Luxor through augmented reality technology. *Revista Internacional de Turismo, Empresa y Territorio*, 7(2), 106-131. DOI: 10.21071/riturem.v7i2.16258
- Zeng, G., Cao, X., Lin, Z., & Xiao, S. H. (2020). When online reviews meet virtual reality: Effects on consumer hotel booking. *Annals of Tourism Research*, 81, 102860. DOI: 10.1016/j.annals.2020.102860
- Zhang, Y. (2020). Promoting user experience with gamified AR travel guide system for city tourism (Doctoral dissertation, Waseda University).



INVESTIGATION OF PERCEIVED RISKS IN HOLIDAY PURCHASES FROM WEB-BASED TRAVEL INTERMEDIARIES ACCORDING TO DEMOGRAPHIC CHARACTERISTICS

Emre Ozan AKSÖZ*,
Furkan HAFİF

Anadolu University,
Eskişehir, Turkey

Abstract:

The primary objective of this research is to identify the risks perceived by tourists when purchasing holidays through web-based travel agencies, as well as the strategies they use to mitigate these risks. The study's data were collected from domestic tourists residing in Eskişehir who had previously purchased a holiday. A total of 406 valid responses were obtained through face-to-face questionnaires. The findings revealed that the most prominent risk dimensions perceived by tourists are performance risk, security risk, and financial risk. Tourists who purchased holidays from travel agency sales offices, as well as females, single individuals, and those in the 18–25 and 50+ age groups, were found to perceive higher levels of risk compared to others. Based on the results, the study provides recommendations for industry practitioners and suggestions for future research.

Keywords:

perceived risk, E-holiday purchases, Web-based travel agencies.

INTRODUCTION

With the advancement of information technologies and the widespread use of the internet, consumer purchasing behavior has shifted significantly from traditional to online channels. The internet, which facilitates both information acquisition and the purchase of goods and services, has become a critical factor influencing the tourism and travel industry. Today, many tourists gather information online before purchasing tourism products, benefit from shared experiences, examine travel suggestions, make comparisons, and ultimately complete their purchases. In this context, web-based travel intermediaries have emerged as vital platforms for both tourists and businesses. Web-based travel intermediaries are defined as platforms that enable tourists to access information and make reservations for services such as accommodation, flight tickets, and car rentals via the internet (Ku and Fan, 2009). Examples of such intermediaries include tatil.com, tatilsepeti.com, tripadvisor.com, booking.com, etstur.com, and jollytur.com. The numerous advantages offered by online shopping have contributed to a growing number of tourists opting for web-based travel intermediaries for holiday and travel reservations (Chen and Kao, 2010).

Correspondence:
Emre Ozan AKSÖZ

e-mail:
ozana@anadolu.edu.tr



However, despite this growth, many tourists continue to avoid using web-based travel intermediaries due to perceived risks. In this context, the primary aim of this study is to identify the risks perceived by tourists when purchasing holidays through web-based travel intermediaries and to examine the strategies used to mitigate these risks.

PERCEIVED RISK

Perceived Risk in Consumer Behavior

The Turkish Language Association (2018) defines the concept of risk as “the danger of suffering harm or loss.” Perceived risk was first introduced into the field of marketing within the scope of consumer behavior as risk-taking behavior by Bauer (as cited in Taylor, 1974: 54). Bauer (as cited in Ross, 1975) argued that consumer behavior inherently involves risk due to the possibility of encountering negative outcomes during purchasing activities. According to Cox and Rich (1964: 33), the foundation of the concept of perceived risk lies in the consumer’s intention to make a purchase. Consumers perceive risk in situations where they are uncertain about whether their purchasing goals will be achieved (Cox and Rich, 1964: 33; Cunningham, 1967: 84).

Since the purpose of this study is to examine perceived risks in online holiday purchases, six risk dimensions commonly regarded as fundamental in this context are briefly defined below.

- Performance Risk: Concerns related to the functionality and reliability of the internet as a communication channel (Hassan, Kunz, Pearson, and Mohamed, 2006: 140).
- Financial Risk: The potential for monetary loss associated with purchasing a product (Jarvenpaa and Todd, 1997: 64).
- Physical Risk: The possibility of harm to the consumer’s health due to the product being unsafe (Jacoby and Kaplan, 1972; Roselius, 1971; Ueltschy *et al.*, 2004).
- Psychological Risk: Anxiety or mental stress experienced by consumers as a result of their purchasing decisions (Lim, 2003: 219).
- Security Risk: The risk of unauthorized access to and loss of control over personal and financial information (Featherman and Pavlou, 2003: 455).
- Time Risk: Concerns about wasting time on poor purchasing decisions, learning how to use a product, or managing product returns and exchanges (Featherman and Pavlou, 2003: 455).

Studies on Perceived Risks in Online Purchases of Tourism Products

Research on security and privacy risks in online shopping demonstrates that consumers perceive a high level of risk regarding the theft of personal and credit card information (Cases, 2002; Caudill and Murphy, 2000; Eti İçli, 2002; Jarvenpaa, Liebermann, and Stashevsky, 2002; Mamman, Maidawa, and Saleh, 2015; Masoud, 2013; Mathur, 2015; Saydan, 2008; Todd, 1997; Ueltschy *et al.*, 2004). Similarly, consumers exhibit significant concerns about security when purchasing tourism products online. Law and Leung (2000) found that the primary concern among individuals who avoid purchasing airline tickets online is credit card security. Other studies also highlight consumer apprehension about sharing personal and financial information (Kim and Kim, 2004; Kolsaker *et al.*, 2004).

It has been reported that consumers perceive risks at every stage of the purchase decision-making process for airline reservation services (Cunningham, Gerlach, and Harper, 2004: 31; Cunningham *et al.*, 2005: 357). According to Cunningham *et al.* (2004: 21), perceived risks increase rapidly as the purchasing stage approaches, whether in traditional or online airline reservations.

High perceived risks in online shopping are said to negatively influence purchasing intentions (Ariff, Sylvester, Zakuan, Ismail, and Ali, 2014). Numerous studies have also examined the impact of perceived risks on purchasing intentions for online tourism products (Agag and El-Masry, 2017; Amaro, 2014; Bigne, Sanz, Ruiz, and Aldas, 2010; Jensen, 2012; Kaş, 2015; Kim *et al.*, 2005; Lin *et al.*, 2009; Sahli, 2015). For instance, Kim *et al.* (2005: 48) identified performance, financial, time, psychological, security, and social risks as negatively affecting the intention to purchase airline tickets online. Similarly, Bigne *et al.* (2010: 216) found that psychological, performance, and privacy risks adversely influence the intention to purchase airline tickets online.



Kaş (2015) investigated the impact of perceived risks on the adoption of online reservation technologies among domestic and international tourists. The findings revealed that perceived risks among Russian and Turkish tourists were significant in determining the acceptance of online reservation technologies. However, this effect was not observed among citizens of European Union countries. A related study concluded that perceived risks in online reservation technologies negatively affect key variables of the Technology Acceptance Model (Özbek *et al.*, 2015: 239).

Bertea and Moisescu (2011) argued that perceived risk types are independent of pricing levels and are instead influenced by the brand awareness of online travel agencies. According to Moisescu and Bertea (2013), low-price positioning strategies combined with high brand awareness in online travel agencies contribute to elevated perceived risks among potential consumers. Conversely, Mohseni *et al.* (2018: 636) demonstrated that well-known brands reduce perceived risks and increase purchasing intentions.

Yang (2013) explored the effects of positive and negative online reviews on perceived risks in online hotel reservations. The study found that positive customer reviews reduce perceived risks, while negative reviews amplify these risks and decrease purchasing intentions.

METHODOLOGY

Population and Sample

The population of this study consists of individuals residing in the city of Eskişehir. The sample includes individuals aged 18 and above, living in the densely populated districts of Tepebaşı and Odunpazarı in Eskişehir, who had previously purchased a holiday in 2023. These districts were chosen because they house a significant portion of Eskişehir's population. According to Krejcie and Morgan (1970: 608), a sample size of 384 is sufficient for a population of one million, assuming 95% confidence and population homogeneity. A non-random sampling method was employed in this study. Non-random sampling is suitable when the probability of selecting individuals from the population is unknown, and resources are limited (Gegez, 2015: 266). Given the constraints of time and cost, the convenience sampling method was selected as the most appropriate non-random sampling approach.

Data Collection Tool

In this study, a questionnaire was employed as the primary data collection tool. The first section of the questionnaire comprises 22 statements designed to identify the risks perceived by tourists when purchasing services from web-based travel intermediaries. These statements were adapted from the studies of Hassan, Kunz, Pearson, and Mohamed (2006), Kim, Qu, and Kim (2009), and Syed and Norjaya (2010). The second section includes 13 features that web-based travel intermediaries should possess, based on the study by Law and Wong (2003). All items were measured using a 5-point Likert scale. The third section contains 11 questions related to participants' travel behavior and demographic characteristics.

To assess the face validity of the questionnaire, the opinions of ten experts were obtained in April 2018. Based on their feedback, incomplete or unnecessary statements were revised. A pilot study involving 39 participants from the target sample was conducted to evaluate reliability, yielding a Cronbach's Alpha coefficient of 0.829. A Cronbach's Alpha value between 0.80 and 1.00 indicates high reliability (Kozak, 2015: 146).

Data collection took place from April 20 to June 2, 2023, between 13:00 and 17:00. The researcher conducted face-to-face surveys with individuals who were accessible and voluntarily participated in densely populated areas of the Tepebaşı and Odunpazarı districts. Of the 420 distributed questionnaires, 406 were deemed valid, as 14 were incomplete or improperly filled. Data were analyzed using SPSS 24, employing frequency analysis, factor analysis, t-tests, and ANOVA tests.



FINDINGS

Findings

The findings related to the demographic characteristics of the participants are presented in Table 1. of the participants, 55.9% (227 individuals) are male, and 59.1% (240 individuals) are married. Among the individuals who responded to the survey, 33.5% (136 individuals) fall within the age range of 26-33, followed by 26.8% (109 individuals) in the 18-25 age group.

Table 1. Findings related to the demographic characteristics of the participants

Demographic Characteristics		Frequency (n)	Percentage (%)
Gender	Male	227	55,9
	Female	179	44,1
Marital Status	Married	240	59,1
	Single	166	40,9
Age	18-25	109	26,8
	26-33	136	33,5
	34-41	98	24,1
	42-49	42	10,3
	50 and above	21	5,2
Educational Level	Primary School	2	0,5
	Middle School	5	1,2
	High School	51	12,6
	University	272	67
	Postgraduate	76	18,7
Household Monthly Income	17003 TL and below	28	6,9
	17004-23000 TL	74	18,2
	23001-30000 TL	110	27,1
	30001-40000 TL	95	23,4
	40001 TL and above	99	24,4
Occupation	Private Sector	170	41,9
	Public Sector	131	32,3
	Retired	9	2,2
	Self-Employed	15	3,7
	Student	58	14,3
	Unemployed	23	5,7
n	Total	406	100

According to Table 1, the majority of individuals in the sample (67%, 272 participants) are university graduates. Additionally, 27.1% (110 participants) have an income of 3,001–4,500 TL. Furthermore, 41.9% (170 participants) work in the private sector, while 32.3% (131 participants) are employed in the public sector. The findings related to the travel behavior of the respondents are presented in Table 2.



Table 2. Findings related to participants' travel behavior

	Travel Behaviors	Frequency (n)	Percentage (%)
Most Frequently Purchased Type of Vacation	Sea-Sand-Sun	282	69,5
	Cultural Tourism	91	22,4
	Health and Thermal Tourism	3	0,7
	Winter Tourism	4	1
	Highland Tourism	25	6,2
	Other	1	0,2
Most Preferred Vacation Purchase Channel	Travel Agency Sales Office	169	41,6
	Online Travel Agency	220	54,2
	Other	17	4,2
Average Number of Vacations Purchased per Year	1 time	238	58,6
	2 times	119	29,3
	3 times	40	9,9
	4 times	4	1
	5 times and above	5	1,2
Travel Companions	Alone	11	2,7
	With my spouse	62	15,3
	With my children	4	1
	With my spouse and children	179	44,1
	With my parents	38	9,4
	With my friends	108	26,6
	Other	4	1
Internet Usage Level	Beginner User	19	4,7
	Intermediate User	252	62,1
	Expert User	135	33,3
	Total	406	100

The majority of participants (69.5%, 282 individuals) prefer sea-sand-sun vacations (Table 2). Furthermore, 54.2% of individuals (220 participants) purchase their vacations through online travel agencies. Among the individuals participating in the study, 58.6% (238 individuals) purchase vacations on average once a year, while 44.1% (179 individuals) travel with their spouse and children. Additionally, 62.1% of participants (252 individuals) identify themselves as intermediate internet users.

In research, the application of parametric tests requires that data be normally distributed, that groups have the same variance, and that participant responses are independent of each other (Yazıcıoğlu and Erdoğan, 2014: 246). To demonstrate normal distribution, skewness and kurtosis values must fall within the commonly accepted range of -2 to +2 (George and Mallery, 2003: 98; Kunnan, 1998: 312). The skewness and kurtosis values of the variables in the perceived risk scale used in this study are within the -2 to +2 range. In other words, the data to be analyzed in this research exhibit normal distribution.

Factor analysis is a method that reduces a large number of independent variables by correlating those that are closely related into a specific number of groups (Kozak, 2015: 150). In this study, exploratory factor analysis was conducted to determine which factors the statements regarding perceived risks in online vacation purchases would fall under and to test the structural validity of the scale. Principal Component Analysis was preferred for identifying these factor dimensions.

As shown in Table 3, the factor analysis resulted in a structure consisting of 22 statements and six dimensions: performance risk, security risk, time risk, financial risk, psychological risk, and physical risk.



Table 3. Factor analysis, mean and standard deviation values

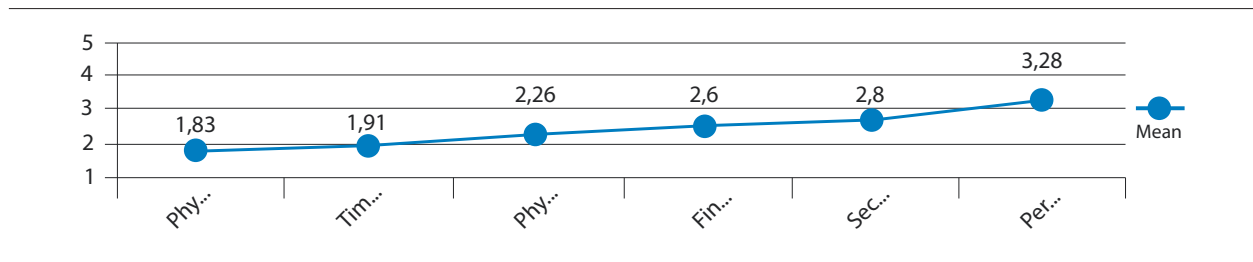
Factors And Items	Factor Loadings						M.	S.S
	1	2	3	4	5	6		
Performance Risk								
I worry that it may not meet my expectations.	,848						3,39	1,25
I am concerned that it will not deliver the promised services.	,900						3,39	1,14
I fear that it will not provide the benefits I expect.	,863						3,32	1,14
When I think about potential issues related to performance ...,	,594						3,05	1,28
Security Risk								
I think sharing personal information is safe.		,737					2,75	1,31
I think the website's security features are sufficient.		,806					2,83	1,23
I believe my privacy rights are protected.		,859					2,86	1,28
I think sharing credit card information is secure.		,809					2,85	1,31
I believe my personal information won't be shared with others		,643					2,74	1,40
Time Risk								
I worry that purchasing holiday online will take too much time.			,778				1,87	1,14
I worry that purchasing a holiday online will lead to inefficient use of my time.			,843				1,83	1,10
I worry that holiday purchase plans will create more time pressure than necessary.			,787				2,04	1,21
Financial Risk								
I think my financial expenditure on an online holiday purchase will be unwise.				,739			2,17	1,21
I worry that the money I spend on an online holiday purchase won't be worth it.				,647			2,80	1,22
I think purchasing a holiday online is not a good method.				,677			2,54	1,30
I worry that I won't get value for the money I spend on an online holiday purchase.				,585			2,92	1,21
Psychological Risk								
The idea of purchasing a holiday online makes me anxious.					,766		2,53	1,33
The idea of purchasing a holiday online makes me feel psychologically uncomfortable.					,750		2,11	1,25
The idea of purchasing a holiday online makes me feel tense.					,721		2,14	1,28
Physical Risk								
I worry about eye strain from looking at a screen when purchasing a holiday.						,727	1,85	1,24
I worry that my computer/phone will get a virus while purchasing a holiday.						,743	2,05	1,27
I worry about getting Carpal Tunnel Syndrome while purchasing a holiday online						,739	1,60	1,04
Cronbach Alpha Values	,86	,83	,83	,73	,87	,67		
Total Cronbach Alpha Value	,80							
Eigenvalue	3,20	3,12	2,53	2,18	2,15	1,89		
Explained Variance (%)	14,5	14,2	11,5	9,9	9,7	8,6		
Explained Total Variance (%)	68,4							



In the field of social sciences, it is accepted that explaining a total variance value between 40% and 60% is sufficient (Tavşancıl, 2006: 48). This scale, comprising six factors, explains 68.4% of the total variance. In this context, it can be seen that the total variance value is adequate. The dimension of “performance risk” accounts for 14.5% of the explained total variance, “security risk” accounts for 14.2%, “time risk” accounts for 11.5%, “financial risk” accounts for 9.9%, “psychological risk” accounts for 9.7%, and “physical risk” accounts for 8.6%.

The Cronbach’s Alpha values for the dimensions of perceived risk range from 0.86 to 0.67. The overall reliability coefficient of the scale is calculated to be 0.80, indicating that the scale used in the research possesses a high level of reliability. The statements to which tourists most commonly relate regarding perceived risks in online vacation purchases are as follows: 1. (3.39), 2. (3.39), and 3. (3.32). These statements are part of the performance risk dimension. Conversely, the statements with the least participation from tourists are 22. (1.60), 11. (1.83), and 20. (1.85), which fall under the dimensions of time risk and physical risk.

Figure 1. Averages Related to Perceived Risk Dimensions in Online Vacation Purchases



When examining Figure 1, it is observed that the tourists participating in the study perceive performance risk as the highest and physical risk as the lowest when purchasing vacations online. As seen in Table 4, according to the participants, the most essential features a web-based travel agency should possess are ranked as follows: 1st (4.91), 2nd (4.88), and 3rd (4.86). The statements with the least agreement from individuals were ranked as 13th (3.47), 12th (4.56), and 11th (4.65).

Table 4. Essential Features that Web-Based Travel Agencies Should Possess

Features	M.	S.D.
1.Comprehensive information on destinations/hotels	4,91	0,37
2.Privacy policies regarding the protection of personal data	4,88	0,50
3.Provision of quick information search options	4,86	0,47
4.Availability of online reservation and confirmation options	4,84	0,55
5.User-friendly system	4,83	0,50
6. Help functions available	4,81	0,58
7. Provision of real-time availability of products/services	4,81	0,54
8. Diversity in pricing options for products/services	4,80	0,58
9. Presence of secure payment method symbols	4,79	0,67
10. Availability of virtual tours and video files of the destination/hotel	4,71	0,70
11. Relevant virtual links provided	4,65	0,69
12. Appropriate presentation style of the website	4,56	0,78
13. Specifically designed for domestic tourists	3,47	1,46



Table 5. T-test results for the comparison of perceived risk dimensions in online vacation purchases based on gender

Factors	Gender	n	M	S.D.	Levene	t	p
Factor 1: Performance Risk	Male	227	3,06	1,04	,003	-5,223	,000*
	Female	179	3,57	0,91			
Factor 2: Security Risk	Male	227	2,83	1,00	,189	0,564	,573
	Female	179	2,77	1,04			
Factor 3: Time Risk	Male	227	1,85	0,96	,418	-1,441	,150
	Female	179	2,00	1,04			
Factor 4: Financial Risk	Male	227	2,46	0,90	,859	-3,849	,000*
	Female	179	2,81	0,91			
Factor 5: Psychological Risk	Male	227	2,12	1,14	,960	-2,719	,007*
	Female	179	2,43	1,15			
Factor 6: Physical Risk	Male	227	1,72	0,88	,263	-2,667	,008*
	Female	179	1,97	0,96			

When Table 5 is examined, it is observed that there is a significant difference between participants' gender and the dimensions of performance risk, financial risk, psychological risk, and physical risk ($p < 0.05$). An analysis of the averages reveals that women perceive higher levels of performance risk, financial risk, psychological risk, and physical risk compared to men.

Table 6. T-test results for the comparison of perceived risk dimensions in online vacation purchases based on marital status

Factors	Marital Status	n	M	S.D.	Levene	t	p
Factor 1: Performance Risk	Married	240	3,18	1,08	,000	-2,643	,009*
	Single	160	3,44	0,91			
Factor 2: Security Risk	Married	240	2,82	1,03	,874	0,359	,720
	Single	160	2,78	1,00			
Factor 3: Time Risk	Married	240	1,84	1,00	,813	-1,893	,059
	Single	160	2,03	0,99			
Factor 4: Financial Risk	Married	240	2,54	0,97	,039	-1,795	,073
	Single	160	2,71	0,84			
Factor 5: Psychological Risk	Married	240	2,15	1,17	,612	-2,338	0,020*
	Single	160	2,42	1,12			
Factor 6: Physical Risk	Married	240	1,80	0,92	,553	-0,780	,436
	Single	160	1,88	0,93			

As observed in Table 6, there is a significant difference between participants' marital status and the dimensions of performance risk and psychological risk ($p < 0.05$). When examining the averages, it is evident that single participants perceive a higher level of risk for both risk dimensions.



Table 7. ANOVA Test Results for the Comparison of Perceived Risk Dimensions in Online Vacation Purchases Based on Age Groups

Factors	Age	n	M	S.D.	F	p	Post-Hoc
Factor 1: Performance Risk	18-25 (1)	109	3,55	0,84	2-1	,000*	2-1 3-1 2-5 3-5
	26-33 (2)	136	3,06	1,05			
	34-41 (3)	98	3,09	1,05			
	42-49 (4)	42	3,43	1,08			
	50 and above (5)	21	3,95	0,76			
Factor 2: Security Risk	18-25 (1)	109	2,81	0,97	5,013	,001*	1-5 2-5 3-5 4-5
	26-33 (2)	136	2,83	1,05			
	34-41 (3)	98	2,98	1,02			
	42-49 (4)	42	2,74	0,92			
	50 and above (5)	21	1,91	0,78			
Factor 3: Time Risk	18-25 (1)	109	2,01	0,87	0,848	,496	-
	26-33 (2)	136	1,80	0,97			
	34-41 (3)	98	1,91	1,11			
	42-49 (4)	42	2,00	1,12			
	50 and above (5)	21	2,04	0,97			
Factor 4: Financial Risk	18-25 (1)	109	2,81	0,77	5,963	,000*	1-2 1-3 2-5 3-5
	26-33 (2)	136	2,43	0,92			
	34-41 (3)	98	2,45	0,97			
	42-49 (4)	42	2,72	0,99			
	50 and above (5)	21	3,23	0,78			
Factor 5: Psychological Risk	18-25 (1)	109	2,47	1,05	7,297	,000*	1-2 2-5 3-5
	26-33 (2)	136	1,91	1,06			
	34-41 (3)	98	2,25	1,22			
	42-49 (4)	42	2,41	1,21			
	50 and above (5)	21	3,11	1,18			
Factor 6: Physical Risk	18-25 (1)	109	1,85	0,94	1,022	,396	-
	26-33 (2)	136	1,85	0,94			
	34-41 (3)	98	1,71	0,84			
	42-49 (4)	42	1,92	1,00			
	50 and above (5)	21	2,11	0,92			

When examining Table 7, it is evident that participants' perceptions of performance risk, security risk, financial risk, and psychological risk vary by age ($p < 0.05$). According to the analysis results, participants in the age groups of 18-25 and 50 and above perceive higher levels of performance risk, financial risk, and psychological risk compared to those in the 26-33 and 34-41 age groups. Additionally, participants aged 50 and above perceive a greater level of security risk compared to other participants.



Table 8. The Comparison of Perceived Risk Dimensions in Online Vacation Purchases Based on Vacation Purchase Channels

Factors	Most Preferred Vacation Purchase Channel	n	M	S.D.	F	p	Post-Hoc
Factor 1: Performance Risk	Travel Agency Sales Office (1)	169	3,61	0,93	19,964	,000*	1-2 3-2
	Online Travel Agency (2)	220	3,00	1,00			
	Other (3)	17	3,66	0,97			
Factor 2: Security Risk	Travel Agency Sales Office (1)	169	2,55	1,02	9,689	,000*	1-2
	Online Travel Agency (2)	220	2,99	0,97			
	Other (3)	17	2,94	1,05			
Factor 3: Time Risk	Travel Agency Sales Office (1)	169	2,19	1,12	14,905	,000*	1-2
	Online Travel Agency (2)	220	1,68	0,81			
	Other (3)	17	2,31	1,17			
Factor 4: Financial Risk	Travel Agency Sales Office (1)	169	2,98	0,87	32,079	,000*	1-2 3-2
	Online Travel Agency (2)	220	2,30	0,84			
	Other (3)	17	2,98	0,82			
Factor 5: Psychological Risk	Travel Agency Sales Office (1)	169	2,72	1,13	35,402	,000*	1-2 3-2
	Online Travel Agency (2)	220	1,85	1,00			
	Other (3)	17	2,96	1,20			
Factor 6: Physical Risk	Travel Agency Sales Office (1)	169	1,99	0,99	4,503	,019*	1-2
	Online Travel Agency (2)	220	1,71	0,83			
	Other (3)	17	1,84	1,14			

According to the analysis results (Table 8), participants who purchased vacations from travel agency sales offices perceive higher levels of performance risk, time risk, financial risk, psychological risk, and physical risk compared to those using other purchase channels. Another noteworthy finding is that participants who prefer web-based travel agencies perceive a greater level of security risk associated with online vacation purchases.

CONCLUSION AND RECOMMENDATIONS

As a result of the factor analysis, a structure consisting of 22 statements and six dimensions was identified. Based on the averages of the factors, the risk dimensions most perceived by tourists are ranked as follows: performance risk, security risk, and financial risk. These results are consistent with findings from several studies on prominent perceived risk dimensions (Bertea and Moiescu, 2011; Bigne *et al.*, 2010; Cunningham *et al.*, 2005; Kim *et al.*, 2005; Kim *et al.*, 2009; Park and Tussyadiah, 2017).

The averages concerning the features of web-based travel agencies that aim to reduce perceived risks in online vacation purchases were also examined. The analysis results indicate that the functionality and reliability of web-based travel agencies are significant factors in mitigating perceived risks.

The research findings show that female tourists perceive higher levels of risk compared to males. This may be due to women being more emotionally sensitive, paying greater attention to details, and potentially being more anxious about online vacation purchases based on previous experiences.

Considering that many individuals in the 18-25 age group may be students, recent graduates, or early in their careers, it can be inferred that their economic status is likely low to moderate. They may have less online purchasing experience due to their financial situation, or they may perceive higher levels of risk because of previous online purchasing experiences. Additionally, the increased perception of risk among tourists aged 50 and above may be related to their later adoption of the internet and online shopping.



The research also found that single individuals perceive higher levels of performance and psychological risk compared to their married counterparts. These findings are consistent with those in the study by Kim *et al.* (2009). It can be posited that married individuals, due to family responsibilities, tend to seek more detailed and extensive information when purchasing vacations online. They are more likely to use websites they trust and have greater online vacation purchasing experience. Additionally, single tourists may display a higher level of interest, which could contribute to their perception of higher risk.

For tourists purchasing vacations from travel agency sales offices, factors such as face-to-face communication with sales representatives, receiving recommendations, and knowing who to contact in case of issues, along with increased awareness of online vacation purchases, may be significant. It is recommended that web-based travel agencies provide up-to-date and detailed information about tourism products, incorporate symbols or notifications that highlight privacy policies, and use filtering and guiding elements. However, while presenting detailed information, it is essential to avoid unnecessary or overwhelming content. Enhancing the presence of written and visual elements (such as photos, videos, virtual tours, etc.) related to tourism products could also be beneficial. Classifying tourism products based on age groups (e.g., hotels preferred by younger or older demographics) could be effective as well.

Future research could yield different results by examining domestic and foreign tourists across various provinces and regions. Additionally, conducting qualitative research with managers of web-based travel agencies or investigating consumer behaviors such as showrooming and webrooming could provide further insights.

REFERENCES

- Agag, G. M. & El-Masry, A. A. (2017). Why do consumers trust online travel websites? Drivers and outcomes of consumer trust toward online travel websites. *Journal of Travel Research*, 56(3), pp. 347-369.
- Amaro, S. (2014). Determinants of intentions to purchase travel online: A holistic approach. *Yayımlanmamış Doktora Tezi*. University of Aveiro, Portugal.
- Ariff, M.S.M., Sylvester, M., Zakuan, N., Ismail, K. & Ali, K.M. (2014). Consumer perceived risk, attitude and online shopping behaviour; Empirical evidence from Malaysia. *IOP Conference Series: Materials Science and Engineering*, 58 (1), pp. 1-10.
- Bertea, P.E. & Moisescu, O. I. (2011). Perceived risk, price and online travel agencies: does price always matter? *Management & Marketing Journal*, 9 (1), pp. 32,42.
- Bigné, E., Sanz, S., Ruiz, C. & Aldás, J. (2010). Why some internet users don't buy air tickets online. In *Information and Communication Technologies in Tourism*, pp. 209-221.
- Cases, A.S. (2002). Perceived risk and risk-reduction strategies in internet shopping. *The International Review of Retail, Distribution and Consumer Research*, 12 (4), pp. 375-394.
- Caudill, E.M. & Murphy, P.E. (2000). Consumer online privacy: Legal and ethical issues. *Journal of Public Policy & Marketing*, 19 (1), pp. 7-19.
- Chen, R. & He, F. (2003). Examination of brand knowledge, perceived risk and consumers' intention to adopt an online retailer. *Total Quality Management & Business Excellence*, 14 (6), pp. 677-693.
- Cox, D.F. & Rich, S.U. (1964). Perceived risk and consumer decision-making: The case of telephone shopping. *Journal of Marketing Research*, 1 (4), pp. 32-39.
- Cunningham, L.F., Gerlach, J. & Harper, M.D. (2004). Assessing perceived risk of consumers in Internet airline reservations services. *Journal of Air Transportation*, 9 (1), pp. 21-35.
- Cunningham, L.F., Gerlach, J. & Harper, M.D. (2005). Perceived risk and e-banking services: An analysis from the perspective of the consumer. *Journal of Financial Services Marketing*, 10 (2), pp. 165-178.
- Derbaix, C. (1983). Perceived risk and risk relievers: An empirical investigation' *Journal of Economic Psychology*, 3 (1), pp. 19-38.
- Featherman, M.S. & Pavlou, P.A. (2003). Predicting e-services adoption: a perceived risk facets perspective. *International Journal of Human-Computer Studies*, 59 (4), pp. 451-474.
- Forsythe, S.M. & Shi, B. (2003). Consumer patronage and risk perceptions in Internet shopping. *Journal of Business Research*, 56 (11), pp. 867-875.
- Forsythe, S., Liu, C., Shannon, D. & Gardner, L.C. (2006). Development of a scale to measure the perceived benefits and risks of online shopping. *Journal of Interactive Marketing*, 20 (2), pp. 55-75.



- Gegez, A.E. (2015). Pazarlama Araştırmaları. 5. Baskı, İstanbul: Beta Yayınları.
- George, D. & Mallery, P. (2003). *SPSS for windows step by step: A simple guide and reference*, 4. Edition, Boston: Allyn and Bacon.
- Hassan, A.M., Kunz, M.B., Pearson, A.W. & Mohamed, F.A. (2006). Conceptualization and measurement of perceived risk in online shopping. *Marketing Management Journal*, 16 (1), pp. 138-147.
- Jacoby, J. & Kaplan, L.B. (1972). The components of perceived risk. *Association for Consumer Research*, 3 (3), pp. 382-393.
- Jarvenpaa, S.L. & Todd, P.A. (1997). Consumer reactions to electronic shopping on the World Wide Web. *International Journal of Electronic Commerce*. 1 (2), pp. 59-88.
- Jensen, J.M. (2012). Shopping orientation and online travel shopping: the role of travel experience. *International Journal of Tourism Research*. 14 (1), pp. 56-70.
- Karabulut, A.N. (2013). Tüketicilerin algılanan risk değişkeni karşısında internetten alışveriş yapma eğilimlerinin ölçülmesi: Beklenen fayda teorisine karşı beklenti teorisi. *Journal of Yaşar University*. 8 (32), pp. 5515-5536.
- Kim, W.G. & Kim, D.J. (2004). Factors affecting online hotel reservation intention between online and non-online customers. *International Journal of Hospitality Management*. 23 (4), pp. 381-395.
- Kim, L.H., Kim, D.J. & Leong, J.K. (2005). The effect of perceived risk on purchase intention in purchasing airline tickets online. *Journal of Hospitality & Leisure Marketing*. 13 (2), pp. 33-53.
- Kim, L.H., Qu, H. & Kim, D.J. (2009). A study of perceived risk and risk reduction of purchasing air-tickets online *Journal of Travel & Tourism Marketing*. 26 (3), pp. 203-224.
- Kolsaker, A., Lee-Kelley, L. & Choy, P.C. (2004). The reluctant Hong Kong consumer: Purchasing travel online. *International Journal of Consumer Studies*. 28 (3), pp. 295-304.
- Kozak, M. (2015). Bilimsel Araştırma: Tasarım, Yazım ve Yayım Teknikleri. 2. Edition, Ankara: Detay Yayıncılık.
- Krejcie, R.V. & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*. 30, pp. 607-610.
- Kunnan, A.J. (1998). An introduction to structural equation modelling for language assessment research. *Language Testing*. 15 (3), pp. 295-332.
- Law, R. & Leung, R. (2000). A study of airlines' online reservation services on the Internet. *Journal of Travel Research*. 39 (2), pp. 202-211.
- Law, R. & Wong, J. (2003). Successful factors for a travel website: perceptions of online purchasers in Hong Kong. *Journal of Hospitality & Tourism Research*. 27 (1), pp. 118-124.
- Liebermann, Y. & Stashevsky, S. (2002). Perceived risks as barriers to Internet and e-commerce usage. *Qualitative Market Research: An International Journal*. 5 (4), pp. 291-300.
- Lim, N. (2003). Consumers' perceived risk: sources versus consequences. *Electronic Commerce Research and Applications*. 2 (3), pp. 216-228.
- Lin, P.J., Jones, E. & Westwood, S. (2009). Perceived risk and risk-relievers in online travel purchase intentions. *Journal of Hospitality Marketing & Management*. 18 (8), pp. 782-810.
- Mamman, H., Maidawa, M. & Saleh, M. (2015). Effects of Perceived Risk on Online Shopping. In *Proceedings of the 1st Management, Technology, and Development Conference*. pp. 318-323.
- Masoud, E.Y. (2013). The effect of perceived risk on online shopping in Jordan. *European Journal of Business and Management*. 5 (6), pp. 76-87.
- Mathur, N. (2015). Perceived risks towards online shopping: An empirical study of Indian customers. *International Journal of Engineering Development and Research*. 3 (2), pp. 297.
- Mohseni, S., Jayashree, S., Rezaei, S., Kasim, A. & Okumus, F. (2018). Attracting tourists to travel companies' websites: the structural relationship between website brand, personal value, shopping experience, perceived risk and purchase intention. *Current Issues in Tourism*. 21 (6), pp. 616-645.
- Moisescu, O.I. & Berteau, P.E. (2013). The impact of brand awareness, brand knowledge and price positioning on perceived risks associated to buying online from Travel Agencies. *Romanian Journal of Marketing*, 8 (3), 13-22.
- Nepomuceno, M.V., Laroche, M. & Richard, M.O. (2014). How to reduce perceived risk when buying online: The interactions between intangibility, product knowledge, brand familiarity, privacy and security concerns. *Journal of Retailing and Consumer Services*. 21 (4), pp. 619-629.
- Özbek, V., Günelan, M., Koç, F., Şahin, N.K. & Kaş, E. (2015). The effects of perceived risk and cost on technology acceptance: A study on tourists' use of online booking. *Celal Bayar Üniversitesi Sosyal Bilimler Dergisi*. 13 (2), pp. 227-244.



- Park, S. & Tussyadiah, I.P. (2017). Multidimensional facets of perceived risk in mobile travel booking. *Journal of Travel Research*. 56 (7), pp. 854-867.
- Roselius, T. (1971). Consumer rankings of risk reduction methods. *The Journal of Marketing*. 35 (1), pp. 56-61.
- Ross, I. (1975). Perceived risk & consumer behavior: A critical review. *Advances in Consumer Research*. 2 (1), pp. 1-20.
- Saydan, R. (2008). Tüketicilerin online alışverişe yönelik risk ve fayda algılamaları: Geleneksel ve Online Tüketicilerin Karşılaştırılması. *Elektronik Sosyal Bilimler Dergisi*. 7 (23), pp. 386-402.
- Sahli, A.B. (2015). Revisiting perceived risk & trust in E-tourism context: Toward an extended technology acceptance model. *Journal of Marketing Research and Case Studies*, pp. 1-14.
- Simonian, A.M., Forsythe, S., Kwon, W.S. & Chattaraman, V. (2012). The role of product brand image and online store image on perceived risks and online purchase intentions for apparel. *Journal of Retailing and Consumer Services*. 19 (3), pp. 325-331.
- Syed, S.A. & Norjaya, M.Y. (2010). What factors influence online brand trust: evidence from online tickets buyers in Malaysia. *Journal of Theoretical and Applied Electronic Commerce Research*. 5 (3), pp. 78-89.
- Tavşancıl, E. (2006). *Tutumların ölçülmesi ve SPSS ile veri analizi*. 3. Edition, Ankara: Nobel Yayınları.
- Taylor, J.W. (1974). The role of risk in consumer behavior. *The Journal of Marketing*. 38 (2), pp. 54-60.
- Ueltschy, L.C., Krampf, R.F. and Yannopoulos, P. (2004). A cross-national study of perceived consumer risk towards online (Internet) purchasing. *Multinational Business Review*. 12 (2), pp. 59-82.
- Yang, B. (2013). The effect of online customer reviews on customer's perceived risk associated with online leisure hotel booking. Purdue University, USA.



SEVERITY AND LOYALTY: THE EFFECT OF SERVICE FAILURES ON AIRLINE TOURISTS

Giuseppe Catenazzo¹,
Seda Çeken²,
Vedran Milojica^{3*}

¹American Institute of Applied Sciences in
Switzerland,
La Tour-de-Peilz, Switzerland

²Institute for Aviation Psychology
Research, Istanbul University,
Istanbul, Turkey

³Faculty of Tourism and Hospitality
Management, University in Rijeka,
Opatija, Croatia

Abstract:

This paper explores how the severity of a service failure experienced during a recent flight for tourism influences loyalty to the respective airline. Results from an online survey show that tourists who experienced a minor issue during their flight exhibited equivalent loyalty to the airline to those who did not experience any problems. However, tourists who experienced a severe service failure during their flight exhibited a decrease in their loyalty. Like in previous studies on product defects, not all service failures are equally relevant to customer relationships: To manage tourist loyalty effectively, airlines should prioritize their efforts to eradicate service failures that tourists deem severe and then the others.

Keywords:

severity of service failure, tourists, loyalty, customer relationship management.

INTRODUCTION

According to the data published by the US Department of Transportation (DOT) for 2023, 96,853 complaints were made in 2023, mainly concerning issues experienced with airlines. Not surprisingly, as in SITA's 2023 Baggage IT Insights Report, service disruptions, especially baggage loss and incorrect baggage delivery, affected passengers' satisfaction and loyalty (Mehra, 2023). Air transportation already suffers from image loss due to service failures due to high passenger numbers and the human-centred nature of the service (Atalik, 2007). Negative experiences can influence customers and potentially lead to business loss (Oliver, 2015). Therefore, enhancing and streamlining operations is of great importance in increasing service quality and passenger satisfaction, considering the economic impacts of the sector (Mainardes *et al.*, 2021).

However, similarly to previous studies on product defects for manufactured products by Catenazzo and Paulssen (2020, 2023), not all service failures are equally relevant to customer relationships. Recent works reveal that passengers review their loyalty to the brand of the used transportation company according to the severity of experienced failures during service provision (Charpentreau, 2024). Elbaz *et al.* (2023) call for recovery strategies to increase customer satisfaction and loyalty, especially when customers experience severe service

Correspondence:
Vedran Milojica

e-mail:
vedran.milojica@gmail.com



failures, such as flight cancellations or long delays. The severity of service failures negatively affects customers' loyalty to airlines, which can decrease customer loyalty (Elbaz *et al.*, 2023). Yet, the relationship between the severity of an experienced failure and loyalty needs further investigation (Catenazzo & Paulssen, 2023).

Expectation Disconfirmation Theory (EDT) provides a theoretical framework used in previous works to understand customer reactions to service failures; a recent study by Hien *et al.* (2024) used EDT in aviation. Accordingly, the discrepancy between customers' expectations and actual experiences after a service failure (disconfirmation) shapes customers' emotions and behaviours. As such, experiencing a service failure triggers complaints, negative word-of-mouth, intention to switch to another airline, and damaged loyalty. Although airlines should set customer satisfaction as their primary goal, not all airline experiences are satisfactory from the consumer's perspective.

Using EDT, a service failure severity can be conceptualised as the intensity of a customer (a tourist) perceiving a service problem. The higher the difference between expectation and experience, i.e. the more severe this intensity, the greater the customer's perceived loss (Weun *et al.*, 2004). Smith *et al.* (1999) found that failure severity significantly affects customers' perceptions of fairness and the effectiveness of recovery efforts. In aviation, serious service failures, such as flight cancellations or long delays, significantly impact future loyalty intentions (Nikbin & Hyun, 2015; Weun *et al.*, 2004). Additional service failures that affect passenger experiences in the aviation industry include flight delays, baggage delays, and poor-quality meals (Matikiti *et al.*, 2018). Gures *et al.* (2013) showed that the severity of these errors in passengers' reactions to service errors determines their complaint behaviours and how airlines respond to complaints increases their loyalty.

Hence, the paper at hand reports how the severity of service failures experienced during the most recent flight for tourism affects passengers' loyalty to the respective airline. More specifically, this study aims to analyse to what extent the specific severity level of an experienced failure influences the intention of passengers to choose the same airline in the future.

METHODOLOGY

Tourists living in London and its surroundings who had taken at least one flight for tourism in the last two months before the poll (September 2024) were invited to participate in an online survey. These respondents were recruited on Prolific, a crowdsourcing platform increasingly used in research (Palan & Schitter, 2018). At the beginning of the questionnaire, participants were asked to refer to the last flight if they took multiple or connecting flights during the examined time frame. Also, if they experienced various issues during this flight, respondents were required to refer to the most severe issues in the survey only. Participants were compensated for participating in the survey; the average participation time was less than three minutes, and the average remuneration was equivalent to £ 7.12 per hour. Out of the initial N=408 participants, only 63% (N=257) participated in the poll in full, successfully passed an attention test (Berinsky *et al.*, 2014), travelled for tourism, fit all other selection criteria, and were retained for analysis. Table 1 reports the main sampling statistics regarding the answers from these N=257 participants.

Females represent a slight majority of respondents (56%), and the average age is 35.72 (standard deviation 10.97), from a minimum of 18 to a maximum of 78 years old. Almost all respondents travelled in Economy class or with an airline offering a single class (90.3%); they are not members of the frequent flying programme of the airline of the analysed flight. The perceived severity of the experienced issue reported by respondents was, on average, equal to 2.8 on a 5-point scale, where 1 is the minimum and 5 is the maximum severity level.



Table 1. Sociodemographic characteristics

Gender	Male: 44%
	Female: 56%
Age	Average: 35.72
	Standard deviation: 10.97
	Min: 18; Max: 78
Class of travel	Economy class / The airline had a single class: 90.3%
	Premium economy class: 6.2%
	Business class: 2.7%
	First-class: 0.8%
Member of the Frequent Flying Programme (FFP) of the airline of the travel	Yes: 26.5%
	No: 73.5%
Experienced an issue with the flight	Yes: 23%
	No: 77%
The severity of the experienced issue	1- Not severe at all: 13.3%
	2- 23.3%
	3- 38.3%
	4- 21.7%
	5- Very severe: 3.4%

Source: Authors' research

We performed a linear regression (OLS) to estimate the impact of having experienced a service failure and its respective severity on the loyalty to the airline of the most recent flight. The question, “How likely would it be for you to fly with the airline of this flight in the future?” was used as the dependent variable in the model. This item was measured on a seven-point scale, from a minimum of not likely at all to a maximum of very likely. Then, we combined the questions on having experienced a service failure during the last flight and the question on the perceived severity of the experienced service failure. This new variable was dummy-coded, and the six obtained variables, i.e. Having experienced no failures and failure severity variables for each of the five levels were used as the independent variables of the regression model.

RESULTS

We used the answers to “having experienced no failures” as a reference category for this regression model. Like all dummy-coded regressions, the results reported in the table below (Table 2) must be compared to this reference category. For instance, for the highest level of experienced severity, i.e. severity level equal to 5, the unstandardised regression coefficient equals -3.374. Hence, travellers who experienced such a severe issue exhibited a three-point scale less loyalty than travellers who experienced no issues with the flight. We also added some controls, i.e. the class of the flight, membership in a frequent flying programme of the flight’s airline, the number of flights taken over the past nine months, gender, and age. None of these variables exert statistically significant effects on the loyalty to the airline of the most recent flight. Adjusted R² was .136; the highest Variance Inflation Factor (VIF) was 1.145, excluding collinearity issues.



Table 2. Regression model

	Unstandardised coefficient	Std. Error	Lower 95%	Higher 95%
Intercept	5.806***	.259	5.297	6.316
Severity=1	-.028NS	.387	-.790	.733
Severity=2	-.367NS	.294	-.947	.213
Severity=3	-1.141***	.239	-1.611	-.670
Severity=4	-.612*	.307	-1.216	-.008
Severity=5	-3.374***	.786	-4.922	-1.826
Class of the flight	-.035NS	.144	-.319	.249
Member of the airline's FFP	.199NS	.160	-.117	.515
Number of flights taken since the beginning of the year	-.004NS	.018	-.039	.030
Gender	-.111NS	.135	-.377	.155
Age	.005NS	.006	-.007	.018

Source: Authors' research

Reference category: No issue during the flight

^{NS} p>.05 * p<.05 ** p<.01 *** p<.001

The above results (Table 2) display that not all failures experienced on a flight hamper the relationship between travellers and the respective airline. Tourists experiencing a non-severe issue exhibit equivalent loyalty to the airline to participants who did not experience any issue. These results extend the findings from Catenazzo and Paulssen (2023) to service failures, specifically to service failures in aviation. Not only for minor product defects with manufactured products but also non-severe service failures are irrelevant in the eyes of travellers for tourism. Loyalty to the airline decreases only if the severity of the experienced service failure is high. For severity levels 1 and 2, loyalty is equivalent to experiencing no service failures. It decreases with failure severity levels 3. The effects of severity levels 3 and 4 on loyalty to the airline do not differ significantly. The difference between these two unstandardised regression coefficients using Cumming's (2009) confidence intervals' overlapping criterion test is inconclusive (p>.05).

DISCUSSION AND CONCLUSION

The research at hand examines the effects of the severity of service failures encountered by travellers for tourism on their loyalty to the airline of their flight. The underlying goal of this study was to determine variations in travellers' loyalty following failures of different severity. Results show that not all problems experienced during the flight damage the relationship between tourists and the respective airline: The decrease in travellers' loyalty was observed only among travellers who experienced a severe failure. The perceptual threshold proposed by Zeithaml and Bitner (2003) and Weun *et al.* (2004) explains why customers consider low-severity service failures forgivable. This is because these errors are usually below the customers' tolerance range. When an error does not significantly disrupt their expectations or cause major dissatisfaction, it is perceived as less serious and more acceptable. Extending the findings of Catenazzo and Paulssen (2023) on product failures to service (airlines') failures, this study revealed that service failures perceived as minor do not significantly affect customer loyalty. However, it was determined that serious service failures perceived as severity levels 4 and 5 substantially reduce customer loyalty. Hess *et al.* (2003) and Tax *et al.* (1998) emphasise that critical severity thresholds change customer perceptions and damage clients' relationship with the airline of the most recent flight.



These findings provide a timely contribution to the literature by shedding light on the relationship between experienced service failures and travellers' loyalty to the respective airline. Yet, like all empirical-based studies, the present work suffers from several limitations. The selected sample only included individuals living in and around London, which hampers the generalizability of the findings. This creates an opportunity for future research examining how the perceived severity of service failures and customer loyalty may vary across different cultural contexts. Second, participants only reported the most serious failure on their last flight—simultaneous effects of multiple failures may have been overlooked. Furthermore, the data was collected via an online survey platform (Prolific), whose members are self-selected and not randomly drawn.

From a practical standpoint, this study suggests that airline operation managers should primarily identify and eliminate service failures travellers deem severe. To maintain customer loyalty, service quality management strategies should focus on reducing the impact of such critical issues. Furthermore, as evidenced in the literature (Johnston & Michel, 2008; Maxham & Netemeyer, 2002), airlines should enforce service recovery policies proactively, especially in the case of severe failures.

REFERENCES

- Atalik, Ö. (2007). Customer complaints about airline service: a preliminary study of Turkish frequent flyers. *Management Research News*, 30(6), 409-419. <https://doi.org/10.1108/01409170710751908>
- Berinsky, A. J., Margolis, M. F., & Sances, M. W. (2014). Separating the shirkers from the workers? Making sure respondents pay attention on self-administered surveys. *American Journal of Political Science*, 58(3), 739-753. <https://doi.org/10.1111/ajps.12081>
- Catenazzo, G., & Paulssen, M. (2020). Product defects are not created equal: prioritizing production process improvements. *Production Planning & Control*, 31(4), 338-353. 10.1080/09537287.2019.1638979
- Catenazzo, G. & Paulssen, M. (2023). Experiencing defects: the moderating role of severity and warranty coverage on quality perceptions, *International Journal of Quality & Reliability Management*, 40(9), 2205-2221. <https://doi.org/10.1108/IJQRM-10-2021-0352>.
- Charpentreau, C. (2024, July 8). US DOT reports record air travel complaints in 2023. *AeroTime*. <https://www.aerotime.aero/articles/us-dot-reports-record-air-travel-complaints-in-2023>
- Cumming, G. (2009), Inference by eye: Reading the overlap of independent confidence intervals. *Statistics in Medicine*, 28, 205-220.
- Dresner, M., & Xu, K. (1995). Customer Service, Customer Satisfaction, and Corporate Performance in the Service Sector. *Journal of Business Logistics*, 16(1).
- Elbaz, A. M., Soliman, M., Al-Alawi, A., Al-Romeedy, B. S., & Mekawy, M. (2022). Customer responses to airline companies' service failure and recovery strategies: the moderating role of service failure habit. *Tourism Review*, 78(1), 1-17. <https://doi.org/10.1108/TR-03-2022-0108>
- Gures, N., Arslan, S., & Bakar, Z. K. (2013). Customer complaint behaviors in Turkish airline industry. *Çukurova Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 17(2), 129-148.
- Hess Jr, R. L., Ganesan, S., & Klein, N. M. (2003). Service failure and recovery: The impact of relationship factors on customer satisfaction. *Journal of the academy of marketing science*, 31(2), 127-145. <https://doi.org/10.1016/j.jretai.2006.10.010>
- Hien, N. N., Long, N. T., Liem, V. T., & Luu, D. X. (2024). Customer Responses to Airline Service Failure: Perspectives from Expectation Disconfirmation Theory. *SAGE Open*, 14(2), 21582440241248334. <https://doi.org/10.1177/21582440241248334>
- Johnston, R., & Michel, S. (2008). Three outcomes of service recovery: Customer recovery, process recovery and employee recovery. *International Journal of Operations & Production Management*, 28(1), 79-99. <https://doi.org/10.1108/01443570810841112>
- Mainardes, E. W., de Melo, R. F. S., & Moreira, N. C. (2021). Effects of airport service quality on the corporate image of airports. *Research in Transportation Business & Management*, 41, 100668. <https://doi.org/10.1016/j.rtbm.2021.100668>
- Matikiti, R., Roberts-Lombard, M., & Mpinganjira, M. (2018). The influence of perceived justice on recovery satisfaction in the airline industry. *Journal of African Business*, 19(4), 512-530. <https://doi.org/10.1080/15228916.2018.1475784>



- Maxham III, J. G., & Netemeyer, R. G. (2002). A longitudinal study of complaining customers' evaluations of multiple service failures and recovery efforts. *Journal of marketing*, 66(4), 57-71. <https://doi.org/10.1509/jmkg.66.4.57.18512>
- Mehra, S. (2023, December 14). A new deep dive into passenger frustration with airlines. *TNMT*. <https://tnmt.com/passenger-frustration-with-airlines/>
- Nikbin, D., & Hyun, S. S. (2015). An empirical study of the role of failure severity in service recovery evaluation in the context of the airline industry. *Review of Managerial Science*, 9, 731-749. <https://doi.org/10.1007/s11846-014-0135-7>
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4_suppl1), 33-44. <https://doi.org/10.1177/00222429990634s10>
- Palan, S., & Schitter, C. (2018). Prolific. ac—A subject pool for online experiments. *Journal of behavioral and experimental finance*, 17, 22-27. <https://doi.org/10.1016/j.jbef.2017.12.004>
- Tax, S. S., Brown, S. W., & Chandrashekar, M. (1998). Customer evaluations of service complaint experiences: implications for relationship marketing. *Journal of Marketing*, 62(2), 60-76. <https://doi.org/10.1177/00222429980620020>
- Weun, S., Beatty, S. E., & Jones, M. A. (2004). The impact of service failure severity on service recovery evaluations and post-recovery relationships. *Journal of Services Marketing*, 18(2), 133-146. <https://doi.org/10.1108/08876040410528737>
- Zeithaml, V.A. and Bitner, M.J. (2003) *Services Marketing: Integrating Customer Focus across the Firm*. 3rd Edition, Irwin McGraw-Hill, New York.



SiTCon

**Singidunum Tourism
Conference - 2024**

EXTENDED ABSTRACTS



SAFETY IN MOUNTAIN TOURISM: CASE OF SLOVENIA

Tomi Špindler^{1*}
Dušan Mandić²,
Janez Mekinc³

¹Faculty of Tourism, University of Maribor,
Brežice, Slovenia

²Singidunum University,
Belgrade, Serbia

³Faculty of Tourism Studies,
University of Primorska,
Portorož, Slovenia

Abstract:

The rapid expansion of tourism, particularly in mountain regions, brings heightened safety risks due to the seasonal and unpredictable nature of these areas. This paper explores safety concerns in mountain tourism, with a focus on crisis management, seasonality, and the impact of external factors such as natural disasters and the COVID-19 pandemic. Literature reveals that seasonality poses significant challenges for mountain destinations, affecting infrastructure, employment, and safety measures. Tourist safety is a critical factor, especially in activities like mountaineering, which carry inherent risks. The study analyzed data from mountain rescue operations between 2006 and 2023, focusing on accidents, interventions, and demographic trends. Results indicated that external factors, such as weather and economic crises, significantly influenced accident rates and rescue missions. A sharp decline in rescue operations in 2020 was attributed to COVID-19 restrictions. While rescue interventions have fluctuated over the years, the importance of coordinated crisis management, preventive safety education, and tailored safety measures for different tourist demographics is emphasized. This research underscores the need for improved safety protocols and visitor awareness in mountain tourism to mitigate risks.

Keywords:

safety, mountain tourism, mountaineering, seasonality.

INTRODUCTION

Tourism is one of the fastest-growing industries globally, with mountain destinations becoming increasingly popular due to their unique landscapes and outdoor recreational opportunities (Mrak, 2011; Beedie & Hudson, 2003). However, as the demand for mountain tourism grows, so does the necessity for effective safety management. Mountain regions, while offering thrilling experiences, are particularly vulnerable to natural hazards such as earthquakes, landslides, and wildfires, which pose significant risks to both tourists and local communities (Ma *et al.*, 2020; Wang *et al.*, 2019). Additionally, the seasonal nature of mountain tourism creates fluctuating pressures on infrastructure and workforce management, intensifying the challenges of maintaining safety and ensuring crisis preparedness (Čorluka, 2019; Jolliffe & Farnsworth, 2003). Recent global events, such as the COVID-19 pandemic, have further highlighted the fragility of mountain tourism, as restrictions brought about significant disruptions to travel and operations,

Correspondence:
Tomi Špindler

e-mail:
tomi.spindler@um.si



causing a sharp decline in visitor numbers and corresponding rescue interventions (Matiza & Slabbert, 2021). Safety concerns are particularly pronounced in adventure and sport tourism, where participants engage in high-risk activities like skiing, mountaineering, and hiking. These activities, while attractive to tourists seeking adventure, often result in accidents and fatalities, raising the need for comprehensive safety strategies (Perić *et al.*, 2018; Musa & Thirumoorthi, 2015). Governments and tourism stakeholders must prioritize the implementation of safety policies and risk management measures, not only to safeguard tourists but also to protect the economic viability of mountain tourism destinations. Understanding the factors that influence safety perceptions, such as visitor demographics, natural hazards, and the role of rescue operations, is essential for enhancing safety outcomes and ensuring sustainable tourism growth (Ivanuša *et al.*, 2012; George, 2010). This study aims to analyze trends in mountain tourism safety, focusing on rescue interventions, accident patterns, and the impact of external factors, with the goal of providing insights for more effective crisis management and safety planning.

LITERATURE REVIEW

Safety in Tourism

Tourism is rapidly expanding, but its vulnerability to various security risks makes safety a central concern, particularly in mountain destinations. These regions are especially susceptible to crises due to their seasonal nature, requiring a strong focus on safety and risk management (Mansfeld & Pizam, 2006; Ivanuša *et al.*, 2012). Governments must understand that security policies affect both domestic and international tourism, influencing visitor numbers and destination safety (Santana-Gallego *et al.*, 2020). Mountain tourist destinations are also vulnerable to natural disasters like earthquakes, which have a significant impact on tourism flows, often greater than terrorist threats (Ma *et al.*, 2020). Additionally, the COVID-19 pandemic severely disrupted mountain tourism, halting operations and marking these areas as particularly fragile due to their reliance on seasonal activity (Matiza & Slabbert, 2021). Safety in mountain tourism requires coordinated crisis management, with a focus on both preventive measures and post-crisis recovery (Ivanuša *et al.*, 2012).

Mountain Tourism and Seasonality

High-altitude mountains, once largely avoided due to their inaccessibility and harsh conditions, have evolved into popular tourist destinations known for their unique landscapes and a wide range of recreational activities (Mrak, 2011; Beedie & Hudson, 2003). This transformation has opened up opportunities for both local communities and the tourism industry. However, mountain tourism faces significant challenges primarily due to seasonality. Kennedy (1999) defines seasonality in tourism as fluctuations in demand during specific times of the year, a phenomenon particularly pronounced in mountain regions. Tourist activity tends to peak during a few busy months, often coinciding with favorable weather conditions for activities like skiing or hiking. This surge in visitors can strain local infrastructure, create environmental pressures, and lead to overcrowding, while the off-season brings inefficiencies and underutilization of resources (Ćorluka, 2019). Moreover, seasonality has profound implications for employment within mountain tourism. Demand for workers is concentrated in the peak season, leading to challenges such as part-time work, underemployment, and difficulties in retaining skilled staff (Jolliffe & Farnsworth, 2003).

Mountain Tourism and Safety

Safety remains a primary concern for tourists, especially in the realm of mountain tourism, where the interplay between natural environments and outdoor activities is profound (Sun & Zong, 2019). With the rise of eco-tourism, an increasing number of safety incidents in mountainous regions have been reported, highlighting the need for enhanced safety measures and management strategies (Sun & Zong, 2019). Mountain tourism has gained international traction, largely due to the deep connection that individuals feel with nature, making these regions increasingly attractive to tourists (Río-Rama, 2018). Tourist safety plays a crucial role in shaping the overall experience, particularly for sport tourists, who often display heightened sensitivity to safety



issues compared to non-sport tourists (Perić *et al.*, 2018). Activities such as mountaineering, while exhilarating, are inherently risky, and the number of participants continues to rise despite frequent reports of injuries and fatalities (Musa & Thirumoorthi, 2015). Mountain regions are particularly vulnerable to natural hazards like landslides, floods, and wildfires, which threaten not only the safety of tourists but also the attractiveness of these destinations (Wang *et al.*, 2019; Kastolani, 2016). Mountain protected areas play a fundamental role in conserving the natural environment while also offering social benefits, including spaces for leisure and recreation. Understanding the motivations and behaviors of visitors in these areas is vital for their effective management (Taczanowska *et al.*, 2019). Well-planned tourist trails fulfill various functions, including safety and ecological preservation. They can minimize negative environmental impacts while enhancing visitor safety (Kolodziejczyk, 2019). Additionally, individual factors such as age, nationality, and visit frequency can significantly influence perceptions of safety in tourist destinations. Research indicates that domestic tourists often have a different awareness of safety and crime compared to international visitors, necessitating tailored safety measures (George, 2010). In mountain environments, four critical factors influence health and injury risks among mountaineers: individual characteristics (such as mountaineering skills and physical fitness), equipment (including ropes and ice axes), the uncontrolled environment (which encompasses climbing routes and weather conditions), and the crucial role of mountain guides (Musa & Thirumoorthi, 2015).

METHODOLOGY

The research included data on mountain rescue interventions, accidents, and the demographics of individuals affected from 2006 to 2023. Descriptive statistics was done, where the focus was on variables such as the number of interventions, including rescues, searches, medical aid, and helicopter assistance. It also examined the severity of injuries, categorized as minor, severe, or fatalities, distinguishing between mountaineers and other groups. Additionally, the study looked into the types of accidents occurring in mountain environments, such as hiking, climbing, skiing, and other outdoor activities. The total number of accidents and incidents was analyzed over the years, with special attention to fluctuations influenced by factors like weather, economic crises, and the COVID-19 pandemic. Demographic data were also considered, focusing on the age groups of those affected, ranging from young individuals to the elderly, to determine which age groups are most susceptible to accidents or fatalities. The research aimed to understand trends in mountain safety and how external factors and seasonality impacted the frequency of mountain rescues and accidents over time.

RESULTS

In the Vorarlberg area, significant variations were observed in 2013 and 2019, with the attractive summer weather and challenging conditions during the snow-poor early winter of 2013 leading to increased rescue deployments, despite a 42% rise in fatalities that year. By 2019, although the number of interventions had decreased, the duration of these operations increased due to extensive search and recovery missions. Slovenia and Vorarlberg both experienced a drop in rescues in 2014, influenced by adverse weather and management issues; however, regulations improved thereafter. In 2020, interventions declined across all three regions due to reduced mountain visits and COVID-19 restrictions. Analyzing trends, the Dolomites saw the highest increase in interventions, followed by Slovenia, while Vorarlberg had the smallest growth. Future predictions for rescue operations remain uncertain due to the ongoing pandemic situation.

CONCLUSIONS AND DISCUSSION

Visitor safety is crucial in adventure tourism, particularly in mountainous regions (Wang *et al.*, 2019). As mountain visits have increased, so have accidents and rescues. Notably, after 2007, both Slovenia and Italy experienced a decline in rescue interventions, attributed to the economic crisis and reduced mountain visitation. However, rescues began to rise again after 2013, peaking until 2019, before sharply dropping in 2020 due to the COVID-19 pandemic. In Vorarlberg, Austria, while overall rescues decreased, there was a rise in



incidents in alpine and rough terrain, likely linked to more locals and inexperienced hikers choosing less populated routes during the pandemic. The correlation between the number of accidents and rescues and visitor numbers highlights the influence of external factors like weather and economic conditions. Given the seasonality of mountain tourism, effective crisis management is essential during both low and high visitation periods. Slovenia's lack of a dedicated rescue helicopter emphasizes the need for coordinated efforts between mountain rescue teams and military or police helicopters. Additionally, cooperation with mountain huts for shelter and resources is vital. Preventive education for mountain visitors about potential dangers, necessary equipment, and preparedness is key to enhancing safety. Teaching the younger generation about safe mountain practices and crisis response will further contribute to improved safety in mountainous areas.

REFERENCES

- Beedie, P., & Hudson, S. (2003). Emergence of mountain-based adventure tourism. *Annals of Tourism Research*, 30(3), 625–643.
- Čorluka, G. (2019). Tourism seasonality—an overview. *Journal of Business Paradigms*, 4(1), 21–43.
- George, R. (2010). Visitor perceptions of crime-safety and attitudes towards risk: The case of Table Mountain National Park, Cape Town. *Tourism Management*, 31 (2010), 806–815.
- Ivanuša, T., Lesjak, M., Roša, M., & Podbregar, I. (2012). Soodvisnost mednarodnega turizma in mednarodnega varnostnega okolja. *Varstvoslovje: Journal of Criminal Justice & Security*, 14(3).
- Jolliffe, L., & Farnsworth, R. (2003). Seasonality in tourism employment: human resource challenges. *International Journal of Contemporary Hospitality Management*, 15(6), 312–316.
- Kastolani, W. (2016). The development of mountain tourism based on disaster mitigation in ring of fire areas. In S. M. Radzi et al. (eds). *Heritage, Culture and Society: Research agenda and best practices in the hospitality and tourism industry*. London: CRC Press.
- Kennedy, E. (1999). Seasonality in Irish tourism, 1973–1995. *Tourism Economics – The Business and Finance of Tourism and Recreation*, 5(1), 25–47.
- Ma, H., Chiu, Y. H., Tian, X., Zhang, J., & Guo, Q. (2020). Safety or travel: which is more important? The impact of disaster events on tourism. *Sustainability*, 12(7), 3038.
- Mansfeld, Y., & Pizam, A. (2006). *Tourism, security, and safety: from theory to practice*. New York: Routledge
- Matiza, T., & Slabbert, E. (2021). Tourism is too dangerous! perceived risk and the subjective safety of tourism activity in the era of covid-19. *GeoJournal of Tourism and Geosites*, 36, 580–588.
- Mrak, I. (2011). *High Mountain Areas and Their Resilience to Tourism Development*. Ljubljana: University of Ljubljana, Faculty of Arts.
- Musa, G., & Thirumoorthi, T. (2015). Health and safety issues in mountaineering tourism. In: G. Musa, J. Higham, & A. Thompson-Carr (eds.), *Mountaineering Tourism*. Routledge
- Perić, M., Đurkin, J., & Vitezić, V. (2018). Active event sport tourism experience: the role of the natural environment, safety and security in event business models. *International Journal of Sustainable Development and Planning*, 13(5), 758–772.
- Río-Rama, M., Maldonado-Erazo, C., Durán-Sánchez, A., & Álvarez-García, J. (2019). Mountain tourism research. A review. *European Journal of Tourism Research* 22, 130–150.
- Santana-Gallego, M., Fourie, J., & Rosselló, J. (2020). The effect of safety and security issues on international tourism. *Annals of Tourism Research*, 20(2020), 102686.
- Sun, J. & Zong, J. (2019). Empirical analysis and countermeasures of tourism potential safety hazards in Qinling Mountains - Take Cui Huashan Mountain an example. Proceedings of the 6th Academic Conference of Geology Resource Management and Sustainable Development 10 February 2019, Pages 724–729.
- Wang, J., Liu-Lastres, B., Ritchie, B. W., & Pan, D. Z. (2019). Risk reduction and adventure tourism safety: An extension of the risk perception attitude framework (RPAF). *Tourism Management*, 74, 247–257.



THE POWER OF SOCIAL MEDIA INFLUENCE ON CONSUMERS IN TOURISM

Nevena Ćurčić*,
Ana Rac,
Bojana Savić

Department of Geography, Tourism and
Hotel Management, Faculty of Sciences,
University of Novi Sad,
Novi Sad, Serbia

Abstract:

The development of communication and information technologies has influenced all forms of public communication and media. As a result, social media has transformed everyday communication and as well as consumer information in tourism. Social media and networking sites are essential tools for obtaining in-depth information about tourists' offer destination. The influence of social media on consumers in tourism is constantly growing, which affects tourists' decision-making to visit a destination and choice of accommodation facilities. The goal of this work is to determine the impact of social media on consumers when choosing accommodation facilities. The paper analyzes the views and ratings of consumers on the importance of social media in the promotion of tourism, the accuracy of information on social media, as well as the influence of digital information on the choice of accommodation facilities. The research was conducted through an online questionnaire on a random sample of respondents from Serbia. The results indicate that a high percentage of respondents are very satisfied with the information provided by social media and that they make a choice of accommodation facilities under the influence of that information. The research concludes that respondents use social media daily, that they get detailed information on social media when choosing a tourist destination and accommodation facilities, and that they do this for every trip.

Keywords:

tourism promotion, social media, influence, consumers, accommodation facilities.

INTRODUCTION

The tourism industry is a rapidly growing industry that successfully adapts to the needs of consumers with the application of various modern achievements. We can say that technological development had the greatest impact on changes in tourism. Namely, the development of communication and information technologies has influenced all forms of public communication and media. The dominant modern forms of information and communication in tourism are media platforms, social networks, and viral communities. The speed of communication and the viral spread of content are the main advantages of social media and its great popularity. Consumers in tourism mostly get information about the destination and accommodation facilities on the websites or social media of the carriers of the tourist offer. Tourists use social media both before the trip and during their stay at the destination, but also after returning from the trip. Tourists themselves are the creators

Correspondence:
Nevena Ćurčić

e-mail:
nevena.curcic@dgt.uns.ac.rs



of certain content, thus influencing the reputation of the destination itself or the accommodation facility, as well as the creation of their image. The aim of this paper is to determine the impact of social media on consumers when choosing accommodation facilities.

LITERATURE REVIEW

In tourism, technology plays an essential role by assisting businesses with daily operations, while at the same time improving the customer experience and making a destination more desired by potential visitors. For this reason, hotels, restaurants, airlines, and other companies must keep up with the latest technology trends (Giotis and Papadionysiou, 2022). The role of information and communication technologies (ICT) is visible in all stages of travel, that is, from the period in which potential tourists decide on the destination they will visit, when choosing a means of transport, creating an itinerary, deciding which accommodation they will choose and which services at the destination they will use, during the journey to the destination and stay in it, until returning from the destination to the permanent place of residence (Jević *et al.*, 2021, p. 141). Most travel decisions are influenced by information on social media and digital marketing (online information) (Armutcu *et al.*, 2023). The use of social networks is considered a powerful tool for choosing tourist destinations and accommodation facilities; as well as for enjoyment which emphasizes the role of entertainment provided by the social network and is a stronger predictor of consumer attitude and tourist behavior intention. (Di Pietro *et al.*, 2012).

There are differences between generations in the amount of media consumed. Thus, Kostić-Stanković and Vukmirović (2020) cite research results according to which as many as 47% of members of Generation Y (people born from 1981 to 1996) make consumer decisions under the influence of social media, and that approximately seven out of ten members of this generation was somewhat influenced by the opinions of other consumers when making a purchase decision (Jević, *et al.*, 2021). The most popular social media currently are Facebook, Instagram, YouTube, TikTok, and X (ex-Twitter). The website that has the most effect on the tourism sector is TripAdvisor (TripAdvisor, 2021; Pontes and Ramos, 2023).

The importance of posts on social media is great considering that people, in principle, trust their peers, as well as those who have already gained experience in destinations and used services in tourism, more than marketing and commercial messages (Buhalis, and, Law, 2008; Süli and Martyin-Csamangó, 2020). Thanks to the ability to create and quickly share multimedia content, social networks enable a simple presentation of the tourist offer and facilitate the establishment of direct communication with tourists with the possibility of timely provision of all additional information at their request, all with minimal costs and time savings (Melović *et al.*, 2020, p. 140).

METHODOLOGY

The article analyzes:

- the attitudes and evaluations of consumers on the importance of social media in tourism promotion,
- the value and accuracy of the information found there,
- as well as the influence on the choice of accommodation capacity itself.

The research was conducted through an online questionnaire on a random sample of Serbian residents. The sample consisted of people of different gender, age, marital status, and work status. The sample for data processing consisted of a total of 115 respondents. The results are presented through descriptive statistics, with visualization using tables and graphs.



RESULTS

Most of the respondents who travel 2-4 times in one year (41.7%) were included in the survey. The social network most used when choosing accommodation is Instagram (53%), followed by Facebook and YouTube. Given that respondents most often spend 1-3 hours on social networks during the day (52.2%) or even 4-5 hours (27.8%), we can consider that the impact of all online information from networks that affect respondents is large. The main factors influencing respondents when choosing accommodation are prices and accommodation location. The largest number of respondents book their accommodation through reservation sites (63.5%), while the fewest do so through social networks. A large percentage of respondents believe that the information that can be found on social networks is good and accurate (38.3%), while the majority still cannot assess the accuracy of the information (46.1%). The method of the validity check information found on social networks about accommodation facilities is carried out by searching on the Internet (78.3%) or through the recommendations of friends. Only 19.1% of respondents have experience booking accommodation through social networks. Impressions related to booking accommodation through social networks are mostly positive: very simple and efficient; excellent; without objection; and very effective but there may be misunderstandings in communication.

CONCLUSIONS AND DISCUSSION

Social media, with the development of technology, has become an important online tool that affects people's lives. Social media as an information channel, a communication channel, and a sales channel have a significant role in the world of digital marketing.

The social media that proved to be the most popular when it comes to researching destinations and accommodation is "Instagram". The results indicate that a high percentage of respondents are very satisfied with the information provided by social media and that they make a choice of accommodation facilities under the influence of that information. The inhabitants of Serbia use social media every day, when choosing a tourist destination, they most often get information on social media and they generally do this for every trip.

Owners of accommodation facilities should use social media promotion more professionally in order to achieve the maximum in achieving the communication and sales goals of their offer. In this way, it will maintain a quality relationship with consumers, upgrade communication following the needs of the market, and create a loyal relationship of consumers towards products and services. Proper promotion management on social networks will result in positive publicity within certain consumer groups, i.e. shaping and strengthening the brand's reputation.

REFERENCES

- Armutcu, B., Tan, A., Amponsah, M., Parida, S., & Ramkissoon, H. (2023). Tourist behaviour: The role of digital marketing and social media. *Acta Psychologica*. 240(2023) 104025. DOI: 10.1016/j.actpsy.2023.104025
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of eTourism research. *Tourism management*. 29 (4): 609-623. DOI: 10.1016/j.tourman.2008.01.005
- Di Pietro, L., Di Virgilio, F. & Pantano, E. (2012). Social network for the choice of tourist destination: attitude and behavioural intention. *Journal of Hospitality and Tourism Technology*, Vol. 3(1): 60-76. DOI:10.1108/17579881211206543
- Giotis, G., & Papadionysiou E. (2022). The Role of Managerial and Technological Innovations in the Tourism Industry: A Review of the Empirical Literature. *Sustainability*. 14(9):5182. DOI:10.3390/su14095182
- Jević, J., Pavković, V., & Jević, G. (2021). The role of social media in contemporary tourism business. *Oditor*. 7(2): 133-156. DOI:10.5937/Oditor2102133J
- Kostić-Stanković, M. & Vukmirović, V. (2020). Tendencije u savremenoj marketinškoj komunikaciji uzrokovane tehnološkim preferencijama generacije ipsilon (Tendencies in modern marketing communication caused by technological preferences of generation Y). *Hum*. 13(19): 157-182. UDK: 339.138:659.231



- Melović, B., Ćirović, D., Vukčević, M., & Mitrović Veljković, S. (2022). Marketing na društvenim mrežama - ocjena online nastupa nosilaca ponude agroturizma u Crnoj Gori primjenom FAI metodologije (Social media marketing - evaluation of online performance of agro-tourism offers in Montenegro using FAI methodology). In Jahorina Business Forum 2022 / Jahorinski poslovni forum 2022, 24-25 March 2022 (pp.139-147). Istočno Sarajevo, Republika Srpska, BiH: Ekonomski fakultet Pale, Univerzitet u Istočnom Sarajevu.
- Pontes, A., & Ramos, C. (2023). How does Social Media influence the Behaviour of Hotel Consumers? *Journal of Tourism, Sustainability and Well-being*. Vol. 11, No. 2, 116–135. ISSN: 2795-5044 | DOI:10.34623/784k-qg19
- Süli, D., & Zita Martyn-Csamangó, Z. (2020). The Impact of Social Media in Travel Decision-making Process among the Y and Z Generations of Music Festivals in Serbia and Hungary. *TURIZAM*. Volume 24, Issue 2, 79–90. DOI: 10.5937/turizam%v-24678
- TripAdvisor. (2021). TripAdvisor. <https://www.tripadvisor.pt/>

CIP - Каталогизација у публикацији -
Народна библиотека Србије, Београд

338.48(082)(0.034.2)

338.486.3:640.45(082)(0.034.2)

UNIVERZITET Singidunum. International Scientific Conference Tourism transformed:
rethinking strategies for modern tourism (2024 ; Beograd)

Book of Proceedings [Elektronski izvor] / Singidunum University International
Scientific Conference Tourism transformed: rethinking strategies for modern tourism,
SITCON, Belgrade October 17, 2027 ; [editor-in-chief Milovan Stanišić]. - Belgrade :
Singidunum University, 2024 (Belgrade : Singidunum University). - 1 elektronski optički
disk (CD-ROM) : graf. prikazi, tabele ; 12 cm

Sistemska zahteva: Nisu navedeni. - Na vrhu nasl. str.: SiTCon Singidunum Tourism
Conference - 2024. - Tiraž 10. - Bibliografija uz svaki rad

ISBN 978-86-7912-834-8

а) Туризам -- Зборници б) Угоститељство -- Зборници

COBISS.SR-ID 160737545

Singidunum Tourism Conference

OCTOBER 17th
BELGRADE **2024**



sitcon.singidunum.ac.rs



9 788679 128348