

Edited by Željko Trezner

Digital and social transformation of mapping tourist attractions:

manual with answers to crucial questions of who, what, when,
where and why

Erasmus+ InnoVet

Karlovac County Tourist Board



Ericsson Nikola Tesla



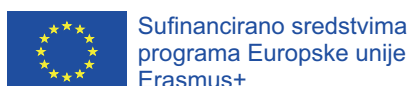
GOSTUR



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Table of contents

Page 7: Trends in contemporary tourism

Page 15: Special interest tourism

Page 23: Digital transformation of tourism

Page 33: The possibilities of GIS application in tourism

**Page 40: Citizen science and mass data collecting in
tourism**

Page 48: Data-based tourism destination management

**Page 59: The importance of sustainable tourism
development**

Page 66: Stakeholders of sustainable tourism development

**Page 74: The contribution of tourism to the sustainable
development goals**

**Page 85: The importance of recognizing and documenting
tourist attractions**

Page 92: Classification and types of tourist attractions

**Page 99: Documentation, mapping and evaluation of
tourist attractions**

About the project

There is no doubt that strong structural changes have impacted contemporary tourism. The question that arises is how to make tourism more sustainable and resilient. That is why the focus of the InnoVET Tourism project is on the digital and green transition as tools for the transformation of contemporary tourism. During the project, possibilities for using information technologies and citizen science in vocational tourism education have been explored. The project put special emphasis on practical solutions and challenges that stakeholders in education and tourism business cannot manage on their own.

The project is innovative in the paradigm shift where vocational education is not just following the world of work, but acts within a new relationship as a full partner in defining new trends and needs. During the project innovative InnoVET digital tools and methodology have been developed, to apply quadruple helix and citizen science in mapping tourist attractions and monitoring the environment. InnoVET solutions have been tested and implemented through several perspectives. Focus groups included tourism vocational schools, tourism colleges, tourist boards, tourism and IT companies, associations and various interest groups, as well as the local community.

The impact of the application of digital and green concept on innovations in vocational education and training was determined by following results during the project. This primarily refers to the development of IT tools and methodology for including vocational students into sustainable tourism development. Also, the applied digital solutions, which are simple to use in vocational education and training, have a clear purpose in the educational process and match well with the need for digital and green skills. Finally, the application of the quadruple helix approach in the project made vocational students and teachers equal partners with the stakeholders from the public and private sector and local community in the innovation process.

Tested and finished InnoVET solution includes a digital tool for mapping tourist attractions and three complementary manuals. The complete solution enables educational institutions, tourist boards, tourist companies, associations or local self-governing authorities an easy initiation of their own project with negligible expenses. The use of crowdsourcing concept and InnoVET solutions enables the creation of a tourist attractions database, developing innovative tourist products, monitoring the state of tourist attractions and reporting damage or pollution done to them. For the purpose of additional information on using InnoVET solutions, disseminating activity results after the end of the project, and promoting InnoVET on a national and EU level as an example of good practice all partners are available.



1. Contemporary tourism: trends and challenges

Photo: Aleksandar Gospić, Hrvatska turistička zajednica

Introduction

A complex global phenomenon like tourism is strongly connected with the globalization process. The scope of cross-border movement of people, services, capital, goods, workers, technologies, and information related to tourism transcends any occurrence in the history of mankind as a whole. Consequently, it is necessary to understand the causes and trends in contemporary tourism. The behavior of tourists is changing constantly and that inevitably shapes future trends. Therefore, the first part of this chapter summarizes the most important trends influencing tourism today.

The decision to venture on a tourist journey is deeply motivated by satisfying primary biological and social needs. Some motives cause mass tourist flows for the purpose of relaxation and vacation, while others involve very specific tourist activities for the relatively modest niche markets. It appears that these niches are becoming narrower all the time, while traditional types of tourism become segmented. Because of this, the second part of the chapter describes the consequences of the transition from traditional types of tourism towards special interest tourism.

Finally, the last part of this chapter presents the changes created by the digital transformation of tourism. The creation of digital platforms and different concepts within tourism's digital transformation has many consequences on tourism supply and demand. It is, therefore, clear that challenges and limitations brought by further tourism digitalization will have a powerful impact on the tourism of the future. However, the challenges of digitalization will definitely not be the only ones to mark the tourism of the 21st century. This chapter attempted to show what has influenced contemporary tourism up to the present moment, and what will continue to influence it in the future.

1.1. Trends in contemporary tourism

The aim of this chapter is to inform readers of the causes, characteristics, and consequences of the most important trends in contemporary tourism, especially in terms of tourist behavior and their reactions to the main changes these trends bring.

After mastering the content of this chapter, reader will be able to:

- describe tourism as a global phenomenon
- explain the connections between tourist flows and leisure time
- illustrate major changes that influence tourist flows
- point out the characteristics of the most important trends in contemporary tourism
- present the consequences of the most important trends on tourist flows
- interpret tourist behavior and reactions to major changes

Tourism is a cluster of relationships and occurrences that are a result of tourist flows. Tourist travels aren't just any journeys taking people away from their permanent residence. These trips are taken without coercion, in free time, occasionally, without the purpose of doing paid work, and the stay is only temporary. Persons involved in such trips are usually called tourists. Every tourist has their own specific reasons for traveling, most commonly vacation and recreation away from their permanent residence.

Apart from the movement of people, international tourism includes cross-border movement of services, capital, goods, workers, technologies and information. It is therefore justified to see the contemporary international tourism as a consequence of globalization processes and as a global phenomenon. Tourism as such has been widely talked about since it became a mass occurrence. **Apart from the massive scale, international tourism is marked by continuous and rapid growth.** The number of international arrivals has increased about 60 times in the last seventy years, with the prediction for the export tourism impacts to surpass the export of goods within global economy.

Contemporary international **tourist flows are marked by evident division into outbound and inbound areas.** According to the World Tourism Organization, just ten inbound countries achieve almost 50 % of tourist expenditure, and over 55 % of the outbound amount is connected to only

Tourist trips

International tourism

World Tourism Organization

Digital and social transformation of mapping tourist attractions

ten countries. This clearly indicates that international tourist flows are also marked by geographic factors. In Europe alone, over 50 % of international tourist arrivals are realized, and Southern Europe in particular is the single most important tourist region.

Finally, tourist travels are most often undertaken in people's free time, at leisure. **Tourists travel when they are free of work, social, and family obligations.** It commonly occurs during school breaks, vacation time, holidays and weekends. This makes international tourism highly **seasonal**. In the outbound countries of the northern hemisphere most travelling takes place during summer, and people from large cities undertake several shorter trips over weekends and during holidays.

There are definitely serious reasons behind such tendencies. Dominant among them is the growth of the world population, which increased three times over the last seven decades. The average life expectancy is increasing, too, due to technological changes which have improved the level of health care. In general, **technological developments enabled higher productivity:** larger profits are made possible with less labor. The consequences of this are obvious: there are more people who can secure financial means beyond those needed for essential livelihood. The increase in productivity has ensured that workers' rights, especially the right to regular working hours and paid vacation, are respected.

Leisure

Increased productivity



Photo: Jernej Borovinsek

Digital and social transformation of mapping tourist attractions

Technological developments enabled better efficiency and lower cost of transport, particularly air transport. **Increase in personal wealth** and investments into road infrastructure led to better personal mobility and car use. Technological solutions provided people with better access to information and easier communication, which greatly decreased the fear of the unknown. More and more people move to urban agglomerations where the pressure on main resources is high. This causes the **need to spend time in natural habitats**, as well as the rise in global awareness about the need for environmental protection.

The question of resources and the environment is becoming important in global political relations. At the same time, globalization creates greater freedom to travel. **Global economic relations enable redistribution of economic activities among countries**, thus creating opportunities for economic growth and development around the world. It is based on innovation and entrepreneurship, and is driven by digitalization, which encompasses goods as well as processes. It seems that major changes influencing tourist flows may be divided into social, technological, economic, political and ecological.

It is therefore expected that in the future more tourist arrivals will come from the countries with a large population, a higher number of younger people and growing economy, such as China and India. The population of wealthier countries will be older, but will probably travel more frequently. The expected growth in efficiency and lower cost of transport will enable tourist trips into the most remote parts of the world, and out of it. It is a logical estimation that the pressure towards **the development of tourism in untouched and protected natural areas will only grow**. The same can be expected of the visits to cultural heritage sites.

With the communication and travel organization processes becoming simpler, thanks to digital technologies, even more traveling will be encouraged. The expected rise in productivity can lead to even shorter working week and more vacation days, which will create **more opportunities for tourists to travel**. However, negative events, such as terrorist attacks, epidemics, wars, strikes, demonstrations, unrests, natural disasters, ecological incidents, and even economic crises, slow down the growth of tourist flows. Still, it seems **not even global crises could stop the growth of the international tourist arrivals** in the world.

Contemporary tourism changed drastically towards the end of the twentieth century, when the scope of supply exceeded demand. Until that time, trends of demand were limited by tourism offer, which had the characteristics of mass or *hard* tourism. For over thirty years the main **qualitative trends have been regulated by tourism demand**. It is largely mobile, with tourists shifting from one tourist destination to another

Development of technology

Changes affecting tourism

- social
- technological
- economic
- political
- ecological

Tourist trips

Unfavorable events for tourism

- terrorism
- epidemics
- wars
- strikes
- demonstrations
- riots
- natural disasters
- environmental incidents
- economic crises

Contemporary tourism

Digital and social transformation of mapping tourist attractions

easily and quickly. Tourists are highly sensitive towards the changes in their income, and the prices of traveling and accommodation. Finally, tourism demand tends to be versatile. Each tourist will, if possible, adapt their travels to their individual habits, interests and needs. This is where the term **selective, new or soft tourism** came into use.

Most qualitative trends shown are connected with tourist behavior and reactions to the main social, technological, economic, political and ecological changes, which is logical in the age of tourism demand domination. Demographic and social changes - in the sense of why, how,

Qualitative trends



Photo: Turistička organizacija Beograda

or what - cause different behavior in certain consumer groups. **The system of values, attitudes and beliefs all have more and more influence on the tourists' decision-making process.**

Technological changes quickly influence tourism. Digital platforms support distribution, not only the transfer of information and communication. Information is present on multimedia platforms, and tourists' experience is connected with virtual reality. Passenger transport is more affordable, due to technological advancements and better usability. Even the use of personal car is being transformed within new

Digital and social transformation of mapping tourist attractions

concepts of digital economy, sharing economy and access economy. **Global services** for car transport, accommodation, catering and sightseeing **based on lower price, higher efficiency and digital platforms are already operational.**

Because of political globalization, the right to travel is being liberalized and both **inbound and outbound tourism policies are implemented.** Outbound visas have become a rarity, and tourist countries have sped up the processes of e-visa introduction and visa-issuing upon arrival. The idea of travel safety is steadily being built through the creation of international rules and harmonization of tourist practices on global scale. Because of the changes in the system of values, greater urbanization, raised awareness about pollution and climate change, tourists are more sensitive towards the behavior of service providers which are not considered ethical.

New economic concepts

- *digital economy*
- *sharing economy*
- *access economy*

Tourism policies

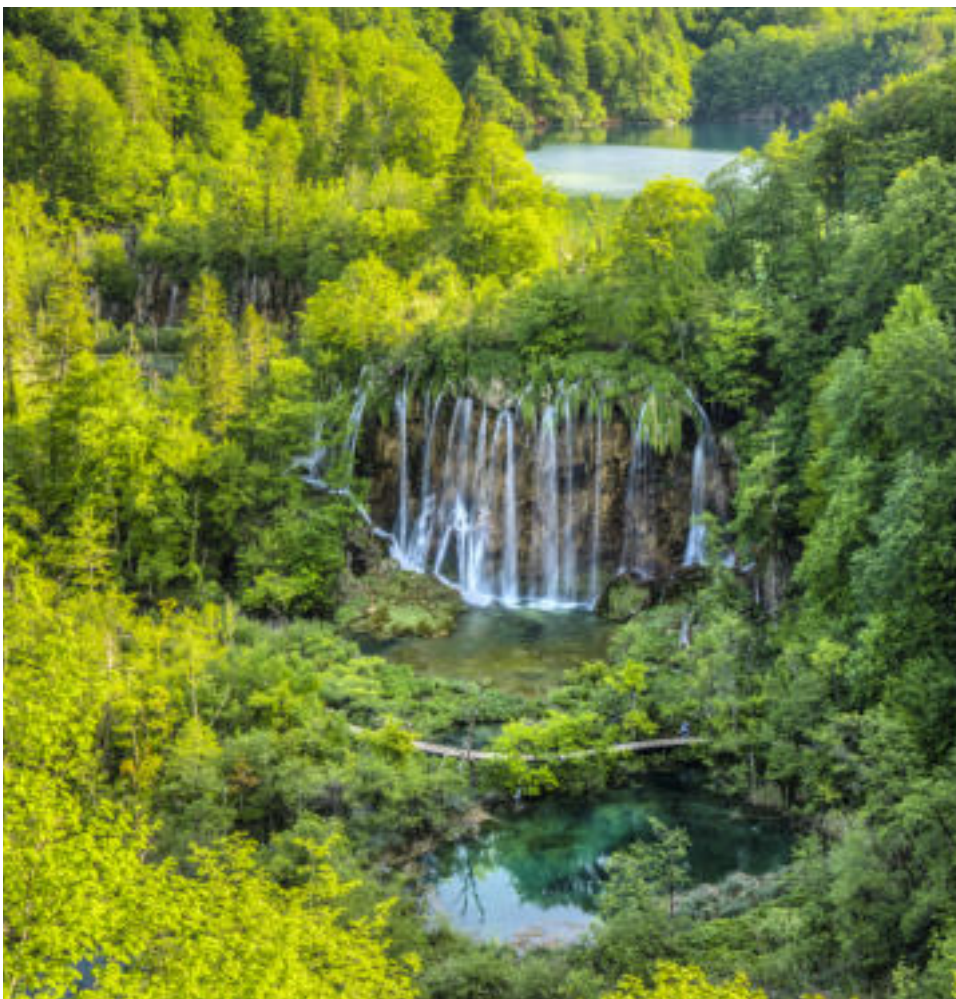


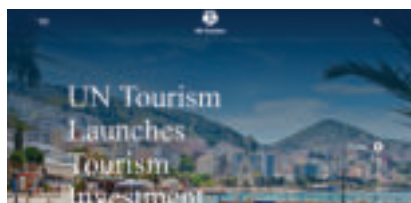
Photo: Zoran Jelača, Hrvatska turistička zajednica

Bibliography

Apart from the information used in the creation of content for this chapter, the following bibliography contains the sources that can help in further research of the topics introduced:

1. Boškov, V. (2021). *Trendovi i inovacije u turizmu*. Visoka poslovna škola strukovnih studija. <https://www.vps.ns.ac.rs/wp-content/uploads/2023/06/Trendovi-i-inovacije-u-turizmu-Boskov-Veronika.pdf>
2. Cvikl, H. & Alič, A. (2020). *Uvod v ekonomiko turizma*. Ministrstvo za šolstvo in šport Republike Slovenije. <https://vsgr.si/wp-content/uploads/2016/09/EKT-Ali%C4%8D-2020.pdf>
3. Čavlek, N., Bartoluci, M., Prebežac, D., Kesar, O., Hendija, Z., Bilen, M., Mikulić, J., Tomašević, A. & Čižmar, S. (2011). *Turizam: Ekonomske osnove i organizacijski sustav*. Školska knjiga d. d.
4. Goldner, R. C. & Ritchie, B. J. R. (2009). *Tourism: Principles, Practices, Philosophies, Eleventh edition*. John Wiley & Sons, Inc.
5. Krivošejev, V. & Rabasović, B. (2020). *Uvod u turizam sa osnovama ruralnog turizma, udžbenik sa praktikumom*. Udruženje domaćina Valjevo. https://e-nastava.vipos.edu.rs/pluginfile.php/4161/mod_resource/content/1/udzbenik%20UVOD%20U%20TURIZAM.pdf
6. Marušić, Z., Čorak, S. & Sever, I. (2018) *TOMAS Ljeto 2017. – Stavovi i potrošnja turista u Hrvatskoj*. Institut za turizam.
7. OECD. (2018). *OECD Tourism Trends and Policies 2018*. OECD Publishing.
8. Planina, J. & Mihalič, T. (2002). *Ekonomika turizma*. Ekonomska fakulteta Ljubljana.
9. Stojanović, J. (2014). Savremene tendencije u turizmu. *Paper presented at Sinteza 2014 - Impact of the Internet on Business Activities in Serbia and Worldwide*. <https://doi.org/10.15308/sinteza-2014-738-742>
10. Trezner, Ž. (2019). *Odgovorno poduzetništvo u suvremenom turizmu, Priručnik za razvoj novih turističkih proizvoda i pokretanje poduzetničkog pothvata*. Grad Solin. <https://www.hgk.hr/documents/treznerodgovornopoduzetnitvouturizmu20195ed8a2a8cbea0.pdf>
11. World Tourism Organization. (2018). *European Union Tourism Trends*. UNWTO. <https://www.e-unwto.org/doi/pdf/10.18111/9789284419470>
12. World Tourism Organization. (2020). *International Tourism Highlights, 2020 Edition*. UNWTO. <https://doi.org/10.18111/9789284422456>
13. World Tourism Organization. (2023). *International Tourism Highlights, 2023 Edition – The impact of COVID-19 on tourism (2020–2022)*. UNWTO. <https://doi.org/10.18111/9789284424986>

Online sources



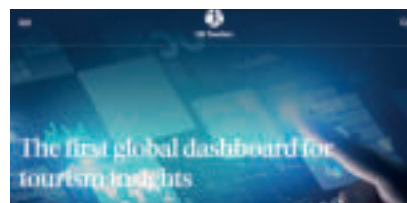
UN Tourism

www.unwto.org



World Travel & Tourism Council

www.wttc.org



UN Tourism Data Dashboard

www.unwto.org/tourism-data/un-tourism-tourism-dashboard



EU Tourism Dashboard

www.tourism-dashboard.ec.europa.eu/?lng=en&ctx=tourism



Eurostat Tourism statistics

ec.europa.eu/eurostat/statistics-explained/index.php?title=Tourism_statistics



European Travel Commission

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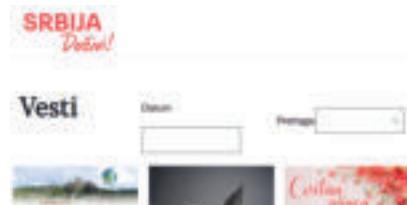
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Ministrstvo za gospodarstvo, turizem in šport

www.gov.si/podrocja/podjetnistvo-in-gospodarstvo/turizem



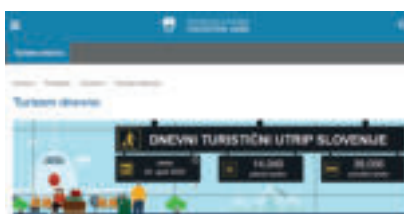
Ministarstvo turizma i omladine

www.mto.gov.rs



Državni zavod za statistiku Hrvatske

podaci.dzs.hr/hr/podaci/turizam/



Statistični ured Slovenije

<https://www.stat.si/statweb/Tourism/TourismDaily>



Republički zavod za statistiku Srbije

<https://www.stat.gov.rs/sr-latn/oblasti/ugostiteljstvo-i-turizam/>

1.2. Special interest tourism

The aim of this chapter is to inform readers of the factors, motives and needs that create higher level of individualization and personalization in tourist experience, causing the development of special interest tourism.

After mastering the content of this chapter, reader will be able to:

- present the most important factors that shape the decision to go traveling
- explain how biological and social needs create the motive to go traveling
- present the consequences of the higher level of individualization and personalization of tourist experience
- describe the consequences of changing the traditional types of tourism into special interest tourism
- point out the characteristics of special interest tourism
- interpret tourist behavior in special interest tourism

A large number of factors influence one's decision to go travelling.

Traditionally, apart from a motive, there's the availability of funds and free time. At least two or more days are needed without any work, family or social obligations in one's residence. When it comes to finances, it is a matter of extra funds, left after meeting one's existential needs. It is important to mention that these traditional external factors are strongly connected to other **economic, social, political, demographic, cultural and environmental** factors, which can have an impact of them.

It is quite certain that people who become tourists are those with strong motivation to go travelling. These **motives are numerous, various, gradable and inter-dependent, with different intensity of orientation**, but behind each one is a specific unfulfilled need. In fact, contemporary tourists travel in order to satisfy one or more needs, which cannot be done in their residence, or the satisfaction provided by a tourism destination is more attractive or affordable.

Primary **biological needs most commonly create motivation for tourist travels**. The need to preserve one's physical integrity motivates a person to travel in order to keep or improve one's health level. Health tourism, and every type of sport activity, strongly fulfills the need to preserve the body's physical integrity. The need to sleep and rest motivates a person to go on a journey to relax, lower or get rid of exhaustion caused by daily activities. Traveling that emphasizes relaxation and recovery completely fulfills the need to rest. **Trends indicate a higher level of need to move**

Influence on the decision to travel

- *motive*
- *available funds*
- *available free time*

Motivation to travel

The need for rest

Digital and social transformation of mapping tourist attractions

and be active, even when the basic motivation is vacation and relaxing by the sea.

Primary **social needs may be even more important in creating tourist motivation**. Each trip is, in a way, a journey into the unknown and satisfies to a certain degree our need to explore. Adventure travels into completely unknown areas strongly satisfy the need to explore. The need for recognition is also often fulfilled with traveling: to be “someone” in today’s world means taking several shorter breaks, skiing trips, cruises, appearing at a conference or at a professional training. Travelling that is “in vogue” satisfies the need for recognition particularly well. **The need for a change**, or the idea of entertainment, which has its psychological roots in this need, **is the most common motivation for tourist travels and it conditions tourists’ behavior while traveling**.

The need for company is the need for human contact and companionship. While they travel, relationships between people are less formal, people are more open, and the hosts are expected to be friendly and ready to communicate. This partially **fulfills the need for affection, which tourism employees provide professionally for their guests**. The supply of travel options for single people or pensioners satisfies the need for companionship and affection. The need for social conformity is also realized through tourism. The supply of travel options for certain formal or informal groups, when their participation is expected, strongly fulfills the need for social conformity.



The need for discovery



The need for companionship



The need for social conformity



Photo: Denis Stošič, Regionalna turistička zajednica Karlovačke županije

The increase in direct personal **communication between tourists and service providers** enables a higher level of individualization and personalized travel experiences based on tourists' needs. Faster flow of information and more direct contact made it possible for the otherwise static tourism supply to adapt more quickly and easily to tourists' needs. The consequences of these processes are visible in significant **segmentation of tourism demand and high variety of offer**. It seems that the main force behind these processes is the focus on satisfying various travel motivations, and not just the traditional ones, related to vacation, recreation, culture, sport and business.

Still, most tourists travel for vacation purposes. Therefore, contemporary tourism is marked by high level of polarization: on the one hand, **a great number of tourists are attracted to recreational and relaxation activities**, while on the other hand, **a smaller number of tourists are attracted to a variety of very specific activities**. In both cases, contemporary tourists want to discover, experience, and learn more, and be involved in the life of tourism destination and their hosts, but are equally ready to spend more if offered the right combination of activities tailored to their specific needs.

The fragmentation of traditional types of tourism, such as leisure, cultural, sports and business, into a large number of new, specific types of tourism, goes hand in hand with the premise. These types are connected to specific activities, therefore, we **talk more and more about the special interest tourism market**: for birdwatching, plants or archeology enthusiasts, fishing, diving, climbing, speleology, rowing, cycling, music, photography, gastronomy, enology, and so on. The concept of special interest tourism encompasses relationships and occurrences that are the result of activities of tourists whose choice of vacation is connected to very specific interests. These interests can be a **consequence of different personal preferences, hobbies or particularities of one's profession**. Unlike other tourists, those who travel because of special interests are intensely focused on chosen activities and perception of their value.

Although practically negligible compared to market segment and power of leisure tourism, from the point of view of a tourism destination, which profiles itself based on its attractiveness, **specific types of tourism are very important, regardless of their market share**. Due to smaller possibility of substitution, specific activities regularly attract customers who are less concerned with affordability than traditional tourists. On top of that, it is important to mention that the periods of high demand for specific types of tourism don't necessarily coincide with vacation times. By developing certain specific types of tourism, and especially by focusing on special interest tourism, **tourism destinations can lower**

Traditional motives of tourist travel

- rest
- recreation
- culture
- sports
- work

Desires of a today's tourist

- discovery
- experience
- participation
- learning

Types of tourism

Specific types of tourism

negative impacts that seasonality and spatial concentration have on the most attractive tourist areas.

Special interest tourism is characterized by limited number of tourists, individual and small group travels, and relying on small-scale economy. Because of this, it is possible to create a spatial and temporal **dispersion of tourist activities towards areas and timeframe when tourists are less present or not present at all**. Within special interest tourism, non-standard and less standardized tourist services are used, which doesn't require a lot of investment into tourist facilities. Tourists involved in special interest tourism are not focused on typical, but rather

Special interest tourism



Photo: Klemen Golob

on a **wide spectrum of various experiences and activities**. For this reason, they visit a larger number of potential instead of actual tourist attractions, as well as travel to non-traditional tourism destinations, leading to a broader tourism offer.

In special interest tourism the emphasis is on tourists' personal preferences. They are, in general, **better educated, more responsible and experienced tourists**, who go on several trips every year. They tend to spend more, and are overall less sensitive about the cost. Due to the characteristics of activities offered by special interest tourism, tourists are more ready for increased physical and intellectual effort and **accept challenges of meeting the new and unknown**. That is why they have a

Personal preferences of tourists

Digital and social transformation of mapping tourist attractions

higher demand for personal interaction with locals and prepare themselves thoroughly before travelling. They are often ready to take **high-risk journeys**, so many activities in special interest tourism take place in sparsely inhabited areas.



Photo: Turistička organizacija Srbije

Bibliography

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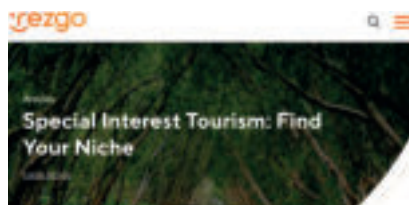
1. Buhalis, D. & Costa, C. eds. (2006). *Tourism Business Frontiers: Consumers, products and industry*. Elsevier.
2. Čorak, S. & Mikačić, V. eds. (2006). *Hrvatski turizam: plavo, bijelo, zeleno*. Institut za turizam.
3. Čorak, S. & Trezner, Ž. eds. (2014) *Destinacijske menadžment kompanije DMK: Priručnik za uspješno poslovanje i marketing u turizmu posebnih interesa*. Hrvatska turistička zajednica. <https://www.htz.hr/sites/default/files/2017-03/DMK-Prirucnik.pdf>
4. Douglas, A., Hoogendoorn, G. & Richards, G. (2023). *Activities as the critical link between motivation and destination choice in cultural tourism*. *Journal of Hospitality and Tourism Insights*, 7(1), 249-271. <https://doi.org/10.1108/JHTI-09-2022-0442>
5. Geić, S. (2011). *Menadžment selektivnih oblika turizma*. Sveučilište u Splitu.
6. Kušen, E. (2002). *Turistička atrakcijska osnova*. Institut za turizam.
7. Lesjak, M., Sikošek, M. & Kerma, S. eds. (2020). *Tematski turizam: teoretični in aplikativni primeri v svetu in Sloveniji*. Založba Univerze na Primorskem. <https://www.hippocampus.si/ISBN/978-961-293-042-4.pdf>
8. Miljković, D., Rijavec, M. & Miljković Krečar, I.. (2018). *Psihologija u turizmu*. IEP i D-2.
9. Močiljanin, M. (2007). *Poslovna psihologija s komuniciranjem: udžbenik za hotelijersko-turističke i ugostiteljske škole*. Školska knjiga d. d.
10. Novelli, M. ed. (2005). *Niche Tourism*. Elsevier.
11. Radošević, B. (2012). *Selektivni oblici turizma*. Visoka turistička škola Beograd.
12. Štetić, S., Cvijanović, D. & Šimičević, D. (2014). *Posebni oblici turizma dunavskog regiona Srbije*. Institut za ekonomiku poljoprivrede Beograd.
13. Trauer, B. (2006). *Conceptualizing special interest tourism—frameworks for analysis*. *Tourism Management*, 27(2), 183-200. <https://doi.org/10.1016/j.tourman.2004.10.004>
14. Vodeb, K. (2014). *Turistična destinacija: sodobna obravnava koncepta*. Založba Univerze na Primorskem. <https://www.hippocampus.si/ISBN/978-961-6832-77-9.pdf>

Online sources



Tourism Teacher

www.tourismteacher.com/special-interest-tourism/



REZGO

www.rezgo.com/blog/special-interest-tourism-find-your-niche/



Responsible Travel

<https://www.responsibletravel.com/holidays/special-interest/travel-guide/top-10-special-interest-holidays>



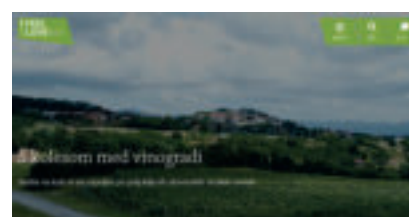
Tourism Tattler

<https://www.tourismtattler.com/31-niche-tourism-groups>



Kovcevsko.com

<https://www.kocevsko.com/sl/ogledi-in-izleti/opazovanje-in-spoznavanje-medveda-v-njegovem-zivljenjskem-okolju/>



I feel Slovenia

www.slovenia.info/sl/zgodbe/s-kolesom-med-vinogradi



Foto Natur

www.fotonatur.si



Cimerfraj.hr

www.cimerfraj.hr/ideje/vrste-turizma



Youtube

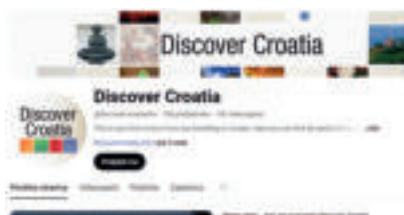
<https://www.youtube.com/watch?v=bAEiN3ng5Ts>

Digital and social transformation of mapping tourist attractions



Biosfera - Biograd

[www.biosferaaktiv.hr/proizvod i/posebni-oblici-turizma-u-bi osferi](http://www.biosferaaktiv.hr/proizvod-i/posebni-oblici-turizma-u-biosferi)



Youtube kanal - Discover Croatia

www.youtube.com/user/discovercroatiainfo



Upoznaj Srednju Dalmaciju!

[www.issuu.com/dalmatia.hr/d ocs/kockica_2015_h](http://www.issuu.com/dalmatia.hr/docs/kockica_2015_h)



Birdwatch Serbia

[www.birdwatchserbia.rs/posm atranje-ptica.html](http://www.birdwatchserbia.rs/posmatranje-ptica.html)



Ekologija.rs

www.ekologija.rs/eko-turizam-u-srbiji-putovati-na-drugacijinacin/

1.3. Digital transformation of tourism

The aim of this chapter is to inform readers of the concept of digital transformation of tourism and its consequences on tourism supply and demand, as well as present possible challenges and limitations created by further digitalization of tourism.

After mastering the content of this chapter, reader will be able to:

- present changes created by digital transformation of tourism
- explain the role of digital platforms in contemporary tourism
- illustrate the most important new concepts in digital transformation of tourism
- describe the consequences of digital transformation on tourism supply and demand
- point out the challenges created by further digitalization of tourism
- interpret the limitations of future digitalization of tourism

Tourism is a phenomenon that relies heavily on access to information and transportation. It is, therefore, logical that each change in the means of transport or communication and information technologies will profoundly impact tourism. In the last decades, tourism has been strongly influenced by **the development of digital technologies as a part of globalization process**. Namely, the disappearance of communication barriers and increased speed and scope of information transfer has thoroughly changed tourist flows. It seems that these changes aren't slowing down at all, just the opposite, so digital transformation of tourism can be seen as one of the consequences of the exponential development we have been experiencing.

The early changes that were a part of digital transformation of tourism began with **a better facilitation of global communication (e-mail), dramatic increase in the availability of information in different formats (the Internet), and the appearance of multi-functional mobile devices (mobile phones and tablets)**. These changes were accepted to such a degree that they seem to have been present long before they were actually used. However, there have been other consequences of the application of digital technologies recently, which led to **a serious disturbance of traditional relationships on the tourism market**. It is quite clear that additional changes are apparent in the near future, due

Digital transformation of tourism

Digital technologies

Digital and social transformation of mapping tourist attractions

to developing technologies. All this leads to the concept of digital transformation of tourism.

The times of using **global distribution systems as digital business tools for more efficient distribution of services** have long been replaced by the option of direct online booking and payment for most tourist services. For quite some time now, the Internet has been more than just the place of promotion and information transfer for tourists - it also allows the distribution of services. At the same time, **digital platform operations have resulted in global networking effects**. The consequences of such effects are visible in viral growth: users attract new users, and a higher number of users attracts more suppliers.

Because of all this, as a consequence of digital transformation of tourism and the arrival of **sharing economy** concept, the contemporary tourism market cannot ignore digital platforms. At present, Airbnb, Booking.com, Flyscaner, Cheapflights, Flixbus, Uber, Bolt, and many others stand out. The appearance of digital platforms in tourism enabled a faster **shift of focus from the service itself towards the experience and creation of brand new tourist behavior patterns**. There has also been a change in tourism supply through the creation of self-employment opportunities and using personal assets as a source of additional income. This leads to

Distribution of services

Digital platforms

- Airbnb
- Booking.com
- Flyscaner
- Cheapflights
- Flixbus
- Uber
- Bolt



Photo: Turistička organizacija Srbije

new socio-economic approaches to tourism through the acceleration of innovations and imaginative creation of tourist products by forming a new system of suppliers and consumers.

In any case, digital platforms present an added value in tourism by **discovering and removing obstacles and speeding up the supply-and-demand transactions**. A set of functions is efficiently used on the tourism market, including: connectivity, interaction, and offer supplementation, as well as the development of a providers and users system. However, the appearance of digital platforms also created a set of challenges in different areas, such as the questions of **unfair competition, taxation, employment status, accountability, information transparency, consumer discrimination, and users' personal data protection**.

In the meantime, several new concepts find their application in tourism. One example is blockchain technology as a kind of response to some of the challenges presented by digital platforms; specifically in the transactional **cost reduction, control and trust among users**. By using blockchain technology service providers can deal with all the key steps towards tourists in a secure environment, without intermediaries or commissions; from the booking process and payment to the management of tourist facilities in real time.

At the same time, using tools provided by the Internet of Things concept will increase the efficiency of business operations for many tourism service providers. **Connecting different gadgets containing microprocessors via the Internet or mobile devices** in hotel rooms is an innovation at present, but will soon be a standard. The same is true for entire destinations in terms of using means of transport, catering and delivery services, tickets, etc. Self-driving cars providing taxi service are no longer an idea but a reality. The **possibilities of using robots in many labor-intensive activities** is being tested practically in both catering and travel agencies. The most common are the tasks that demand instant response in repetitive activities in restaurants, at the reception, providing information, delivery, baggage transfer, security, etc.

The use of **augmented and virtual reality is already a standard in the contemporary interpretation of cultural and natural heritage** for tourists. It enables a unique computer-generated experience in a controlled environment, independent of weather conditions, availability, time of day or year. Such technologies also provide an added "virtual" layer to the interpretation, which better connects material and non-material heritage and reveals deeper "secrets" of both cultural and natural heritage. The **use of mobile phones in virtual and augmented reality** considerably contributes to their growing presence in tourism.

Functions of digital platforms

- *connection*
- *interaction*
- *supplementing the offer*
- *developing the ecosystem of providers and users*

Blockchain technology

Internet of Things

Computer-generated experience

Digital and social transformation of mapping tourist attractions

We must not ignore the appearance of completely new mobile devices which will connect augmented and virtual reality to the process of service selection, booking, communication and social networking. A role in this will be played by **voice-operated functions, high resolution multimedia, and a new generation of personal digital assistants based on artificial intelligence (AI)**. The possibility of Internet connections at 5G speed will definitely create the capacity for larger data transfers, not possible with previous generation mobile networks.

Mobile devices

5G technology



Photo: Ivo Biočina, Hrvatska turistička zajednica

There is no doubt that these technological options will be reflected on tourism and will create new opportunities for both tourism supply and demand, which can only be predicted at the moment. However, the broad application possibilities of artificial intelligence (AI) may bring even bigger changes. They will enable tourism service providers to drastically **increase the efficiency of communication and service personalization**. At the same time, it will provide tourists with comfort in communication, a choice of tailored services, and a top-quality customer experience. Humans could never surpass the scope of information in real time that artificial intelligence tools can include and present in their existing versions.

Artificial intelligence

Digital and social transformation of mapping tourist attractions

It is clear that digitalization in all forms that have been presented will greatly impact tourism in the future. However, even in the circumstances where artificial intelligence can create personalized multimedia content, **tourism will still be based on authentic experiences and satisfying human need** for companionship and love they are provided with. At the same time, without human assistance, artificial intelligence won't be able to generate all the information needed on its own.

Due to these facts, further digitalization of tourism brings many challenges which all tourism destinations will have to face. First of all, there is a question of creating a proper digital tourism environment. Next is the question of encouraging, promoting and free flow of innovation. There is also the matter of applying an appropriate and globally unique standard and **creating a single global digital market**. All these challenges are at the same time huge opportunities for further development of tourism.

Multimedia content

Digitalization



Photo: Klemen Golob

Bibliography

Apart from the information used in the creation of content for this chapter, the following bibliography contains the sources that can help in further research of the topics introduced:

1. Cimbalević, M. (2019). *Mogućnosti primene koncepta pametnog turizma za unapređenje turističke ponude Srbije*. [Doktorski rad]. Nacionalni repozitorij disertacija u Srbiji. <https://nardus.mpn.gov.rs/handle/123456789/11429>
2. Pranita, D. (2018). Digitalization: The Way to Tourism Destination's Competitive Advantage (Case Study of Indonesia Marine Tourism). *The 2nd International Conference on Vocational Higher Education (ICVHE) 2017 "The Importance on Advancing Vocational Education to Meet Contemporary Labor Demands"*, *KnE Social Sciences*, 243–253. <https://knepublishing.com/index.php/Kne-Social/article/view/2763/>
3. Dwivedi, Y. K. et al. (2023). "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71(2023), 1-63. <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
4. Egger, R., Gula, I. & Walcher, D. eds. (2016). *Open Tourism: Open Innovation, Crowdsourcing and Co-Creation Challenging the Tourism Industry*. Springer-Verlag.
5. Europska komisija. (2022). *Tranzicijski put za turizam*. Europska komisija. <https://op.europa.eu/hr/publication-detail/-/publication/404a8144-8892-11ec-8c40-01aa75ed71a1>
6. Lopez-Cordova, E. (2020). *Digital Platforms and the Demand for International Tourism Services*, *Policy Research Working Paper No. 9147*. World Bank. <http://hdl.handle.net/10986/33352>
7. Konstantinova, S. (2019). Digital transformations in tourism. *Knowledge – International Journal*, 35(1), 188-193.
8. Njeguš, A. (2021). *Informacioni sistemi u turističkom poslovanju*. Univerzitet Singidunum.
9. Risteska, J. (2020). The Digital Transformation Process and Future Trend sin Tourism Sector. *Knowledge – International Journal*, 41(.), 249-254.
10. The World Bank Group. (2018). *Tourism and the Sharing Economy: Policy & Potential of Sustainable Peer-to-Peer Accommodation*. The World Bank Group.

<https://documents1.worldbank.org/curated/en/161471537537641836/pdf/Tourism-and-the-Sharing-Economy-Policy-Potential-of-Sustainable-Peer-to-Peer-Accommodation.pdf>

Online sources



Blockchain za početnike

rck.elpros.net/blockchain-za-pocetnike-sto-je-blockchain-i-zasto-mijenja-globalnu-ekonomiju/



Što je blockchain tehnologija?

www.mentorica.biz/aktualno/sto-je-blockchain-tehnologija-i-kako-funkcionira-468/

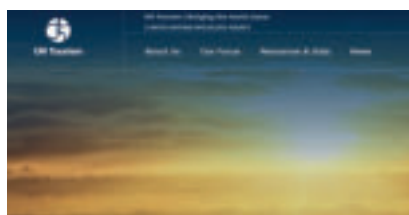
Blockchain u području turizma – problemi i izgledi



Da li Blockchain donosi noviteta svoje tehnologije u područje turizma i kako se koristi u ovom području?

Blockchain u području turizma

www.guland.com.ua/hr/blockchain-i-turizam-putovanja-%C4%87e-biti-prakti%C4%8Dnija.htm



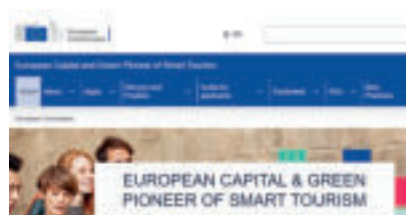
Digital transformation

www.unwto.org/digital-transformation



The tourism and digitalization

www.goodrebels.com/rebelthinking/tourism-sector-impact-digitalization/



European Commission

https://smart-tourism-capital.ec.europa.eu/index_en



Digitalizacija ima v turizmu potencial

www.lipovlist.turisticna-zveza.si/digitalizacija-ima-v-turizmu-velik-potencial/



Slovenska turistična organizacija

www.slovenia.info/sl/novinarsko-sredisce/sporocila-za-javnost/19897-digitalni-preboj-za-vecjo-in-trajnostno-vrednost-slovenskega-turizma



Digitalne preobrazbe

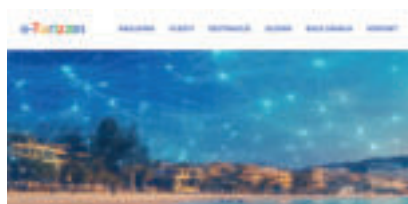
www.etrend.si/blog/digitalne-preobrazbe-nove-moznosti-tudi-za-turizem

Digital and social transformation of mapping tourist attractions



Hrvatska gospodarska komora

www.hgk.hr/digitalizirani-procesi-i-kvalitetni-ljudi-idealna-su-kombinacija-za-uspjeh-u-turizmu-najava



Digitalna transformacija

www.e-turizam.com/digitalna-transformacija/digitalna-transformacija-u-turizmu/



Dostupan sustav e-turizam

www.tportal.hr/biznis/clanak/pre-dstavljen-e-turizam-pogledajte-koje-sve-digitalne-javne-usluge-za-turizam-nudi-20230125



Turizmarium.rs

www.turizmarium.ogledalo.rs/2021/10/zasto-nam-je-potreban-turizam-4-0-u-srbiji/



Turizmarium.rs

www.turizmarium.ogledalo.rs/2023/03/uspon-digitalnog-turizma/



SRIP TRAJNOSTNI TURIZEM

<https://www.srip-turizem.si/nova-strategija-digitalne-preobrazbe-slovenskega-turizma-je-tukaj/>



2. Data-based tourism management: technologies and solutions

Photo: Turistička organizacija Srbije

Introduction

The widespread use of mobile devices for taking photographs and making videos, which also include the option of storing data about the geographical location where the file was created, open up new possibilities for the use of geo-information system (GIS). It is especially practical in tourism where GIS can be used in strategic and operational sustainable tourism development, as well as in the preparation of tourist travels. That is why the first part of this chapter explains the concept, role, possibilities and challenges of applying geo-information system (GIS) in tourism.

The development of options for communication among people and the simplified availability of information has sped up and strengthened the process of including volunteers, non-scientific organizations and citizens into scientific activities. This practice creates many benefits as well as challenges. In case of tourism, it is primarily a matter of collecting mass data and other forms of mass support. That is why the second part of the chapter presents methods to include crowdsourcing into tourism and the connections between mass data collecting and managing a tourism destination.

Managing a tourism destination is efficient and effective managing of resources that contribute to tourism in a particular area. Such resource management represents the inclusion of all key participants, as well as making decisions based on specific data. Luckily, it is possible nowadays to instantly collect and analyze large quantities of information. That is why the last part of this chapter presents ways to make better decisions in tourism destination management and investment into marketing activities, based on collected and analyzed data, as well as to improve tourist experience faster, while using fewer resources.

2.1. The possibilities of GIS application in tourism

The aim of this chapter is to present readers with the concept, role and application options of geo-information system (GIS) in sustainable tourism development and organizing tourist activities.

After mastering the content of this chapter, reader will be able to:

- describe the concept, role and application options of geo-information system (GIS)
- explain specific options of using GIS in tourism
- illustrate examples of strategic and operational applications of GIS in sustainable tourism development
- point out options provided by GIS for tourists in preparation for and carrying out travels
- present the most important challenges of GIS application in tourism
- interpret the role of mobile devices in collecting geographically positioned information

Geo-information system (GIS) is a system which enables the use of information technology for collecting, storing, analyzing and searching data defined by its spatial location. To simplify, **GIS makes a location visible on a map with all the various information types and formats that describe it.** Such visual representation can help in the understanding of patterns, relationships and geographical context of different information. The use of GIS makes communication, management, and decision making about different spatial challenges easier. It is, therefore, commonly used in various activities connected with spatial management and exploration, such as geodesy, cartography, geology, spatial and urban planning, and is becoming more present in tourism as well.

Tourists travel because of facilities that are located in a certain area, but at the same time strongly influence changes in those areas. That is why **GIS found its primary application in tourism in the making of strategic development decisions** connected with spatial planning. The facilities tourists use are defined by their location. It applies equally to tourist attractions and various service providers, including transportation. Information about their location is important for making critical development decisions, with the goal of avoiding unwanted consequences that uncontrolled tourism development may cause. It is well known that tourist flows are concentrated around the most

The use of GIS

- *geodesy*
- *cartography*
- *geology*
- *spatial planning*
- *urbanism*

Tourist flows

Digital and social transformation of mapping tourist attractions

attractive places in an area. That is why it is necessary to timely predict and avoid inappropriate occupation of space, and GIS can help with that.

Due to good visualization of different challenges that development can create in an area, **GIS can be a good tool in sustainable tourism development.** Easier analysis of a large quantity of data which can be shown in space with GIS, makes finding optimal choice of locations for the development of tourism simpler. Also, GIS enables easier monitoring of different indicators and more transparent depiction of conflicts that tourism can cause. In any case, it is **easier to determine the influence tourism development has on its natural and social environment.** Therefore, it seems strategic planning and monitoring of such development will become impossible in the future without actively applying GIS.

Due to the option of showing different types of spatial information, **GIS can be used in operational activities of managing sustainable tourism.** These options may include energy and water supply, waste management, traffic and tourist movement. There is no doubt that all these issues can be connected with their location, that possible alternatives are present, and that each operational decision has an effect on the spatial concentration of tourists. This is the reason why the application of GIS is necessary in the operational decision making about a destination's infrastructure.



Photo: Stanko Kozel

Development of
tourism

GIS in sustainable
tourism management

Obviously, GIS can enable successful application of digital technologies in complex problem solving connected with the development of tourism. It **achieves the best results thanks to the quick determination of possible challenges due to its efficient display**. The visualization of various occurrences and states in an area enables easier monitoring of changes. This can result in a more successful reaction to unwanted events and crisis management. Besides, **GIS can quickly process a large scope of information which enables more precise predictions and decision making**. This simplifies both the priority identification and understanding of key trends. All these reasons point at GIS as an important tool for the successful management of competitive tourism destination.

From a tourist's perspective, **GIS is an important tool allowing a more efficient preparation and implementation of a tourist journey**. Tourism is deeply dependent on unobstructed transfer of a large quantity of information in different formats. This is a challenge in contemporary tourism that tourists deal with successfully by using digital technologies. Considering that most information is related to the spatial component of traveling, it seems tourists use GIS more than they are even aware of. **During a journey, tourists find themselves in a place outside their residence which is unknown to them**, so they need information to find their way. In the past, such information was presented as printed maps, while today they are the result of digital displays based on GIS.

GIS still enables all the basic goals that tourists would achieve by using traditional tourist maps. It helps people from different cultures and countries with orientation in unknown areas, encompasses a broad scope of information about the area, and satisfies the need for information. This information, when it comes to tourist maps, includes accommodation, cultural, entertainment and recreational facilities, services and transport, unique spatial characteristics and various warnings. Of course, using GIS to display selective and/or targeted layers offers extra options, as GIS normally contains much more information.

We must keep in mind that with traditional maps and GIS, the end result is the same: the representation of spatial reality. However, maps are based on a picture with fixed data; while **GIS is a database which can easily and as required generate various new visualizations based on user's specific demand**. That is why GIS can be used in tourism as basis for quicker and cheaper creation of traditional printed maps. Still, the real value of GIS lies in the use of digital representations on fixed and mobile devices for the creation of interactive maps and maps generated upon user's specific demand. GIS enables the connections between different databases and an instant creation of complex visualizations

Crisis management

Digital technologies

Tourist information in GIS

- *tourist maps*
- *accommodation facilities*
- *cultural content*
- *entertainment and recreation*
- *services and transport*
- *the uniqueness of the area*
- *various warnings*

Digital representations

Digital and social transformation of mapping tourist attractions

that would be too slow, too expensive and unreasonably time-consuming in a traditional approach.

GIS also provides an option for simple and quick search, as do any other databases with a spatial analysis and visualization option. Its special importance in tourism is in the choice of a **targeted information cluster** (for example, only tourist attractions, accommodation or restaurants)



Photo: Turistička organizacija Srbije

that will be shown on a map, without showing all the irrelevant data that can make a map "a blind zone". However, unlike printed maps, digital ones can be connected to different file formats, including multimedia content. For the successful application of different files **in GIS, it is important that they contain relevant data about the geographical location they are related to**. That is why one of the most important challenges of GIS application in tourism is the collecting of such information, since it was not needed for geographical pinpointing before GIS.

Using mobile phones and digital devices in general to take photos and make videos includes options of storing geographical data of the location where the photo or video was created. Considering the number

Multimedia content

Mobile phones

Digital and social transformation of mapping tourist attractions

of mobile devices in the world, this enables practically unlimited creation and collecting of geographically located information. In the case of tourism, the paradox is even greater than in other examples of GIS application. Apart from tourism professionals and host communities, tourists as GIS users can become part of information collecting.



Photo: Ivan Sardi, Hrvatska turistička zajednica

Bibliography

Apart from the information used in the creation of content for this chapter, the following bibliography contains the sources that can help in further research of the topics introduced:

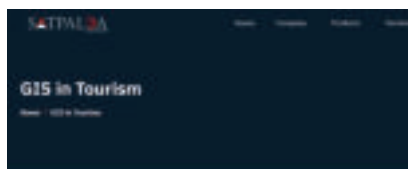
1. Breg Valjavec, M., Klanjšček, M. & Ciglič, R. (2020). Smartkarst.eu – spletna navigacijska platforma za razvoj trajnostnega turizma v čezmejni kraški pokrajini. In: Ciglič, R. et al. (eds.), *Modeliranje pokrajine*, 189-200. ZRC SAZU, Geografski inštitut Antona Melika.
<https://omp.zrc-sazu.si/zalozba/catalog/download/1927/7981/1297?inline=1>
2. Eboj, O. V. (2017). Tourism Mapping: an Overview of Cartography and the Use of GIS. *BIMP-EAGA Journal for Sustainable Tourism Development*, 6(1), 61-67.
<https://doi.org/10.51200/bimpeagajtsd.v6i1.3068>
3. Jovanović, V. & Njeguš, A. (2008). The Application of GIS and its Components in Tourism. *Yugoslav Journal of Operations Research*, 18(2), 261-272.
<https://doi.org/10.2298/YJOR0802261J>
4. Jovanović, V., Đurđev, B., Srdić, Z. & Stankov, U. (2012). *Geografski informacioni sistemi*. Univerzitet Singidunum i Univerzitet u Novom Sadu.
5. Maksin, M., Pucar, M., Korać, M. & Milijić, S. (2009). *Menadžment prirodnih i kulturnih resursa u turizmu*. Univerzitet Singidunum.
6. Minić, N. (2010). Geografski informacioni sistemi u oblasti turizma i njihova primena u marketingu turističke destinacije. *Singidunum revija*, 7, 363-370.
https://www.researchgate.net/publication/236984630_Geografski_informacioni_sistemi_u_oblasti_turizma_i_njihova_primena_u_marketingu_turisticke_destinacije
7. Peruško, I. (2019). *Primjena geografskih informacijskih sustava u turizmu*. [Diplomski rad]. Repozitorij Sveučilišta Jurja Dobrile u Puli.
<https://repozitorij.unipu.hr/islandora/object/unipu%3A4202/datastream/PDF/view>
8. Škvorc, L. & Šulc, I. (2021). Interaktivna turistička karta otoka Krka. *Geografski horizont*, 67(1), 35-45. <https://hrcak.srce.hr/270702>
9. Vuković, M. (2022). The Application of GIS in Sustainable Tourism Management. *Economics of sustainable development*, 6(2), 53-62.
<https://scindeks-clanci.ceon.rs/data/pdf/2560-421X/2022/2560-421X2202053V.pdf>

Online sources



GIS for tourism

www.gisfortourism.wordpress.com/



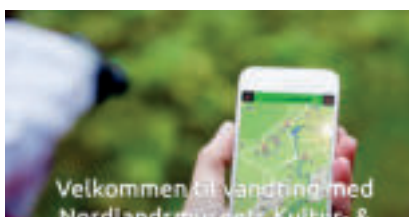
GIS in tourism

www.satpalda.com/blogs/gis-in-tourism/



GIS Cloud

www.giscloud.com/blog/using-gis-in-tourism-tourist-map-of-solta/



Nordlandsmuseet

www.vandringen.no/?id=2047218663



Turistički Svet

www.turisticisvet.com/vesti/turizam/u-boru-napravljena-prva-onlajn-platforma-za-bicikliste-u-srbiji.html



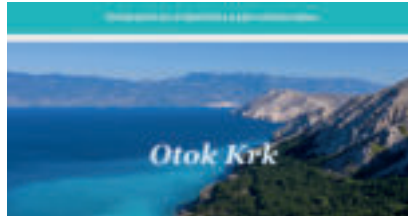
MAK usluge

www.mak-usluge.hr/reference_izbor/



Hrvatska turistička zajednica

www.htz.hr/hr-HR/interaktivne-karte-gorskog-kotara



Karta otoka Krka

<https://experience.arcgis.com/experience/4020472ca5394d44a0ecc2f83c70c8d6>



Interaktivna karta kampa

www.camps-cres-losinj.com/hr/nova-interaktivna-karta-kamp-cikat-2023.aspx

2.2. Citizen science and mass data collecting in tourism

The aim of this chapter is to present readers with the concept, application and challenges of citizen science in practice, especially in mass data collecting and other forms of crowdsourcing in tourism.

After mastering the content of this chapter, reader will be able to:

- describe the reasons for the occurrence and the concept of citizen science
- point out scientific areas and fields in which citizen science is often applied
- illustrate the most important benefits and ethical challenges in citizen science application
- explain how volunteers can get involved in citizen science projects
- present ways of applying crowdsourcing in tourism
- relate mass data collecting and tourism destination management

The collecting and processing of information leading to scientific discoveries is the job of scientists. However, the participation of citizens and “non-professional” scientists in scientific research and even scientific discoveries is nothing new. The rise in communication options among people and the **easier availability of different information has sped up and improved the process of including volunteers, non-scientific organizations and citizens into scientific activities**. That is why the concept of citizen science appeared in the late twentieth century. It covers different activities in which “regular” citizens cooperate with scientists on projects, hoping to contribute to solving a particular problem.

Scientific activities that use the principles of citizen science can be implemented in many scientific areas. The common application of citizen science is especially connected with natural sciences. There are numerous examples of citizen science in astronomy, ecology and environmental protection, botany, zoology, oceanography, geology and climatology. However, there are also examples in social sciences research, such as sociology, psychology, information and communication sciences; as well as in humanities; with research in geography, IT, medicine, public health, agriculture, technology and engineering.

Citizen science

Examples of citizen science

Digital and social transformation of mapping tourist attractions

Like any other scientific approach, citizen science is marked by specific benefits and challenges. The most common ones are the challenges related to more complex research and demanding tasks that can be inappropriate for volunteers. Still, with the correct training and education, data collecting by volunteers can be highly reliable compared to that collected by professional scientists. Although **volunteer motivation level, and with it the result, varies significantly**, it is not uncommon for volunteers to show extremely high motivation level, sometimes surpassing professionals. The appearance of bias can be seen in the actions of both professionals and volunteers. Still, **volunteers are more likely to invent or distort data if there is a reward for research participation**.

Most challenges in the application of citizen science are not so great that they could not be appropriately prevented or limited. The benefits of citizen science are significant. Although this approach is still being developed, **in some scientific areas, especially in terms of mass data collecting, on broader scale and over a longer time period it will be irreplaceable**. On top of that, citizen science contributes to scientific democratization by opening up possibilities of citizens becoming a part of scientific research and new insight creation. Citizen science contributes to broadening scientific interest onto the topics citizens are particularly concerned about, but are not the focus of professional scientists. This often includes social issues and/or environmental projects, and the care for resources that affect the lives of “regular” people.

Volunteers

Democratization of science



Photo: Denis Stošić, Regionalna turistička zajednica Karlovačke županije

Citizen science creates certain ethical challenges in practice. There is the issue of intellectual property, as well as basic principles of implementing citizen science projects so that volunteer contribution is acknowledged. That is why **the European Citizen Science Association has defined the basic principles of citizen science**, chief among them being the ones that point towards the importance of citizens' role in projects and their actual scientific outcomes. Both professional scientists and volunteers can gain from participating in citizen science projects, but volunteers should also be enabled to **take part in the more complex phases of the scientific process, and receive project feedback.**

The problem of bias should be treated equally as with professional scientists, and the data and results published whenever possible in the so-called open format. **The contribution of volunteers as citizen scientists must be acknowledged in the research achievements** and publications, because such projects too must be valued based on scientific results and impact. In any case, citizen science project leaders **must take into account all the usual legal and ethical issues**, as well as the ones related to this particular approach to science.

In practice, volunteers can get involved in citizen science projects in three different ways. The simplest are support projects. They are designed by professional scientists, and citizens are expected to implement activities of mass data collecting and analyzing. On the collaborative project level, also designed by professional scientists, volunteers may become involved in several scientific activities, such as defining experiments, interpreting data or other project stages. The highest level of citizen science is co-creative projects. They are designed by scientists and interested citizens together, and they function as partners throughout the project and work alongside in all phases of the scientific process.

As mentioned before, mass data collecting as a type of mass support or crowdsourcing, is an irreplaceable benefit that contributes to the citizen science concept. It actually involves **activities of a large number of participants in collecting services, ideas or data.** Although these activities aren't related exclusively to using digital technologies, it is **the development of digital technologies and the internet which enabled mass data collecting**, used most often today in citizen science concept, as well as in tourism.

The appearance of crowdsourcing in tourism is mostly interpreted and used in its generic form of **engaging individuals instead of an organization to collect and distribute services, ideas or information.** Those can be local people or tourists. The help they can provide extends from marketing, over collecting ideas for creating or improving existing

Scientific outcome

Open format

Different types of projects

- support projects
- collaborative projects
- co-creative projects

Crowdsourcing

Digital and social transformation of mapping tourist attractions

tourist products, to developing innovations in tourism. Along with the concept of co-creation of tourist products, mass assets collecting or crowdfunding, and tourism that leans on local community, this represents **an important part of innovation in tourism** or *open tourism*.

Open innovations include the cooperation between different participants in tourist product innovation. They also make including new ideas generated by the local community easier. **Open innovations support the concept of collaborative development of tourism and respond more easily to the challenges of including less used attractions.**



Photo: Mitja Kobal

Additionally, they facilitate the creation of tourist products which cater for specific tourist interests. Considering that such tourist products demand specific competences on the part of service providers, open innovation can help in the development of both public and private sector. **Open information and open innovation accompanied by digital technologies create a new potential for collaboration between different stakeholders in a tourism destination.**

As a special kind of mass support, there is also mass-supported cartography or crowdmapping, which when related to GIS use, creates

Crowdfunding

Open innovation

Digital and social transformation of mapping tourist attractions

new opportunities for application in tourism. Among them is **the mapping of tourist resources, particularly tourist attractions**. A special role in this can be played by local residents who know the attraction base of the area where they live. It is also possible to include tourists, who can **help with the so-called local blindness and notice potential tourist attractions that local people may ignore**. Young people, who grew up with digital technologies and content sharing, present untapped potential for a systematic approach to collecting large quantities of data. **The inclusion of young people during their schooling can create the feeling of interconnection with sustainable tourism development**, and through data collecting they can be included in tourism management.

It is possible to use different tools, approaches and methods in data collecting. It is also possible to collect different type of data. That can include basic information about all tourist attractions, or only about the part of tourism offer, such as cultural heritage, gastronomy, etc. Although collecting all data has value in the scope of information, **partial data**

Crowdmapping

Content sharing

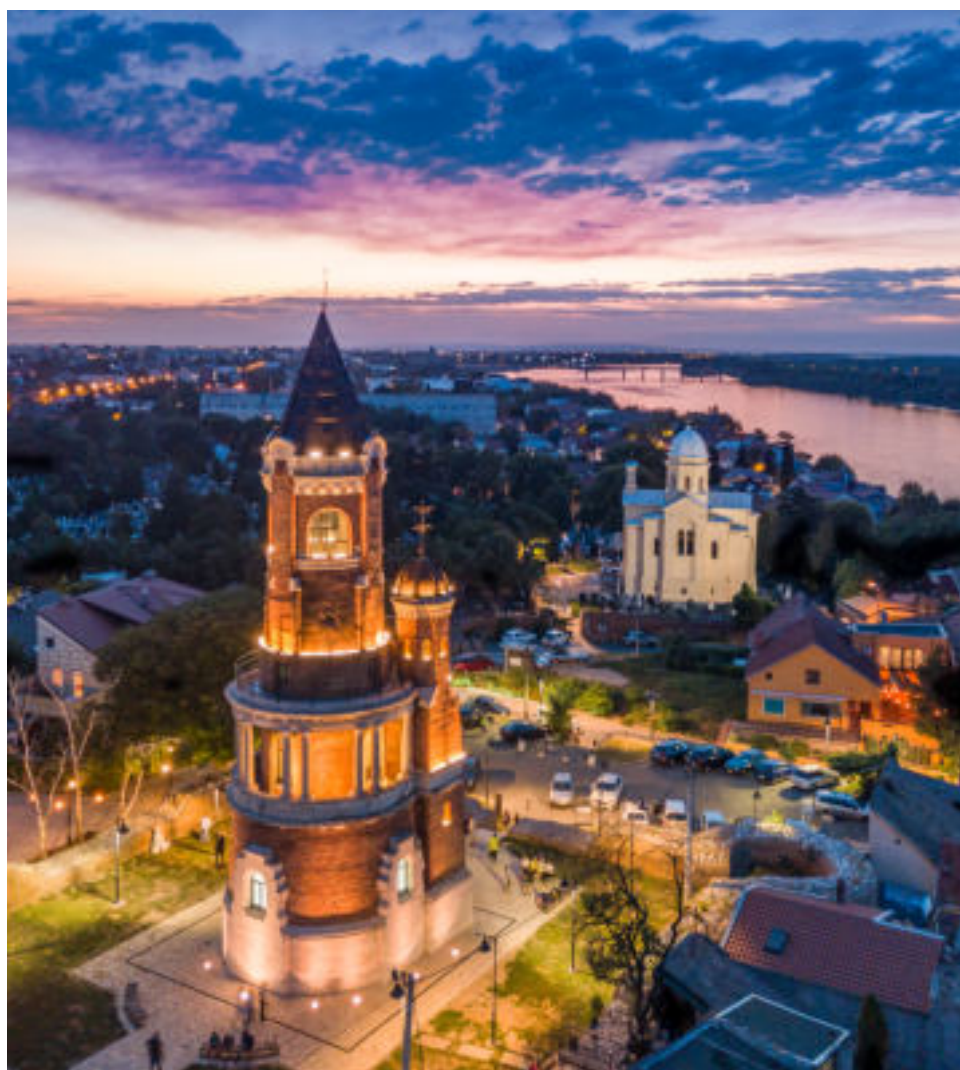


Photo: Turistička organizacija Srbije

Digital and social transformation of mapping tourist attractions

collecting provides better understanding of availability, attractiveness, and distribution of tourist facilities. Also, apart from the tangible or material content, mass data collecting allows gathering of intangible parts of tourism offer: myths, legends, traditions, heritage interpretation, etc.

Tourists and local residents can participate in mass data collecting of other information that can contribute to the more successful management of a tourism destination. This includes data about unwanted tourist distribution, damages to natural and cultural heritage, traffic jams, movements within a tourism destination, as well as personal impressions about the content used. However, what is more important about contemporary digital technology is the option of **instant uploading of geo-positioned photographic, video and textual material.** With the correct processing of this information, it is possible to make more competent decisions in tourism destination management.

 Data collecting

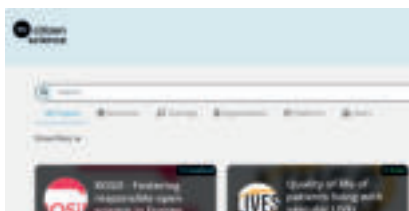
 Tourism management

Bibliography

Apart from the information used in the creation of content for this chapter, the following bibliography contains the sources that can help in further research of the topics introduced:

1. Bakogiannis, E., Potsiou, C., Apostolopoulos, K. & Kyriakidis, C. (2021). Crowdsourced Geospatial Infrastructure for Coastal Management and Planning for Emerging Post COVID-19 Tourism Demand. *Tourism and Hospitality*, 2021(2), 261–276. <https://doi.org/10.3390/tourhosp2020016>
2. Dinić, B., Sadiković, S., Oljača, M., Milovanović, I. & Smederevac, S. (2022). *Vodič za građansku nauku*. Filozofski fakultet u Novom Sadu.
3. Egger, R., Gula, I. & Walcher, D. eds. (2016). *Open Tourism: Open Innovation, Crowdsourcing and Co-Creation Challenging the Tourism Industry*. Springer-Verlag.
4. Ferguson, L. (2017). *Mapping and Managing Natural and Cultural Assets*. SHAPE Project. https://shape.interreg-npa.eu/subsites/SHAPE/WPt2_Capitalising_on_assets/DT2.1.1_Report_on_mapping_and_managing_assets_and_assessing_climate_change_impacts.pdf
5. Frančula, N. (2015). Masovno skupljanje podataka i masovna podrška. *Geodetski list*, 69(92)(3), 226-226. <https://hrcak.srce.hr/285770>
6. Frančula, N. (2022). Platforme za masovno kartograflanje. *Geodetski list*, 76(99)(3), 286-287. <https://hrcak.srce.hr/284976>
7. Garrigos-Simon, F. J., Gil-Pechuán, I. & Estelles-Miguel, S. eds. (2015). *Advances in Crowdsourcing*. Springer International Publishing Switzerland.
8. Ivanjko, T., Zlodi, G. & Horvat, Z. (2024). *Građanska znanost*. Sveučilište u Zagrebu, Filozofski fakultet FF-press. <https://doi.org/10.17234/9789533791333>
9. Jernsand, E. M., Persson, M. & Lundberg, E. eds. (2023). *Tourism, Knowledge and Learning*. Routledge. <https://doi.org/10.4324/9781003293316>
10. Pocock, M. J. O., Chapman, D. S., Sheppard, L. J. & Roy, H. E. (2014). *Choosing and Using Citizen Science: a guide to when and how to use citizen science to monitor biodiversity and the environment*. Centre for Ecology & Hydrology. https://www.ceh.ac.uk/sites/default/files/sepa_choosingandusingcitizenscience_interactive_4web_final_amended-blue1.pdf
11. Schoenenberger, N., Zenzerović, P. & Tolić, A. (2020). *Priručnik za građansku znanost*. Institut za razvoj i inovativnost mladih. <https://izradi.croatianmakers.hr/wp-content/uploads/2020/09/Prirucnik-za-gradjansku-znanost-cijela-knjiga-i-korice.pdf>
12. Tweddle, J. C., Robinson, L. D., Pocock, M. J. O. & Roy, H. E. (2012). *Guide to citizen science: developing, implementing and evaluating citizen science to study biodiversity and the environment in the UK*. Natural History Museum and NERC Centre for Ecology & Hydrology for UK-EOF. <https://www.ceh.ac.uk/sites/default/files/citizenscienceguide.pdf>
13. Wiggins, A. & Crowston, K. (2011). From Conservation to Crowdsourcing: A Typology of Citizen Science. 2011 44th *Hawaii International Conference on System Sciences*, 1-10. <https://doi.org/10.1109/HICSS.2011.207>

Online sources



Citizen Science Platform

eu-citizen.science/projects



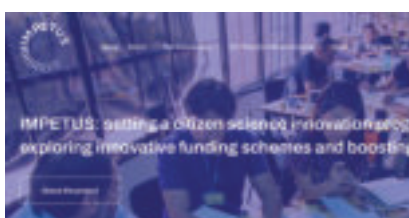
Citizen science - EU

<https://cordis.europa.eu/article/id/435872-citizen-science-inspiring-examples-of-societal-engagement-for-horizon-europe/hr>



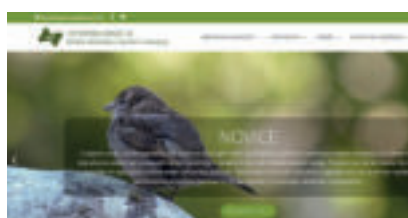
Citizen Science Program

www.sophie2020.eu/activities/citizen-science/



IMPETUS

www.impetus4cs.eu/



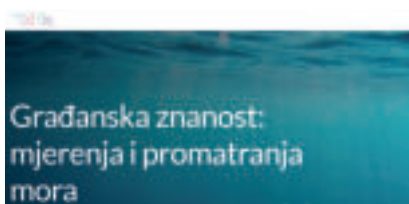
citizenscience.si

www.citizenscience.si/



CENTER ZA KARTOGRAFIJO

www.ckff.si/projekti.php?znak_a=15



Institut za razvoj i inovativnost mladih

www.seas.croatianmakers.hr/



Osnazi-Usavrši-Integriraj za razvoj

www.oui.hr/



Vesti iz TOS-a - Srbija

<https://srbee.bio.bg.ac.rs/azijska-pcela-smolarica/gradjanska-nauka>

2.3. Data-based tourism destination management

The aim of this chapter is to present readers with the concept, characteristics, benefits and key issues which tourism destination management faces, especially in terms of steps, tools and challenges of data-based destination management.

After mastering the content of this chapter, reader will be able to:

- describe characteristics and conditions that tourism destinations have to meet
- explain the advantages of successful tourism destination management
- point out issues that tourism destination management must resolve
- present the basis for interest coordination among different tourism stakeholders
- illustrate steps and tools of data-based tourism destination management
- explain the main challenges of data-based tourism destination management

Tourism destination is the mainframe of tourism development that occupies a specific area. **This area is geographically marked by tourists' perception, not by administrative borders.** This is logical, since tourists have different types of tourist experiences within a destination. However, each tourism destination must meet certain conditions. It has to be attractive to tourists and offer a specific range of tourist activities. At the same time, it must be available, and provide adequate catering and accommodation facilities and other amenities.

Each **tourism destination is marked by spatial integrity and its particular tourism offer.** Successful destinations are oriented towards tourism market regardless of administrative borders. At the same time, they successfully coordinate key participants through management and planning. That is why a tourism destination is not considered successful until it achieves a degree of intensity and continuity of tourist flows. Also, it is a consequence of **mutual activity of different stakeholders in tourism, who established a system of tourism destination management.**

Tourism destination

Tourism offer

Digital and social transformation of mapping tourist attractions

Successful management of a tourism destination brings many benefits. In general, it means **better use of space and a possibility for less known or less “quality” resources to gain economic value**. The concepts of a tourism destination and a tourism destination product always encompass several different attractions and the possibility for several activities. It helps with **creating a better identity for a destination and its higher recognition on the market, as well as a more successful tourist product placement**. From the tourists’ perspective, this means they can expect more content while staying in an area, with fewer unpleasant or unexpected experiences.

All areas where tourism is being developed did not follow the logic or a need to manage a destination. It often happens that **an intense tourism development places emphasis only on building accommodation facilities**. For this reason, many tourism destinations today face neglect, urban disorganization and lack appropriate infrastructure. Unfortunately, many accommodation providers are not aware that the level of tourism destination’s quality directly affects their business, since **tourists primarily choose a destination** when making a decision to travel, not an accommodation facility.

Due to all this, managing a tourism destination (i.e. destination management) must **find answers for complex issues about tourism**

Tourism destination product

Tourism destination management

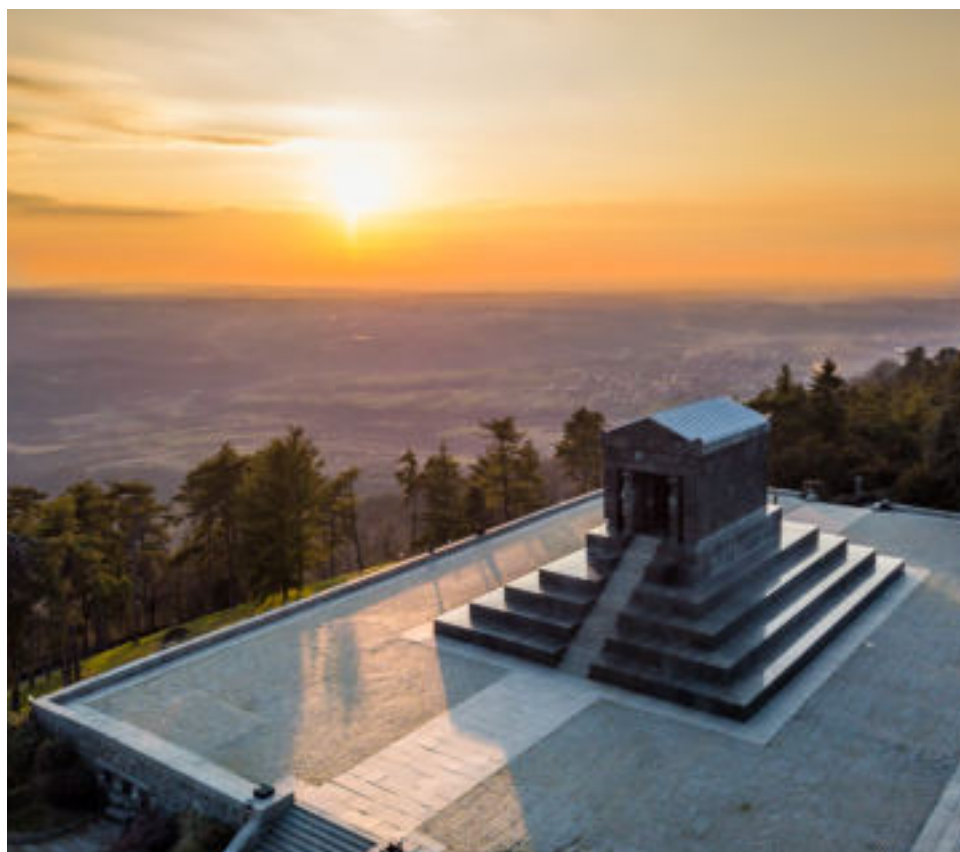


Photo: Turistička organizacija Srbije

development as much as to short-term question of success on the tourism market. This is why tourism destination management is a matter of care and systematic development that concerns everyone who, in any way, influence the creation and development of tourism offer. This definitely includes local residents. To conclude, **tourism destination management is an effective and efficient managing of all resources** that contribute to tourism in an area.

Activities that contribute to development and improvement of tourism must be **a result of balanced interests of all tourism stakeholders.** This includes stakeholders who create and implement tourist products in order to achieve their optimal quality, competitiveness, sustainability and optimal economic impact on the tourism market. During the process, they **face global competition and the consequences of globalization process as much as the expectations and perception of various interest groups in the destination, who may oppose them.**

Recognizing and using opportunities to **create good partnerships is very important for the success of a tourism destination.** Since every success must be measured, identification and application of correct standards and measures of success is crucial for the correct evaluation and advancement of competitiveness. This is why many tourism destinations bravely move forward towards finding new techniques of tourism destination management, which often surpass traditional and theoretical concept of management and administration **through the concepts of co-creation and transformational or regenerative tourism.**

Still, in digital times of easy information access and communication, **it seems logical to make decisions based on specific data.** That is why the concept of data-based tourism destination management is mentioned more and more often. It is justified if it is possible to efficiently collect the needed quantity of data and quickly analyze and interpret them. From the perspective of **following different indicators that can point at unsustainable practices,** it is definitely needed.

Analyzing a large quantity of data **enables a more successful identification of tourist behavior patterns and trends that can profoundly impact the future of a tourism destination.** This is not only a matter of analyzing statistic indicators which are traditionally collected, but also using various techniques that digitalization provides, such as citizen science, mass data collecting, and mass support data analysis, which tourists themselves can participate in. This knowledge can be used short-term to improve communication with tourists, manage tourist flows in a destination, and lessen the negative impacts of seasonal movements and tourist pressure on the most attractive areas and facilities.

Systematic development of tourism

Tourism stakeholders

Competitiveness

Data-based management of tourism destinations

Statistical indicators

Digital and social transformation of mapping tourist attractions

The development of digital technologies, various applications and mobile devices that use tourists' personal information and their activities' location data, **enable instant collecting and analysis of a large quantity of information**. This helps to make better decisions in tourism destination management and investment into marketing activities. It is possible to **improve tourists' experience of a destination while using minimum resources**. In the time of rapid changes caused by digital economy concept, it is also a necessity.

The first step to be made is to develop data collecting abilities. **Mass data collecting and open innovations with the application of digital technologies support a cost-efficient approach to data collecting**. This is



Photo: Zoran Jelača, Hrvatska turistička zajednica

particularly important for smaller destination management organizations, which may see tourist attraction mapping as a serious challenge. It is crucial to **ensure that collected data is digitalized in high quality and easily available in digital form**. The open data concept is a key in further data use. Once the information about tourist attractions become digitally available and open to users, it is easier to encourage various new entrepreneurial digital initiatives, such as mobile applications for a particular segment of tourism offer.

Tourists' personal data

Data collection

Digital and social transformation of mapping tourist attractions

More information can be found today in digital environment than statistical reports. **The data has to be actively collected through the analysis of visits to websites, blogs and social networks.** The same is possible by using mobile applications for tourists that can simultaneously collect a large quantity of data. The information can also be collected from other **publicly available information systems and databases, or through activities of citizen science.**

Of course, data collecting is meaningful only if the information is actively and continuously analyzed. **The information can be analyzed by using internet analytics tools, but it is good to develop one's own data analysis systems.** Collected, logically analyzed and well-presented data can speed up good decision making. Since collected information is not just numbers, data analysis should not be displayed only as tables and graphs. It is much better to display them as pictures, multimedia content and maps which show an activity or information about an area. **It is important to share such analysis among all key stakeholders in tourism development,** including tourists themselves.

Mobile applications

Data analysis



Photo: Bogdan Mak

Data-based tourism destination management is not a simple process and creates many challenges. Things to consider include investment into information technology, the development of analytical skills, the use of innovative work methods and the creation of innovation and collaboration culture. However, to manage a tourism destination, it is possible to use the existing public information infrastructure, encourage innovation in collaboration with educational and research institutions, and **develop new forms of cooperation with a wide circle of stakeholders within the citizen science and knowledge economy concepts.**

Encouraging
innovation

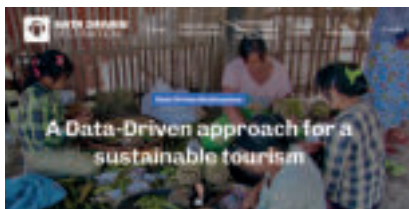
Bibliography

Apart from the information used in the creation of content for this chapter, the following bibliography contains the sources that can help in further research of the topics introduced:

1. Alič, A. & Cvikl, H. (2021). *Uvod u turizem in destinacijski menadžment*. Ministrstvo za šolstvo in šport Republike Slovenije. https://vsagt.si/wp-content/uploads/2021/10/UTD_2021.pdf
2. Brumen, B. & Starc Peceny, U. eds. (2021). *Zbornik konference »Turizem 4.0 in znanost«*. Univerza v Mariboru, Univerzitetna založba. <https://doi.org/10.18690/978-961-286-515-3>
3. Bartoluci, M. & Nakič, M. (2023). *Menadžment turističke destinacije*. Veleučilište Aspira.
4. Carter, M. R., Nevill, H. L. T., Ward-Perkins, D. & Connolly, G (2022). *Destination Management Handbook: A Guide to the Planning and Implementation of Destination Management*. World Bank Group. <http://documents.worldbank.org/curated/en/099451003012313859/IDU07402ad17053a5043c909eb80cd040870838c>
5. Egger, R., Gula, I. & Walcher, D. eds. (2016). *Open Tourism: Open Innovation, Crowdsourcing and Co-Creation Challenging the Tourism Industry*. Springer-Verlag.
6. Knežević Cvelbar, Lj., Mayr, M., Vavpotič, D., Mihalič, T., Smrekar, A., Polajnar Horvat, K., Ribiero, D. & Kuščer, K. (2021). *Smernice za management turističnih destinacij na podlagi modelov nosilnih zmogljivosti in turističnih tokov*. Ekonomska fakulteta v Ljubljani. <http://www.ef.uni-lj.si/zaloznistvoslike/495/Smernice%20za%20MTD%20za%20web.pdf>
7. Leal, F., Malheiro, B. & Burguillo, J. (2016). Recommendation of Tourism Resources Supported by Crowdsourcing. *ENTER 2016 PhD Workshop, International Conference on Information and Communication Technologies in Tourism 2016*, 18-25. <https://doi.org/10.13140/RG.2.2.30159.69283>
8. Lešnik Štruhec, T., Pavlaković, B. & Pozvek, N. eds. (2023). *Turistične destinacijske organizacije: gonila povezanega kreativnega zelenega razvoja in trženja*. Univerza v Mariboru, Univerzitetna založba. <https://doi.org/10.18690/um.ft.1.2023>
9. Magaš, D., Vodeb, K. & Zadel, Z. (2018). *Menadžment turističke organizacije i destinacije*. Fakultet za menadžment u turizmu i ugostiteljstvu.
10. Maksin, M., Pucar, M., Korać, M. & Milijić, S. (2009). *Menadžment prirodnih i kulturnih resursa u turizmu*. Univerzitet Singidunum.
11. Michail, A. M. & Gavalas, D. (2019). Bucketfood: A Crowdsourcing Platform for Promoting Gastronomic Tourism. *2019 IEEE International Conference on Pervasive Computing and Communications Workshops (PerCom Workshops)*, 9-14. <https://doi.org/10.1109/PERCOMW.2019.8730727>
12. Morrison, A.M. (2023). *Marketing and Managing Tourism Destinations*, (Third Edition). Routledge.
13. Polajnar Horvat, K. & Ribiero, D. (2019). Izzivi v turističnem sektorju: kako se evropske turistične destinacije soočajo s preturizmom. *Geografski vestnik*, 91(1), 81–94. <https://doi.org/10.3986/GV91104>

14. Vodeb, K. (2014). *Turistična destinacija: sodobna obravnava koncepta*. Založba Univerze na Primorskem.
<https://www.hippocampus.si/ISBN/978-961-6832-77-9.pdf>
15. Wardhani, W., Pratiwi, R., Hartono, S., Editya, E. & Dasmadi, D. (2020). Crowdfunding: Is It Beneficial in Destination Marketing?. 1st International Conference on Accounting, Management and Entrepreneurship (ICAMER 2019), 179-182
<https://doi.org/10.2991/aebmr.k.200305.044>
16. World Tourism Organization. (2007). A Practical Guide to Tourism Destination Management. UNWTO. <https://doi.org/10.18111/9789284412433>
17. Zhang, H., Leung, X., Bai, B. & Li, Y. (2021). Uncovering crowdsourcing in tourism apps: A grounded theory study. *Tourism Management*, 87 (2): 104389.
<https://doi.org/10.1016/j.tourman.2021.104389>

Online sources



Data-Driven tourism approach

<https://datadrivendestinations.com/2023/01/a-data-driven-approach-for-a-sustainable-tourism/>



SmartGuide

<https://blog.smart-guide.org/en/data-driven-destination-management-with-smartguides-big-data-analysis-service>



DATA-DRIVEN DESTINATION

<https://destinationthink.com/blog/data-driven-destination/>



World Economic Forum

<https://www.weforum.org/agenda/2019/09/a-roadmap-for-destination-management-in-the-digital-economy/>



Data Appeal

<https://datappeal.io/news/>



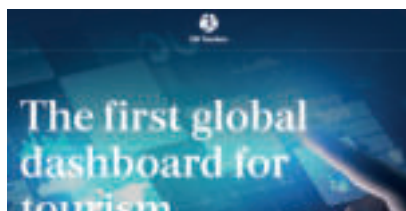
Smart Tourism Destinations

<https://smarttourismdestinations.eu/>



What is Destination Management?

<https://mize.tech/blog/what-is-destination-management-and-why-is-it-important/>



UN Tourism Data Dashboard

<https://www.unwto.org/tourism-data/un-tourism-tourism-dashboard>



EU Tourism Dashboard

<https://tourism-dashboard.ec.europa.eu/?lng=en&ctx=tourism>



3. Sustainable tourism development: importance, stakeholders and goals

Photo: Sotesk Vintgar

Introduction

Tourism development does not only create positive but also numerous adverse effects on both natural and social environment as well as local economy. Therefore, it is very important to understand what sustainable tourism development is based on and how to achieve ecological, social and economic sustainability of tourism. In doing so, it is helpful to regularly test the ethics of each idea for the tourist activities development, and especially to apply the principles of responsible and ethical tourism. That is why the first part of this chapter shows the effects of tourism development on the natural and social environment and local economy, as well as possible means of finding balanced and responsible approach to tourism development.

Sustainable tourism development is impossible without the participation of a large number of different stakeholders, so it is necessary to use participatory tourism practices and models. Each group of stakeholders has their own specific interests and roles in sustainable tourism development that need to be considered. Special instruments and capacities are required for sustainable tourism development. That is why the second part of this chapter describes models of participatory approach to tourism development, key groups of stakeholders and their roles, as well as specific instruments and required capacities for sustainable tourism development.

As a global phenomenon, tourism can strongly contribute to global goals of sustainable development. There is a broad spectrum of goals to which tourism can contribute. Actions on eradicating poverty and hunger in the world, improving the health and competence of employees, and generally improving the lives of local communities are particularly pronounced. Above all, tourism contributes to tolerance and understanding. Therefore, the final part of this chapter presents the possibilities of tourism's contributions to sustainable development goals, especially in terms of eradicating poverty and hunger, improving the health and life of local communities in general, as well as tourism's contribution to tolerance and understanding.

3.1. The importance of sustainable tourism development

The aim of this chapter is to acquaint readers with the effects of tourism development on the natural and social environment as well as the local economy, especially on the necessity to find balanced and responsible approach to tourism development.

After mastering the content of this chapter, reader will be able to:

- present what sustainable tourism development is based on
- explain how tourism development affects the natural and social environment
- illustrate how to achieve the economic sustainability of tourism
- describe the ways of finding a balanced approach to tourism development
- point out the ways to test the ethics of an idea for developing tourist activities
- interpret the benefits of applying the principles of responsible and ethical tourism

Not every tourism development is sustainable. **Sustainable tourism development meets the present needs of tourists, tourism companies, as well as local communities without compromising the ability of future generations to satisfy their needs.** Such tourism has less adverse and more positive effects. That is why in sustainable tourism development, achieving positive economic effects is not based on destroying the resources on which its future depends. On the contrary, these effects should be based on preserving the natural environment, as well as the social relations of local communities. In general, **good tourism management can bring economic and social benefits and improve environmental conservation**, just as inadequate tourism management can cause severe damage.

Tourism development significantly affects the natural environment. Therefore, it is important to focus on positive actions and effects of sustainable tourism. **Tourism development directly affects the natural environment by taking over basic natural resources such as land and water.** Indirectly, tourist movements causes air pollution and climate change. Tourist activities affect the natural environment through their impact on ecosystems: they can significantly disrupt the interrelationships and mutual influences of the living and non-living

Sustainable development of tourism

Natural environment

Digital and social transformation of mapping tourist attractions

nature. Thus, they can act on the reduction of biodiversity through various influences on plant and animal life. Sustainable tourism development therefore focuses on **finding solutions with minimum impact on the natural environment.**

In searching for a solution for ecological sustainability, first of all, it is essential to adopt a holistic approach and a sense of the volume of tourist activities. Encouraging positive practices and appropriate regulations will certainly help. We should not ignore the possibility of collecting environmental fees or providing ecological incentives. Nevertheless, it appears that achieving the right balance between tourism development and nature protection mainly depends on creating **appropriate awareness and value systems among all tourism stakeholders.**

Tourism development makes equally significant impacts on the social environment – local communities. **It strongly affects the space and other social resources also used by the local community.** These primarily include arable land, urban structures, and individual attractive buildings. Interrelationships and mutual influences between host communities and tourists are extremely strong. Tourist activities can, therefore, change the social and cultural environment of the host communities. Tourists “consume” contents of tangible and intangible cultural heritage and, by doing so, can alter them dramatically.



Photo: Jost Gantar

Ecological
sustainability

Social environment

Solutions for social sustainability are primarily based on an ethical approach to tourism development and the creation of equal opportunities for all involved stakeholders in the local community. It is necessary to **achieve a good balance between the conservation and use of cultural assets**. In addition to encouraging good practices, creating awareness of the social and cultural values of the local community can also be of assistance here. When it comes to preserving space, it is, by all means, related to appropriate spatial planning and its implementation, as well as regulations on the construction and protection of cultural heritage.

Although it commonly appears that tourism development brings only positive economic effects, this is not so. **Tourism development can have a devastating effect on the economy of host countries**. For this reason, it is necessary to carefully consider the relationship between actual costs and benefits when considering tourism development. Unfortunately, the benefits are often transferred to tourism companies, and a substantial part of visible and invisible costs are left as a burden on local communities. The development of **businesses related to tourist consumption can lead to aggressive depletion of basic production factors**, consequently leaving less space for other economic activities. Intensive tourism development can create dependence on income from tourism, which is highly sensitive to various disturbances. This can threaten the economic viability of local communities in the short and long term.


In achieving economic sustainability, it is necessary to closely monitor the relationship between the actual costs and benefits of tourism development. In any case, **it is essential to keep in mind the fair distribution of costs and benefits between companies and the local community**. At the same time, it is possible to act to increase the involvement and protection of small and local entrepreneurs. In any case, it is necessary to increase local consumption, employ the local workforce, and encourage investments by local entrepreneurs, thus reducing outflows from the local economy.

The balanced effects of tourism development are best tested through the existence of a balance of three fundamental dimensions of sustainable tourism. These are the already presented economic, social, and ecological dimensions. **The ideas for tourism development that focus only on creating economic benefits while simultaneously causing damage to the local community and the environment should be discarded**. A perfect balance of all three dimensions of sustainability is sometimes impossible and often very difficult to achieve. Nevertheless, it is certainly necessary to invest an adequate effort in searching for possible solutions.

 Social sustainability

 Economic effects

 Economic sustainability

 Dimensions of sustainable tourism

Digital and social transformation of mapping tourist attractions

Socially acceptable options should be sought only among those that **do not cause irreparable or disproportionate damage to the natural environment**. Among the options that are acceptable in the ecological context, one should look for **those that do not create a burden and/or hidden costs for the local community and tourists**. Eventually, business ideas that meet all the previous conditions and can bring profit to the service provider, with **which they can ensure stable investments in further development, remain acceptable**.



Photo: Turistička organizacija Beograda

However, all those ideas whose development would not make immediate service providers or their employees proud in the local environment in which they live should be rejected. In this situation, moral relativism is acceptable. **Tourism should not be developed for tourists but for the prosperity of the local community**. If some tourist activities not acceptable to the providers for ethical or even personal reasons of their employees, they should not be further developed. This also applies to circumstances in which service providers would be under unbearable **pressure from local community members, a social group, and/or their relatives** based on their moral principles. The same principle applies in the case of specific moral norms of a selected target group of tourists.

Investments in development

Ethical traditions

Moral relativism

Digital and social transformation of mapping tourist attractions

That is why **tourist activities should be based on universal moral principles already at the stage of idea development.** Different ideas for the development of tourist activities should be tested for ethics. Sometimes, this can be a complex process, and sometimes it will be a simple reflection. There are different ways to perform the test. One of the most effective is to **simultaneously look at the ethical challenge from the perspective of all three most important ethical traditions.** The first one focuses on respecting the rules, the second on achieving balanced effects, and the third one relies on virtues. It is important to satisfy all three requirements because it is impossible to predict in advance which ethical traditions potential service users are more inclined to.

Changes in the system of values among tourists create an important trend of high sensitivity to the application of ethical norms. **Tourist travel is based on a high level of trust between a service provider and a tourist.** That is why service providers who do not follow the usual ethical standards quickly lose their buyers. If tourism offer includes unethical content or activities, it will not gain the trust of the users. Failure to **apply the principles of responsible and ethical tourism** certainly does not lead to sustainable tourism development.

Ethics

User trust



Photo: Vedran Božičević, Regionalna turistička zajednica Karlovačke županije

Bibliography

Apart from the information used in the creation of content for this chapter, the following bibliography contains the sources that can help in further research of the topics introduced:

1. Alfier, D. (2010). *Zaštita prirode u razvijanju turizma*. NEBO.
2. Cetina, E. (2022). Održivi razvoj turizma u Hrvatskoj. *Zbornik Istarskog veleučilišta - Rivista dell' Università Istriana di scienze applicate*, 1(1), 80-86. <https://hrcak.srce.hr/file/412249>
3. Dražić, G. (2020). *Održivi turizam* (Prvo izdanje). Univerzitet Singidunum. <https://singipedia.singidunum.ac.rs/izdanje/43277-odrzivi-turizam>
4. Europska komisija. (2022). *Tranzicijski put za turizam*. Europska komisija. <https://op.europa.eu/hr/publication-detail/-/publication/404a8144-8892-11ec-8c40-01aa75ed71a1>
5. Lešnik Štruhec, T., Pavlaković, B. & Pozvek, N. eds. (2023). *Turistične destinacijske organizacije: gonila povezanega kreativnega zelenega razvoja in trženja*. Univerza v Mariboru, Univerzitetna založba. <https://doi.org/10.18690/um.ft.1.2023>
6. Longar, U. & Grivec, M. (2023). Vpliv tehnologije na razvoj trajnostnega turizma. *Zbornik radova MES*, 9(2023), 207-217. <https://doi.org/10.7251/BLCZR0623207L>
7. Lovelock, B. & Lovelock, K. M. (2013). *The Ethics of Tourism: Critical and applied perspectives*. Routledge.
8. Mihalič, T. (2006). *Trajnostni turizem*. Univerza v Ljubljani: Ekonomska fakulteta.
9. Mihalič, T. (2019). Prekomeren ali podmeren turizem – primerjalna analiza ekonomske trajnosti slovenskega turizma. *Economic and Business Review*, 21(4). <https://doi.org/10.15458/2335-4216.1090>
10. Mihalič, T. (2022). *Sustainomics in tourism: ecological and political sustainability issues*. Univerza v Ljubljani: Ekonomska fakulteta.
11. Mowforth, M. & Munt, I. (2009). *Tourism and Sustainability* (3rd ed.). Routledge
12. Raspor, A. (2019). *Trajnostni turizem v državah Zahodnega Balkana*. Perfectus, Svetovanje in izobraževanje, dr. Andrej Raspor, s.p. https://www.researchgate.net/publication/338655981_Trajnostni_turizem_v_drzavah_Zahodnega_Balkana#fullTextFileContent
13. Stojanović, V. (2023). *Turizam i održivi razvoj*. Univerzitet u Novom Sadu, Prirodno-matematički fakultet. http://www.dgt.uns.ac.rs/dokumentacija/udzbenici/turizam_i_odrzivi_razvoj.pdf
14. Trezner, Ž. (2019). *Odgovorno poduzetništvo u suvremenom turizmu, Priručnik za razvoj novih turističkih proizvoda i pokretanje poduzetničkog pothvata*. Grad Solin. <https://www.hgk.hr/documents/treznerodgovornopoduzetnitvouturizmu20195ed8a2a8cbea0.pdf>
15. Vodeb, K. ed. (2014). *Trajnostni razvoj turističnih destinacij alpsko-jadranskega prostora*. Založba Univerze na Primorskem. <https://zalozba.upr.si/ISBN/978-961-6963-12-1.pdf>
16. Weaver, D. (2006). *Sustainable Tourism: Theory and Practice*. Butterworth-Hainemann.

Online sources



Sustainable development

<https://www.unwto.org/sustainable-development>



Global Code of Ethics for Tourism

<https://www.unwto.org/global-code-of-ethics-for-tourism>



Global Sustainable Tourism Council

<https://www.gstcouncil.org/>



The transition of EU tourism

https://single-market-economy.ec.europa.eu/sectors/tourism/eu-tourism-transition_en



Sustainable tourism

https://single-market-economy.ec.europa.eu/sectors/tourism/eu-funding-and-businesses/funded-projects/sustainable_en



Sustainable tourism

<https://www.europarc.org/sustainable-tourism/>



Trajnostni turizem

<https://www.gov.si teme/trajnostni-turizem/>



Goodplace

<https://www.goodplace.si/nasi-projekti/>



Trajnostni Turizem v Sloveniji

<https://trnulja.com/trajnostni-turizem-v-sloveniji/>

3.2. Stakeholders of sustainable tourism development

The aim of this chapter is to acquaint readers with models of participatory approach to tourism development, key groups of stakeholders and their roles, as well as specific instruments and necessary capacities for sustainable tourism development.

After mastering the content of this chapter, reader will be able to:

- explain why sustainable tourism development is not possible without participation of different stakeholders
- describe the models on which the participatory approach to tourism is based
- illustrate key groups of stakeholders in sustainable tourism development
- point out the most important roles of some stakeholders in sustainable tourism development
- present specific instruments of sustainable tourism development
- interpret the importance of ensuring the necessary capacities for sustainable tourism development

Sustainable tourism development is not possible without the active involvement of different interest groups and institutions operating in an area. We should keep in mind that they often have different, often opposing goals and interests. Therefore, it is possible **to develop sustainable tourism only through understanding, cooperation, and trust of all involved groups and institutions**. It will certainly be easier if they have an agreement about the vision (goals) and mission (purpose) of tourism development in an area. It is necessary to inform all interest groups and institutions about actions that will be carried out for tourism development, primarily due to the possibility of further coordination of actions of all stakeholders in the development.

Some models on which the participatory approach to development is based sort the most important interest groups according to the model of a triple (companies - educational and research institutions - government/local government), quadruple (+ citizens), and even quintuple (+ environment) helix. In sustainable tourism development, one should take into account more interest groups. When it comes to tourism development, **some interest groups are not homogenous, and within them, it is possible to observe different views and attitudes towards the development of tourism**. Additionally, tourists themselves

Sustainable tourism
development

Participatory approach
to development

Digital and social transformation of mapping tourist attractions

should be considered an indispensable group of stakeholders in the sustainable development of tourism.

Tourism companies play an important role in the development of sustainable tourism, but they are often criticized for their preference for mass tourism. Unfortunately, **many companies operate based on the concept of the economy of scale because tourism demand is essentially mass and price elastic.** Nevertheless, one should distinguish between tourism companies that are focused solely on short-term profit, gross exploitation of natural and social resources without concern for the welfare of a tourism destination, which use sustainability only as a marketing slogan and companies that honestly operate on the principles of corporate social responsibility.

For this reason, it is not good to observe all tourism companies as a kind of service in mass tourism. Besides, **most companies that offer services to tourists are micro and small companies, and many operate on the principles of a small-scale economy and are strongly connected with the local community.** Tourism companies are not just hotel chains, resorts,

Corporate social responsibility

Small and micro enterprises



Photo: Pexels

and branded hotels, large tour operators, and transportation companies, but also numerous small accommodation service providers (family hotels, guest houses, accommodation in households), restaurants and bars, tourist family agricultural farms, small travel agencies, tourist guides, and various other tourism service providers. Small and micro companies in tourism destinations are an extremely important group of stakeholders who care about sustainable tourism development.

In addition to companies that are often collectively referred to as the "private sector", an extremely important group of stakeholders in the development of tourism is covered by the term "public sector". These are different bodies of administration and government, from the local and regional self-government level, through government bodies to international organizations and parastatal bodies. **The public sector bears the greatest responsibility for key developmental issues of tourism and shaping tourism destinations.** However, the public sector also has at its disposal the widest range of instruments with which it can manage the development of tourism. They can be grouped into various legislative, economic, administrative, and planning measures. Perhaps, for the sake of an example, among those measures, there are the issues of land use planning, infrastructure planning and construction, environmental impact assessments, determination of carrying capacity, as well as the setting of responsible business standards.

Educational and research organizations can significantly contribute to sustainable tourism development. Such institutions have the opportunity to **follow trends through the implementation of research, critically assess the effects caused by tourism development,** and devise new developments and business models in tourism. Educational institutions are extremely **important in sharing new knowledge and encouraging practical implementation.** Perhaps even more, they can strongly affect the creation of the system of values of future experts based on the principles of socially responsible business operations in tourism. Simultaneously, the development of new competences in tourism employees can encourage the use of new technologies, especially those that strongly contribute to sustainable tourism development, such as digital and "green" technologies.

Nevertheless, the local community is at the heart of sustainable tourism development. **Tourism should be developed in an appropriate range and primarily in the interest of the local community.** Unfortunately, this is often not the case. Namely, the local community is not a unique set of stakeholders. The interests of residents who do not benefit from tourism may differ significantly from those who receive income from tourists. Especially **at the beginning of tourism development, the local population tends to euphorically agree to development models that are**

Private and public sector

Carrying capacity

Educational institutions

Local community

Digital and social transformation of mapping tourist attractions

not at all sustainable. Later, there are changes in which the pressure for tourism development is even greater because it is necessary to consider the interests of various groups that do not represent the autochthonous population. Tourism attracts new residents as a needed workforce, including seasonal workers, newly-arrived retirees, owners of holiday homes and apartments, as well as new entrepreneurs in tourism who settle in a tourism destination.



Photo: Hrvoje Serdar, Hrvatska turistička zajednica

Various citizen associations, professional organizations, trade unions, temporarily organized pressure groups, and even religious communities often undertake the vocal representation of the interests of certain resident groups. Activities of such organizations (often called the "civil sector") can significantly contribute to sustainable tourism development. In addition to promoting the interests of the groups they represent, they can affect many issues in sustainable tourism development. They can thus point out the issues of fair business in tourism, lobby for ecological and social issues, and also promote

Civil sector

traditional values. They can even **become actively involved in creating tourism offer in their area of activity** (ecology, sport, culture, etc).

Tourists are often considered a cause of problems in sustainable tourism development, but the positive effect of the presence of tourists should not be neglected. **Sustainable tourism can be developed only with the support of tourists.** This is certainly true due to a stronger connection between guests and hosts and their cultures, the development of new experiences, and encouraging guests to behave responsibly and contribute to the local economy. Responsible tourists will avoid tourism destinations where there are violations of human rights and exploitation of workers and where natural and cultural heritage is destroyed. They will arrive with a desire to meet people who live in a tourism destination and their culture, and they will prepare themselves for such travels and show respect and consideration for their hosts.

Past experiences indicate that sustainable tourism development presupposes the use of certain instruments. These primarily include **the determination of adequate indicators and the limits of sustainability.** It is then necessary to establish adequate **management and control through legislation, spatial planning, and development supervision.** This can be accompanied by economic measures such as collecting environmental fees and providing incentives. However, practice has shown that various voluntary instruments, such as different instructions and rules, codes, systems for management and certification of sustainable tourism, are frequently used. Nevertheless, in tourism destinations successful in sustainable tourism development, there is also widespread support for sustainable tourism management. In addition to ensuring the capacities for implementation (physical, human, and financial), it is also valuable to provide adequate information, where substantial support can be provided by various media content and sources.

Responsible tourists

Implementation capacities

- *physical*
- *human*
- *financial*

Bibliography

Apart from the information used in the creation of content for this chapter, the following bibliography contains the sources that can help in further research of the topics introduced:

1. Ali, F., Hussain, K., Nair, V. & Nair, P. K. (2017). Stakeholders' perceptions & attitudes towards tourism development in a mature destination. *Tourism: An International Interdisciplinary Journal*, 65(2), 173–186. <https://hrcak.srce.hr/183651>
2. Carayannis, E. & Campbell, D. (2012). Triple Helix, Quadruple Helix and Quintuple Helix and How Do Knowledge, Innovation and the Environment Relate To Each Other?. *International Journal of Social Ecology and Sustainable Development*, 1, 41–69. <https://doi.org/10.4018/jesed.2010010105>
3. Dražić, G. (2020). *Održivi turizam: prvo izdanje*. Univerzitet Singidunum. <https://singipedia.singidunum.ac.rs/izdanje/43277-odrzivi-turizam>
4. Europska komisija. (2022). *Tranzicijski put za turizam*. Europska komisija. <https://op.europa.eu/hr/publication-detail/-/publication/404a8144-8892-11ec-8c40-01aa75ed71a1>
5. Geršič, M., Gašperič, P., Rus, P., Šmid Hribar, M. & Razpotnik Viskovič, N. (2022). Trajnostno certificirane turistične destinacije skozi prizmo obiskovalcev. *Acta geographica Slovenica*, 62(3), 85–102. <https://doi.org/10.3986/AGS.11214>
6. Krce Miočić, B., Razović, M. & Klarin, T. (2016). Management of sustainable tourism destination through stakeholder cooperation. *Management: Journal of Contemporary Management Issues*, 21(2), 99–120. <https://hrcak.srce.hr/171236>
7. Lešnik Štruhec, T., Pavlaković, B. & Pozvek, N. eds. (2023). *Turistične destinacijske organizacije: gonila povezanega kreativnega zelenega razvoja in trženja*. Univerza v Mariboru, Univerzitetna založba. <https://doi.org/10.18690/um.ft.1.2023>
8. Mihalič, T. (2006). *Trajnostni turizem*. Univerza v Ljubljani: Ekonomska fakulteta.
9. Mowforth, M. & Munt, I. (2009). *Tourism and Sustainability (3rd ed.)*. Routledge.
10. Mušič, K., Kocipet, T. & Sikošek, M. eds. (2014). *Turizem in management*. Založba Univerze na Primorskem. <https://zalozba.upr.si/ISBN/978-961-6832-79-3.pdf>
11. Pavlović, S. (2014). Indikatori održivog razvoja za turističke destinacije. *Svarog*, 9, 254–265. <http://svarog.nubl.org/wp-content/uploads/2014/12/Doc.-dr-Slobodanka-Pavlovi%C4%87-INDIKATORI-ODR%C5%BDIVOG-RAZVOJA-ZA-TURISTI%C4%8CKE-DESTINACIJE.pdf>
12. Schütz, F., Heidingsfelder, M. L. & Schraudner, M. (2019). Co-shaping the Future in Quadruple Helix Innovation Systems: Uncovering Public Preferences toward Participatory Research and Innovation. *She Ji: The Journal of Design, Economics, and Innovation*, 5(2), 128–146. <https://doi.org/10.1016/j.sheji.2019.04.002>
13. Starc Peceny, U., Mokorel, S. & Ilijaš, T. (2019). Turizem 4.0: Izzivi in priložnosti za lokalno skupnost. *Uporabna informatika*, 27(2), 51–56. <https://doi.org/10.31449/upinf.vol27.num2.48>
14. Stojanović, V. (2023). *Turizam i održivi razvoj*. Univerzitet u Novom Sadu, Prirodno-matematički fakultet. http://www.dgt.uns.ac.rs/dokumentacija/udzbenici/turizam_i_odrzivi_razvoj.pdf

15. Stubičar, N. & Marot, N. (2022). Kulturni turizem in lokalno prebivalstvo na primeru mestne destinacije Ljubljana. *Dela*, 58, 77-98. <https://doi.org/10.4312/dela.58.77-98>
16. Težak Damijanič, A., Pičuljan, M. & Ilak Peršurič, A. S. (2023). Stakeholders' Experiences with Participative Approach in Tourism. *Journal of the Geographical Institute "Jovan Cvijić" SASA*, 73(1), 93-108. <https://doi.org/10.2298/IJGI2301093T>
17. Vodeb, K. ed. (2014). *Trajnostni razvoj turističnih destinacij alpsko-jadranskega prostora*. Založba Univerze na Primorskem. <https://zalozba.upr.si/ISBN/978-961-6963-12-1.pdf>
18. Wanner, A. & Pröbstl-Haider, U. (2019). Barriers to Stakeholder Involvement in Sustainable Rural Tourism Development—Experiences from Southeast Europe. *Sustainability*, 11(12), 3372. <https://doi.org/10.3390/su11123372>
19. Weaver, D. (2006). *Sustainable Tourism: Theory and Practice*. Butterworth-Hainemann.
20. World Tourism Organization. (2004). *Indicators of Sustainability for Tourism Destination, A Guidebook*. UNWTO. <https://doi.org/10.18111/9789284407262>

Online sources



European Tourism Indicators System

https://single-market-economy.ec.europa.eu/sectors/tourism/eu-funding-and-businesses/funded-projects/sustainable/indicators_en



user-participation.eu/

<https://www.user-participation.eu/hr/>



Tourism transition pathway

https://single-market-economy.ec.europa.eu/sectors/tourism/eu-to-tourism-transition/tourism-transition-pathway_en



Participativni turizam

https://mint.gov.hr/UserDocsImages/AAA_2020_ABC/c_dokumenti/200128_prirucnik_PT_hrv.pdf



Participativni turizam

https://www.zagor.info/Cms_Data/Contents/ZagorInfo/folders/dokumenti/publikacije/~contents/PBEJBQV8QEF9Q7QQ/prirucnik-za-participativno-odlucivanje.pdf



Helix Guide for Innovations

<https://northsearegion.eu/media/11651/a-quadruple-helix-guide-for-innovations.pdf>



Quadruple Helix Collaborations in Practice

<http://riconfigure.eu/publication/quadruple-helix-collaborations-in-practice/>



Kulturni centar Novog Sada

<https://www.kcns.org.rs/agora/interesne-grupe-u-turizmu-i-oblici-njihove-saradnje/>



Stečak map

<https://stecakmap.info/>

3.3. The contribution of tourism to sustainable development goals

The aim of this chapter is to acquaint readers with the possibilities of the contribution of tourism to the sustainable development goals, especially in terms of eradicating poverty and hunger, improving health and life in general of local communities, as well as its contribution to tolerance and understanding.

After mastering the content of this chapter, reader will be able to:

- describe the possibilities of the contribution of tourism to the global sustainable development goals
- explain how tourism can work to eradicate poverty and hunger in the world
- present how tourism affects the improvement of health and competence of employees
- point out the need to reduce the impact of tourism on water pollution and energy consumption
- illustrate the positive effects of tourism on the local community life
- interpret how tourism contributes to tolerance and understanding

Tourism as a phenomenon and complex relationships that arise due to tourist consumption in tourism destinations can, above all, contribute to the global goals of sustainable development. Namely, significant assets can thus be transferred from more developed areas into less developed ones. Therefore, it is good to look at how the development of specific tourist activities may contribute to sustainable development goals. It will not be possible for all 17 goals to achieve an equal intensity of contribution in every tourism offer, but understanding the set goals will certainly **help to avoid and/or neutralize the adverse effects of tourism development.**

Tourism strongly affects the eradication of poverty. It offers **an opportunity for the employment of a large number of low-qualified but specifically trained people.** Tourism offer should include the attraction, training, and employment of local residents, especially those who have difficulty finding work and/or live at the poverty line. It can be done directly or indirectly **by encouraging entrepreneurial activities.** A way to

Sustainable development goals

Eradication of poverty

Digital and social transformation of mapping tourist attractions

make expensive tourist offer available to tourists with lower incomes should be found. Tourism may contribute to the eradication of hunger in the world. The development of sustainable tourism offer should include support, encouragement, and presentation of the sustainability of extensive agricultural production on small family farms. In this way, tourist consumption creates **opportunities for maintaining traditional agricultural production.**

Tourism contributes to improving health and physical well-being. This can be achieved equally for tourists and local residents. Incomes from tourism enable investment into better healthcare. However, tourists often visit tourism destinations for **the existence and use of the benefits of natural healing agents.** The development of tourism offer should include all elements that promote healthy lifestyles, primarily physical activity and a healthy diet. The same applies to all recommendations regarding a healthy working environment, reduction of health risks, and human rights of the sick by relevant international and national organizations.

Tourism development always creates the need for specific education. **Tourist products are primarily based on particular skills and a system of values of the service provider.** It is hard to meet these demands with outdated educational systems that primarily aim at acquiring a wide scope of knowledge. Therefore, the development of tourism offer must include various activities aimed at employees acquiring the necessary competences. They can be related to the support of existing institutions

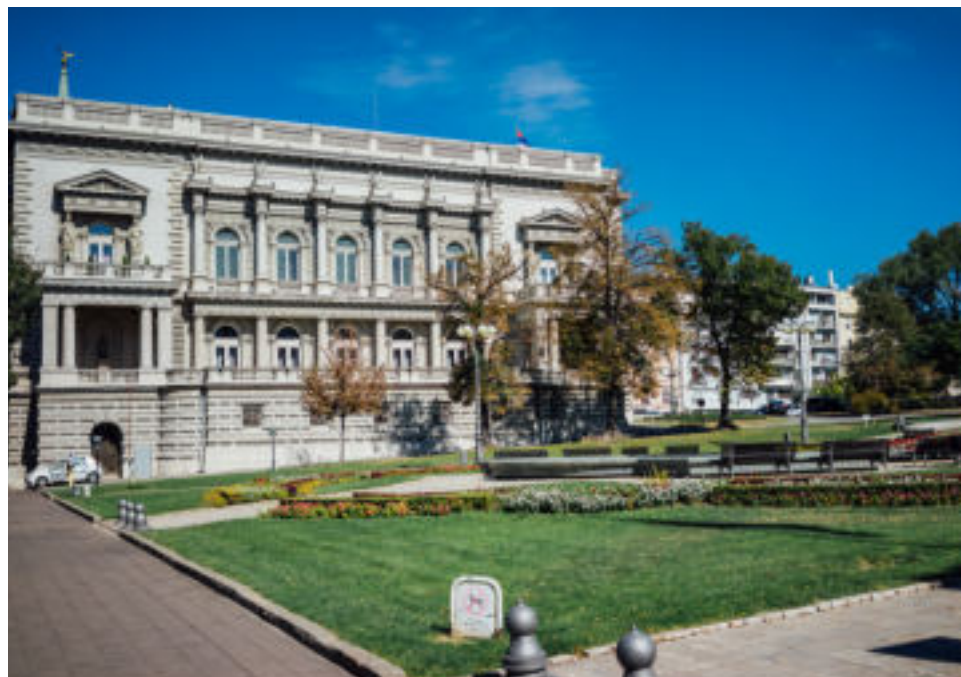


Photo: Turistučka organizacija Beograda

The eradication of hunger in the world

Improving health and physical well-being

Reduction of health risks

Specific education

(professional practice, student and mentor exchanges, and inclusion in the teaching process). They can be informal in cooperation with various organizations of the civil society. It is desirable **to include sensitive groups in education, such as the young people without any work experience, women, retirees, persons with disability, etc.**

Tourism can simultaneously threaten and contribute to gender equality. It is known that **the majority of employees in hospitality are women, and that significantly fewer women hold managerial positions.** The same is true for women entrepreneurs. Nevertheless, in activities where income is generated from tourism, there are numerous opportunities for women to prove themselves as excellent managers and entrepreneurs. For this reason, in the development of tourism offer we **should pay attention to providing equal opportunities for both women and men.**

Drinking water is a scarce resource, and the impact of tourism on water supply and pollution is immense. The development of any tourism offer and any **investment in tourism must devote special attention to the effectiveness and efficiency of drinking water consumption.** Clean drinking water should only be used when necessary and in necessary quantities. Tourist products should be created to **minimize the use and pollution of water as a resource.** At the same time, such ideas should be promoted, which is possible through appropriate education and involvement of employees as well as tourists.

In tourism, there is a relatively large consumption of energy. Every aspect of saving energy and the use of renewable energy sources greatly contributes to the reduction of the greenhouse effect and mitigating climate change. Tourism offer should therefore be designed in such a way to **increase energy efficiency and the use of renewable energy resources.** This is possible in various areas, from heating, cooling, hot water production to using electric vehicles. Activities related to energy consumption should include both employees and tourists.

Tourism creates every tenth workplace in the world and even more than that in some countries. A large number of small entrepreneurs and micro-entrepreneurs create a tourism offer. That is why the development of tourism offer must ensure opportunities for appropriate working conditions and economic growth. **Tourist products should not contain any form of forced or child labor.** Tourism service providers must avoid any kind of discrimination against employees, especially migrants. The same is true for inappropriate working conditions or living conditions for seasonal workers. It would be good if **the development of tourism offer supported entrepreneurship, especially among young people.**

 Gender equality

 Drinking water

 Energy consumption

 Appropriate work conditions

Digital and social transformation of mapping tourist attractions

Basic infrastructure

Tourism is directly dependent on the quality and availability of basic infrastructure. Many infrastructure projects are justified by the need for tourism development, and many opportunities in tourism are missed due to inadequate infrastructure. The development of tourism offer **should include consideration of the efficient use of the existing and justified development of new infrastructure.** Any unjustified pressure on the existing infrastructure is inappropriate. The same applies to



Photo: Aleksandar Gospic, Hrvatska turistička zajednica

investments in infrastructure that are not acceptable from the perspective of the balance of economic, ecological and social effects.

It has been known for a long time that tourism decreases economic, social and cultural differences and inequalities. Considering the transfer of income from more developed areas and the visits of more educated guests from other cultures, tourism can have a positive effect on local communities. Tourism **offer should be developed with respect for the possibilities of economic integration and respect for social and cultural diversity.** Such tourism offer can be an incentive for the restoration of neglected urban areas and revitalization of abandoned rural areas.

Social and cultural differences and inequalities

The responsible development of tourism can improve the infrastructure and living conditions of local communities with the additional income it creates. Primarily, tourism offer should be designed to encourage the restoration and preservation of the natural and cultural heritage as the resources it depends on. **The development of tourism offer should encourage investment in the advanced infrastructure from which the local community will benefit.** It particularly refers to the efficiency of public transportation, the reduction of pollution and general preservation of the environment.

Tourism offer should be designed according to the model of sustainable production and consumption. This means creating the greatest possible effects with as few resources as possible. **Impacts on the environment, both natural and social, should be reduced.** Tourism offer should be developed taking into account different innovative business models that enable it. **The rules of "reduce, reuse and recycle" should certainly be consistently applied.** It is necessary to implement and consistently use adequate methods of monitoring the achieved effects.

The growth of tourist travel affects climate change. At the same time, numerous tourism destinations will be affected by consequences of climate change. This is why **it is necessary to develop tourism offer with the intention of continuous reduction of the carbon dioxide emissions into the atmosphere.** This primarily applies to transportation and accommodation service providers, but also to the complete experience of holidays and traveling. Any **unnecessary release of carbon dioxide into the atmosphere should be eliminated.** If it is not possible, then it should be compensated accordingly. Such policies should be incorporated into the framework of tourism offer development.

Tourism offer related to the coastal region and the sea should contribute to the preservation and protection of sensitive marine ecosystems. **Pollution on the surface and by the coast, as well as the forms of pollution that are not visible at first glance should be taken into consideration.** It includes sound, light and any other pollution that disrupts marine life. In particular, actions that disproportionately and unjustifiably damage habitats and/or directly affect marine life should be avoided.

Tourism can also threaten ecosystems on land, especially in rural and mountain regions. Most often, the most endangered areas are rich in biodiversity and protected natural heritage because they attract tourists. **The development of tourism offer must include a responsible approach to sensitive areas.** This approach should also include the involvement of tourists and not only the concern for preservation and protection. It is also possible to develop tourism offer that will enable the revival and

Living conditions of local communities

Sustainable production and consumption

Climate change

Marine ecosystems

Terrestrial ecosystems


rehabilitation of areas where the impact of human activities on the natural environment is visible.

Contemporary international tourism is a global phenomenon. It includes a large number of people of different races, nations, religions and value systems. Tourism is based on multiculturalism and respect. That is why **the development of tourism offer must include activities that will not create any kind of conflict**. In doing so, the rights of tourists and local residents should be equally respected. Tourism offer should be created to encourage tolerance and understanding. This particularly applies to societies and regions where consequences of armed conflicts or forced migration are present.

Tourism as a phenomenon includes a large number of stakeholders. It is not only the public sector that defines policies and creates conditions for the development of tourism, but also a private sector which generates direct economic effects from tourism. Tourism is affected by the activities of various civil society organizations, educational institutions, religious communities, the media, and other stakeholders. Tourist products are commercialized by the private sector. However, **in the development of tourism offer, it is necessary to create a broad partnership framework**. It should also include direct competitors in the tourism destination. Some market activities are more efficient with cooperation based on the principle of simultaneous cooperation and competition (coopetition) in production-oriented clusters.

 **Multiculturality and appreciation**

 **Stakeholders**


 **Simultaneous cooperation and competition**

Bibliography

Apart from the information used in the creation of content for this chapter, the following bibliography contains the sources that can help in further research of the topics introduced:


1. Brumen, B. & Starc Peceny, U. eds. (2021). *Zbornik konference »Turizem 4.0 in znanost«*. Univerza v Mariboru, Univerzitetna založba. <https://doi.org/10.18690/978-961-286-515-3>
2. Buhalis, D., Leung, X., Fan, D., Darcy, S., Chen, G., Xu, F., Tan, G., Nunkoo, R. & Farmaki, A. (2023). Editorial: Tourism 2030 and the contribution to the sustainable development goals: the tourism review viewpoint. *Tourism Review*, 78(2), 293-313. <https://doi.org/10.1108/TR-04-2023-620>
3. Boluk, K. A., Cavaliere, C. T. & Higgins-Desbiolles, F. (2019). A critical framework for interrogating the United Nations Sustainable Development Goals 2030 Agenda in tourism. *Journal of Sustainable Tourism*, 27(7), 847-864. <https://doi.org/10.1080/09669582.2019.1619748>
4. Dražič, G. (2020). *Održivi turizam* (Prvo izdanje). Univerzitet Singidunum. <https://singipedia.singidunum.ac.rs/izdanje/43277-odrzivi-turizam>
5. Khizar, H. M. U., Younas, A., Kumar, S., Akbar, A. & Poulouva, P. (2023). The progression of sustainable development goals in tourism: A systematic literature review of past achievements and future promises. *Journal of Innovation & Knowledge*, 8(4), 100442. <https://doi.org/10.1016/j.jik.2023.100442>
6. Lockstone-Binney, L. & Ong, F. (2022). The sustainable development goals: the contribution of tourism volunteering. *Journal of Sustainable Tourism*, 30(12), 2895-2911. <https://doi.org/10.1080/09669582.2021.1919686>
7. Mihalič, T. (2022). *Sustainomics in tourism: ecological and political sustainability issues*. Univerza v Ljubljani: Ekonomska fakulteta.
8. Rosato, P. F., Caputo, A., Valente, D. & Pizzi, S. (2021). 2030 Agenda and sustainable business models in tourism: A bibliometric analysis. *Ecological Indicators*, 121(2021), 106978. <https://doi.org/10.1016/j.ecolind.2020.106978>
9. Stojanović, V. (2023). *Turizam i održivi razvoj*. Univerzitet u Novom Sadu, Prirodno-matematički fakultet. http://www.dgt.uns.ac.rs/dokumentacija/udzbenici/turizam_i_odrzivi_razvoj.pdf
10. Trezner, Ž. (2019). *Odgovorno poduzetništvo u suvremenom turizmu, Priručnik za razvoj novih turističkih proizvoda i pokretanje poduzetničkog pothvata*. Grad Solin. <https://www.hgk.hr/documents/treznerodgovornopoduzetnitvouturizmu20195ed8a2a8cbea0.pdf>
11. United Nations. (2023). *The Sustainable Development Goals Report 2023: Special edition Towards a Rescue Plan for People and Planet*. UN. <https://unstats.un.org/sdgs/report/2023/The-Sustainable-Development-Goals-Report-2023.pdf>
12. Vodeb, K. ed. (2014). *Trajnostni razvoj turističnih destinacij alpsko-jadranskega prostora*. Založba Univerze na Primorskem. <https://zalozba.upr.si/ISBN/978-961-6963-12-1.pdf>
13. World Tourism Organization and United Nations Development Programme. (2017). *Tourism and the Sustainable Development Goals – Journey to 2030*. UNWTO. https://www.undp.org/sites/g/files/zskgke326/files/publications/UNWTO_UNDP_Tourism%20and%20the%20SDGs.pdf

Online sources



United Nations

<https://sdgs.un.org/2030agenda>



United Nations - priručnici

<https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981>



United Nations Statistics Division

<https://unstats.un.org/sdgs/>



UN Stats

<https://www.youtube.com/watch?v=zF361a019zA&t=8s>



Sustainable development

<https://www.unwto.org/sustainable-development>



Tourism for SDGs

<https://tourism4sdgs.org/>



Sustainable Development Goals

https://commission.europa.eu/strategy-and-policy/sustainable-development-goals_en



Ciljevi održivog razvoja

<https://www.eca.europa.eu/hr/sustainable-development-goals>



SDG Watch Europe

<https://sdgwatcheurope.org/>



SDG Transformation Center

<https://sdgtransformationcenter.org/>



Solimar International

<https://www.solimarinternational.com/resources/toolkits/>



Ministarstvo turizma i omladine

<http://lora.bioteka.hr/un-ciljevi-odrzivog-razvoja/>



RH portal indikatora (SDG)

<https://croatianbureauofstatistics.github.io/sdg-indicators/>



Republički zavod za statistiku

<https://sdg.indikatori.rs/sr-latn/>



Statistical Office of the Slovenia

<https://www.stat.si/StatWeb/en/News/Index/11549>



4. Tourist attractions: recognition and evaluation

Introduction

Tourist attractions are the most important tourism resources and the main factors that attract tourists. Tourist activities are connected to these attractions, and therefore, they must be carefully evaluated, particularly from a marketing perspective. However, identifying and documenting tourist attractions is not a simple task. Consequently, the first part of this chapter presents the major challenges in recognizing, documenting, and protecting tourist attractions, especially regarding the use of contemporary databases, mobile devices, and network connectivity.

Tourist attractions can be classified according to various criteria. Therefore, it is possible to identify a relatively large number of different types of tourist attractions. There are even very detailed classifications of them. Thus, the second part of this chapter explains the purpose, the most important criteria, and the types of tourist attractions. It is specifically explained how they can be spatially distributed with examples of both tangible and intangible tourist attractions. Finally, the importance of recognizing potential tourist attractions and the purpose of using their detailed classifications is presented.

There are numerous benefits to recognizing, documenting, and evaluating tourist attractions. These tasks can be approached in various ways, each with its own advantages and disadvantages. However, the use of contemporary technologies and approaches significantly facilitates these processes. Therefore, the last part of this chapter presents the benefits, possibilities, and approaches to recognizing, documenting, and evaluating tourist attractions. This is particularly done in terms of contemporary documentation and mapping of tourist attractions and the assessment of their developmental and marketing aspects.

4.1. The importance of recognizing and documenting tourist attractions

The aim of this chapter is to inform readers about tourist attractions as the most important resource and the main factor of appeal in tourism, particularly in terms of the importance of recognizing, documenting and protecting them.

After mastering the content of this chapter, reader will be able to:

- present tourist resources that are the basic prerequisites for attracting tourists
- point out which tourist resources influence the duration of stay and increase in visitation
- illustrate tourist attractions as the main appeal factor in tourism
- describe the most important challenges in recognizing tourist attractions
- explain the importance of documenting tourist attractions in contemporary databases
- interpret the necessity and possibilities of protecting tourist attractions.

The most important resource for the development of tourist products are tourist attractions. These are those **natural or social resources that can attract or are already attracting tourists to a certain area**. Tourists are actually attracted to the opportunity of engaging in various activities that the tourist attraction provides. It is best when it involves an activity that cannot be pursued at home. If people can engage in that activity at home, then it is important for that activity in the tourism destination to be more extensive, in a more attractive environment, or cheaper. The existence of a tourist attraction itself means nothing if it cannot be linked to tourist activities.

However, besides tourist attractions, **there are a large number of resources needed to create a competitive tourist product**. Some are better described as basic prerequisites for tourist arrivals. These include preserved environment, transportation position and connectivity, municipal infrastructure, and spatial organization. An important prerequisite for tourists' visits is also the quality of spatial organization, the design of buildings, and green areas. Nor should we forget the aspects of peace, political stability, and satisfactory levels of personal and health security. Some resources directly affect the possibility of

 Tourist attractions

 Tourist resources

Digital and social transformation of mapping tourist attractions

staying and increasing the visitation of tourism destinations. These include hospitality facilities, travel agencies, skilled workers, tourism zones, and various forms of tourism organization. Other important resources also include the tourist information system, the education level of the local population, and even the attractiveness of a neighbouring area. **Generally speaking, tourist resources encompass all material and non-material values that can become components of a tourist product.**

However, **only tourist attractions act as appeal factors in tourism.** Therefore, it is equally important to determine which attractions exist in a tourism destination, as well as recognize which activities tourists want to engage in. It is necessary **to systematically carry out the process of**



Photo: Nejc Suhadolnik

Potential tourist attractions

identifying and evaluating the potential of individual tourist attractions. This means determining which attractions are available and what can be done with them. It does not matter if some attractions currently do not attract tourists or are not attractive enough to them. Original attractions can always be improved to be more appealing. Perhaps even more importantly, **tourist attractions can be created.** Although some real tourist attractions already draw tourists in, they may not be the tourists needed. Therefore, it is good, **in developing new tourist products, to assess all tourist attractions as potential tourist attractions.**

The biggest challenge in identifying potential tourist attractions is the syndrome of local blindness. Attractions that locals can recognize, local entrepreneurs most often do not perceive as something attractive to tourists. Therefore, **the identification of tourist attractions should be approached from the perspective of marketing evaluation.** This perspective starts with the question of whether there is an activity related to the potential attraction that desired tourists could engage in. Can target tourists do this activity in their place of residence or elsewhere? Is this activity in the tourism destination in a more attractive environment than elsewhere and is it perhaps more extensive?

Local blindness syndrome

Perhaps even more important is to ask **what needs to be done for this activity to be unique in the tourism destination,** if it cannot already be more extensive and in a more attractive environment than elsewhere. This question is usually not easy to answer. It is necessary to thoroughly study where in the world such activities are offered, **what makes them unique, how extensive they are, and in what environment they are carried out.** Fortunately, today it is not necessary to travel around the world to determine this. It is enough to have the time and sense to choose the right keywords when searching the Internet.

Once it has been established that there is potential for implementing activities that can attract desired tourists, the most important step in assessing the potential of selected ideas for developing a tourist product is completed. **However, it may not be possible to attract desired tourists to the tourism destination.** Perhaps there simply aren't many of them. Maybe the level of attractiveness of the tourist product will not be enough for them. It is also possible that they do not want or cannot travel at all. These questions cannot be answered without a good understanding of the behavior of desired groups of tourists. Fortunately, there are certain patterns of tourist behavior when making decisions about traveling. Knowing them can help find the right answers.

Tourists' behavior

Therefore, even in the recognition of tourist attractions, a large number of questions arise that need to be answered and appropriately documented. These answers constitute important **factors for tourism**

Digital and social transformation of mapping tourist attractions

development based on solid and up-to-date information. New possibilities of using digital technologies and democratic concepts of data collection and processing enable the rapid creation of a huge amount of data. These pieces of information can be used by various stakeholders in tourism development in a tourism destination. Therefore, it is necessary **to store information in an appropriate database that is available to different users.**

Digital technologies

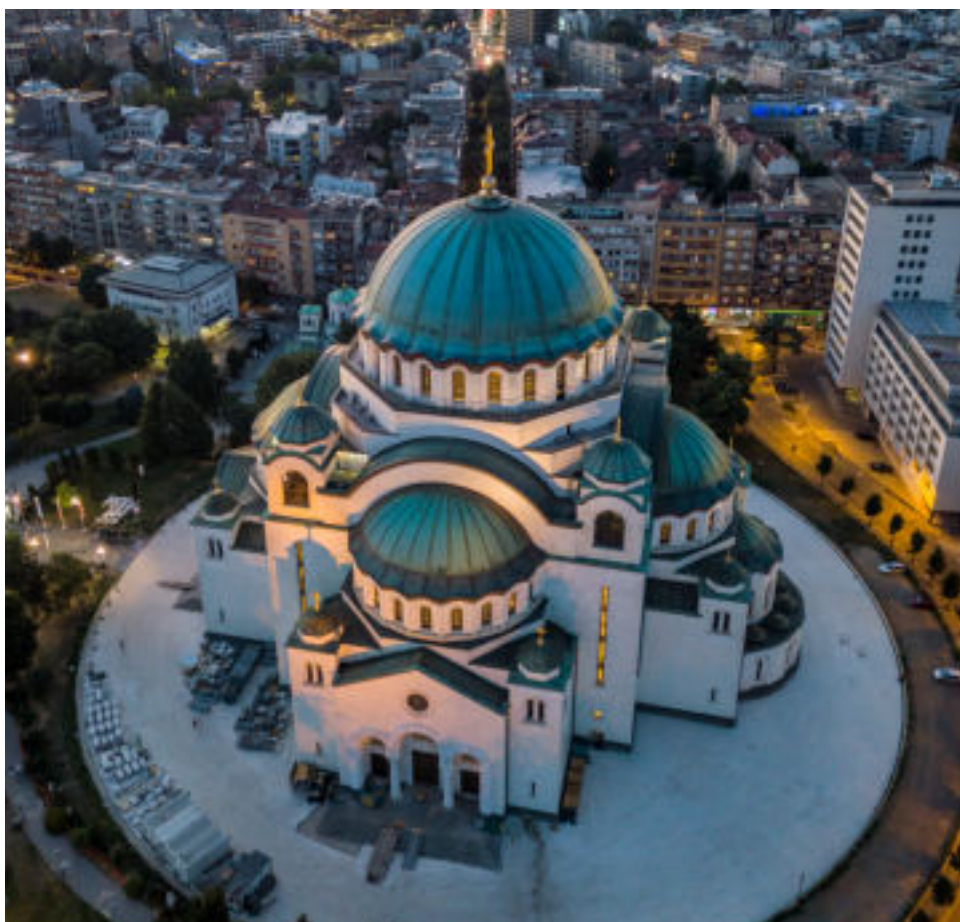


Photo: Turistička organizacija Beograda

Contemporary databases do not limit storage and access only to words and numbers. For tourism, which relies on the transfer of significant amount of **information, it is important to include a large volume of photo, video, and audio content.** In addition, all this information contains geolocation data since tourist attractions occupy specific locations in space. The role of **an old-fashioned tourist attraction register and atlas is fulfilled today by contemporary digital attraction databases.** The use of mobile devices enables efficient filling of such databases with information in various formats, and network availability allows their search.

Network availability

Digital and social transformation of mapping tourist attractions

Stored data, besides serving the purpose of making development decisions, can also serve to inform tourists and promote tourism destinations. At the same time, they can also be used in the development of new tourism products. For complex tourist products such as **package tours, excursions, events, and meetings, it is possible to create entirely new reasons for visiting a tourism destination.** Such products contain a higher level of added value. Additionally, this expands and deepens the value chain of the tourism offer and increases the attractiveness of a destination. Moreover, when new tourist products encompass unused tourist attractions, new opportunities are created for their inclusion into tourists' movements.

Recognized and properly evaluated tourist attractions increase opportunities for the local community to participate in tourism revenue. They create pride among the local population and a sense of value of the quality of life in a tourism destination. However, such values are easy to lose. Therefore, **tourist attractions need to be appropriately protected from damage and destruction.** Rapid and early warning of harmful events is often an important measure for protecting tourist attractions. The existence of a large number of tourist attractions in a database and its accessibility enables **easy and quick reporting of on-site risks and harm done to these attractions.** Given the network availability of the database, such reports can be made by the local population as well as tourists.

Value chain

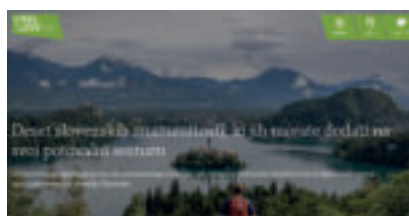
Protection of tourist attractions

Bibliography

Apart from the information used in the creation of content for this chapter, the following bibliography contains the sources that can help in further research of the topics introduced:

1. Čavlek, N., Bartoluci, M., Prebežac, D., Kesar, O., Hendija, Z., Bilen, M., Mikulić, J., Tomašević, A. & Čižmar, S. (2011). *Turizam: Ekonomske osnove i organizacijski sustav*. Školska knjiga d. d.
2. Dražić, G. (2020). *Održivi turizam* (Prvo izdanje). Univerzitet Singidunum.
<https://singipedia.singidunum.ac.rs/izdanje/43277-odrzivi-turizam>
3. Kádár, B. & Gede, M. (2013). Where Do Tourists Go? Visualizing and Analysing the Spatial Distribution of Geotagged Photography. *Cartographica The International Journal for Geographic Information and Geovisualization*, 48(2), 78-88.
<https://doi.org/10.3138/carto.48.2.1839>
4. Kušen, E. (2002). *Turistička atrakcijska osnova*. Institut za turizam.
5. Kušen, E. (2010). A system of tourism attractions. *Tourism: An International Interdisciplinary Journal*, 58(4), 409–425. <https://hrcak.srce.hr/63597>
6. Leiper, N. (1990). Tourist attraction systems. *Annals of Tourism Research*, 17(3), 367–384.
[https://doi.org/10.1016/0160-7383\(90\)90004-B](https://doi.org/10.1016/0160-7383(90)90004-B)
7. Macuh, B. & Raspor, A. (2023). Tudi ljudje s posebnimi potrebami iščejo pristočasne in turistične dejavnosti. *Perfectus PRO*, 2023(2), 14-19.
https://www.researchgate.net/publication/375526675_Tudi_ljudje_s_posebnimi_potrebami_iscejo_prostocasne_in_turisticne_dejavnosti#fullTextFileContent
8. Richards, G. (2002). Tourism Attraction Systems: Exploring Cultural Behavior. *Annals of Tourism Research*, 29(4), 1048–1064. [https://doi.org/10.1016/S0160-7383\(02\)00026-9](https://doi.org/10.1016/S0160-7383(02)00026-9)
9. Stojanović, V. (2023). *Turizam i održivi razvoj*. Univerzitet u Novom Sadu, Prirodno-matematički fakultet.
http://www.dgt.uns.ac.rs/dokumentacija/udzbenici/turizam_i_odrzivi_razvoj.pdf
10. Trezner, Ž. (2019). *Odgovorno poduzetništvo u suvremenom turizmu, Priručnik za razvoj novih turističkih proizvoda i pokretanje poduzetničkog pothvata*. Grad Solin.
<https://www.hgk.hr/documents/treznerodgovornopoduzetnitvouturizmu20195ed8a2a8cbea0.pdf>
11. Vodeb, K. (2018). *Turistične atrakcije*. Univerza na Primorskem.
<https://zalozba.upr.si/ISBN/978-961-7055-10-8.pdf>
12. Vranješ, M. (2020). Zgodbe z »najlepše reke«: humanističnogeografski pogled na zgodovino razvoja in upravljanja turizma na Soči. *Geografski vestnik*, 92(2), 29-44.
<https://doi.org/10.3986/GV92202>
13. Zhang, W., Tan, G., Lei, M., Guo, X. & Sun, C. (2018). Detecting tourist attractions using geo-tagged photo clustering. *Chinese Sociological Dialogue*, 3(1), 3-16.
<https://doi.org/10.1177/2397200917752649>
14. Zheng, J., Bai, X., Na, L. & Wang, H. (2022). Tourists' Spatial–Temporal Behavior Patterns Analysis Based on Multi-Source Data for Smart Scenic Spots: Case Study of Zhongshan Botanical Garden, China. *Processes*, 10, 181. <https://doi.org/10.3390/pr10020181>

Online sources



Slovenske znamenitosti

<https://www.slovenia.info/sl/destinacije/znamenitosti>



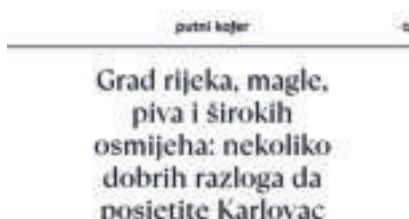
Hrvatske atrakcije

<https://croatia.hr/hr-hr/atrakcije>



Otkrij Srbiju

<https://www.serbia.travel/en/see-serbia>



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<https://putnikofer.hr/mjesta/i-zlet-u-karlovac-sto-posjetiti-u-karlovcu/>



Što posjetiti u Mariboru?

<https://putnikofer.hr/mjesta/i-zlet-u-maribor-sto-posjetiti-u-mariboru/>



Što posjetiti u Beogradu?

<https://putnikofer.hr/vodici-svijet/beograd-sto-posjetiti-u-beogradu/>

4.2. Classification and types of tourist attractions

The aim of this chapter is to inform readers about the purpose, key criteria, and types of tourist attractions, especially regarding the importance of recognizing and classifying them in detail.

After mastering the content of this chapter, reader will be able to:

- explain the purpose of classifying tourist attractions
- describe the key criteria for categorizing tourist attractions
- point out how tourist attractions can be spatially distributed
- illustrate examples of tangible and intangible tourist attractions
- present the importance of recognizing potential tourist attractions
- interpret the benefits of using detailed classifications of tourist attractions.

Many authors have worked on classifying tourist attractions. Some even simplify the concept by equating tourist resources and tourist attractions, although not all resources in tourism are necessarily tourist attractions. However, **the main purpose of classifying tourist attractions should be to facilitate their recognition and evaluation.** Digital attraction databases can use the division into different types for easier searching and categorization of tourist attractions. Using different criteria for classifying tourist attractions also aids in better understanding of their specific characteristics.

The most common division of tourist attractions, based on their origin, is into natural and man-made. **Natural attractions are formed as a result of natural forces and processes, while man-made attractions are created by human activity,** and can also be referred to as anthropogenic or social. In some places in nature, there is strong evidence of human activity, making it difficult to classify attractions into one of the two groups. Some authors therefore propose a third group of attractions that result from human activity in nature, such as agricultural areas, parks, zoos, botanical gardens, and similar.

There is a connection between the concept of natural and cultural heritage and the concept of natural and **man-made tourist attractions.** **However, man-made tourist attractions do not necessarily have to be cultural heritage at the same time,** as is the case with attractions that arise precisely because of tourist activities, such as theme and/or

Classification of tourist attractions

Types of tourist attractions

- *natural and man-made*

amusement parks, casinos, and the like. There are also so-called tourist para-attractions that draw in tourists, but that is not their primary purpose; such as shopping centers, medical facilities, and educational institutions.

All attractions can be divided into tangible and intangible according to their character. Tangible (material) tourist attractions can further be divided into movable and immovable. **Movable material tourist attractions are not tied to one location and cannot be precisely and permanently positioned.** This is the case, for example, with wildlife, means of transport, or objects of art. However, it is possible to determine the precise location where they are observed or can often be found. **Immovable material tourist attractions are precisely and permanently tied to the place where they are located,** such as buildings, roads, bridges, lakes, beaches, cliffs, and trees. Depending on how they are positioned, tourist attractions can be dotted, linear or surface-arranged.

Non-material (intangible) tourist attractions in most cases correlate with common examples of intangible (non-material) cultural heritage. However, **tourists are often attracted to non-material attractions that cannot be characterized as intangible cultural heritage.** These can include contemporary industrial, handicraft, and agricultural production, gastronomy, or activities such as modeling, innovation, sports, and the like. Like movable attractions, **non-material tourist attractions cannot be precisely and permanently located in space.** However, it is still possible to determine **the place where their presentation is possible or where the tangible result is available,** as is the case with gastronomy, winemaking, handicrafts, traditional building, and similar activities.



Photo: Izvan fokusa, Regionalna turistička zajednica Karlovačke županije

Tourist para-attractions

Types of tourist attractions

- *tangible and intangible*
- *movable and immovable*
- *dotted, linear and surface-arranged*

Intangible cultural heritage

Some **tourist attractions naturally appeal to tourists, but some need to be enhanced to make this possible**. Additionally, while for some original attractions one visit is enough for a lifetime, they can inspire repeat visits if enhanced. Therefore, based on their originality, tourist attractions can be divided into original and enhanced. The best example is the common enhancement of immovable cultural-historical heritage, which is attractive in itself but becomes even more so if various events, presentations, competitions, or exhibitions are held within it. A similar example applies to natural heritage, which becomes more attractive to tourists if they are involved in popular scientific activities, such as counting, identifying, or protecting plant and animal life.

Tourist attractions can be classified as primary or secondary, based on the intensity of their appeal. **Primary tourist attractions represent the main reason for visiting and staying in a tourism destination**. Secondary attractions are no less important for choosing a tourism destination. Namely, tourism destinations with a greater number of secondary tourist attractions increase their chances in the tourism market. However, **the terms "primary" and "secondary" should not be confused with the tourist attraction's significance**. For some tourists attracted to specific activities (sports, education, entertainment events, etc.), some otherwise highly important tourist attractions may not be interesting to visit at all.

Tourist attractions can also be divided according to the nature of tourist activities into predominantly leisure and non-leisure activities. **Most tourist activities are related to leisure time when tourists are free from work, family, and business obligations**. Therefore, most tourist attractions are associated with leisure activities. However, **there are attractions that constitute the main content of tourist trips not related to leisure**. These are often the aforementioned tourist para-attractions, such as shopping centers for favorable prices or a wide range of products, educational institutions for specific educational programs, healthcare facilities for specific medical procedures, and the like. The same applies to certain economic or administrative facilities.

Tourist attractions can be classified as real or potential based on their availability. Real tourist attractions are available in all forms of external and internal accessibility, including an appropriate number of parking spaces. They also experience a **certain intensity and continuity of visits, with easily accessible information and suitable reception capacities** for the expected visit intensity. Potential tourist attractions are those with no intensity or continuity of visits, lacking both suitable reception capacities, and often transportation accessibility. Most of the time, there is **no available information indicating their tourist attractiveness**, and

Types of tourist attractions

- original and enhanced
- primary and secondary
- leisure and non-leisure
- real and potential

Appeal intensity of tourist attractions

Leisure

Availability of tourist attractions

Digital and social transformation of mapping tourist attractions

often even the local population does not have a proper understanding of their value.

The same tourist attraction may be classified into multiple categories depending on the criteria applied. This means that some characteristics overlap among different tourist attractions. **In terms of development, recognizing potential tourist attractions is particularly significant.** Firstly, destinations with a higher number of unused potential tourist

Development of tourism



Photo: Andrej Tarfila

attractions can relatively quickly and easily develop a greater number of new and attractive tourist products, positioning themselves better in the tourism market. Moreover, **overlooking the abundance of potential tourist attractions may inadvertently result in their degradation or destruction**, thereby diminishing the foundation for tourism development.

It is **extremely important to appropriately recognize, evaluate, and document all tourist attractions for their sustainable use and protection.** This is even more crucial for potential tourist attractions and utilizing various detailed classifications can aid in this endeavor.

Digital and social transformation of mapping tourist attractions

Systematically searching for potential tourist attractions based on different classifications enables **solving the problem of local blindness and facilitates the identification of potential opportunities** for new attractions, as well as new opportunities for existing tourist attractions. One of the more comprehensive detailed classifications of tourist attractions was presented by Eduard Kušen in the book "Tourist Attraction Basis."

Detailed classification of tourist attractions



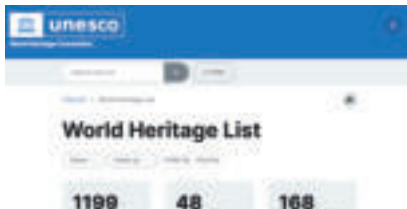
Photo: Turistička organizacija Beograda

Bibliography

Apart from the information used in the creation of content for this chapter, the following bibliography contains the sources that can help in further research of the topics introduced:

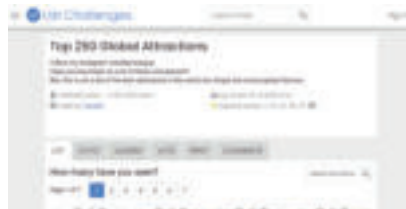
1. Botti, L., Peypoch, N. & Solonandrasana, B. (2008). Time and tourism attraction. *Tourism Management*, 29(3), 594–596. <https://doi.org/10.1016/j.tourman.2007.02.011>
2. Ćorluka, G., Vitezić, V. & Peronja, I. (2021). The Temporal Dimension of Tourist Attraction. *Tourism: An International Interdisciplinary Journal*, 69 (3), 443-453. <https://doi.org/10.37741/t.69.3.9>
3. Čavlek, N., Bartoluci, M., Prebežac, D., Kesar, O., Hendija, Z., Bilen, M., Mikulić, J., Tomašević, A. & Čižmar, S. (2011). *Turizam: Ekonomske osnove i organizacijski sustav*. Školska knjiga d. d.
4. Kušen, E. (2001). Turizam i prostor: Klasifikacija turističkih atrakcija. *Prostor*, 9(1(21)), 1-12. Hrčak. <https://hrcak.srce.hr/10801>
5. Kušen, E. (2002). *Turistička atrakcijska osnova*. Institut za turizam.
6. Kušen, E. & Tadej, P. (2003). Functional classification of tourism attractions. *Tourism*, 51(4), 427–442.
7. Lešnik Štruhec, T., Pavlaković, B. & Pozvek, N. eds. (2023). *Turistične destinacijske organizacije: gonila povezanega kreativnega zelenega razvoja in trženja*. Univerza v Mariboru, Univerzitetna založba. <https://doi.org/10.18690/um.ft.1.2023>
8. Pavlaković, B., Semeja, A., Turnšek, M., Alegro, T. & Pozvek, N. eds. (2021). *Turistična destinacija Artiče: študija izvedljivosti*. Univerza v Mariboru, Univerzitetna založba. <https://doi.org/10.18690/978-961-286-533-7>
9. Pearce, P. L. (1991). Analysing tourist attractions. *The Journal of Tourism Studies*, 2(1), 46–55.
10. Vodeb, K. (2018). *Turistične atrakcije*. Univerza na Primorskem. <https://zalozba.upr.si/ISBN/978-961-7055-10-8.pdf>

Online sources



World Heritage List

<https://whc.unesco.org/en/list/>



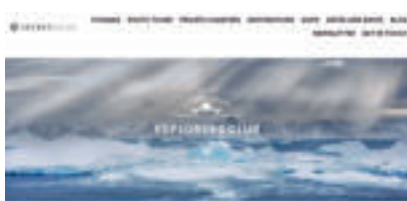
Top 250 Global Attractions

<https://www.listchallenges.com/top-250-famous-attractions-in-the-world>



Best & Worst Tourist Attractions

<https://stasher.com/blog/stasher-reveals-the-worlds-best-worst-tourist-attractions/>



50 Best Places to Visit in Europe

<https://www.secretatlas.com/explorers-club/travel-tips/best-places-to-visit-in-europe/>



Ruined by Mass Tourism?

<https://www.thecollector.com/which-popular-sites-have-been-ruined-by-mass-tourism/>



Tourist Attractions Ruined by Morons

<https://www.youtube.com/watch?v=XFA5M9rfCvc>

4.3. Documentation, mapping and evaluation of tourist attractions

The aim of this chapter is to inform readers about the benefits, possibilities, and approaches to recognizing, documenting, and evaluating tourist attractions, particularly regarding the assessment of their developmental and marketing aspects.

After mastering the content of this chapter, reader will be able to:

- explain the benefits of recognizing, documenting, and evaluating tourist attractions
- present how to approach the recognition of tourist attractions
- describe the advantages and disadvantages of different approaches to recognizing tourist attractions
- point out the possibilities of contemporary documentation and mapping of tourist attractions
- illustrate the process of evaluating tourist attractions
- interpret the importance of assessing the developmental and marketing aspects of tourist attractions.

Without proper documentation of recognized tourist attractions, the opportunity for various stakeholders in tourism development to utilize that information is lost. Similarly, **without appropriate evaluation, the professional and market value of recognized tourist attractions will not be clear**. Finally, without placing information about tourist attractions on a map, it will not be evident where exactly an attraction is located or the area it covers. Therefore, all three processes should be treated as a single process. The use of **digital technologies for collecting, processing, and displaying tourist attractions enhances the efficiency** of this process. New paradigms, such as citizen science and crowdsourcing, further contribute to this efficiency.

Documentation of tourist attractions is preceded by their recognition. Tourist attractions can be recognized either through random selection or systematically. **Random selection involves randomly recognizing and documenting tourist attractions that can be observed in the area**. This method has its advantages and disadvantages. One advantage of using random selection is providing an opportunity for a large number of participants in the documentation process to recognize a large number of tourist attractions in a wide range of locations while engaging in other

Citizen science

Recognition of tourist attractions

Digital and social transformation of mapping tourist attractions

activities. However, the randomness of location selection and personal affinities in recognizing tourist attractions may result in some attractions not being documented and/or some areas not being covered.

A systematic approach addresses the problem of omitting certain attractions and/or areas. **The systematic approach is based on determining a geographic area where systematic recognition and documentation of all types of tourist attractions are conducted.** Detailed classifications of tourist attractions can serve as reminders of all types of tourist attractions that need to be looked for in an area. However, organizing a systematic approach is relatively difficult and expensive, since it presupposes the creation of specially formed and educated teams that will spend a certain amount of time solely on the tasks of recognizing and documenting tourist attractions.

It seems necessary to combine both approaches. **Various volunteers, civil society organizations, interested citizens, and even public officials can be involved in the random selection method,** contributing to the recognition and documentation of attractions alongside their regular activities. These could include Red Cross volunteers, mountain rescue teams, members of hiking or cultural societies, various associations for the preservation of natural or cultural heritage, as well as representatives of local councils, municipal wardens, staff from conservation departments, or nature protection institutions during their

**Detailed classification
of tourist attractions**

Volunteers



Photo: Turistička organizacija Beograda

regular fieldwork. This could also involve archaeologists, geologists, or geographers during their research, and even hunters during their regular activities in the hunting grounds.

For the systematic approach, the participation of interested institutions needs to be ensured. The main issue often arises regarding the costs of employing staff if they are not engaged in their regular activities. However, **funding resources from various national and international sources** can be secured for such purposes. Additionally, in collaboration with educational institutions from various fields, systematic work can be organized on a specific area and/or group of tourist attractions through field trips and practical activities for students, as well as through focused final projects and theses. This approach can involve a wider range of disciplines, not just students from tourism schools. For example, students from natural science schools and geography students can systematically document natural attractions, while students from art schools and art history students can do the same for cultural heritage.

Documentation and mapping are now easier and faster than ever before due to the use of portable devices such as mobile phones. During fieldwork, regardless of the approach, the time required for initial documentation can be extremely short. If geolocation is enabled on the mobile phone, it is sufficient to take a photo or short video of the recognized tourist attraction. With the use of the appropriate application, initial evaluation can be done instantly, or it can be done later. However, during fieldwork, it is advisable **to identify the basic type of attraction and suitable forms of tourist activities and to assess accessibility for people with disabilities**, which can be supported by additional photos and/or videos. If there is already any damage or visible risk of damage and/or destruction to the attraction, this can be immediately documented with photos/videos.

Further activities of textual description can be done later, but they can also be delegated to other participants in this process. In some situations, this is even a recommended approach. Namely, **for certain tourist attractions, additional research may be necessary**, and the results of these studies can be published by multiple individuals for each tourist attraction. What is beneficial in the participatory approach to gathering information is that specific experts for particular types of tourist attractions can be involved later in the detailed textual description process to ensure the quality assessment of each tourist attraction and the information collected up to that point. This ensures **both expert review of entered texts and the relevance of the recorded information.**

Educational institutions

Registration of tourist attractions

Specific experts

Digital and social transformation of mapping tourist attractions

The final step in the evaluation process is the tourism assessment of each tourist attraction. This usually **consists of analyzing information covering developmental (long-term) and marketing (short-term) aspects of a tourist attraction's use**. Most of this work needs to be done after fieldwork, but some observations may need to be noted in the field to avoid the need for a return visit. Critical questions that arise in developmental and marketing evaluation relate to questions of physical accessibility (roads, trails, stairs, opening hours, special access conditions for tourists, toilet availability, specific equipment for touring,

Assessment of the tourist attraction



Photo: Pointers, Regionalna turistička zajednica Karlovačke županije

tickets...) and information accessibility (published information on websites, tourist information, brown signs, interpretation panels or brochures, availability of tourist guides).

It is important to determine the possibility of using a tourist attraction depending on the time of year/month/week/day. **Particularly, the physical capacity of the space should be assessed (how many people, vehicles, etc., can access)**, and whether the attraction has the characteristics of a point in space (e.g., monument), a line (e.g., river), or an area (e.g., park). Other important questions include information about other users of the tourist attraction (e.g., local residents) and for what purposes (e.g., religious ceremonies in religious buildings). It would be good to **identify which tourist activities and types of tourism are**

Use of tourist attractions

suitable for such a tourist attraction. The list of tourist activities and types of tourism should primarily correlate with those indicated by the appropriate tourism strategy for the area, but it should not exclude the possibility of proposing some new ones. Equally useful is identifying whether there are suitable hospitality facilities for tourists nearby (accommodation, catering, beverage service, excursion sites, tasting rooms, etc.).

It is useful to assume which specific groups of tourists might be interested (e.g., cyclists, mountaineers, photographers, nature lovers, hikers...). In this regard, it would be advisable to include comments from fans of such activities in the evaluation. Their comments could be **particularly helpful in defining the opportunities and threats that the evaluated tourist attraction could have in attracting tourists.** Likewise, they could help highlight all the strengths and weaknesses that the evaluated tourist attraction has for the selected user groups to which they belong.



Photo: Meta Sepič

Tourist activities

Users of tourist activities

Bibliography

Apart from the information used in the creation of content for this chapter, the following bibliography contains the sources that can help in further research of the topics introduced:

1. Alegro, T. ed. (2021). *Projekt Gradovi Posavja: Prihodnost je v digitalizaciji kulturne dediščine*. Univerzitetna založba Univerze v Mariboru. <https://doi.org/10.18690/978-961-286-470-5>
2. Duarte-Duarte, J. B., Talero-Sarmiento, L. H. & Rodríguez-Padilla, D. C. (2021). Methodological proposal for the identification of tourist routes in a particular region through clustering techniques. *Heliyon*, 7(2021), e06655. <https://doi.org/10.1016/j.heliyon.2021.e06655>
3. Han, S., Liu, C., Chen, K., Gui, D. & Du, Q. (2021). A Tourist Attraction Recommendation Model Fusing Spatial, Temporal, and Visual Embeddings for Flickr-Geotagged Photos. *ISPRS International Journal of Geo-Information*, 10(1), 20. <https://doi.org/10.3390/ijgi10010020>
4. Karagöz, D., Günay Aktaş, S. & Mert Kantar, Y. (2022). Spatial analysis of the relationship between tourist attractions and tourist flows in Turkey. *European Journal of Tourism Research*, 31, 3102. <https://doi.org/10.54055/ejtr.v31i.2745>
5. Kušen, E. (2002). *Turistička atrakcijska osnova*. Institut za turizam.
6. Lešnik Štruhec, T., Pavlaković, B. & Pozvek, N. eds. (2023). *Turistične destinacijske organizacije: gonila povezanega kreativnega zelenega razvoja in trženja*. Univerza v Mariboru, Univerzitetna založba. <https://doi.org/10.18690/um.ft.1.2023>
7. Milenkovski, A., Gjorgievski, M. & Nakovski, D. (2016). Tourist valorization by applying the scoring method, *UTMS Journal of Economics*, 7(2), 165-173. <https://www.utmsjoe.mk/files/Vol.%207%20No.%202/UTMSJOE-2016-0702-03-Milenkovski-Gjorgievski-Nakovski.pdf>
8. Slehat, M. (2019). *Evaluation of Potential Tourism Resources for Developing Different Forms of Tourism: Case Study of Iraq Al-Amir and its surrounding areas – Jordan*. [PhD Thesis]. Catholic University of Eichstätt-Ingolstadt. <https://doi.org/10.13140/RG.2.2.28719.79526>
9. Spasojevic, B., Beric, D. & Stamenkovic, I. (2013). The valorization of tourism potential of Ovcar-Kablar' orthodox monasteries based on the use of two methods: The qualitative and quantitative research method and the Hilary du Cros research method. *Geographica Timisiensis*, 22(1), 33-45. <https://link.gale.com/apps/doc/A505886318/AONE?u=anon-58d21f8e&sid=googleScholar&xid=2d27d80b>
10. Tomić Reljić, D., Žmire, A., Šekutor, M., Koscak, V. & Butula, S. (2015). Vrednotenje primernosti krajinske podobe kot orodje za razvoj in varstvo dragocenih podeželskih območij. *Dela*, 44, 85-102. <https://doi.org/10.4312/dela.44.85-102>
11. Truchet, S., Piguët, V., Aubert, F. & Callois, J. M. (2016). Spatial influence of attractions on tourism development. *Tourism Geographies*, 18 (5), 539-560. <https://doi.org/10.1080/14616688.2016.1221985>
12. Vodeb, K. (2018). *Turistične atrakcije*. Univerza na Primorskem. <https://zalozba.upr.si/ISBN/978-961-7055-10-8.pdf>

Online sources



The Geotagging Debate

<https://www.unsustainablemagazine.com/examining-the-geotagging-debate/>



When not to geotag while traveling

<https://www.nationalgeographic.com/travel/article/when-why-not-to-use-geotagging-overtourism-security>



How to Post Responsibly

<https://www.travelandleisure.com/how-instagram-geotags-impact-travel-6746125>



InnoVET tourism

http://ss-trgovacko-ugostiteljska.skole.hr/projekti/innovet_tourism?news_hk=5856&news_id=1387&mshow=1553#mod_news



Eurostat Tourism statistics

<https://www.youtube.com/watch?v=yJmnLFFsuH4&t=5s>



Tourism Valorization of the St Anthony's Channel in Šibenik

<https://priroda-skz.hr/en/eu-projects/tourism-valorization-of-the-st-anthonys-channel-in-sibenik/>