



Online Tools for Tourism Recovery – IT Perspectives, Legal, Economic and Management Aspects

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Abstract: *The problem we addressed in the paper included an analysis of the state of the tourism sector during the two years of the COVID-19 pandemic. In addition to international tourism, one of the main goals was the economic analysis of tourism in the Republic of Serbia. The COVID-19 pandemic changed the everyday life and work of people and disturbed the order in almost all economic branches, so tourism was not spared either. In addition to the economic analysis of today's tourism sector, the paper provides an analysis of the use of available online tools in order to better position in the market and better visibility of the tourist offer to potential tourists. By using the available online tools, the contact between the interested tourist and the hotelier of a certain area is realized much faster. Their application is especially important for small rural households and tourist places that base their offer on untouched nature.*

1. INTRODUCTION

Over the past two years, life as we have known it has almost changed radically. Everything unusual became every day, while many human habits, regular activities, travel, and social gatherings had to be set aside. The COVID-19 pandemic affected almost all cities in the world, whether it was companies where it is possible to organize work from home, or it was a heavy industry where it is impossible to move production to the home conditions of their employees. Precisely because of its specifics, as well as its rapid spread, the pandemic found humanity unprepared (Putra, et. al. 2021). Therefore, the pandemic has greatly endangered world tourism, as one of the very profitable branches of the economy. The impact of the pandemic on the tourism sector is particularly great given the fact that a large number of countries around the world base their economic benefits on tourism, which is engaged by the majority of the population. By closing borders and making travel impossible, the economies of many countries have been severely disrupted.

Research shows that 2019 was the year in which tourism at the global level reached its maximum in terms of the number of overnight stays, the number of flights, as well as income from both domestic and foreign tourists. 2019 was extremely successful for tourism on a global level. This is supported by the fact that 10.3% of global GDP was realized on the account of tourism, which amounts to an incredible 8.9 trillion dollars. 330 million jobs were realized in this sector. 44 countries of the world are considered dependent on tourism, and the criterion for that was the fact that 15% of their GDP comes from tourism. The top 10 countries on the list that ranks countries according to the number of employees in tourism are exotic islands such as Antigua and Barbuda, Aruba, Saint Lucia, the Virgin Islands and the Maldives (Muritala, et. al. 2019). European countries appear on the list after the 20th place, and among them, Montenegro

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is in the 22nd place, where a third of the population has a job in this activity. Next is Georgia with 28% of employees in tourism. The list also includes Croatia with a quarter of the population (about 383,000 people) who are employed in tourism (25% or 26th place on the list). In 2019, this country generated revenues from tourism of 13 billion dollars. Albania, Iceland, and Greece each have 22% of employees in tourism, followed by Malta with 21%. Of the European countries, Portugal is on the list with 18%. Apart from the number of employees in the tourism sector, the contribution of tourism to GDP also appears as an indicator of the importance of this sector to the economy of a country. In that respect, Mexico has the highest percentage of participation with 15.5%, while Spain is in the first place among European countries with 14.3%. Just behind Spain is Italy with 13%. Of the European countries on the list are Germany (9.1%), France (8.5%), and the Netherlands (5.7%) (<https://www.visualcapitalist.com/countries-reliant-tourism/>).

After an unprecedented 73% drop in international tourism during 2020 due to the COVID-19 pandemic, demand for international travel remained very weak in the early months of 2021 (UNWTO, 2021). The report of the United Nations World Tourism Organization also illustrates the dramatic situation, stating that tourism has declined by three decades due to the coronavirus pandemic. It is generally known that tourism as an economic branch is largely dependent on various parameters such as geopolitical situations in the countries to which tourist destinations belong, natural disasters, epidemics, as well as situations that would endanger the safety of tourists. Precisely for these reasons, it cannot be said that there were no problems when it comes to tourism, that there were no interruptions in work or the closure of certain tourist destinations. However, the fact is that there has never been an interruption in the provision of tourist services worldwide. In contrast to destinations that often have problems when it comes to tourist offers due to unstable political situations, interpersonal conflicts, or bad climate, some destinations number millions of tourists annually, and thus closing their tourist destinations, the impact on their economy is very large. It is a particularly important fact that popular tourist destinations are also characterized by the fact that the population has been oriented towards tourism as a basic economic branch over the years. The trend that was present in global tourism before 2020, i.e. before the beginning of the COVID-19 pandemic, was marked as sustainable tourism. This trend occurred as a consequence of recognizing the negative impact of tourism (and not only tourism) on the environment. To that end, the residents of certain tourist destinations opposed the excessive number of tourists (Jovic Bogdanovic, et. al. 2021, p. 247).

As already mentioned, tourism in Serbia in the years before the pandemic recorded a significant boom, which was especially evident in 2019. In that year, a record number of tourist arrivals in Serbia of as much as 3.7 million was recorded, which is 84.4% more than in 2010. Then, for the first time, an almost equal number of arrivals of domestic and foreign tourists was recorded, with an increase in domestic tourist nights of 57.1% compared to 2010 and an incredible percentage increase in the number of foreign tourist nights of as much as 176.2% (Radivojević, 2020, p. 9). The virus has affected supply chains in the service delivery channels of almost all countries in the world. The impact of canceled events, indoor accommodation and closed attractions was immediately felt in other parts of the supply chain, such as catering, food preparation and delivery, renting out halls for various purposes, and laundry services. Restaurants also had to close, although in some countries the move to take away/delivery sales allowed some to continue operating.

2. LITERATURE REVIEW

As the impact of the COVID-19 pandemic on both international and domestic tourism cannot be ignored, scientists around the world are analyzing the state of tourism during the pandemic with the aim of finding solutions for the economic improvement of this sector.

In one of the researches, the authors analyzed the impact of the COVID-19 pandemic on rural tourism in the Republic of Serbia. The research aimed to look at the damage caused by the COVID-19 pandemic to rural tourism in our region from the economic, social and legal aspects. Rural tourism is observed from the point of view of visitors, more precisely tourists, as well as from the point of view of the local population, who, in addition to engaging in agriculture, is one of the types of income in rural areas where they live and engage in tourism. Empirical research was conducted using a questionnaire survey by service providers in rural tourism. Based on the conducted research, the authors defined guidelines for the recovery of rural tourism in the Republic of Serbia based on the challenges of further development of world tourism (Batricevic, et. al., 2021). In the conclusion, the authors defined some of the basic problems of rural tourism development during the pandemic. The authors also defined recommendations for the development of tourism in the Republic of Serbia.

One of the researches included the impact of the COVID-19 pandemic on tourism on the territory of the Zlatibor mountain in the Republic of Serbia. This research showed that the pandemic had a huge impact on rural tourism in the area of Western Serbia, especially the area of the Zlatibor region. Based on the results of the study, the authors gave some of the main conclusions that should contribute to the recovery of tourism in this part of the Republic of Serbia. Also, the results of the research provide instructions for the further course of tourism development in eco-rural environments on Zlatibor with sustainable development. The results confirm certain differences in Zlatibor's rural destinations in the pre-pandemic period and in times of challenges caused by the corona pandemic virus. The findings suggest that one can move from the survival phase to the phase of accelerated development of tourism in eco-rural tourism destinations. In fact, this crisis may improve the development of domestic tourism by improving the quality of tourist services in the countryside (Bozovic, et. al., 2021, p. 2015).

In one of the researches, the main conclusions of the authors refer to the fact that the impact of COVID-19 on the tourism sector, as well as the economic situation of some countries, is still an insufficiently researched topic. Research has shown that the impact of the COVID-19 pandemic on tourism is far greater in developing countries than in developed countries. For example, in countries whose GDP is based on tourism, the pandemic has affected the population in the domain of daily activities. The big problem of the population of these countries is the dependence of their earnings on tourism. The authors of the research concluded that in the field of research it would be important to make a comparative analysis of the consequences on the economy that arose under the influence of the COVID-19 pandemic and the global economic crisis in 2008 (Lukovic, et. al., 2020).

In addition to scientific research papers on the impact of COVID -19 on the world economy in a broader sense and the tourism sector in a narrower sense, a large number of organizations also deal with this topic. One of the researches was created by people employed in the Dinarides Parks - a network of protected areas of the Dinarides in cooperation with WWF Adria. The effects of a pandemic on protected areas before all represent the consequences of

the implementation of health and safety measures in order to control and suppress the epidemic. Restrictions movements introduced by the governments of the countries in the region from March 2019, as expected, had a large impact on protected areas because they made it difficult operation of the steering wheel and disabling visiting and attending people in shelters areas. One of the most noticeable influences is certainly economic consequences due to restrictions on tourist activities in protected areas. Such effects are most affected by the protected areas that are primarily oriented to income from tourism (Parkovi, 2021). The research also lamented the positive effects on protected areas. A positive example of the impact of a pandemic is reflected through the impact on the protected good itself; increased attendance influenced the promotion of the area, its values and contents. The increased attendance also affected the larger budget local population engaged in tourism and by issuing accommodation units, because all the facilities were maximally filled.

Agritourism as one of the most popular forms of tourist offer is certainly affected by the new situation. It is for these reasons that the impact of the COVID-19 pandemic on agritourism has been the subject of many studies. Authors in one of the research assess the impacts and management strategies of agritourism in Brunei. Of course, the main goal was to assess the state of agritourism during the COVID -19 pandemic. The authors also focused on creating a study in which they can observe the implication and contingency plans to divert crises, as pandemics. Research has shown that farmers involved in agritourism offer in order to overcome the losses incurred by fewer tourists turned to innovation in agricultural production to reduce the cost of the same. On the other hand, many people tried to attract tourists in different ways. Some of the methods included the use of applications that provide better visibility of their online accommodation. Some of them used social media to promote agritourism as tourism with a reduced risk of infection. The author's research has shown that it is necessary to encourage continuous improvement and training of local farmers in order to create a new agritourism offer, as well as constant training to increase the area of activity, which aims to create new jobs (Chin, et. al., 2021).

One of the researches included the tourist plans of the people in Poland during the COVID-19 pandemic. Special emphasis was placed on the plans of Poles to spend their holidays on agritourism farms. The research showed that a large number of tourists decided on this type of vacation, so this was a good choice during the pandemic. The authors concluded that agritourism farms must take adequate measures in order to provide all the conditions for a smooth and safe stay. Some of the measures relate to the current epidemiological situation, such as limiting the number of people in the rooms, installing hand sanitizers and regularly disinfecting the rooms (Wojcieszak-Zbierska, 2020).

In one of the researches, the authors observe the situation in tourism in Slovakia from the perspective of domestic and foreign tourists and the perspective of overnight stays during one visit to the country. Specifically, they looked at the online communication of selected agritourism facilities from the popular travel portal. As part of the analysis they observe active communication of accommodation facilities and restaurants on social media, focusing on Facebook and Instagram. They conclude that given the negative effects of the pandemic on tourism, the closure of borders gave the possibility for domestic tourists to travel around Slovakia. Also, they note that the area of online communication is one of the most significant (Supekova, 2021).

3. ANALYSIS OF THE CURRENT STATE OF TOURISM

The years behind us spent in the COVID-19 pandemic are new to each of us. Life under masks, closed borders, state of emergency, curfew, are just some of the measures that have influenced the way of life of a large number of people. Restrictions on travel both within the territory of some countries and on travel to other countries have greatly influenced the further development of tourism. Tourism as a branch of the economy had a kind of upward trajectory of growth until the end of 2019. This growth trend was interrupted by the COVID-19 pandemic. During 2020 and 2021, tourism at the global level experienced a large decline in the number of arrivals of foreign tourists, and in general in terms of the number of overnight stays.

According to the available data from the World Tourism Organization, we performed an analysis of the current state of the world and domestic tourism. The analysis within the research covers the period from 2019 to 2021. The goal was to compare the number of international arrivals as well as the number of overnight stays realized during 2020 and 2021 in relation to 2019. Based on the available data for international tourist arrivals in 2020. year, and for the nine months in 2021. year the diagram shown in Figure 1 was created. Based on the diagram, a small decrease can be seen during the first months of 2020, while in other months the decrease is significantly higher. If we look at the data for 2021, it is evident that the decline in the number of international arrivals at the global level continues, as was the case with the number of arrivals in the last months of 2020. It is also evident from the data that the decline in the number of arrivals during 2021 is decreasing as the end of the year approaches. This trend coincides with the reduction in the number of infected people daily, as well as with the measures that countries around the world have introduced in order to enable people who have been immunized to travel. If we compare the percentage of tourist arrivals in 2020 and 2021 with the percentage of arrivals in 2019, the data show that despite all measures taken to improve conditions for tourism recovery, as well as increase the number of arrivals, the number of arrivals is far below that which was in 2019.



Figure 1. International tourist arrivals on global level in 2020 and first nine months of 2021 [%]

Source: <https://www.unwto.org/>

If we look at international tourist arrivals by region, the largest losses for 2020. were recorded in the Asia-Pacific region, as can be seen in Figure 2. This region also suffered the biggest drop in the number of arrivals in 2021, even more than in 2020.

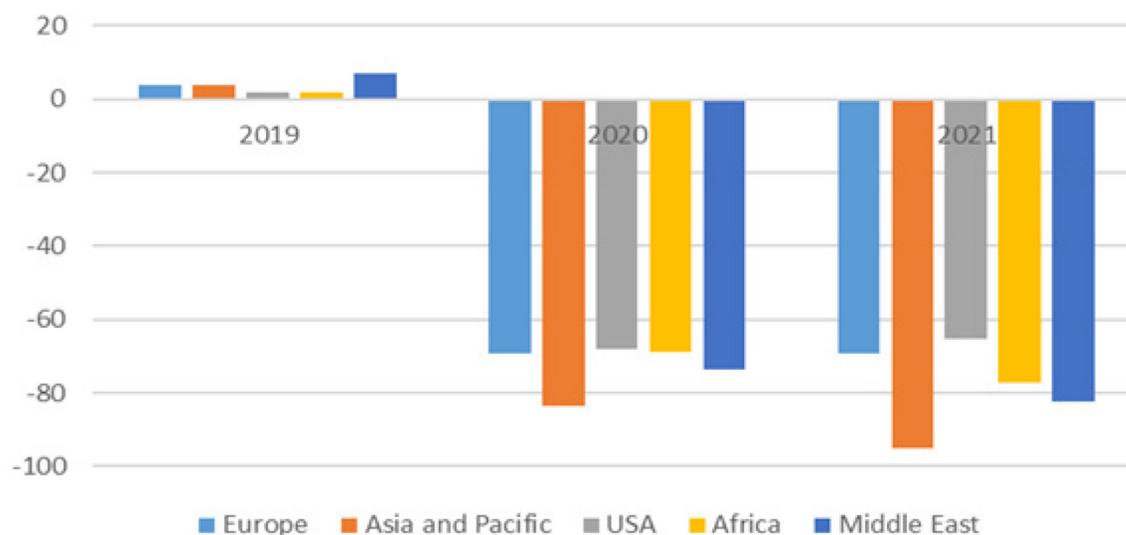


Figure 2. International tourist arrivals on regional level in 2019, 2020, and first nine months of 2021. [%]

Source: <https://www.unwto.org/>

Looking at other regions of the world covered by the survey, it is noticeable that for most regions there was a percentage drop close to that of 2020. A slightly smaller decline in international tourist arrivals was recorded in the USA region. The fact that the survey for 2021 is based on the data available for the first nine months must certainly be taken into account. The percentage of international tourist arrivals based on regional levels during 2020 and 2021 is far below the knowledge that was in 2019. And as in 2019, each of the regions recorded an increase in the number of international arrivals, over the next two years due to the COVID-19 pandemic, each of these regions recorded a large decline. During 2020, such a large decline was certainly something that people engaged in tourism did not expect, while the decline in the number of arrivals during 2021 is something that could be expected.

Following its tourist offer, the Republic of Serbia attracts a certain number of both domestic and international tourists. Like other countries in the region, the goal is to achieve the largest possible number of international tourists who would primarily visit the tourist destinations of the Republic of Serbia. Revenues of hoteliers and others in the chain of tourist offers are directly related to the number of tourists who visit a place. During the previous two years, the Republic of Serbia was very often in a lockdown, which caused a smaller number of international tourists. In practice, it can be said that the situation in the Republic of Serbia regarding the COVID-19 virus has passed from one pandemic wave to another. On the one hand, the pandemic caused the Republic of Serbia to close its borders in one period so that there would be no influx of people from abroad and the spread of the pandemic. This practice especially dominated during 2020. On the other hand, due to the increased number of patients in the Republic of Serbia, its citizens are often put on the red list, so there was a recommendation that foreign nationals should not choose their vacation or recreation tourist destination of Serbia. Precisely for these reasons, there were few days when citizens of the Republic of Serbia were able to travel or receive visits from foreign nationals.

If we compare the data on the number of international tourist arrivals for 2019, 2020, and 2021. available by the World Tourism Organization, it shows a decrease in the number of arrivals during 2020 and 2021 compared to 2019, which can be seen in Figure 3. It can also be noticed that

the number of arrivals during the first months of 2020 is almost the same as the number of arrivals during 2019, after which there is a decline. However, during 2021, the decline in the number of arrivals begins in January. If we compare this with the data at the world level, it can be concluded that the decline in the number of tourists in the Republic of Serbia follows the world trend.

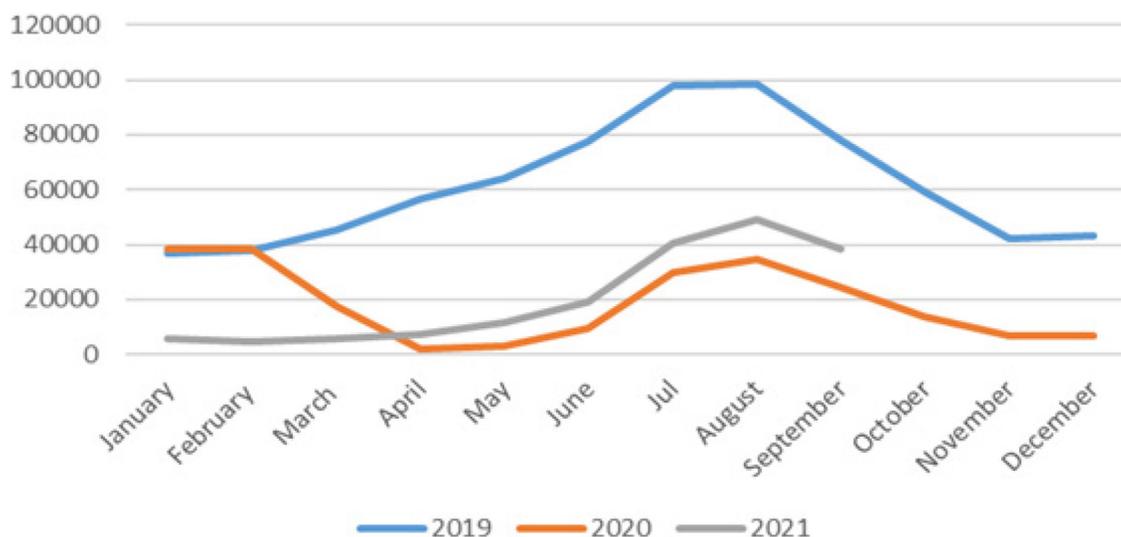


Figure 3. Comparison of number of international tourist arrivals (thousands) for Republic of Serbia in 2019., 2020. and 2021.

Source: <https://www.unwto.org/>

The situation in the field of tourism at the world level due to the COVID-19 pandemic also affected the structure of tourists visiting the Republic of Serbia. In this regard, the number of foreign tourists who came to visit the Republic of Serbia is significantly lower than in the years before the pandemic. Data from the World Tourism Organization show that in May 2020, the share of foreign tourists was 11%, which is 23% less than the share of foreign tourists in 2019. During June, the share of foreign tourists was 10%, which is 29% less than in the same period in 2019. If we compare July, the share of foreign tourists is lower by 31% compared to July 2019. The number of foreign tourists and overnight stays that they realized during 2021 is almost the same as in 2020. Tourism entrepreneurs have responded to falling demand by reducing the prices of accommodation in the observed period but not to the appropriate extent. The number of nights in March 2020. in the Republic of Serbia fell by 46% compared to 2019. year, to which the accommodation service providers responded by reducing the price by 7.3%. Not looking at April, which cannot be a real indicator of market movements tourist services because a state of emergency lasted throughout the month; a decline of 83% in the number of overnight stays in May was accompanied by a decline of 8% in accommodation prices. Current trends in the tourism services market are good an indicator of the readiness of tourist places and providers' service to changing conditions and an indicator of their flexibility. Stara Planina already in June recorded a higher number of overnight stays than in the same month the previous year, while in July it achieved a number overnight stays of over 10 thousand, compared to just over 3 thousand from the same month in 2019. With these results in the period from the declaration of the state of emergency until the end of July Stara Planina achieved the lowest cumulative decline in the number of overnight stays in the Republic of Serbia (for only 13%). Significant results and an increase in the number of overnight stays in July 2020 (Radivojevic, 2020). compared to the previous year are both Sokobanja and Banja Palić (both spas noted a cumulative drop of 27%).

4. ONLINE TOOLS TO SUPPORT TOURISM RECOVERY

The rapid advancement of information and communication technologies (ICT) and the dynamic development of tourism have been correlated for years. Since the end of the eighties of the 20th century, software applications and solutions applied in tourism, often called e-tourism, have been emerging. Information technologies improve the process of connecting the tourist offer and the tourist demand on the market, thus giving a completely new dimension to the distribution of package deals. The global tourism market implies the expansion of business to the global level, and thus the establishment of wider distribution channels that would allow more efficient product placement (Viduka, et. al., 2013). In the tourism industry, there are more and more services provided to tourists, and they are based on the use of the Internet as the main communication channel. The use of specialized software applications compatible with modern electronic devices, as well as the interaction between tourists and tourist destinations open a new dimension in tourism. In order to interact between tourists and tourist destinations, a large number of different applications are in use. One of the types of applications is applications for obtaining the necessary information about a specific tourist destination (Labanauskaite, et. al. 2020). The user can download the application from the Internet with the help of which he will receive all the necessary information. In most cases, this information contains information about sights, attractions, hotels and restaurants, the best way to travel to the destination, etc. The advantages of such applications are multiple, especially due to the fact that in most cases such applications offer the ability to search for information related to many other destinations. In this way, the user has the latest information about a destination at his disposal at all times. Also, in addition to information about existing destinations, applications are updated with information about new destinations that have been added to the system database since the last update (Bendon, et. al., 2010).

Very important services within e-tourism are also applications for searching and booking flights, accommodation, and tickets for various tourist attractions and sights. Previously, the process of finding the desired hotel in many cases was at least exhausting and time-consuming. The transition from the traditional way of booking accommodation to booking using online applications has brought great benefits to both potential tourists and specific service providers. The fact that a large number of hotels have electronic booking systems within their web portals also shows how popular online accommodation booking has become. In addition, there is a growing presence of independent services that provide services for finding and booking accommodation. Standalone online services are a link between hoteliers and potential guests. Through these services, hoteliers are offered only the possibility of advertising (Chamboko-Mpotaringa, 2021). The entire process of searching between accommodation facilities that meet the requirements of system users as well as the reservation itself is performed independently of the hotelier. The introduction of online accommodation reservations has reduced the problems that occur under the influence of the human factor and increased the accuracy, consistency and up-to-dateness of the information.

In the area of marketing communication, the service providers' website plays an extremely important role, as it is still the most-used channel following online booking sites (Dodova & Soviar, 2021). Service providers also need to pay close attention to online reviews, consumers are reluctant to write lengthy reviews, they are happy to score and most of them are looking at the reviews of others before making their travel decisions.

The mentioned online tools and services are in constant use both by people who live from tourism and by tourists. The practice of using online tools has increased with the development of

tourism, increasing the number of tourists and increasing the tourist offer. The COVID-19 pandemic has caused a decrease in tourists worldwide, which has only led to greater competition both between individual regions and between people and organizations in those regions. The current situation highlights the need to reach tourists as easily and quickly as possible. More precisely, the problem of the reduced number of tourists has caused hoteliers, tourist organizations, private accommodation, tourist attractions and all those who live in tourism to work on improving their marketing. Work on marketing improvement is based on online services and social networks. The main goal of their use is the rapid availability of all necessary information to interested tourists. It is also necessary to constantly improve and increase their ranking within search engines so that tourists get information about a particular accommodation or destination as one of the ten highest-ranked.

Having in mind the COVID-19 pandemic, tourist organizations must point out the key facts that set them apart from other destinations in terms of security. In this regard, each individual hotelier or issuer of accommodation in the information about their accommodation should highlight the security measures that are taken daily in order to achieve greater safety of their guests. Also, some of the very important information can be the distance from the hospital, the equipment of human pharmacies, etc. In cooperation with local self-governments, tourists can also be provided with information on whether and in what number there are infected people in the territory of the city or municipality in which they plan their stay (Reyes-Menendez, et. al., 2019). Of course, tourists will prefer to choose a place that offers them security and fewer opportunities than infection. For example, the agritourism offered in the time of pandemics can offer much more than is the case with urban environments. This is supported by the data that during the pandemic, tourists opted for an offer that includes more time in untouched nature, outside cafes, restaurants, and crowds, as well as enjoying the rural idyll and cuisine. Thanks to online tools and social networks, such small tourist complexes are attracting more and more tourists every day. Information about their offer becomes easily accessible to everyone. Also, this type of information is easy to spread among people, more precisely far easier than it was before.

The use of online services and social networks, unlike before the pandemic COVID-19, should not be just one of the possibilities or desires of an individual (Linnes, et. al. 2021). The application of such services should enable the rapid economic recovery of today's tourism sector. It is practically necessary to use the offered services, habits and needs of people to use online services and social networks in order to fight and attract every potential tourist under their roof. Living in a pandemic, people have become accustomed to working from home, they have become accustomed to trying to find everything online for everything they need, and to get what they want using the appropriate service. It is for these reasons that tourism organizations and all those around them need to take advantage of the newly acquired habits of the human population in order to sell them as much as possible what they offer.

5. LEGAL FRAMEWORKS OF TOURISM

Every society has its habits, and tourism as one of them is a massive socio-economic phenomenon with many positive effects. The modern tourist market is in constant need of new forms of spending free time, in the most diverse way possible. Tourism is often seen as a targeted, planned and motivated behavior, where the most important role in making a travel decision is played by the expectations of the person traveling. That is why the needs, attitudes and motives of tourists are crucial (Walland, 2006). Precisely because of the mentioned characteristics of

tourism, we can, to a certain extent, see it as a point of connection between urban and less urban areas. Tourism is one of the most efficient ways to preserve the preserved nature of the whole (lakes, rivers, mountain lookouts and landscapes, etc.), but also cultural heritage (archaeological sites, monasteries, etc.) can be valorized (Matijasevic-Obradovic & Bingulac, 2015). Bearing in mind that tourism is a kind of user of space, and it is not an irreversible consumer of natural elements, with the controlled development of tourism, the development of a certain area can be achieved (Jovicic, 2000).

The current state of tourism in the world and the Republic of Serbia requires changes in legal regulations so that on the one hand tourists can be provided with unhindered travel and enjoyment of the tourist offer, while on the other hand, it is necessary to ensure the safety of all. If we observe the application of online tools in tourism, it is necessary to pay special attention to the protection of the personal data of users of these tools. As in most cases, the users of these tools are natural persons, they need to be provided with legal protection in case of unauthorized use of their data left to the service provider after logging in to the system. In 1981 the Council of Europe adopted the first international treaty to address the right of individuals to the protection of their personal data: Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data, known as “Convention 108”. The treaty was drafted in a technologically neutral style, which enables its provisions to be fully valid today, regardless of technological developments. In 2018, the treaty was updated by an amending protocol, not yet in force, aimed at ensuring that its data protection principles are still adapted to new tools and new practices. To this day, “Convention 108” still remains the only legally binding international instrument with a worldwide scope of application, open to any country, and with the potential to become a global standard. The treaty establishes many principles for states to transpose into their domestic legislation to ensure that data is collected and processed fairly and through procedures established by law, for a specific purpose, that it is stored for no longer than is required for this purpose, and that individuals have a right to have access to, rectify or erase their data. An additional protocol requires each party to establish an independent authority to ensure compliance with data protection principles and lays down rules on transborder data flows. So far, 55 countries have ratified “Convention 108” and many others have used it as a model for new data protection legislation.

On the other hand, during a pandemic, personal data protection cannot come first. Specifically, the protection of personal data is a lower priority than public health. For example, if a guest is found to be positive, his or her personal data must be provided to the competent authorities in order for him or her to be adequately cared for. Also, each of the hoteliers, if he has information about the movement of a positive person, must submit his personal data. It is for these reasons that some countries have enacted legal regulations governing cases in which an employer or legal entity is allowed to disclose the personal data of its employees or its guests.

According to GDPR Article 6, the processing of personal data is illegal unless it can be justified. In the following cases, processing of subject data is justified. The data subject has given for one or more processing activities, unambiguous consent to process his data. The permission must be freely given, clear, and easy to withdraw. The data processing activity is necessary to execute or to enter into a contract to which the data subject is a party. Legitimate interest is used as a legal basis for data processing. That is processing necessary for compliance of a company with a legal obligation. The vital interests of the data subject have to be protected through data processing. This is can take place in emergency and medical care situations. A data processing

activity has to take place on behalf of a government entity. Processing is necessary for a legal obligation. Finally, the legal basis for data processing needs to be documented and the data subject to be informed. Additionally, in case of a change in the legal basis, the data subject has to be notified. In case of a data leak, the data subjects must be informed within 72 hours. Otherwise, a company will face penalties. According to GDPR Article 25, the protection of personal data has a central role in a company. In their whole life cycle, data must be protected. This means that the concept of data protection by design and by default will apply in any data processing stage (Chatzopoulou, 2021).

In order to respond to the challenges posed by the COVID-19 pandemic in terms of personal data protection, the EU Directive on Privacy and Electronic Communications was adopted (Coronavirus/COVID-19 Data Privacy Guidance). The adopted directive stipulates that the processing of personal data with regard to location may be carried out only in cases of anonymous data collection or in the case of consent obtained from the data subject. The directive authorizes the EU Member States to prescribe special measures in national law to protect national and public security (Rikhsibaevna, et. al. 2019).

The opportunity provided by the Directive has been used by many European countries, as well as some parts of Asia. For example, The Italian government has developed cooperation with mobile operators, who submit the collected location data to the Ministry of Health, thus providing them with information on the number of citizens who have disobeyed the prescribed measures of restriction of movement. This dictatorship has been adopted by many countries across the European Union. The directive was also implemented by some Asian countries. If we look at the countries of the European Union, Italy stands out, whose government, in cooperation with mobile operators, collected data on the location of mobile phone users. These data served the Ministry of Health in order to record the number of citizens who turned a deaf ear to the prescribed measures to ban movement. Polish authorities have launched the use of an application intended for citizens who are in quarantine. A citizen who is in quarantine is obliged to take a selfie with geolocation from time to time. In this way, by using a given application, the authorities can be sure that the citizen is really in quarantine. Special measures for foreign nationals have been introduced in China. Namely, upon arrival in the country, every foreign citizen would receive a bracelet that records his movements. In this way, the authorities have an insight into whether the isolation measure was violated or not. In Singapore, all data on infected people was made public, after which an application was launched that allows tracking the location of the victims of the coronavirus. Needless to say - the legality of this measure is definitely questionable (Zunic Maric & Djukanovic, 2020).

If we look at the laws and bylaws of the European Union, it can be seen that the Personal Data Protection Act (GDPR) categorizes medical data as a special category of data. Practically, the personal data of the patient are treated as special data whose privacy must be taken into account. Viewed from the point of view of companies and employers, security of communication must be ensured, in order to avoid the possibility of finding information about the health reasons for the employee's absence in any form of communication. Thus, for example, care must be taken in which case the information about the employee must be considered secret or it can be revealed which employee it is (Bradford et. al. 2020). Transferred to the state of the pandemic, and in order to protect the personal data on the health condition of the employee, the team is obliged to take all measures to protect the employee when the presence of the virus is confirmed. This practically means that measures should be aimed at avoiding revealing the identity of a worker

who has health problems. However, how health data is considered a special group of personal data, and how, on the other hand, a pandemic state is in itself a state that requires changes to the GDPR, prescribes in which cases an exception may be made. Some of the special categories of personal data that may be collected are, for example, data distributed by Union or Member State law; In cases when data are used to protect personal data or other fundamental rights, as well as in cases where it is in the public interest or interest in public health, including the prevention or control of infectious diseases and other serious health threats. Such derogations are permitted for health purposes, including public health and health system management (Gecic & Okiljevic, 2020).

In this regard, Art. 6 and 9 of the GDPR provide a legal basis to allow employers and competent public health authorities to process personal data in the context of an epidemic, without the obligation to obtain the consent of the data subject. This applies, for example, when it is necessary for employers to process the data in question in accordance with the public interest in the field of public health, as well as to protect vital interests or fulfill a legal obligation. As more and more cases of coronavirus positives are detected daily, employers are obliged to monitor the spread of the epidemic and, if necessary, take steps to protect their employees. However, the exchange of information for these purposes must be proportionate to the risk and need for exchange, which should be assessed regularly and carefully. It is up to employers to decide what steps should be taken to ensure employee safety (EDPD, Statement of the EDPB Chair on the processing of personal data in the context of the COVID-19 outbreak).

The protection of personal data and the protection of patients' medical data must be carried out in accordance with all applicable legal norms. However, in a time of the pandemic, protecting this data is becoming a real challenge. It is for these reasons that all entities involved in the process of using data should work on data protection so that they remain personal in the end. In this regard, all online tools used to enter or transfer such data must have appropriate security mechanisms, and encryption mechanisms to prevent malicious use of this data.

6. CONCLUSION

Tourism as an economic branch of each of the countries contributes to the increase of income of people who have found their employment in the tourism sector, as well as the state in general. Observed from the point of view of income generation and economy, tourism is directly conditioned by the free movement of people as well as social interaction. Over the past two years, tourism has suffered huge losses due to the COVID-19 pandemic. The decline in the number of international tourist arrivals worldwide has almost never been so great. If the decline in the number of tourists is compared to the crises that have befallen the world in the recent past, such as the global economic crisis, it can be concluded that the decline in the number of tourist arrivals during the pandemic is unimaginably greater. The decline at the world level is almost equally reflected in the Republic of Serbia and the surrounding countries.

In order to mitigate the economic consequences of the COVID-19 pandemic on the tourism sector and its employment, tourism organizations, local government, government, non-governmental organizations and people whose livelihoods depend on potential tourists must make an effort and contribute. One of the ways to fight for the recovery of tourism is the use of information and communication technologies in terms of their application through various management and marketing services as well as online services and social networks. The main goal of

the application of these services is better advertising of everything that is the tourists offer in a region. By applying these services, multimedia information can be transmitted around the world in a very short time, which enables easier and faster acquaintance of tourists with the offer of a region. The available information should be based on all the facts concerning the safety of tourists during their stay. In this way, if all individual actors work together to increase the number of tourist arrivals, an increase in revenues in this area can be expected.

REFERENCES

- Batricevic, A., & Stankovic, V. (2021). Is COVID-19 pandemic affecting rural tourism in Serbia. *Quaestus Multidisciplinary Research Journal*. *Iss. 18*, 118-135.
- Bendon, G., & Hundson, S. (2010). *Our mobile future: how smartphones will transform visiting experiences*, London: Horizon Digital Economy Research.
- Bozovic, S., Kosic, K., & Vukoicic D. (2021). Developing Ecotourism in a time of pandemic: The Case of the Zlatibor Mountain, Serbia. *Ecologica*, *28(102)*, 215-222.
- Chamboko-Mpotaringa, M. (2021). Tourism Digital Marketing Tools and Views on Future Trends: A Systematic Review of Literature. *African Journal of Hospitality, Tourism and Leisure*, *10(2)*. 712-726.
- Chatzopoulou, I. (2021). GDPR and tourism: legal framework, compliance and implications for the tourism industry. *Journal of International Scientific Publications-Economy & Business*. *15*, 125-133.
- Chin, W., Musa, S. & Coetzee, W. (2021). Agritourism resilience against COVID-19: Impacts and management strategies. *Cogent Social Sciences*, *7(1)*, 1-19.
- Coronavirus/COVID-19 Data Privacy Guidance, Retrieved on October 12, 2020, from: <https://www.cov.com/-/media/files/corporate/publications/2020/03/overview-of-COVID-19-data-privacy-guidance.pdf>
- Dodova, I., & Soviar, J. (2021). The application of online marketing tools in marketing communication of the entities with the tourism offer in 2020 in Slovakia, *Transportation Research Procedia*. *55*, 1791-1799.
- EDPD, Statement of the EDPB Chair on the processing of personal data in the context of the COVID-19 outbreak, Retrieved on August 12, 2020, from: https://edpb.europa.eu/sites/edpb/files/files/news/edpb_COVID-19_20200316_press_statement_en.pdf
- Gecic, G. & Okiljevic, M. (2020). Virus COVID-19 does not care about the protection of personal data, Gecic Law, Retrieved on October 12, 2020, from: <https://www.coronavirus.geciclaw.com/sr/virus-COVID-19-ne-mari-za-zastitu-podataka-o-licnosti/>
- Jovic Bogdanovic, A., Pajic, S., & Jovanovic, M. (2021). Uticaj pandemije COVID-19 na turizam u Evropi. In Radosavljevic, Z. (Ed.), *Pravo, ekonomija i menadzment u savremenim uslovima*, Presented at 7th international conference LEMIMA 2021, Belgrade.
- Jovičić, D. (2000), *Turizam i životna sredina*, Beograd, Zadužbina Andrejevic
- Labanauskaite, D., Fiore, M., & Stasys, R. (2020). Use of E-marketing tools as communication management in the tourism industry. *Tourism Management Perspectives*. *34*.
- Linnes, C., Itoga, H., Argusa, J., & Lema, J. (2021). Sustainable Tourism Empowered by Social Network Analysis to Gain a Competitive Edge at a Historic Site. *Tourism and Hospitality*, *2(4)*, 332-346.
- Lukovic, S., & Stojkovic, D. (2020). COVID-19 pandemic and global tourism. *Hotel and Tourism Management*. *8(2)*, 79-88.
- Matijasevic-Obradovic, J., & Bingulac N. (2015). Pravni aspekti ruralnog razvoja i agroturizma u Srbiji. *Agroekonomika*, Univerzitet u Novom Sadu, *44(66)*, 82-91.

- Muritala, B., Sanchez-Rebull, M., & Harnandez-Lara A. (2020). A Bibliometric Analysis of Online Reviews Research in Tourism and Hospitality. *Sustainability*, 12(23).
- Parkovi (2021). Uticaj pandemije COVID-19 na stanje zasticenih podrucja u region Dinara, Regionalni pregled, Parkovi Dinara, Podgorica.
- Putra, A., Dona, Akhirianto, P., & Aisyah, N. (2021). Designing A Virtual Jakarta Tourism Application On Android OS And Virtual Reality Tools. *International Journal Of Science Technology & Management*. 2(5), 1460-1467.
- Radivojević, A. (2020). Turistički sektor u Republici Srbiji tokom trajanja pandemije. Kvartalni monitor, Faculty of Economics, University of Belgrade, (Fondacija za razvoj ekonomske nauke), Belgrade.
- Reyes-Menendez, A., Saura, J., & Ferrao, F. (2019). The importance of behavioral data to identify online fake reviews for tourism businesses: a systematic review. *PeerJ Computer Science*. 1-22.
- Rikhsibaevna, S., Aleksandrovna, D., Abduvohidovna, N., & Evgenievna, O. (2019). Economic and Legal Aspects of Tourism Regulation in the New Economy: International Practice. *Journal of Environmental Management and Tourism*, 2(34), 460-465.
- Supekova, S. (2021). Social Networks Communication of agritourism facilities under the influence of the COVID -19 pandemic. Faculty of Economics and Business Pan-European University in Bratislava Slovakia, 1-6.
- Viduka, D., Bašić, A., & Lavrnić, I. (2013). *Cloud Computing Kao Potencijalno Rešenje U Elektronskom Poslovanju*, Časopis iz oblasti ekonomije, menadžmenta i informatike - Biz-Info, 4(2), p. 79-85
- Wall, G. & Mathison, A. (2006), *Tourism: change, impacts and opportunities*, Pearson Education Limited, Harlow.
- Wojcieszak-Zbierska, M., Jęczmyk, A., Zawadka, J., & Uglis, J. (2020). Agritourism in the Era of the Coronavirus (COVID-19): A Rapid Assessment from Poland. *Agriculture*, 10(9), 1-19.
- Zunic Maric, T., & Djukanovic, J. (2020). Personal data protection (not) stayed because of COVID-19. Retrieved on October 12, 2020, from: <https://zuniclaw.com/COVID-19-zastita-podataka/>