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Abstract: Covid-19 pandemic has been spread rapidly world-wide during the last two years. Apart from the negative results in the health department – 290,959,019 confirmed cases and 5,446,753 deaths as at 4 January 2022 (WHO, 2022) – coronavirus pandemic creates a global negative impact on trade and economic world, causing problems, including unemployment and poverty. Unfortunately, one of the major economical markets that was heavily “injured” is the Tourism Industry. More than 100.8 million of people, working in the hospitality industry, have lost their jobs in the last two years (Statista, 2021), whereas a lot of businesses (such as hotels, restaurants, café-bars and airlines) are close to bankrupt. The aim of the current paper is to study the relationship between Covid-19 and its effect on the tourism sector. The methodology which will be used is literature selection of papers, studies, articles, journals retrieved from online bibliographic databases (such as Science Direct and Google Scholar). Finally, although there is a serious number of threats due to the decrease on the tourist industry, there are a lot of opportunities which could come up (for the tourism sector) after Covid-19 era. Both of them will be investigated in the current paper.

1 INTRODUCTION

Covid-19 pandemic has been changing the world’s economy during the last two years. One of the economic sector that was mostly hurt by the coronavirus pandemic, is the tourism industry. Due to the worldwide rapid spread of the Covid-19 pandemic, there has been a rapid increase in cancellations of trips, flights, holiday reservations, and hotel and restaurant reservations because of the insecurity that was created on travellers (Jim, et al., 2021). In order to prevent the spread of the pandemic some measures were taken by a lot of governments worldwide. For example: the introduction of national and international travel restrictions, the closing of border gates mutually in many countries, the use of quarantine practices, and the cancellations of events. As a result, all these measures have negatively affected the national as well as the international tourism industry and have brought tourism activities to a halt (Baum & Hai, 2020).

Although there is no doubt that Covid-19 pandemic has brought a large financial decline to the tourism industry, it challenges scholars to investigate the opportunities that could arise for the hospitality field. Developing ecotourism, establishing health and safety travel and hospitality protocols not only for the travellers but also for the employees, training managers and employees, developing the use of technology and robotics for the hospitality and travel industry, could be some of the positive aspects that can be brought into surface after Covid-19 era.

The main purpose of the current study is to investigate the effects of Covid-19 pandemic on the tourism industry not only on a global level but also focusing on the effects on European region. In addition, Covid-19 era brings the necessity to investigate how the hospitality and the travel section can benefit from all this damaging situation.
This paper is a literature review which will examine the current research findings, through a selection of papers, studies, articles retrieved from online bibliographic databases. Finally, this study hopes to give the trigger for future research in the field of the tourism industry.

2 COVID-19 IMPACT ON THE TOURISM SECTOR (WORLDWIDE)

Apart from the general economical market, Covid-19 pandemic has led tourism industry on a huge decrease. The rapid spread of the virus has forced many government policies to adopt strong containment, often referred to as lockdown. Hale et al. (2021) introduced a measurement (Containment and Health Index – CHI) of intensity of closure and containment policies (for example school closings, restaurant dining closings, stay – at – home measures) and policies towards disease surveillance (for example testing and contact tracing). Figure 1 shows CHI measure by country on the first day of each months. As anyone can notice in a few months the world had changed and intensive policy responses had become a global phenomenon (Hale et al., 2021).

Figure 1: CHI by country on the first day of each month. The colour scale bar indicates the CHI score, from <20 (pale yellow) to >80 (dark red) (Hale et al., 2021).

These restrictions have caused the breaking of the links of tourism industry, including: transportation, hospitality or hotel businesses, tourist attractions, café – bar and restaurants, travel agencies etc. (Universitas Terbuka, 2021). As a result a lot of million people working in tourism industry have lost their jobs unexpectedly (100.8 million worldwide). Figure 2, shows the millions of jobs per continent that have been lost during 2020. The biggest damage has been caused in Asia Pacific region with almost 63.4 million of jobs loss, followed by Europe with 13 million of jobs loss (Statista, 2021).

Although is it not the first time that the world experiences a pandemic outbreak during the last 20 years (SARS 2004 and Ebola 2014) (Khan, Janjua & Yu, 2020), it is the first time that the tourist sector seems to deal with this amount of financial decline. According to Behsudi (2020), tourism – dependent countries will likely feel the negative impacts of the crisis for much longer than other economies. Contact – intensive services key to the tourism as well as travel sectors are disproportionately affected by the pandemic and will continue to struggle until people feel safe to travel again (Behsudi, 2020). Similarly, Rahman et al. (2021) researched the effect of Covid-19 on tourist’s travel risk and management perceptions. The findings of their study indicated that Covid-19 has affected tourists’ travel risk and management perceptions and its impact on risk management, service delivery, transportation patterns, distribution channels, avoidance of overpopulated destinations, hygiene and safety. From tourists’ point of view, coronavirus pandemic has created tourists’ health anxiety and reduce their travel plans for destinations (Rahman et al., 2021). In addition, Ulak (2020) argues that global mobility has spread the pandemic to all countries and for that reason the tourism intention among the global tourists has dropped significantly for safety and healthy related reasons. Hoque et al. (2020) discovered that tourists were extremely cautious when making travelling plans during outbreaks of the pandemic. According to these scholars, psychological impacts of Covid-19 pandemic on tourist’s travel intentions and experiences seems to be their major concern.

Another threat that was created by Covid-19 pandemic is the decline of the gross domestic product (GDP). More thoroughly, there are a lot of studies (Ongan & Demiroz, 2005; Selimi, Sadiku & Sadiku, 2017; Dash, Tiwari & Singh, 2018) explain the positive impact of the tourism sector on the
In order to understand the enormous drop of the contribution of tourism sector to GDP, Figure 4 exhibits the contribution of travel & tourism industry to a) GDP and to b) employment, by region in the year 2020. More thoroughly, in 2019 tourism industry has a positive contribution to GDP of every region from 6.9% (in Africa region) to 14.1% (in Caribbean) (WTTC, 2021). However, Covid-19 pandemic has caused the huge drop of the contribution of tourism industry to GDP in every region. This fall ranges from -41.1% (Latin America) to -58.0% (Caribbean).

One of the major sector of the tourism industry that was “injured” the most due to Coronavirus pandemic is airline industry. Airline industry remains fragile and one of the biggest casualties of the global pandemic (Sun, Wandelt & Zhang, 2020). According to Xuan et al. (2021) air traffic declines due to social isolation, and travel restrictions have grounded two-thirds of commercial airlines. Because of this uncertain situation, 7.5 million flights are cancelled; and customers demand refunds. According to International Air Transport Association (IATA) all the member countries lost $230 million on average per day and halve annual revenues from $838 million to $419 in 2020 – this is the largest decline in the recent history of aviation (IATA, 2020).

Figure 4: Contribution of travel industry to GDP. Regional overview 2020 (WTTC, 2021).

In the first months of the pandemic, there was an 80% reduction of passengers compared to 2019 (ICAO, 2020). It is predicted that air traffic should be back to the pre-Covid-19 position in 2024 (IATA, 2020).

3 COVID-19 EFFECT ON THE TOURISM INDUSTRY IN EUROPE

Europe’s Travel and Tourism Sector came front with the biggest economic collapse of the last decades, due to Coronavirus situation (SchengenVisaInfo, 2021). According to the World Travel and Tourism Council (WTTC, 2021b), in Europe, Tourism Industry contribution to GDP has fallen by 51%. In other words, travel contribution to overall GDP in Europe fell from a 9.5 share in 2019 to 4.9 in 2020.

Moreover, international tourism arrivals of 2020 in Europe dropped by 70% compared to those of 2019 (European Parliament, 2021). The highest reductions were caused in Central/Eastern Europe (74.9%), followed by Northern Europe (73.4%) and South Mediterranean Europe (72.4%), while results in Western Europe were less severe (56.2%) (UNWTO, 2021). Figure 5 diagram shows the international tourist arrivals in Europe from January 2019 to September 2021. As anyone can notice April 2020 has the largest decrease in the last 3 years. However, in 2021 there is an increase in the international flights (compared to 2020) and hopefully the prediction of IATA, that the air traffic should be back in its earlier position in 2024 (IATA, 2020b), seems to be an
optimistic scenario. Last but not least, domestic travel in Europe has been increased from 55% in 2019 to 69% in 2020.

Figure 5: Change in international tourist arrivals in Europe due to COVID-19 pandemic from January 2019 to September 2021 (Statista, 2022).

As far as the accommodation is concerned, there has been a significant lower occupancy. More specifically, the average occupancy rates in hotel in Europe in 2020 were 33.1% which means that they were 54.2% lower than the average occupancy rate in 2019. As a result, hotels were forced to reduce price so as to stimulate bookings (STR, 2021). The Average Daily Room Rate was 93.34 Euro in 2020, which is 18.2% lower than in 2019. Due to the drop in occupancy and prices, there was also a reduction in the revenues per available room to the amount of 62.5% in comparison to 2019 (STR, 2021). Actually, the revenue per available room in 2020 (30.86 euro) was the lowest on record (STR, 2021). Similarly, hospitality sector (food and beverage facilities, culture and leisure and sport activities) had also a significant drop. More thoroughly, food and beverages services revenues were dropped by 30% in 2020 compared to 2019 (Eurostat, 2022). Also, the number of employees in food and beverage services in 2020 was 16% lower than the number of employees in 2019. Furthermore, culture and creative industries in Europe has a huge drop due to Covid-19 pandemic. More specifically, 31% of the revenues in culture and creative industries were lost in 2020. Performing arts revenues had an enormous drop (90%) as well as music events (76%) (European Parliament, 2021) As far as the museums, half of the European museums reported a drop in visitors between 25% to 75%, even though they had re-opened to the public after the first wave of 2020 (NEMO, 2021). Finally, travel agencies and tour operators had a huge drop (71%) in 2020 in comparison to 2019 (Eurostat, 2022). According to Eurostat, there was a 63% drop in employees from 2.7 million workers in 2019 to 1 million workers in 2020.

4 OPPORTUNITIES FOR DEVELOPMENT ON TOURISM AFTER COVID-19 ERA

4.1 Ecotourism

Although Covid-19 pandemic has serious negative effects on world’s economy as well as the worldwide health system, there seem to be a positive effect on the environment due to the rapid fall of the air pollution. More specifically, airline industry is responsible for 2.5% approximately of the Global CO₂ emission, as well as a small amount of the increase of the temperature worldwide (Tabushi, 2019). Because of the massive lockdown a lot of airlines grounded their air crafts, which had as a result the reduction of air-pollution (Khan, Janjua & Yu, 2020). Moreover, due to the lockdown situation (less transportation pollution), the concentration of NO₂ emission in the air has been rapidly decreased not only in highly industrialized countries but also in most European countries (Khan, Janjua & Yu, 2020). This fact can give a chance for all countries and members of them to be environmentally “awaken”. Covid-19 pandemic has caused a decline in ecotourism visitation, upsurge in poaching incidences, global economic downturn and increased intensity of lobbying for further international hunting and wildlife trade bans (Mudzengi et al., 2021). In order to develop ecotourism after Covid-19 era, Mudzengi et al. (2021) suggest the following strategies that should be adopted in a long term basis: broadening livelihood options, promoting domestic visitation, aggressive marketing, capacity building, lobbying for government support, promoting effective stakeholder interactions, and developing an international hunting code of ethics.

On the same point of view, after Covid-19 era gives a great opportunity for investment in green infrastructure. As an example, the European Green Deal which was established by European Commission before Covid-19 pandemic, can be used after Covid-19 era. Its plan is to turn Europe into the first “climate-neutral” continent by 2050 through a set of measures to reduce Europe’s emission of greenhouse gases (Ec.Europa, 2021). The aim of the European Green Deal is to invest in greening the existing tourism infrastructure (attractions, accommodation capacities, leisure, meeting venues, mobility) in combination with the renovation and the improvement of energy efficiency and clean energy transition in Europe (Europe’s renovation wave) (Energy. Europa, 2021). As a result, this will guide to
more sustainable buildings, creation of new jobs, improvement of the life quality of the local populations (renovation should consider both the needs of tourists and locals), reduction of carbon emissions, and shift to energy – efficient sources (Tourism Manifesto, 2021).

4.2 Increasing Traveller’s Trust

As it is already said, Covid-19 pandemic has caused insecurity, fear, uncertainty to a lot of tourists worldwide. As a result tourism revenues have been dramatically decreased. One of the major topics that concerns the scholars of the Tourism Management is “How can we increase traveller’s trust?”.

In order to make tourists feel more secure and safe, the member countries of the European Union have established a healthy protocol for travellers. This consists of the following elements:

- EU Digital Covid Certificate: EU Digital Covid Certificate has been operating since 1st July 2021. It is used as proof that a person: a) has been fully vaccinated against Covid-19, b) has recovered from Covid-19, c) has a negative test result. The aim of EU Digital Covid Certificate is to facilitate travelling among EU citizens. This certificate is issued by national authorities and travellers holding it are exempted from quarantine and testing upon arrival in EU countries, unless emergencies related to variants require more strict protocols (Ec.europa, 2021b).
- European Digital Passenger Locator Form (dPLF). It is used by public health authorities in order to collect travel data and personal information for the traveller. The aim of dPLF is to facilitate contact tracking if a person is exposed to the Covid-19 virus (Euplf, 2021).
- National Health pass (green pass). This is an extension of the EU Digital Covid Certificate. The national health passes are used for access to venues, leisure activities and facilities. In most countries it is used for enter to restaurants (indoor), theatres, cinema, gym, indoor sport centres, concerts, sport events, museums and cultural sites (Euronews, 2021).
- European Tourism COVID-19 Safety Seal. The basic use of the European Tourism Covid-19 Safety Seal is to outline a model for standardised health and safety protocols in the tourism services (Ec.europa, 2021c). The main purpose for this safety seal is to increase traveller’s trust, improve safety protocols and harmonize them in tourism businesses (European Parliament, 2021). This stimulates a new era for safety travel.

All these measures will probably stay in force and continue to develop during the following years, so as to help travellers to regain their trust in travel as well as to enhance safety perceptions when booking and when visiting a destination (European Parliament, 2021), not only for the Covid – 19 era, but also for future reference.

4.3 Organizational Culture and Leadership

Organizational culture of a hospitality business consists of the setting of values, rules and priorities that are followed by the personnel and all the individuals who are involved in it (Belias et al., 2017; Belias et al., 2015; Belias et al., 2016). Organizational culture is a valuable factor in tourism industry, and it plays an important role in employee behaviour and organizational outcomes (Taha & Espino-Rodriguez, 2020). It is important for an organization to adjust its organizational culture due to the changes of the external environment such as the crisis of Covid – 19 pandemic. Leaders play one of the most important role in the changes of culture which caused by the coronavirus pandemic.

According to the research of Brown et al., (2021) leaders should evaluate which cultural adaptations that have emerged in their organization since the pandemic are functional and can be a source of strength and innovation for the future. For example, managers should continue communicating with employees in a very frequent way (Brown et al., 2021). Similarly, Ngoc Su et al. (2021) suggest that frequent communication and interactions between management and employees was a key element which provided mutual benefits both for business and employees.

Another important element that management should focus on is the safety of employees regarding Covid-19 virus. A tourism business (such as a hotel) should emphasize on training the employees to comply with the safe health protocols for their own as well as the customers’ safety (Lai et al., 2020). Also, Coban and Ozel (2021) suggest that leaders should be trained and be prepared for scenario crisis, such as Covid-19 pandemic.

Last but not least, according to Belal (2021), management should take actions for things to be done that it would not be so easy to be done when a hospitality business, such as a hotel, is fully operated. For example improve the skills of the employees. As a result, employees would gain more skills in
different positions as well as it would reduce their sense of work insecurity (due to lockdown) as they would feel a part of the hotel business.

### 4.4 Technology and Robotics

Despite of all the negative impacts, Covid-19 pandemic could be used as an opportunity for the development of technology and robotics that can be used in the tourist sector. Robotics applications in the hotel and tourism industry may be a desirable investment for start-up companies and entrepreneurship (Belias, 2019). Some of the robots (machines which have been designed to automatically perform specific tasks accurately) (Revfine, 2021) which can be used in the tourism industry are the below: a) Robot Concierge and reception, b) Automatic machine for self check in-out, c) Robot assistants for hotels and airports, d) Robot in travel agencies, e) Chatbots for flight or hotel booking, f) Security robots for airports, g) Automatic machines for drinks and meals

Some of the benefits that the robots have are the following: reduction of labor costs, improvement of guest experience (Ivanov & Webster, 2017), improvement of the quality of service of hotels (Parasuraman et al., 1991) and performing simple routine tasks and reducing the workload of the reception (Belias, 2019). Apart from the above advantages, one of the greatest benefit of the use of robotics in Covid-19 era, is their contactless function, without the necessity of human interaction between the employee and the costumer. This may increase the sense of safety and secureness that the travellers may feel when they visit their tourist destinations.

### 5 CONCLUSIONS

Covid-19 pandemic has one of the most negative impacts on the tourism industry during the last decades. The reduction of the world’s GDP due to the fallout of the revenues of the tourist industry, the reduction of the flights, the millions of jobs lost and the fear and insecurity in the travellers decision to organize a trip, are some of the major threats that coronavirus pandemic has caused to the worldwide tourism sector. However, we should try and have an optimistic point of view of this unfortunate situation. We should try and see the opportunities that can arise in order to develop tourism economy. Some of them are: investment in ecotourism, establishing health and safe protocols in travel and hospitality businesses, training managers and employees in crisis situations, developing robotics’ applications in the tourism industry. These opportunities may lead tourism to a new innovation era.

### REFERENCES


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