OPEN UNIVERSITY OF CYPRUS

FACULTY OF ECONOMICS AND MANAGEMENT

MASTER IN BUSINESS ADMINISTRATION

Master Thesis



"The impact of Covid-19 on Hospitality Industry and Recovery Strategies"

Konstantinos Papageorgiou

Supervisor

Dr. Daina Nicolaou

December 2021

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Abstract

The huge crisis that the world is now facing as a result of the appearance of COVID-19, which was declared as a world pandemic in March 2020, is unprecedented. COVID-19 has had a catastrophic social and economic impact on several sectors, with tourism and hospitality sectors being hit the hardest. The purpose of this study was to investigate the impact of COVID-19 on the hotel industry in Europe by reviewing existing literature and administrating a survey questionnaire to 53 hotel managers in Europe. The study examined the impact COVID-19 had on these European hotels, the recovery strategies they employed to handle this challenging situation and their expectations of their future as businesses.

The results indicate that the performance of all the hotels in Europe, under this study, were greatly influenced by the coronavirus. What proved to have a significant relationship were the location and the size of the hotels and their decreasing Average Daily Rates. The relationship between the type of the hotel and its decreasing Occupancy Rates were also found to be significant.

As far as the recovery strategies are concerned, all of them followed several strategies in order to face the crisis, reduce their costs and survive as businesses. In addition, the majority of them agreed that they are required to be better prepared for crisis management in the future. Most of them admitted that their greatest concern was uncertainty in international travel, the rising costs of daily products and increasing business revenue. As for their future expectations, the majority of them were optimistic about the future and that the hotel industry will recover by 2023. The implications, which derive from this research, can be significant for the hotel managers in their effort to fight against the pandemic consequences.

Περίληψη

Η τεράστια παγκόσμια κρίση που αντιμετωπίζεται αυτή τη στιγμή ως αποτέλεσμα της εμφάνισης του COVID-19, ο οποίος ανακηρύχθηκε παγκόσμια πανδημία τον Μάρτιο του 2020, είναι άνευ προηγουμένου. Ο COVID-19 είχε καταστροφικό κοινωνικό και οικονομικό αντίκτυπο σε αρκετούς τομείς, με τους τομείς του τουρισμού και της φιλοξενίας να έχουν πληγεί το περισσότερο. Σκοπός αυτής της μελέτης ήταν να διερευνήσει τον αντίκτυπο του COVID-19 στην ξενοδοχειακή βιομηχανία στην Ευρώπη, αναθεωρώντας την υπάρχουσα βιβλιογραφία και διανέμοντας ένα ερωτηματολόγιο σε 53 διευθυντές ξενοδοχείων στην Ευρώπη. Η μελέτη εξέτασε τον αντίκτυπο που είχε ο COVID-19 σε αυτά τα ευρωπαϊκά ξενοδοχεία, τις στρατηγικές ανάκαμψης που χρησιμοποίησαν για να χειριστούν αυτή τη δύσκολη κατάσταση και τις προσδοκίες τους για το μέλλον τους ως επιχειρήσεις.

Τα αποτελέσματα δείχνουν ότι η λειτουργία όλων των ξενοδοχείων στην Ευρώπη, που συμμετείχαν στο πλαίσιο αυτής της μελέτης, επηρεάστηκε σε μεγάλο βαθμό από τον κορονοϊό. Αυτό που αποδείχθηκε ότι είχε σημαντική σχέση ήταν η τοποθεσία και το μέγεθος των ξενοδοχείων και οι μειωμένες Μέσες Ημερήσιες Τιμές τους. Η σχέση μεταξύ του τύπου ξενοδοχείου και των μειωμένων ποσοστών πληρότητας βρέθηκε επίσης να είναι σημαντική.

Όσον αφορά τις στρατηγικές ανάκαμψης, όλα τα ξενοδοχεία ακολούθησαν διάφορες στρατηγικές για να αντιμετωπίσουν την κρίση, να μειώσουν τα κόστη τους και να επιβιώσουν ως επιχειρήσεις. Επιπλέον, η πλειοψηφία τους συμφώνησε ότι απαιτείται να είναι καλύτερα προετοιμασμένοι για τη διαχείριση κρίσεων στο μέλλον. Οι περισσότεροι από αυτούς παραδέχθηκαν ότι η μεγαλύτερη ανησυχία τους ήταν η αβεβαιότητα που επικρατεί στα διεθνή ταξίδια, το αυξανόμενο κόστος των καθημερινών προϊόντων και τα αυξανόμενα επιχειρηματικά έξοδα. Όσον αφορά τις μελλοντικές προσδοκίες τους, η πλειονότητά τους ήταν αισιόδοξη για το μέλλον και ότι η ξενοδοχειακή βιομηχανία θα ανακάμψει μέχρι το 2023. Οι επιπτώσεις, που προκύπτουν από αυτήν την έρευνα, μπορεί να είναι σημαντικές για τους διευθυντές ξενοδοχείων στην προσπάθειά τους να καταπολεμήσουν τις συνέπειες της πανδημίας.

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List of Abbreviations

GDP Gross Domestic Product

WTTC World Travel and Tourism Council

UNWTO World Tourism Organization

OECD Organization for Economic Cooperation and Development

ISTAT Italian National Institute of Statistics

OCC Occupancy Rate

ADR Average Daily Rate

RevPAR Revenue Per Available Room

ALOS Average Length of Stay

MPI Market Penetration Index

WHO World Health Organization

PPE Personal Protective Equipment

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Chapter 1 - Introduction

1.1 Research Background

Since the last days of 2019, the world and the global economy are facing challenges and circumstances that were previously unknown. The new pandemic, Covid-19, that has emerged has found all countries unprepared about how they should handle the challenges that came along with it and how to keep a balance between the health-related issues and the welfare of their economy. Several industries have been affected by the virus in the past two years. The hospitality industry has suffered perhaps the worst consequences and is still struggling to recover. Due to the nature of the virus and the rate of its transmission from person to person, almost all countries around the world have implemented strict lockdowns during the last couple of years in an effort to reduce the spread of the virus. Restrictive measures of distancing and social isolation have created an unprecedented crisis in the hospitality sector. This forced some businesses in the hospitality industry (such as restaurants and hotels) to temporarily shut their doors while others that could not afford the running costs to shut down permanently.

So far, tourists' decisions in travelling were influenced by different kind of risks, such as economic, security, service and political instability risks. Yet, this was the first time that tourists had to consider health risks before choosing to travel. COVID-19 has transformed the tourist industry drastically since there was uncertainty between tourists and they were being hesitant to travel. Due to the fact that a variety of global activities (such as sporting events, international conferences), and ordinary activities (such as travelling for relaxation), have been cancelled to stop the spread of the virus, many small to medium hospitality operators have been dramatically influenced (Sao Joao, 2021).

Tourism is one of the fastest growing industries globally and usually offer a range of benefits to the destination, for example providing employment and foreign currency to the host country as well as significantly contributing to the country's GDP. The effects of the COVID-19 pandemic and its limitations could be found worldwide. According to the Industry Pulse Report (2020), the predicted consequence of COVID-19 was approximately 100 million job losses and 2.7 trillion USD decline of GDP for 2020. This data was based on data from June 2020 (Medova, Mackova, Harmacek, 2021). However, each country is a different case. In some

countries, the effect on tourism and the hospitality industry was very important for the GDP rates since GDP rates are highly dependent on tourism. Tourist destinations of global interest, belong to the category of countries most affected by the pandemic in the last two years.

Hotel organizations around the world have seen booking cancellations worth billions of euros. Restaurant managers laid off staff since they were forced to close their businesses temporarily. Many potential customers followed stay-at-home orders, choosing to eat homemade cooked meals. Certain restaurant managers criticized the government for imposing the stay-at-home and social distancing plans which devastated many small restaurants and small businesses in small cities. They reported that governments were ordering people to social-distance themselves with stay-at home policies. These campaigns were thought to be an indirect way of preventing people from visiting pubs, hotels and restaurants, which resulted in the disastrous effects on the hospitality industry during the pandemic (Ozili, Arun, 2020).

The statistics from the global results concerning the hotels occupancy in 2020 were catastrophic. On April 2020 the occupancy reached its lowest levels of 13%, compared to prepandemic rates. Global hospitality occupancy has relatively increased this year, for that period of the year, following the vaccinations against Covid-19 virus, that began in early 2021. However, the occupancy has not yet returned to the percentages it had before the pandemic (Amadeus, 2021).

1.2 Purpose of the Study

It is widely known that COVID-19 has had detrimental effects on almost all business fields. The hotel industry was undoubtedly one of the most hit industry due to the fact that the majority of countries have closed their borders which prevented people from travelling. Since the virus has been around for only two years now, there is limited research conducted on the effect it had on the hotel industry. Therefore, the main purpose of this research paper is to understand the impact of COVID-19 on the hotel industry in Europe and identify the areas of the hotel sector that were mostly affected. Additionally, the study intends to define the strategies implemented by hotel institutions and suggest practices that can be used in the future, in order to increase demand and recover from the effects of the pandemic, as soon as possible.

1.3 Structure of the Dissertation

This dissertation consists of five chapters. The first chapter presents the research background and purpose of the study and the second chapter provides a review of the literature on hospitality industry. The third chapter includes a description of the research method employed by the study, the rationale for selecting it and the way which it was implemented and finally presents and analyses the research data. The discussion, which follows in chapter four gives possible explanations and commentary on the results and relates them to prior studies. The last chapter, conclusion, summarizes the findings and presents the implications and limitations of the study along with suggestions for further research.

Chapter 2 - Literature Review

In the following literature review, the first part will focus on the rise of international tourism during the last years before Covid-19 had emerged. Then, the impact of Covid-19 on three different sectors around the world will be discussed (i. on tourism in general, ii. on small and medium sized enterprises and small and medium sized tourism enterprises, iii. on the hotel industry) will be discussed. The next part will provide an insight into the various recovery strategies which hotel managers have employed in order to reduce the effects of Covid-19 on the viability of these institutions. Finally, the future of travel and hospitality is further analyzed.

2. 1 International Tourism before Covid-19

Due to the increase of middle-class households, the international growth in consumers' spending, the popularization of travelling worldwide have led in the expansion of global tourism in the last decade (Niewiadomski, 2020). International arrivals have exceeded 1 billion for the first time in 2011 and before the pandemic the number of tourist arrivals was increasing by 50 million each year (De Micco et al., 2019). The year 2019 was the tenth consecutive year of international travel growth with 1.5 billion of international tourist arrivals (UNWTO, 2020a) and the year when the tourism growth rate has continued to surpass the global economy growth by 2.5% (WTTC, 2020 a). Pre-pandemic, outbound tourism increased yearly by 3.3% from America, 3.8% from Europe, 4.2% from the Middle-East and 6% from Asia (De Micco et al., 2019)

In 2019 there was still an increase in tourism as there was an increase of 4% in global tourism arrivals. However, the rate was slower compared to the increase rate of 7% in 2017 and 6% in 2018. This fall in international tourism resulted due to uncertainty around Brexit, geopolitical issues, trade tensions and the international economic slowdown (UNWTO 2020a). All of the above factors indicate that global tourism is highly affected by external factors in the global environment. According to estimations of UNWTO (2011) by 2030, the number of global tourist arrivals should reach and surpass 1.8 billion. In addition, the World Travel and Tourism Council estimated that the tourist industry's contribution to the global GDP (gross domestic product) would increase by 3.1% in 2020 and 4.2% yearly until 2026 (De Micco et al., 2019).

2. 2. The Hospitality Industry

The hospitality industry can be defined as the industry which is concerned with services related to leisure and customer satisfaction. Lashley and Morrison (eds. 2000:143) have provided a one-sentence definition of the hospitality industry which they regard as: "comprised of commercial organizations that specialize in providing accommodation and/ or food, and/or drink through a voluntary human exchange, which is spontaneous in nature and undertaken to enhance the mutual well-being of the parties concerned."

While the hospitality industry may be thought to cover four sectors: a. food and beverage industry (including restaurants, cafeterias, pubs), b. the lodging industry (hotels, vacation rentals, bed and breakfasts), c. the recreation industry (amusement parks, theatres, museums) and d. meetings and events industry (sporting events), this research paper will focus on the lodging and hotel industry.

2. 3 The impact of Covid-19

In December 2019, the world was faced with a challenge which was particularly difficult to handle – an extremely infectious disease called Covid-19 which was spreading at an alarming rate and was threatening the lives of millions of people. Lockdowns and quarantines have been imposed in the majority of countries in an attempt to slow the spread of the disease. Yet, the consequences of the measures taken around the world had a growing impact on the global economy.

2. 3. 1 The impact of Covid-19 on tourism

The size of the current effect that the pandemic had on enterprises was unprecedented. Unlike other previous earth-shattering events like Sars 2002, Mers 2012, 9/11 terrorist attack in the USA, the tsunami in 2004, Covid-19 pandemic was of an international scale. Those events did not cause the overall shutdown of businesses, travel and life activities. However, based on past evidence, tourism has shown high resilience of the tourist-related industries (Hall et al., 2017).

Thus, certain experts believe that once the most difficult moments will have passed, the touristy industry and tourism-related businesses will gradually go back to a normal level (Korze and Skabar, 2021).

Covid-19 pandemic has affected almost all kinds of sectors, however international travel and tourism was one of the most affected sectors and as a consequence tourism business enterprise. Dow Jones indices in April 2020 show that Travel and Tourism Index was affected the most with a 32.26% decline in comparison with other fields like transportation which has fallen 25.82% and food and beverage makers which decreased by 14.12% (Torrell, Alarcón, 2020). In an attempt to contain the spread of the virus lockdown measures were imposed which resulted in the temporary closure of most tourist destinations around the world. Consequently, most large and small-scale enterprises that are tourism-related have been temporarily closed. Therefore, there was a sharp decrease in the income of these enterprises in tourism. Most enterprises have thus decided to implement different rationalization strategies that would prevent their businesses from permanent closure.

At the beginning of the outbreak of COVID-19, the world health organization (WHO) and UNWTO (2020n) put public health first but in proportion to local risk and thus did not propose stop travelling. Then, UNWTO (2020k) put the public health as priority and along with WHO launched campaigns that discouraged people from travelling, such as "Travel tomorrow", "staycation" or "stay at home to travel tomorrow". In early August 2020, the US State Department warned people against travelling to 50 countries. Most European countries banned tourists from the USA (Baran, 2020). Most Asian countries have banned foreigners from travelling there (Freed, 2020).

The consequences the outbreak had on tourism were estimated to be three times that of 2008-2009 Global economic crisis (UNWTO, 2020f). Only in May 2020, the international tourist arrivals fell 98 % compared to those in May 2019. UNWTO stated a 56% year-on-year fall in tourists in the first 5 months of 2020. In addition, there was a 96% drop in hotel bookings in all subregions of Europe from January to May 2020 compared to the same period of the previous year (ETC, 2020). Globally, the overall decline in tourist arrivals could be interpreted as around 910 billion to 1.2 trillion US dollars in export incomes from tourism and a 100 to 120 million direct tourism jobs at risk. (UNWTO, 2020e).

In terms of tourist destinations, Croatia (-86%) and Cyprus (-78%) were mostly affected in April /May 2020. According to some research about Europe, there was a 50% income decline in restaurants and hotels, 85% for tourist operators, 85% for long-distance railway and 90% for cruises and airlines (EC, 2020f).

Spain has been an attractive tourist destination and it holds the second position worldwide for international tourist arrivals with their tourist visits reaching 83.7 million in 2019 and with an income of 80 billion dollars (Rodriquez & Alonso, 2020). The hospitality industry is also an important sector in Spain since Spain offered 14,840 hotels in 2019 and hired annually an average of 219, 796 employees (Rodriquez &Alonso, 2020). Similar with all popular tourist destinations, Spain has been greatly affected by the pandemic. In the first seven months of 2020, there was a fall of 72.43% in international tourist arrivals which accounts for 34.8 million tourists and a loss of 38 billion euros.

Italy which is the fifth most popular tourist destination in the world and the third in Europe has suffered as it was one of the most severely hit by the pandemic countries in 2020. Income from tourism in Italy fell from 44.3 billion euros in 2019 to 21.08 billion euros in 2020 (January-November) (Firuzi, Rahimov, Mammadova, Gadimov, Mahmarza & Salehzada, 2021). Travelers' choose to travel to Italy for various reasons, including relaxation and holiday, visiting big events and business. Furthermore, Italy is visited for its culture, cuisine, fashion and architecture, beautiful scenery. The reason why there was such a big decline is that major football and fashion events that usually take place in Italy were cancelled due to Covid-19.

Noy, Doan, Ferrarini and Park (2020) claim that the economic crisis caused by COVID-19 is considered to be higher in poorest parts of the world with the greatest threats seen in sub-Saharan Africa. In Africa, the long-term effects of the pandemic might reverse the efforts of development that have been going on for decades and deteriorate poverty levels (Buheji et al. 2020). The pandemic has greatly influence tourism in Africa (OECD, 2020). In a recent article, it has been argued that the ramifications of COVID-19 might be irreversible on conservation and protected areas in Africa since communities there are highly dependent on nature tourism (Hockings et al. 2020).

2. 3. 2 The impact of Covid-19 on SMEs and SMTEs

Tourist enterprises can be characterized by different sizes. Large multinational organizations operate along small companies. In a variety of tourist destinations, small tourism organizations are numerally dominant (OECD, 2008). Small business entities and companies are often referred to as SMEs (Small Medium-sized companies), in the field of tourism SMTEs (small and medium-sized tourist enterprises).

Large organizations often benefit from standardization and economies of scale while SMTEs can offer to their clients more appealing and personalized services (Korze and Skabar 2021). In tourism, SMTEs play an important role in many different ways: in relation to the provision of tourist services, in creation of jobs, in economic stimulus and in balanced development of destinations (Fu et al. 2019). Some research suggests that SMEs and SMTEs have the tendency to be more vulnerable during periods of economic crisis than larger companies (ICT, 2020). They face difficulty accessing funding and have a high mortality rate; only about half of them survive longer than five years (Monson, 2020).

Covid-19 has undoubtedly influenced almost all business sectors. However, some sectors have been more significantly affected than others. Researchers agree that small businesses have been affected the most as they are more vulnerable to various economic crises. Since SMTEs are numerically dominant in the tourism, they have been affected twice by the COVID-19 crisis (Korze and Skabar, 2021). Small tourist businesses can survive for shorter periods of time than larger ones after their loss of income and temporary closure (OECD, 2020). Small business operations have been affected by almost 67% compared to large business which have been affected by 40%. As stated by some estimates, over half of small businesses might have to shut down completely. SMEs that operated in tourist accommodation or restaurant have lost an income and valorisation of 50 to 80% (Korze and Skabar, 2021).

In accommodation and food services, 75% of the companies that participated in surveys claimed that their business operations have been strongly influenced by partial or full lockdown measures (ITC, 2020). In March 2020, hotel occupancy had decreased 70% (Oliver, 2020). By

August 2020, hotels in Orlando, New Orleans, Boston and Oahu stood at less than 33% of their capacity (American Hotel and Lodging Association, 2020). In April 2020, U. S restaurants averaged 30 million dollars of monthly sales while in the fourth quarter of 2020 they reached 65 million. In July 2020, they were still 20% below average (DeMicco et al., 2019).

Another study conducted (by Facebook 2020, World Bank and OECD) on approximately 86 000 managers of SMEs, stated that one third of them had to shut down permanently or were facing serious difficulties. Their biggest challenges were reduced demand and limited funds. The difficulties were more serious for those small companies run by self- employed or for personal income. In personal business sector almost 52% of those companies closed their doors while in hotels, cafes and restaurants 43% (Facebook, 2020). Even though the majority of them applied for government funding, not all of them were informed about the possibilities which could help them survive (Humpries et al., 2020). Most businesses claimed that no amount of stimulus money could compare to a functional company (Korze and Skabar, 2021). Furthermore, smaller companies tended to adopt more retreating strategies than the larger companies (ITC, 2020) since they cannot afford to stay put and still survive, they have to find agile ways to get through those challenging times.

In a study conducted in South Africa, some businesses declared that they had been running at a loss while others claimed that they had almost become bankrupt (Rogerson et al., 2021). In Bela-Bela, tourism-related businesses have reported a 60% decrease in demand with business tourism (e.g. conferences) being most badly affected (Rogerson et al., 2021). In the same study, managers of tourism-related businesses claimed that even when they had bookings, customers expected to have lower prices which was very challenging for those businesses that still had their expenses running.

2. 3. 3 The impact of Covid-19 on the hotel sector

The hotel sector is a significant part of the hospitality and tourism industry. Almost 75% of hotels have reported that they have witnessed disruption in the supply chain (Fernandes, 2020). According to the tourism Ministry of India, branded hotels were hit the most by the pandemic consequences followed by tour operators (Chatterji & Dutta, 2020). In his study, Noel (2020) found that higher category hotels were affected the most because it was most difficult for them

to adapt their facilities to social distancing. He also concluded that the closure rates of higher category hotels exceeded 50%.

Industry experts have predicted that there was a decline of 11-29% of profit on the hotel industry in Europe for 2020. In Spain, in March 2020, there was a reduction of 22.02% of hotels open compared with the same month of the previous year and a reduction of 30.94% of the number of employees hired in the hotel industry. The hospitality industry in Italy is very significant and it is the fourth in the world in terms of the number of the hotel rooms offered. Italy has approximately 1 million rooms available followed by the US, China and Japan (Mordor Intelligence, 2020). According to WTTC, Italy has lost 36.7 billion in 2020 due to travel restrictions. The decrease in the number of visitors travelling to Italy could account for an astonishing 82% reduction in international visitor spending (WTTC). Travel and Tourism in Italy provided 3.5 million jobs in Italy in 2019 which is 14.9% of the country's total workforce (WTTC, 2020). It also produced 232.9 billion euros of GDP which accounts for 13% of GDP of the Italy's economy. In the first nine months of 2020, ISTAT estimated that the hospitality industry in Italy has lost 52% of its revenue.

Studies in Lebanon have also witnessed an occupancy of 28% in February 2020, which was 40% down of the previous year's occupancy. Several hotels in Lebanon have to shut down as they had an occupancy of as low as 0% (Yacoub & ElHajjar 2020). The consequences of Covid-19 in the Middle east, and more specifically in Lebanon, are even more serious as there is absence of government aid. The Lebanese authorities have not devised a plan to respond to the crisis and lead to economic recovery (Yacoub & ElHajjar 2020).

The hotel industry in America has also suffered. The American and Lodging Association reported that the expected losses of US hotels were almost 83.7 billion dollars in hotel occupancy in 2020, compared with the previous year, whereas job losses stood at 630 000 in 2020 (Aharon et al., 2021). Furthermore, about half of hotels institutions in the US are still in a recession since most of them are operating with 20% occupancy (Aharon et al., 2021). Aharon et al. (20021) reported that in a study in Canada, 82% of respondents claimed that their hotel performance had been extremely affected by Covid-19 crisis. The hospitality industry in China, where the virus outbreak began, had a sharp decline in revenue of over 9 billion dollars in revenue (Aharon et al., 2021)

2. 4 Recovery Strategies Employed by Hotels

Organizations had to become adaptable to change and eager to follow new strategies in order to be able to survive. "Native Adaptability is a business' ability, or inability to, easily and quickly adapt to safer health practices in a pandemic—mostly notably, its ability to create or maintain an environment conducive to social distancing among their customers" (Noel 2021). Different hotels may have different levels of adaptability even though they belong to the same industry. For instance, a hotel with small rooms but large communal places (lobbies, conference centres, big swimming pool areas) would be influenced differently in a pandemic in contrast to a hotel with large room and minimal communal places (Noel, 2021). Since the native adaptability of these businesses differs, so does demand losses and failure risks (Noel, 2021).

Businesses have to be prepared for disasters and act accordingly. Disaster preparedness is defined as a strategy that identifies and proactively gets ready for an incident, with the aim to reduce losses for the business (Gruman et al., 2011). Gruman et al. (2011) suggested that there should be three stages in disaster preparation: before, during and after.

Hospitality managers were responsible for the decision-making processes and the future of their hotels. However, a lot of hospitality managers have not been prepared for handling crisis in their hotels. In a cohort of 50 hospitality managers, who were asked on their preparedness of crisis management, 7 of them reported that they had no crisis management plans in place and only 2 of them claimed that they had (Giousmpasoglou et al., 2021). Yet, in the same study almost half of the managers under study claimed that they had been confident and ready to deal with the crisis that came along with COVID-19. Several hotel managers felt that new purposemade training programs for hotel staff as well as support from corporate offices had been enlightening and helpful (Giousmpasoglou et al., 2021).

One of the main strategies small companies have employed was to protect their employees and customers from getting infected while keeping their customers informed about the status of their business (ITC, 2020). Following safety and cleanliness protocols to protect their

customers was important. Consequently, they followed a strategy of resilience by reducing their workload and adjusting their business temporarily (Korze and Skabar, 2021).

Research suggests a wide range of recommendations for businesses in order to ensure their survival. The best piece of advice was to ensure the liquidity of the business and be able to have cash flow according to the "Cash is King" rule (ICT, 2020; Monson 2020). This could be managed by planning ahead on the businesses expenses and needs, laying off staff that is not essential and finding ways to cut costs where necessary. The importance of marketing practices in the recovery stages of the hotels is significant in preparing promotional plans. In a study in South Africa, hotel managers reported that the most widely used tactic was increased marketing and more specifically advertising reduced prices and offers on different social media platforms (Rogerson et al, 2021). Some hotels in Spain have even named their infection prevention campaigns in order to let their customers know that they care about their safety and rebuild their confidence in travelling. Some of the names given were "Stay safe with Melia", "How we care" and "Feel safe at NH" (Rodriquez & Alonso 2020). According to a study of 46 countries and a study where 38 hotel managers were interviewed, building confidence in communication from governmental bodies about safety and security was of outmost importance when choosing to travel.

Few employees were given paid leaves while the rest were still working in the hotels, therefore the operational cost has gone down (Joshi & Bhaskar, 2020). Hyatt decided to lay off 1,300 staff members but offered severance pay to laid off employees. In addition, the hotel has decided to cut the salaries of senior management, board members and all other staff members since Covid-19 has significantly reduced their revenue (ET Hospitality World, 2020). In a recent study in South Africa, hotel managers claimed that Covid-19 circumstances forced them to lay off temporary staff and cut down on permanent staff (Rogerson et al, 2021)

Keeping maintenance costs low was another life-saving strategy. In the initial stage of the pandemic, some managers claimed that they closed less used facilities (Lai & Wong 2020). Additionally, hotels suspended maintenance tasks without affecting the quality of their services. However, some maintenance costs, such as elevators, that involve safety should be carried out as normal (Lai & Wong, 2020).

Another strategy that hotels employed in order to be able to maintain some of their staff members and afford to pay the running costs is turning their hotel rooms into isolation wards. A variety of hotels all around the world including some famous and luxurious ones have offered their properties to health care like Raddison hotels, the Four Seasons Hotels in India and Oxford Hotels and Resorts in the UK. The American Hotel and Lodging Association (AHLA) has launched 'Hotels for Hope' which is a national website that links hotel properties with the health sector in an effort to help it meet its growing demand (Johanson, 2020).

Lowering the prices in order to attract visitors and support demand was another strategy that hotel organizations have employed. It was reported that in March and April 2020, most major Italian tourist cities have lowered their prices. Rome and Milan are estimated to have reduced the prices by 17% while Venice, Turin and Florence have reduced them by 21%, 25% and 28% respectively (The Data Appeal Company, 2020). However, in the first period of the disease, lowering prices could not result in increased sales. According to Noel (2020), higher-category hotels had higher price discounts (28%-30%) than lower category hotels. Furthermore, hotels had been more flexible in relation to change and cancellation policies which allowed customers to make amendments without extra charges.

Hotel managers, in some cases with government support, tried to attract domestic tourists in order to raise their revenues. For instance, the Cyprus government had devised a scheme to provide an incentive for permanent residents to spend their vacations in a local hotel. The Cypriot government covered 35% of the total cost of a hotel stay with a minimum stay of 3 nights. In Bela-Bela South Africa, during the pandemic, there was an upturn in domestic travel with domestic tourists favoring weekday stays due to their reduced prices (Rogerson et al. 2021). However, some hotel managers in South Africa were wary of the sustainability of this increase of domestic travel (Rogerson et al. 2021). They considered it to be only temporary and subject to change once the borders of the country opened.

The tourism sector, through the WTTC, devised a series of safety protocols (using sanitizers, temperature checks, wearing masks, accepting only customers that had a safe pass and limiting crowding in common areas) in order to curb the spread of the virus. Tourism certification schemes have been created in the hospitality sector which help hotels increase their clientele as they help them meet social and environmental standards. The five largest hotels in Spain

have collaborated with certified bodies which specialized in the field of security and health security in particular which helped them comply with the new measures (Rodriquez & Alonso 2020). However, hotel managers should advertise the fact that their hotels adhere to all health standards in order to rebuild their guests' confidence. Baltescu (2020) in a study found out that 30% of Romanian hotels do not include information about the measures they take on their website page.

Rearranging the hotel facilities and services and making adaptations was another tactic that helped some hotels deal with this challenging situation. In a study, certain hotel managers disclosed that they had changed the nature of their business. One respondent claimed that he has changed their establishment from a bed and breakfast to a guest house (Rogerson et al. 2021). Shifting establishments to self-catering guests houses, reducing crowding, limiting the number of guests, closing some parts of the hotel were some strategies that were in line with the government regulations that banned alcohol and dining in several countries.

The Group of twenty (G20- the twenty largest economies in the world), which have a tourism activity that accounts for more than three quarters of the world's tourism, have cooperated in order to find a coordinated recovery of the tourism sector internationally. In April 2020, the European Council approved a first budget of 540 million euros to support countries in order to avoid mass lay-offs (Rodriquez & Alonso 2020). Subsequently, in May 2020 the European Parliament proposed a new plan (The New Generation EU) of 750 billion euro which is part of a longer plan of 1100 billion euro between 2021 and 2027 (Rodriquez & Alonso 2020). In the US, President Trump offered a 100 billion dollar aid package in March 2020 to support the hotel industry (Aharon et al., 2021).

Hotel managers have received financial help from European and Local commissions which somehow mitigated the effects of the pandemic. Financial aid was given in the form of bank loans with public guarantees, labour funding for keeping employees and support payments for rents. Tax benefits was another kind of support that lots of hotels received from the government. However, since hotels continue to face the devastating effects of Covid until now, governments should find alternative ways to help and support them.

Undoubtedly, the competition among hotels is tough because of the effects of the pandemic. Therefore, hotels need to find strategies that will make them stand out. In order for hotels to gain a competitive advantage they need to have green strategies since green issues play an important part in the hotel industry (Ho et al., 2021). Customers are concerned about environmental issues and are conscious of the resource waste that hotels produce and the damage they cause to the environment. Green marketing strategies involve adopting a plan in order to protect the environment and offer technological innovation that would save energy, use green products and recycle waste (Ho et al., 2021).

2. 5 The Future of Travel and Hospitality

What does the future hold for the travel and hospitality industry? How quickly will the businesses that managed to survive be able to recover and return to their normal business activities? It is estimated that by 2026 travel and tourism will have replaced the 100 million jobs that were lost (DeMicco et al., 2021).

Even when the covid period will be over, some of the health care measures and precautions enforced by hotels will have to be preserved as a marketing tool for hotels and in order to have an advantage over their competitors. Some findings show that luxury hotels might be the ones to recover first since some managers claimed that strong brands will survive while smaller organisations might disappear (Giousmpasoglou et al. 2021).

Augmented Reality (AR) Technology has been reported in the literature as a way to help the hotel and lodging industry. AR can be defined as "an interactive experience of a real-world environment where the objects that reside in the real world are enhanced by computer-generated perceptual information, sometimes across multiple sensory modalities, including visual, auditory, haptic, somatosensory and olfactory." (Wikipedia). AR can aid tourist organizations and hotels since they can offer potential travelers and guests the opportunity to experience what their hotel room and tourist destination will be like, access information and improve knowledge about a place through their electronic devices. The fact that potential guests will be provided with an experience which is closer to the real experience, will make them more inclined to make a decision and proceed with an actual booking (Ivasciuc, 2020).

After the pandemic is over, a factor which will determine travelling behavior is tourists' perceptions of safety and risks connected to travelling (Wen et al., 2020). Risk perceptions vary from real risks. Real risks involve uncertainties as to whether an activity will bring possible negative outcomes whereas perception risks involve an individual's subjective perceptions which are affected by social, cultural and contextual factors and based on personal feelings and attitudes (Brown et al., 2018). Thus, perceived risks may influence people's decision to travel even though the real risks may be minimal. Tourists' risk perceptions are usually influence by the perceived significance of health-related risks, media coverage, access to information about risks and safety measures such as social distancing, hands sanitizing, contactless services, wearing masks and temperature checks (Godovykh et al., 2021).

Travelling will always be a priority for people in the next decades since our hectic lives demand some time-off to unwind. Predictions that virtual reality tours will replace tourism are not confirmed. "Virtual tours" will not affect conventional travelling until 2040. Instead, virtual tours will be used as a marketing tool to attract more visitors for in-person visits to different destinations (DeMicco et al., 2019).

The effects of Covid-19 are serious and need to be urgently addressed. The hotel industry with the help of governmental bodies should act immediately in order to mitigate the effects of COVID-19 and employ recovery strategies that will pave the way for a new era where travelling and the hotel industry will flourish again.

Chapter 3 - Research Methodology and Data

3.1 Research Design

This chapter presents the research methods that have been used in the dissertation. First, the research aim is outlined along with a brief explanation for the chosen method and the implementation of the research activities to effectively address the purpose of this research. Then, the results, measures and data analysis are discussed. Finally, the statistical calculations are presented which consist of the descriptive findings and the results of the inductive analysis.

3.1.1 Research Aim

The aim of this research is to understand the impact of COVID-19 on the operation of 53 hotels in Europe and investigate the recovery strategies of the hotels and how they manage to meet the challenges of the industry during the pandemic period.

3.1.2 Research Questions

The research questions which the study aims at providing answers for are:

- 1. How were hotel operations affected by the coronavirus?
- 2. How do we evaluate the current situation of the hotel businesses and how their performance is assessed since the advent of the pandemic?
- 3. How did the hotel units adapt to the new health and safety rules (hygiene measures, equipment, and personnel)?
- 4. What was the impact of Covid-19 on hotel performance rates (occupancy level OCC and average daily rate ADR)? A comparison of the rates before and during the pandemic.
- 5. What was the most challenging part in the operation of those hotels, during the pandemic?

- 6. Which strategies did hotels follow to face the Covid-19 crisis?
- 7. What did they do to reduce costs and survive as a business?
- 8. What are their expectations in terms of their performance rates (occupancy level OCC, average daily rate ADR and hotel's Revenue per Available Room RevPAR) for the following year?
- 9. What are their biggest concerns about the impact Covid-19 had on their hotels?
- 10. Will the hospitality industry return to pre Covid-19 levels and when?
- 11. Will the hotels afford a similar crisis in the future?

3.1.3 Research Methodology

Research planning refers to the overall strategy employed in order to incorporate the data of the study in a comprehensible and logical way, thus ensuring the research problem is addressed effectively. Research can be divided into two categories quantitative or qualitative in nature. Quantitative research consists of calculations of numbers and accuracy, while qualitative research consists of experiences and human perceptions. Quantitative research uses a demanding and controlled plan to analyze phenomena using precise measurement. Qualitative research analyzes phenomena using an in-depth, holistic approach and a fluid research plan that involves detailed narratives (Polit & Beck, 2012).

The methods of collecting data for research purposes involve secondary and primary information. Primary data is gained by the researcher for a precise purpose. The primary research is specially planned to meet the proposed objectives by offering fresh and new data in the field. Secondary data refers to the already existing data gathered by other researchers that conducted research before for different purposes. (Toma, 2018).

As far as the research goal of this dissertation is concerned, a quantitative method was selected which was based on the collection of primary data. Secondary data was not collected since it is limited and would not contribute to the achievement of all the research objectives. Therefore, primary data was gathered from 53 hotels in various European countries which include various specific facts relating to hotel operation before, during and after the Covid-19 pandemic. This data collection methodology is reliable and up-to-date because it provides a better realistic view of the subject, allowing for a high degree of accuracy and relevance. The sample includes hotels which showed interest in contributing to such a survey and were directly affected by covid-19.

Thus, the data collected is primary which gives a realistic view of the research topic that is being examined (Ghauri and Gronhaug, 2005).

In order to conduct primary research, a questionnaire was developed on the impact of Covid-19 on the operation of European hotels and the recovery strategies which each hotel employed. This survey provided extensive information for my research, in order to draw conclusions about the extent to which the hotel units were affected by the onset of the pandemic, the ways in which they attempted to recover and how successful they were in meeting this challenge.

3.2 Questionnaire Development

The development of the questionnaire was a challenging and complex procedure as several revisions needed to be made to the draft questionnaire in order to ensure its accuracy and reliability before it could be finalised and distributed.

3.2.1 Questionnaires Piloting

Before proceeding with the distribution of the questionnaire, the first draft of the questionnaire was pilot tested in early October. Questionnaire piloting is considered to be critical since it identifies any problems in the wording or any other aspect. During piloting, researchers should strive for increasing the consistency, validity, and practicality of the questionnaire. The first draft of the questionnaire was piloted with three hotels to ensure that the questionnaire results would not be negatively affected by inadequate wording, vague instructions, or inappropriate layout. The three hotels based in Cyprus, have been required to fill the questionnaire and provide feedback about any difficulties, inaccuracies, or any other comments they would like to add. As a result, a second questionnaire was developed in mid-October with an improved layout which made the questionnaire more effective by adjusting the answers that participants had to choose. Some of the data have been rephrased to make them less ambiguous and more accurate. In addition, a few more questions were added, as it was found that there would be some gaps in the collection and analysis of the results.

3.2.2 Final Questionnaire

The final questionnaire focuses on three different periods (the pre-covid period, during covid period and after covid period including the future expectations). It was developed considering the significant changes in the hotel industry due to the pandemic and by following the timeline of the pandemic. Thus, the pre-covid period is defined as the period before February 2020, when the pandemic appeared in Europe for the first time. During covid period is defined as the period between February 2020 until November 2021 (current month). The after-covid period involves the following months or years.

The final questionnaire (Appendix 2) consists of thirty-seven questions and is divided into three sections. Section A involves the demographic data from the hotels. Section B involves some specific rates regarding the impact of Covid-19 on their hotel operation. Finally, Section C involves the recovery strategies which were implemented by the hotels and the hoteliers' expectations for the future.

The questionnaire contains fourteen Likert-type questions which can be answered using a five-point Likert scale, a statement with which the respondent expresses the level of agreement / disagreement (strongly disagree, disagree, neutral, agree, strongly agree or definitely not, probably not, unsure, probably yes, definitely yes or very dissatisfied, dissatisfied, neutral, satisfied, very satisfied). These Likert-type questions are divided into three periods (before, during and after the pandemic) as already described. The scale intends to evaluate the effect of coronavirus on hotel operation and compare their performance before and during the pandemic. There are also four yes/no questions, and the rest are multiple choice or multi-select questions with five to 10 options. The purpose of these questions is to gather some background information about the hotel in section A and provide the consequences of the pandemic referring to the occupancy rate, average daily rate, and revenue per available room rate for each hotel, before and during the pandemic period in sections B and C. Furthermore, some of the multiselect questions focus on the recovery strategies followed by each hotel and the measures they took to face the challenges of the coronavirus crisis.

3.2.3 Questionnaire survey and data collection

The processing and collection of the questionnaires was conducted between 15th of October and 15th of November. The survey was conducted online, in an effort to collect data from various European countries and enough data for the analysis. The people who participated in the survey were all professionals from the hotel industry or hotel owners, representing their hotels. Hotels from various European countries were selected (Cyprus, Greece, the United Kingdom, Italy, Spain, France, Austria, Germany, Czechia). This selection was intended to provide an extensive perspective on the topics studied focusing on the geographical area of Europe, considering that the European countries have a similar pandemic timeline (lockdowns and reopening periods). In addition, differences between countries could also be discussed. Most of the hotels were selected through the 'Booking.com' platform. Subsequently, their emails were identified from their own website or from several tourist websites. The Google forms application was used for the online distribution of the questionnaire and the collection of data from the respondents. An email with the link of the questionnaire was sent to all participants who were kindly asked to contribute to the research by completing and submitting the questionnaire online. Lastly, with the help of algorithms, the results were analyzed and presented in charts in a graphical representation.

Participants were informed about the purpose of this research. It was made clear that the survey is anonymous, and that all information is strictly confidential. The total number of hotels contacted via email was approximately one thousand - about one hundred in each country. Numerous questionnaires have been sent to ensure a sufficient number of answers. The response rate was as low as 5 % as the number of questionnaires finally collected was fifty-three.

3.3 Results analysis and statistical methods

Answers were provided mainly by senior hotel managers (owners, general managers, assistant managers, sales and marketing directors, reservations managers) and a few other managers in other positions (front office managers, revenue and administration managers). The responds, given by hoteliers and managers, will be set out for a proper understanding of how the hotel

industry responded to the Covid-19 pandemic. Analysing the main issues, some conclusions will be drawn about the strategies implemented to deal with the pandemic and the extent to which they were effective. Since the sample includes more than 30 responds, the distributions can be analysed statistically, and inferential statistics can be applied along with statistical tools as a regression analysis. The small sample size does not allow for the conclusions to be generalized but some reliable statistical findings were extracted.

Initially, the descriptive findings will be reported and subsequently the results will be analyzed and compared. Reference will be made to the most important findings of the research related to the impact of Covid-19 on the hotel industry. This will be followed by the findings related to the recovery strategies implemented as well as the hoteliers' expectations for the industry performance rates in the future. The background information of the hotels will then be presented and some secondary findings which occurred from the analysis.

In addition, a comparison will be drawn between the background hotel information and the amount of impact they had as well as the recovery strategies they employed. Finally, a comparison between the European countries as to the amount of impact they had will be discussed.

3.3.1 Impact of Covid-19 on the Hotels Operation

The findings related to the impact of Covid-19 are presented in results analysis below. In order to present the descriptive statistics, Likert type questions were analyzed in numerical values from 1 to 5.

3.3.1.1 The level to which hotels have been affected by the coronavirus

A 5-point Likert scale was given to the participants in order to indicate the level to which their businesses have been affected by the coronavirus. According to Figure 3.1, 43.4% (n=23) of the hotels have been extremely affected by the virus and a percentage of 39.6% (n=21) have been significantly affected. A small percentage of the respondents (15.1%, n=8) argued that they had been moderately affected and only 1.9% (n=1) responded that their business has not been affected by the coronavirus. The above results were used to find the descriptive statistics for the hotels in total. Table 3.1 presents the mean and standard deviation for each specific

level of effect for all hotels. The mean score of this scale (M=4.23), shows that overall hoteliers believe that their hotels have been significantly affected by the coronavirus.

Table 3.1 Descriptive Statistics of the item: "The level to which hotels have been affected by the coronavirus"

	n	Sum	Mean	Standard Deviation
The level to which hotels affected by the coronavirus	53	224	4.226	0.847

10. How has your business been affected by the coronavirus? 53 responses

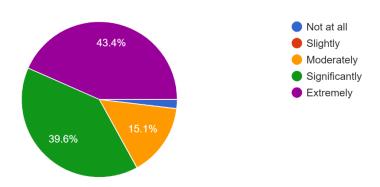


Figure 3.1 The level to which hotels have been affected by the coronavirus

3.3.1.2 Total number of months in which the hotels have been operational since the advent of the Coronavirus (approx. the last 18 months)

The total number of months in which the participating hotels were operational during the last 18 months are illustrated in Figure 3.2. As is shown, most hotels (30.2%, n=16) had been operational for only 1 to 6 months. 24.5% of the hotels (n=13) had been operational between 6 and 9 months, while 20.8% (n=11) were open for 9 to 12 months. 13.2% of the hotels (n=7) remained open between 12-15 months and a few hotels (11.3%, n=6) answered that they had been operational for 15 to 18 months. Collected results were used to find the descriptive statistics for the hotels in total. In order to simplify the calculations, answers were analyzed in numerical values (1 to 5) which were allocated to each response. So, Table 3.2 presents the

mean and standard deviation for each option for all hotels. The mean score of this scale (M=2.51), shows that the average number of months in which hotels were operational since the advent of the Coronavirus are between 9 to 12 months.

Table 3.2 Descriptive Statistics of the item: "Average number of months in which hotels have been operational since the advent of the Coronavirus"

	n	Sum	Mean	Standard Deviation
Average months in which hotels have been operational since the advent of the Coronavirus	53	133	2.509	1.353

11. How many months does the hotel being operational since the advent of the Coronavirus (approx. the last 18 months)?

53 responses

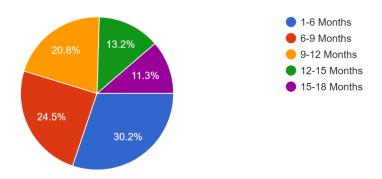


Figure 3.2 Average number of months in which hotels have been operational since the advent of the Coronavirus

3.3.1.3 Evaluation of the hotels' current situation

Figure 3.3 presents the findings of the evaluation hoteliers made of their hotels' current situation. For this Likert scale question, number 1 corresponds to an extremely bad situation, while number 5 corresponds to an extremely good current situation. As is demonstrated, the majority of 47.2% (n=25) evaluated their hotel's current situation as average. A significant number of participants 34% (n=18) evaluated their situation as good. A few hoteliers (7.5%, n=4) evaluated their situation as extremely good, while a few others (9.4%, n=5) evaluated their situation as bad. Only one of the participants (1.9%, n=1), evaluated their current situation

as extremely bad. Table 3.3 indicates the mean and standard deviation regarding the respondents' evaluation of their current situation. The mean score of this scale (M=3.36) shows that hoteliers in total evaluated their hotels' current situation as average - neither good nor bad.

Table 3.3 Descriptive Statistics of the item: "Evaluation of hotels' current situation"

	n	Sum	Mean	Standard Deviation
Evaluation of hotels current situation	53	178	3.359	0.834

12. From 1 to 5, how would you evaluate the current situation of your business? 53 responses

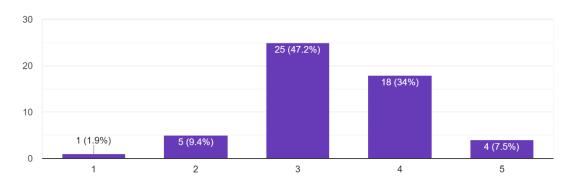


Figure 3.3 Evaluation of hotels current situation

3.3.1.4 Performance rate of online reviews during the pandemic, compared to the prepandemic period.

An indicator of hotel performance during the pandemic is online reviews. Figure 3.4 illustrates the online reviews rate of the hotels in this study. As can be observed, the majority of the online reviews 68% (n=34) remained about the same. 14% of the participants responded that their online reviews were better during the pandemic, while 15% of the participants responded that online reviews were worse. A small percentage 2% (n=1), responded that their online reviews were much worse during the same period. Three participants did not answer that question. In order to simplify the calculations, answers were analyzed by numerical values (1 to 5) and were allocated to each response. Table 3.4 presents the mean and standard deviation of the online

reviews for all hotels. The mean score of this scale (M=2.94), shows that online reviews during the pandemic are about the same compared to the pre-pandemic period.

Table 3.4 Descriptive Statistics of the item: "Online reviews during the pandemic, compared to pre-pandemic period"

	n	Sum	Mean	Standard Deviation
Online reviews during the pandemic	50	147	2.94	0.619

13. How was the online reviews for the hotel during the pandemic, compared to the pre-pandemic period?

50 responses

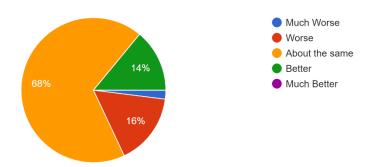


Figure 3.4 Online reviews during the pandemic, compared to pre-pandemic period

3.3.1.5 Hotel occupancy level (OCC) before the pandemic

An important rate that shows the performance of hotels is the percentage of their occupancy. OCC before the pandemic is indicated in Figure 3.5. As is shown, most hotels (44.2%, n=23) had an approximate OCC of 90%. 26.9% of the hotels (n=14) had an OCC of 80%, while 15.4% (n=8) answered that their OCC was almost 100%. The rest of the hotels (13.5%, n=7) had an OCC of 70% approximately. Descriptive statistics of the OCC level before the pandemic are indicated in Table 3.5. The mean and standard deviation were calculated, presenting the high OCC levels of the hotels which participated in the survey before the pandemic. The mean M=8.62 indicates a percentage of 86%.

Table 3.5 Descriptive Statistics of the item: "Hotel occupancy rate level (OCC) before the pandemic"

	n	Sum	Mean	Standard Deviation
OCC level before the pandemic	52	448	8.615	0.905

22. What was your occupancy percentage level before the pandemic (during 2019)? 52 responses

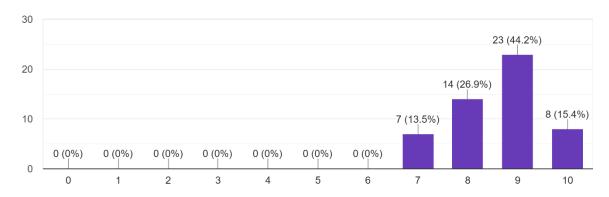


Figure 3.5 Occupancy rate before the pandemic

3.3.1.6 Hotel occupancy level (OCC) during the pandemic (the last 18 months).

Figure 3.6 presents the OCC level of the participating hotels during the pandemic. As noticed, the answers cover a wide range in terms of their occupancy rates. Briefly, it can be clearly seen that 5.7% (n=3) of the hotels had an occupancy level of 0% (hotels which probably remained closed during the pandemic), 3.8% (n=2) of them had an OCC of 10%, 11.3% (n=6) had an OCC of 20%, 17% (n=9) had an OCC of 30%, 3.8% (n=2) had an OCC of 40%, 18.9% (n=10) an OCC of 50%, 11.3% (n=6) an OCC of 60%, 13.2% (n=7) an OCC of 70%, 9.4% (n=5) an OCC of 80% and 5.7% (n=3) an OCC of 90%. However, none of them had a full occupancy. Table 3.6 presents the mean and standard deviation of the hotels' OCC level. The mean score of this rate (M=4.74) indicates a percentage of 47%, which is much lower compared to the OCC levels before the pandemic.

Table 3.6 Descriptive Statistics of the item: "Hotel occupancy level (OCC) during the pandemic"

	n	Sum	Mean	Standard Deviation
(OCC) level during the pandemic	53	251	4.736	2.214

23. What was your occupancy percentage level during the pandemic (the last 18 months)? 53 responses

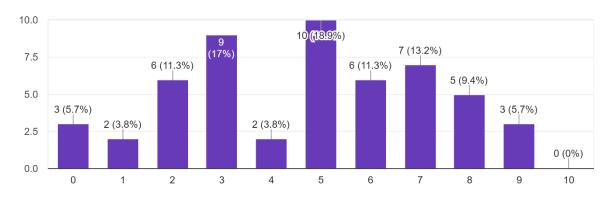


Figure 3.6 Occupancy rate during the pandemic

3.3.1.7 Hotels average daily rate (ADR) before the pandemic (during 2019).

Another rate which helps evaluate hotel performance and hence can help extract some important data regarding the impact of Covid-19 on the hotel industry, is the average daily rate (ADR). According to Figure 3.7, 43.1% (n=22) of the participating hotels had an average daily rate between 101-150 euro. 17.6% (n=9) had an ADR of 76-100 euro and the same percentage (17.6%, n=9) of the respondents admitted that they had an ADR of 151-200 euro. A few hoteliers 13.7% (n=7) responded that their ADR was more than 250 euro, while 5.9% (n=3) had an ADR of 201-250 euro. Only one of the participants 2% (n=1), had an ADR between 51-75 euro. None of the participants had an ADR below 50 euro. Two participants did not provide any answer for this question. In order to simplify the calculations, answers were analyzed by numerical values (1 to 7) which were allocated to each response. Descriptive

statistics of the average daily rate (ADR) before the pandemic are indicated in the Table 3.7. The mean and standard deviation were calculated, presenting the ADR before the pandemic of the hotels which participated in the survey. The mean (M=4.49) indicates an average ADR of 101-150 euro for all hotels.

Table 3.7 Descriptive Statistics of the item: "Hotel average daily rate ADR before the pandemic"

	n	Sum	Mean	Standard Deviation
ADR before the pandemic	51	229	4.49	1.30

25. What was your average daily rate (ADR) before the pandemic (during 2019)? 51 responses

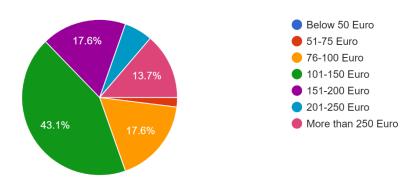


Figure 3.7 Hotels average daily rate ADR before the pandemic

3.3.1.8 Hotels average daily rate (ADR) during the pandemic (the last 18 months).

The average daily rate (ADR) during the pandemic is illustrated in Figure 3.8. As is shown the majority (34%, n=17) of the participating hotels responded that their average daily rate (ADR) was between 101-150 euro. A significant number of participants 24% (n=12) had an ADR of 76-100 euro. Some hoteliers (16%, n=8) had an ADR of 51-75 euro, while a few others (12%, n=6) had an ADR of 151-200 euro. Only one of the participants (2%, n=1), responded that their hotel ADR was more than 250 euro during the pandemic. The rest of the participants, 8% (n=4) responded that their ADR was below 50 euro and 4% (n=2) claimed that they had an ADR of

201-250 euro. Three hotels did not answer that question. Table 3.8 presents the mean and standard deviation of the ADR of all participating hotels. In order to simplify the calculations, answers were analyzed by numerical values (1 to 7) which were allocated to each response. The mean score of this rate (M=3.46) indicates that the average level of the total hotels' ADR is between 76-100 euro, which is lower compared to the ADR before the pandemic.

Table 3.8 Descriptive Statistics of the item: "Hotel average daily rate (ADR) during the pandemic"

	n	Sum	Mean	Standard Deviation
ADR during the pandemic	50	173	3.46	1.343

26. What was your average daily rate (ADR) the last 18 months, during the pandemic? 50 responses

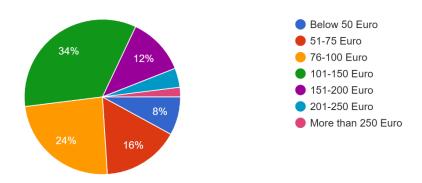
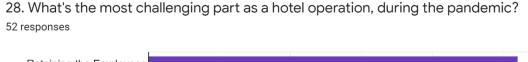


Figure 3.8 Hotel average daily rate (ADR) during the pandemic

3.3.1.9 The most challenging part regarding hotel operation, during the pandemic

What respondents considered to be the most challenging part regarding their hotel's operation during the pandemic is illustrated in Figure 3.9. This question allowed the hoteliers to make multiple selections if applicable for the hotels. As can be observed, the majority of the participants (50%, n=26 and 51.9, n=27) responded that the most challenging parts during the pandemic were "Retaining the employees" and "Keep the hotel running", respectively. A large number of participants, (34.6%, n=18) selected the "Gain customers' trust" as the most challenging part, while another high percentage (30.8%, n=16) selected "New cleaning and housekeeping rules". A small number of hoteliers (13.5%, n=7) selected "Deal with a

Coronavirus case at the hotel" as the most challenging part. A few participants specified some other challenging parts as: the lack of staff, the fact that the hotel was closed and recruiting staff.



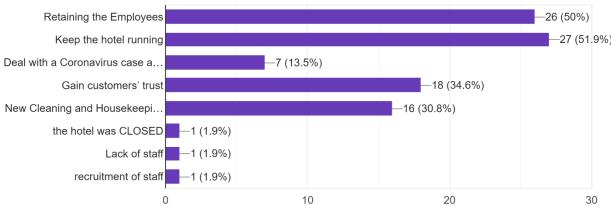


Figure 3.9 The most challenging part regarding hotel operation, during the pandemic

3.3.2 Actions against Covid-19 and recovery strategies applied by the hotels

In this section, the recovery strategies applied by the hotels which participated in the questionnaire survey are presented.

3.3.2.1 Increasing Health and safety measures in the hotels, during the pandemic.

A 5-point Likert scale was given to the participants in order to indicate the level in which they increased the health and safety measures in their hotels, during the pandemic. According to Figure 3.10, the majority of participants (55.8%, n=29) drastically increased health and safety measures in their hotels. 30.8% (n=16) of the participants responded that they increased the health and safety measures to a large extent, while 11.5% (n=6) of the participants responded that they increased health and safety measures at a moderate level. A small percentage 1.9% (n=1) answered that they increased their measures, to a small extent only. 52 out of 53 participants answered this question. The above results were used to find the descriptive statistics for the hotels in total. Therefore, Table 3.10 presents the mean and standard deviation

of increased health and safety measures for all hotels. The mean (M=4.40) indicates that hotels in average increased to a big extent their health and safety measures.

Table 3.9 Descriptive Statistics of the item: "Increasing health and safety measures in the hotels, during the pandemic"

	n	Sum	Mean	Standard Deviation
Increase level of health and safety measures in the hotels, during the pandemic	52	229	4.404	0.773

14. From 1 to 5, to what extent did you increase the health and safety measures in the hotel, during the pandemic?

52 responses

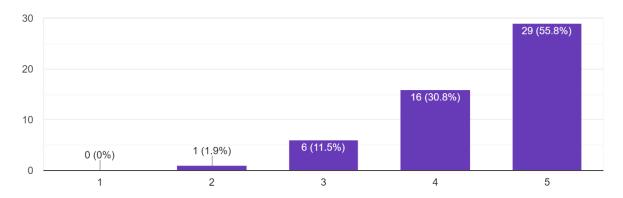


Figure 3.10 Increase level of health and safety measures in the hotels, during the pandemic

3.3.2.2 What the hotels were equipped according to the new hygiene rules of employees and customers.

Figure 3.11 presents the responds of the hoteliers on the equipment they used in order to follow the new hygiene rules in their hotels. This question allowed the hoteliers to make multiple selections, if applicable for the hotels. As is shown, almost all participants 98.1% (n=52) were equipped with "Alcohol sanitizers" and a large group (81.1%, n=43) was equipped with "Disinfectant sprays". A large number of participants (52.8%, n=28) were equipped with "Automated temperature scanner", while another big percentage (35.8%, n=19) was equipped

with "Air purifiers". Some of the hotels (22.6%, n=12), were equipped with "Anti-bacterial floor mats". A few participants specified that they equipped their hotels with plexiglass dividers, automatic gloves machine, face coverings, check in tools based on technology and new PPEs (personal protective equipment).

15. Following the new rules for the employees and customers hygiene in the hotels, the property equipped with (Select multiple if applicable):
53 responses

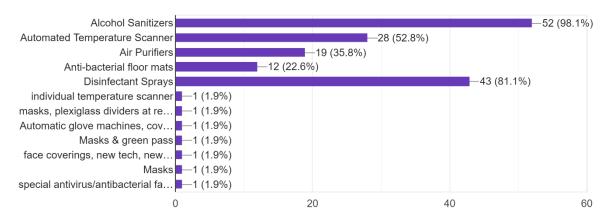


Figure 3.11 Equipment according to the new hygiene rules

3.3.2.3 Hotels provided training to the employees regarding prevention measures against Covid-19

A yes or no question was given to the participants, in order to mentioned whether they provided any training to the employees regarding prevention measures against Covid-19 in their hotels. As can be seen in Figure 3.12, a small percentage 15.4% (n=8) of the sample did not provide any related training to the employees, compared to the large percentage of 84.6% (n=44) of the hotels who provided some training for the prevention measures against Covid-19. 52 participants answered this question.

16. Did you provide any training to your employees regarding prevention measures against Covid-19, in a hotel business?

52 responses

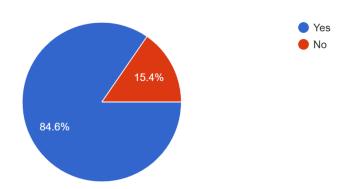


Figure 3.12 Providing training on prevention measures against Covid-19

3.3.2.4 Hotels which offered quarantine service

During lockdown periods, some of the hotels provided their facilities to accommodate people who were in mandatory quarantine. It was an alternative way to secure some income from the governments in periods of lowered demand. However, as we notice from Figure 3.13, a few of the hotel managers (20.8%, n=11) attempted such a thing. Most of the participants in the survey (79.2%, n=42), answered that they did not turn their hotel into a quarantine hotel.

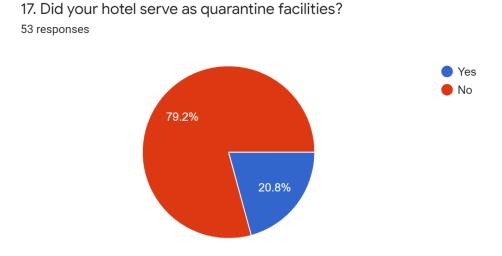


Figure 3.13 Hotels which offered quarantine services

3.3.2.5 Hotels which received funding from the government

Governments around the world provided fundings to the businesses affected by the coronavirus. In the case of European hotels, a quite large percentage 82.7% (n=43) of the hotels in the survey, received some funding from their governments, as indicated in Figure 3.14. The rest (17.3%, n=9) of the hoteliers responded that the did not received any funding. 52 out of 53 participants answered this question.

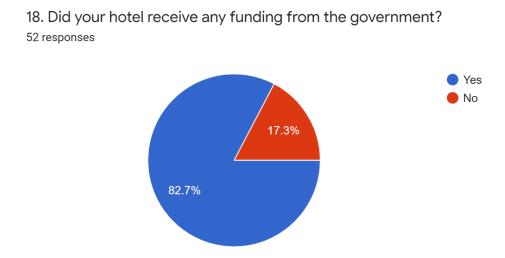


Figure 3.14 Hotels which received funding from the government

3.3.2.6 Level of satisfaction with government support to the hotels, during the pandemic period.

In this question, the participants were requested to indicate their level of satisfaction with the governments' support during the pandemic. A 5-point Likert scale was given to the participants as illustrated in Figure 3.15. As is shown, the majority of 45.3% (n=24) responded that they were satisfied with government support. A significant number of participants (26.4%, n=14) selected the neutral level of satisfaction. A few hoteliers (9.4%, n=5) responded that they were very satisfied with the government support, a few others (13.2%, n=7) responded that they were dissatisfied while only a small percentage (5.7%, n=3) of the participants responded that they are were dissatisfied.

To simplify the calculations, answers were analyzed by numerical values (1 to 5) which were allocated to each response. Table 3.10 presents the mean and standard deviation of the level of satisfaction with government support for all hotels. The mean (M=3.40) indicates a neutral average satisfaction level of the hotels regarding the government support they received during the pandemic period.

Table 3.10 Descriptive Statistics of the item: "Hotel satisfaction level with government's support during the pandemic period"

	n	Sum	Mean	Standard Deviation
Hotels' satisfaction level with government's support	53	180	3.396	1.052

19. Indicate your level of satisfaction with government's support to your business, during the pandemic period.

53 responses

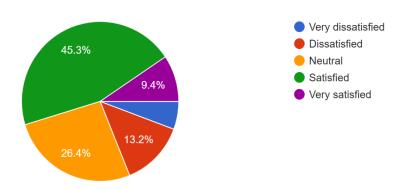


Figure 3.15 Hotels satisfaction level with government support during the pandemic period

3.3.2.7 Hotels should require proof of vaccination or recovery from the virus from their guests.

Hotel managers were asked if they agreed to request a proof of vaccination or recovery from the virus from their guests. According to Figure 3.16, 30.2% (n=16) of the hotel managers answered that they strongly agree with this statement. 20.8% (n=11) of the participants responded that they just agree with the above statement. Another large percentage of 30.2%

(n=16) remained neutral regarding their level of agreement. A small percentage of the participating managers (13.2%, n=7) disagree that they should ask their guests for proof of vaccinations and only 5.7% (n=3) responded that they strongly disagree with that statement. Answers were analyzed by numerical values (1 to 5) which were allocated to each response. The above results were used to find the descriptive statistics for the hotels in total. Table 3.11 presents the mean and standard deviation of the answers given to this question. The mean score of this scale (M=3.57) shows that overall, the participants agree with the statement that hotels should require from their guests' proof of vaccination or recovery from the virus.

Table 3.11 Descriptive Statistics of the item: "Hotel level of agreement with requesting proof of vaccination or recovery from the virus from their guests"

	n	Sum	Mean	Standard Deviation
Hotels' level of agreement for requesting from their guests' vaccination proof or a proof of recovery from the virus	53	189	3.566	1.217

20. Hotels should require vaccination proof or a proof of recovery from the virus, from their guests.

53 responses

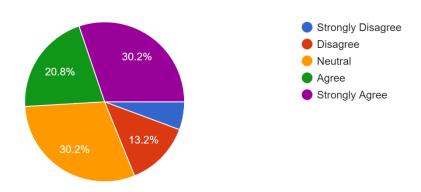
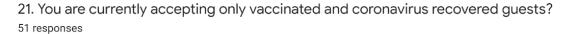


Figure 3.16 Hotel level of agreement with requesting proof of vaccination proof or recovery from the virus from their guests"

3.3.2.8 Hotels which currently accept vaccinated and recovered guests only

Participants were asked to state if they are currently accepting vaccinated and coronavirus recovered guests only. As can be observed from Figure 3.17, a small percentage 29.4% (n=15) of the hotel managers claimed that they accept only vaccinated and coronavirus recovered guests. The majority of the participants (70.6%, n=36) responded that they do not accept vaccinated and coronavirus recovered guests only. 51 out of 53 participants answered this question.



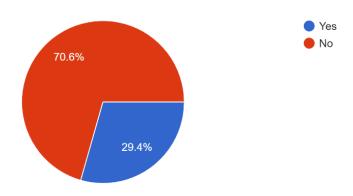


Figure 3.17 Hotel which accept vaccinated and coronavirus recovered guests only

3.3.2.9 Strategies implemented by the hotels to manage the Covid-19 crisis.

The strategies applied by the hotels to manage the Covid-19 crisis are illustrated in Figure 3.18. This question allowed the hoteliers to make multiple selections if applicable for their hotels. As is shown, the most common answers were "Special offers" (64.2%, n=34) and "More flexible cancellation policies" (67.9%, n=36). A large number of participants (47.2%, n=25) implemented the strategy of "Reduction of operating expenses". Some of the hotels (28.3%, n=15), selected the strategy of "Investment in new technologies", while some other participants (28.3%, n=25) carried out "Renovations" to their property. Only two of the participants (3.8%) responded that their hotel did not apply any strategy and one hotelier (1.9%) specified that they "Broadened their business proposition".

29. As a result of the Covid-19 crisis, did you implement any of the following strategies? (Select multiple if applicable)
53 responses

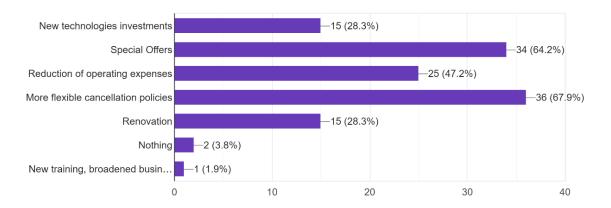


Figure 3.18 Strategies implemented by the hotels, as a result of Covid-19 crisis

3.3.2.10 Strategies employed to reduce costs and survive as businesses?

Figure 3.19 presents the actions taken by hotels to reduce costs and survive as businesses. This question allowed the hoteliers to make multiple selections if applicable for the hotels. The most common answer (42.3%, n=22) was "Lay off staff". 34.6% (n=18) of the participants "Reduced employees' working hours", 32.7% (n=17) "Reduced or stopped their marketing expenses", 28.8% (n=15) "Closed parts of the hotel", while 21.2% (n=11) closed their restaurants. A small percentage (9.6%, n=5) answered that they did nothing to reduce their costs. Some others specified the actions they have taken such as closing the entire hotel for several months, successful management of costs, hotel staffing restructure and better yield management.

30. What have you done to reduce costs and stay alive, as a business? (Select multiple if applicable)
52 responses

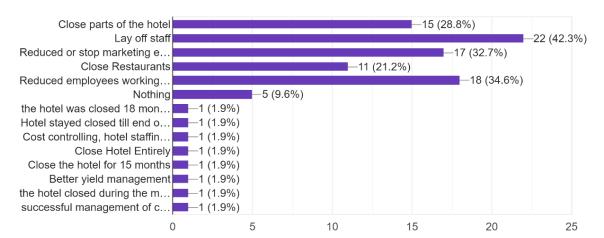


Figure 3.19 Strategies to reduce costs and survive as businesses

3.3.3 Future expectations

An analysis will follow based on the participants' responses regarding their future expectations of their hotel performance in the next years.

3.3.3.1 Hotel expectations for their occupancy rate (OCC) over the next year.

A 5-point Likert scale was given to the participants in order to indicate the level of their expectation, regarding the occupancy rate (OCC) of their hotels over the next year. According to Figure 3.20, the majority of 66% (n=35) of the hotels, expect that their OCC will be higher over the next year. 18.9% (n=10) expect their OCC to be much higher, while 11.3% (n=6) expect it to be about the same. A small percentage of the participating hotels (3.8%, n=2) expect their occupancy to be lower. None of the hoteliers responded that their OCC will be much lower.

The above results were used to find the descriptive statistics for the hotels in total. As in the previous section, Likert type questions were used to present the descriptive statistics with numerical values (1 to 5) which were allocate to each response. Therefore, Table 3.12 presents the mean and standard deviation of all managers' expectations for the OCC. The mean score of this scale (M=4) shows that overall hoteliers believe that their hotels OCC will be higher over the next year.

Table 3.12 Descriptive Statistics of the item: "Hotel expectations for their occupancy rate over the next year"

	n	Sum	Mean	Standard Deviation
Occupancy rate expectations over the next year	53	212	4	0.68

24. How do you expect your occupancy to be developed the next year, compared to your previous answer?

53 responses

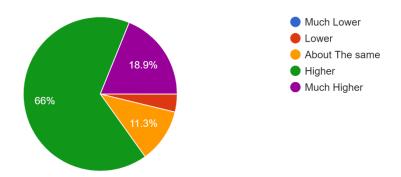


Figure 3.20 Hotel expectations for their occupancy rate over the next year

3.3.3.2 Hotel managers' expectations for their average daily rate (ADR) over the next year

Figure 3.21 presents the results which occurred when the hoteliers have been asked to indicate their expectations regarding the average daily rate (ADR) of their hotel over the next year, compared with the ADR during the pandemic period (last 18 months). For this Likert scale, number 1 corresponds to much lower ADR, while number 5 corresponds to much higher ADR. As is shown, the majority of 47.2% (n=25) expect that their ADR will be higher over the next year. Another large percentage 43.4% (n=23) of the participants, expect their ADR to be about the same over the next year. A few hoteliers 9.4% (n=5) expect that the ADR of their properties will be much higher over the next year. None of the participants responded that their ADR will be lower or much lower. Table 3.13 indicates the mean and standard deviation of the managers' expectations for their ADR. The mean score of this scale (M=3.66) shows that hoteliers in total

expect their average daily rate (ADR) to be higher, compared with the ADR during the pandemic (last 18 months).

Table 3.13 Descriptive Statistics of the item: "Hotel managers' expectations of their average daily rate (ADR) over the next year"

	n	Sum	Mean	Standard Deviation
ADR rate expectations over the next year	53	194	3.66	0.649

27. How do you expect your average daily rate (ADR) to develop the next year, compared to your previous answer?

53 responses

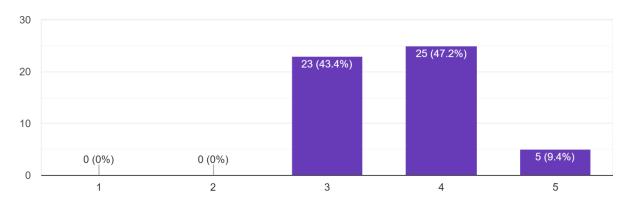


Figure 3.21 Hotel Managers' expectations for their average daily rate (ADR) over the next year

3.3.3.3 Hotel managers' expectations for Revenue per Available Room rate (RevPAR) over the next 12 months

In this question, the participants were asked whether they expect Revenue per Available Room rate (RevPAR) to be increased over the next year. A 5-point Likert scale was given to the participants to answer this question, as illustrated in Figure 3.22. As is shown, the majority of 58.5% (n=31) responded that "probably yes", the RevPAR will be increased in the next 12 months. A significant number of participants 20.8% (n=11) were "unsure". A few hoteliers 11.3% (n=6) responded that "definitely yes" while a few others (7.5%, n=4) responded that

their RevPAR "probably will not increase". Only 1.9% (n=1) of the participants responded that their RevPAR will not definitely increase over the next 12 months. Table 3.14 presents the mean and standard deviation of the expectations of all hotel manages that participated in the survey. The mean (M=3.70) indicates that they believe that their RevPAR will probably increase over the next 12 months.

Table 3.14 Descriptive Statistics of the item: "Managers' expectations of whether their RevPAR will increase, over the next 12 months"

	n	Sum	Mean	Standard Deviation
RevPAR levels expectations for the next 12 months	53	196	3.698	0.845

31. Do you expect your hotel's Revenue per Available Room (RevPAR) to increase over the next 12 months?

53 responses

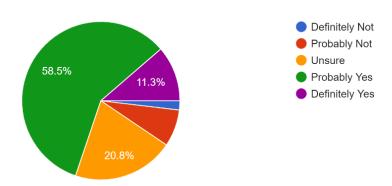


Figure 3.22 Hotels expectations whether their RevPAR will be increased, over the next 12 months

3.3.3.4 Managers' expectations for their Revenue per Available Room rate (RevPAR) level of increase, over the next 12 months

Considering the results from the previous question, the participants who responded that their RevPAR is expected to increase were also asked to indicate the level of this increase. For this reason, we have only 44 responses for the specific question. A 5-point Likert scale was given

as illustrated in Figure 3.23. As can be noticed, the answers cover all 5 points of the scale in terms of the RevPAR increase level.

Descriptive statistics of this item is presented in Table 3.15, which include the mean and standard deviation of their expectations for the RevPAR increase level. The mean score of this scale (M=3.05) shows that hoteliers in total expect that the RevPAR of their hotel will increase moderately over the next 12 months.

Table 3.15 Descriptive Statistics of the item: "RevPAR level of increase, over the next 12 months"

	n	Sum	Mean	Standard Deviation
RevPAR level of increase, over the next 12 months	44	134	3.045	1.14

32. If your answer is yes, to what extent from 1 to 5 do you think your RevPAR will increase in the next 12 months?

44 responses

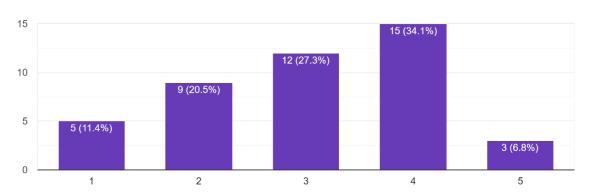


Figure 3.23 RevPAR level of increase, over the next 12 months

3.3.3.5 Managers' expectations for performance rates development over the next 12 months, compared to your current situation?

The hotel managers' expectations for their performance rates development, over the next 12 months, compared to the current situation, are illustrated in Figure 3.24. As can be observed, most of the hotels 66% (n=35) responded that their performance rates will be better in the next 12 months. A large number of participants (26.4%, n=14) responded that their performance

rates will be about the same. Only two of the participating managers (1.9%, n=1), indicated that they expect "worse" performance rates and 1.9% (n=1) indicated that they expect "much worse". On the other hand, some other participants (3.8%, n=2) responded that their performance rates will be much better. Table 3.16 presents the mean and standard deviation of this item. The mean (M=3.68) indicates that the overall expectations of the participating hotel managers are confident that their performance rates will be better the next year, compared to their current situation.

Table 3.16 Descriptive Statistics of the item: "Performance rates development over the next 12 months"

	n	Sum	Mean	Standard Deviation
Performance rates development over the next 12 months	53	195	3.679	0.673

33. How would you expect your hotel's performance rates to evolve over the next 12 months, compared to your current situation?



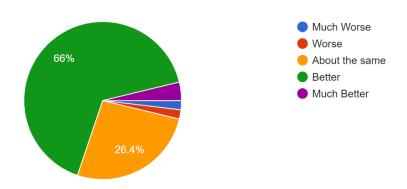
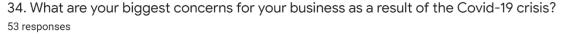


Figure 3.24 Performance rates development over the next 12 months

3.3.3.6 Biggest concerns for the hotels regarding the Covid-19 crisis.

Figure 3.25 presents the hotel managers' biggest concerns regarding the Covid-19 crisis. This question allowed the hoteliers to make multiple selections if applicable for the hotels. The most common answer (69.8%, n=37) was "Uncertainty in International Travel". 47.2% (n=25) of the participants admitted that their biggest concern was the "Rising costs of daily products"

while 37.7% (n=20) claimed that it was "Increase Revenue". 24.5% (n=13) said that it was difficult to "Meet changing guest expectations", while another 24.5% (n=13) was concerned about "Demand of new bookings". A small percentage (3.8%, n=2) selected "Lack of staff" as one of the biggest concerns for their businesses.



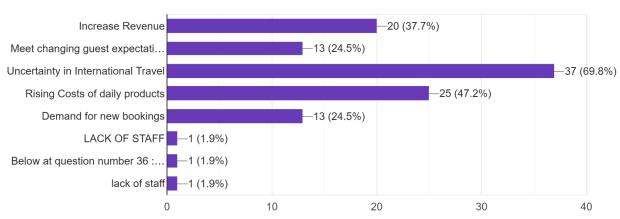


Figure 3.25 Biggest concerns for the hotels regarding the Covid-19 crisis

3.3.3.7 Estimations on the full recovery of the hotel industry

Hotel managers have been asked to estimate when the hotel industry will be fully recovered and able to return to pre Covid-19 levels. As can be noticed in Figure 3.26, the biggest percentages of the participants (37.7%, n=20 and 35.8%, n=19) believe that hotel industry will be fully recovered until 2023 and 2024 respectively. A few hoteliers believe that during the next year, their performance rates will return to pre-pandemic levels. The rest of the participating hotel managers responded that full recovery will take place later than 2024.

35. Performance rates of the Hotel industry will return to pre Covid-19 levels until: 53 responses

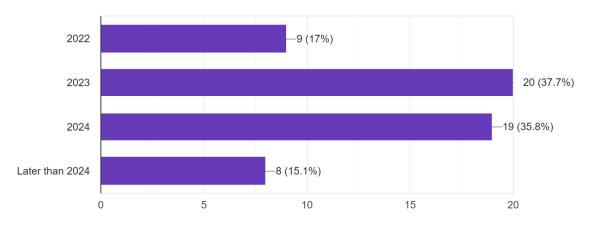


Figure 3.26 Estimation on the full recovery of the hotel industry

3.3.3.8 Hotel managers' opinion on whether their hotel could afford a new lockdown in the future

A 5-point Likert scale was given to the participants to indicate their opinion on whether their hotels will be able to afford a new lockdown in the future. According to Figure 3.27, the majority (34%, n=18) expect that they will probably not afford a new lockdown and a big percentage 32.1% (n=17) answered that they are not sure. 15.1% (n=8) responded that they will definitely not afford a new lockdown, while 13.2% (n=7) believe that they will probably afford a new lockdown. A small percentage (5.6%, n=3) of the participating managers believe that will definitely afford a new lockdown. As explained in the previous sections, the descriptive statistics will be presented in Likert type numerical values (1 to 5), as they were allocated to each response. Table 3.17 presents the mean and standard deviation considering their opinion on whether they would afford a new lockdown in the future. The mean score of this scale (M=2.60), shows that overall hoteliers are not sure if their properties will afford a new lockdown in the future.

Table 3.17 Descriptive Statistics of the item: "Hotels managers' opinion on whether they would afford a new lockdown in the future"

	n	Sum	Mean	Standard Deviation
Hotels' expectation if they would afford fa new lockdown in the future	53	138	2.604	1.167

36. Do you believe your hotel will afford a new lockdown in the future? 53 responses

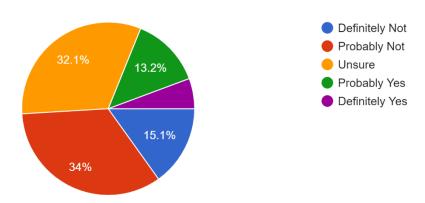


Figure 3.27 Hotel managers' opinion on whether their hotel could afford a new lockdown in the future

3.3.3.9 Hoteliers should feel more confident in facing a similar crisis in the future

Participants were asked to respond whether they agree with the statement that they should feel more confident in facing a similar crisis in the future. According to Figure 3.28, 41.5% (n=22) of the hoteliers answered that they agree with this statement. 24.5% (n=13) of the hoteliers remained neutral regarding their level of agreement. 20.8% (n=11) of the participants responded that they strongly agree with the above statement. A small percentage of the participants (9.4%, n=5), disagree that they should feel more confident and only 3,8% (n=2) responded that they strongly disagree with that statement.

Answers were analyzed in numerical values (1 to 5) which were allocated to each response. Table 3.17 presents the mean and standard deviation of the specific level of agreement for all hotels. The mean score of this scale (M=3.66), shows that in total the participants agree with the statement that hoteliers should feel more confident in facing a similar crisis in the future.

Table 3.18 Descriptive Statistics of the item: "Level of agreement with the statement that hoteliers should feel more confident in facing a similar crisis in the future".

	N	Sum	Mean	Standard Deviation
Hotels should feel more confident to face a similar crisis in the future	53	194	3.66	1.037

37. Hoteliers should feel more confident to face a similar crisis in the future. 53 responses

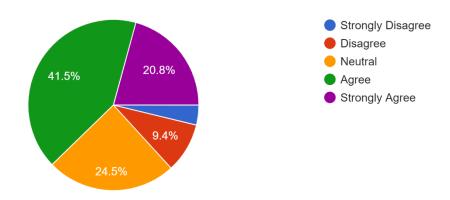


Figure 3.28 Level of agreement with the statement that hoteliers should feel more confident in facing a similar crisis in the future

3.3.4 Background information and demographics

Business demographics or firmographics are the same as demographics for people, with a variety in the purpose (*Weinstein 2004*). The difference is that firmographics are sets of characteristics for a group of companies' segmentations (*Wikipedia 2021*). To classify the various hotels into groups, five variables were selected for analysis. These are the country, the years of hotel operation, its size, the type of lodging property and the period of the year when they are open. The answers to each variable are given in the table below.

Table 3.19 Firmographics of the hotels participated in the Survey

n	Country	Job Title	Size of the Hotel	Years of Operation	Type of the Hotel	Operating Period
1	Cyprus	Hotel Manager	26-50 Rooms	Less than 5 years	Beach Hotel	March to October
2	Cyprus	Hotel Manager	51-100 Rooms	15 to 20 years	Beach Hotel	October to March
3	Cyprus	Reservations Manager	151-200 Rooms	More than 20 years	Resort	March to October
4	Cyprus	Reservations Manager	101-150 Rooms	More than 20 years	Beach hotel	End of April to End of October
5	Cyprus	F&B Manager, Administration & Sales	More than 200 Rooms	More than 20 years	Resort	All the year
6	Cyprus	Hotel Manager	More than 200 Rooms	More than 20 years	Resort	March to October
7	Cyprus	Owner	51-100 Rooms	5 to 10 years	Resort	All the year
8	Cyprus	Hotel Manager	101-150 Rooms	More than 20 years	Resort	All the year
9	Greece	Hotel Manager	26-50 Rooms	15 to 20 years	Hotel & Spa	All the year
10	Greece	Sales and Marketing Director	151-200 Rooms	15 to 20 years	Chain Hotel	March to October
11	Greece	Operations Manager	1-25 Rooms	Less than 5 years	City Hotel	All the year
12	Greece	Front office manager	26-50 Rooms	Less than 5 years	City hotel	All the year
13	Greece	Front Office Manager	51-100 Rooms	More than 20 years	Chain Hotel	All the year
14	Cyprus	Reservations Manager	101-150 Rooms	Less than 5 years	Hotel & Spa	March to October
15	Greece	Hotel Manager	51-100 Rooms	More than 20 years	Business Hotel	All the year
16	Greece	Sales and Marketing Director	151-200 Rooms	More than 20 years	City Hotel	All the year
17	Greece	Owner	26-50 Rooms	More than 20 years	City Hotel	All the year
18	Greece	Revenue Manager	101-150 Rooms	15 to 20 years	Chain Hotel	All the year
19	Cyprus	Assistant Hotel Manager	26-50 Rooms	10-15 years	Resort	All the year
20	UK	Hotel Manager	26-50 Rooms	More than 20 years	Business Hotel	All the year
21	Italy	Reservations Manager	26-50 Rooms	More than 20 years	Boutique Hotel	All the year
22	Italy	Owner	1-25 Rooms	15 to 20 years	Resort	March to January
23	Czechia	Assistant Hotel Manager	51-100 Rooms	More than 20 years	City Hotel	All the year
24	France	Owner;Reservations Manager	1-25 Rooms	10-15 years	Boutique Hotel	All the year
25	Italy	Owner;Hotel Manager	51-100 Rooms	More than 20 years	Business Hotel	All the year
26	Italy	Reservations Manager	1-25 Rooms	More than 20 years	City Hotel	All the year
27	UK	L&D Manager	More than 200 Rooms	More than 20 years	Business Hotel	All the year
28	France	Assistant Hotel Manager	51-100 Rooms	More than 20 years	Chain Hotel	All the year
29	France	Hotel Manager	1-25 Rooms	More than 20 years	Business Hotel	All the year
30	Italy	Reservations Manager	101-150 Rooms	More than 20 years	Chain Hotel	All the year

n	Country	Job Title	Size of the Hotel	Years of Operation	Type of the Hotel	Operating Period
31	Austria	Reservations Manager	More than 200 Rooms	More than 20 years	Chain Hotel	All the year
32	Italy	Assistant Hotel Manager	51-100 Rooms	More than 20 years	Business Hotel	All the year
33	UK	Owner	1-25 Rooms	15 to 20 years	Boutique Hotel	Closed for 2 weeks mid-December and 2 weeks early January
34	Italy	Owner	26-50 Rooms	More than 20 years	Resort	All the year
35	Italy	Assistant Hotel Manager	26-50 Rooms	More than 20 years	Hotel & Spa	March to October
36	Cyprus	Reservations Manager	151-200 Rooms	More than 20 years	Chain Hotel	All the year
37	Cyprus		More than 200 Rooms	More than 20 years	Beach Hotel	March to October
38	Cyprus	Accountant	More than 200 Rooms	5 to 10 years	Beach Hotel	All the year
39	Cyprus	Accounts	More than 200 Rooms	More than 20 years	Beach Hotel	March to October
40	Cyprus	Reservation Department	More than 200 Rooms	More than 20 years	Chain Hotel	March to October
41	Cyprus	Accountant B	More than 200 Rooms	More than 20 years	Beach Hotel	All the year
42	Cyprus	Reception	More than 200 Rooms	More than 20 years	Chain Hotel	March to November
43	Spain	Hotel Manager	51-100 Rooms	10-15 years	Business Hotel	All the year
44	Spain	Owner	26-50 Rooms	Less than 5 years	Boutique Hotel	March to October
45	Spain	Sales and Marketing Director	101-150 Rooms	10-15 years	Beach Hotel	All the year
46	Germany	Sales and Marketing Director	101-150 Rooms	10-15 years	Hotel & Spa	All the year
47	Germany	Human Resources Manager	More than 200 Rooms	15 to 20 years	Chain Hotel	All the year
48	Austria	Hotel Manager	101-150 Rooms	5 to 10 years	Hotel & Spa	All the year
49	Austria	Hotel Manager	151-200 Rooms	15 to 20 years	Business Hotel	March to October
50	Cyprus	Fnb Services Manager	151-200 Rooms	More than 20 years	Beach Hotel	March to October
51	Cyprus	Secretary	More than 200 Rooms	More than 20 years	Chain Hotel	March to October
52	Cyprus	Assistant Hotel Manager	151-200 Rooms	15 to 20 years	Beach Hotel	March to October
53	UK	Reservations Manager	151-200 Rooms	More than 20 years	Chain Hotel	All the year

Representatives of the hotels are senior managers in main positions, which gives more reliability to the collected data. By analyzing the firmographics data of the hotels, we gathered the following results, as described below:

3.3.4.1 Location

As can be drawn from Figure 3.29, the most samples were collected from Cyprus 37.7% (n=20). A significant number of hotel respondents were from Greece 17% (n=9) and Italy 15.1% (n=8). A few other hotel managers that participated in the survey were from the United Kingdom 7.5% (n=4), France 5.7% (n=3), Spain 5.7% (n=3), Austria 5.7% (n=3), Germany 3.8% (n=2) and Czech 1.9% (n=1).

1. What country is your hotel located? 53 responses

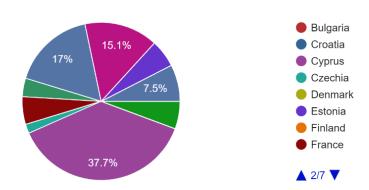
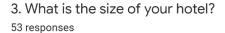


Figure 3.29 Countries where the participated hotels are located

3.3.4.2 Size of the hotel

Regarding the size of the hotels, Figure 3.30 indicates the distribution across the survey participants. We notice that the participants work for hotels of all sizes which can be divided into three categories. Small hotels with a number of hotel rooms from 1 to 50 rooms constitute 30.2 % of the responds. Medium size hotels with 51 to 150 rooms constitute 32.1% of the responds while large hotels with more than 150 rooms constitute 37.7% of the responds.



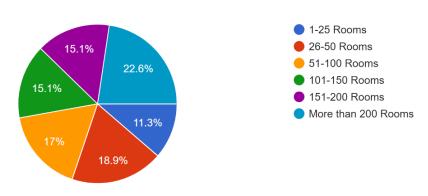


Figure 3.30 Size of the hotels

3.3.4.3 Years of operation

The total years of hotels operation are illustrated in Figure 3.31. As is shown, the majority 58.5% (n=31) of the respondents work for hotels with more than 20 operational years. Hotels with less than five years of operation accounted for 9.4% (n=5) and 5.7% (n=3), which is the minority, accounted for the hotels which have been operational for 5 to 10 years. 9.4% (n=5)

of the participating hotels have been operational for 10 to 15 years, while a significant number of hotels 17% (n=9) have been operational for 15 to 20 years.

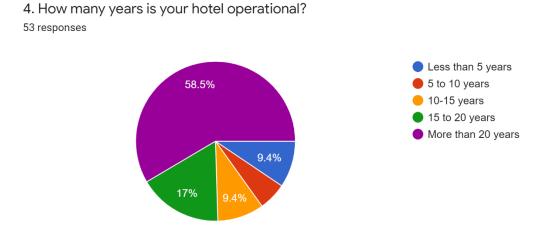


Figure 3.31 Participated Hotels Years of Operation

3.3.4.4 Type of lodging property

The types of lodging property are separated mainly in five categories (Chain hotels, resorts, beach hotels, hotel & spa and business hotel), as indicated in Figure 3.32. As can be observed the majority were beach hotels (25%, n=13). Chain hotels accounted for 23.1% (n=12) of the responds. The rest of the participating hotels were resorts which accounted for 17.3% (n=9), hotel & spas which accounted for 17.3% (n=9) and business hotels which accounted for 19.2% (n=10). Some of the participants specified that their type of property was a city hotel and small hotels or boutique hotels which could be identified as subcategories of the main hotel types.

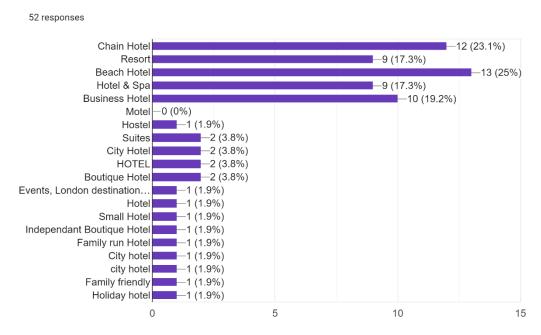


Figure 3.32 Types of the Hotels

3.3.4.5 Period of the year in which the hotels are usually open

Figure 3.33 illustrates the period when participating hotels remain open during the year.

As can be seen a very large percentage (64.2%, n=34) of the sample are the hotels which run their business open all the year. The second most popular response regarding the period of the year in which the hotels are open, is March to October 26.4% (n=14). The remaining percentage (9.4%, n=5) refers to different periods in which these hotels operate during the year.

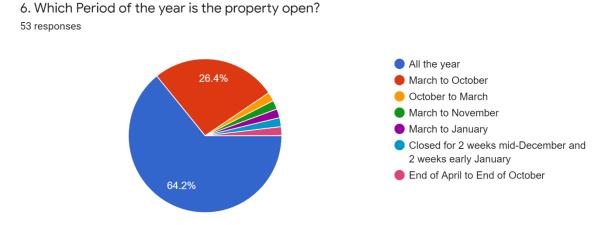


Figure 3.33 Operating Period During the Year

3.3.4.6 Percentage of online and direct bookings

Figures 3.34 and 3.35 show that online bookings (OTA) are the most preferred type of booking, with a small lead compared with direct bookings. A large percentage of 34.6% of the participants opted for category 21-40% of direct bookings and a percentage of 30.8% for category 0-20%. Regarding online bookings, we noticed that the same categories of 21-40% and 0-20% were reported with much lower percentages of 22.6% and 11.3% respectively. The largest percentage (almost twice the number of the participants who chose direct bookings) answered that more than 40% of their bookings are done online (namely categories 41-60%, 61-80% and 81-100%). The results confirm customers' preference to online bookings.

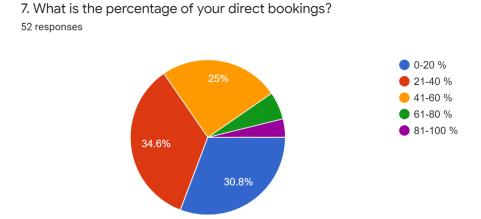


Figure 3.34 Percentage of Direct Bookings

8. What is the percentage of your online bookings (OTA)?

20.8%
24.5%
20.8%
21-40 %
41-60 %
61-80 %
81-100 %

Figure 3.35 Percentage of Online Bookings

3.3.4.7 Importance of positive online reviews for the hotels

Figure 3.36 indicates the importance of online reviews according to the hoteliers. The great majority of the participants (84.9%, n=45) responded that online reviews are extremely important for their hotel (number 5 on the Likert scale). The rest of the participants (15.1%, n=8) responded that online reviews are important to a lower scale by choosing number 4 and 3 on the Likert scale.

9. How important are positive online reviews for your hotel? 53 responses

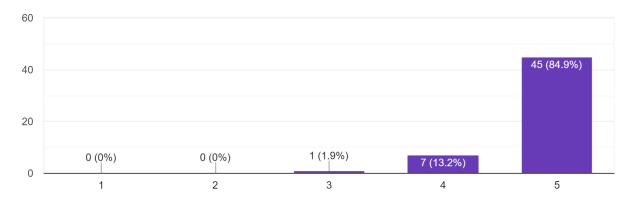


Figure 3.36 Importance of positive online reviews for the hotels

Chapter 4 - Analysis of the research data

4.1 Statistical Methods for Data Analysis

In this section the relation between the variables is going to be analysed, using the Data Analysis tool in Microsoft Excel software. Using Pearson's correlation coefficient, the relationships between the following groups were examined: i. performance rates OCC and ADR and level to which the hotels have been affected by the coronavirus, ii. OCC and ADR, iii. Number of months in which the hotels were operating since the advent of Covid-19 and their current situation iv. Hotels' current situation and the future expectations for the performance rates OCC, ADR and v. RevPAR and future performance rates. As far as the analysis of three or more than three independent groups is concerned, ANOVA analyses were used to examine whether there is a significant relationship between them. A relationship between groups is significant when the p-value is smaller than 0.05.

4.2 Relationships between performance rates and Covid-19 impact on hotels

4.2.1 Relationship between OCC and ADR levels and level to which hotels have been affected by the coronavirus.

A further analysis was performed of the OCC and ADR percentages, in order to estimate the level of their decrease, compared with their values before the pandemic. By calculated the difference between the two periods, the exact level of their decrease, was computed. The relationship between OCC levels of decrease and the level to which hotels have been affected by the coronavirus is illustrated in Table 1 (Appendix 3). As can be observed, the correlation coefficient multiple was R=0.363 and the p-value was 0.0076. Since the p-value is smaller than 0.05, then the correlation is statistically significant. That means that there is a significant positive relationship between the two levels. It can be also suggested that the decrease of their

OCC level has a direct influence on the level to which hotels have been affected by the coronavirus.

The relationship between ADR levels of decrease and the level to which hotels have been affected by the coronavirus is illustrated in Table 2 (Appendix 3). As it is shown, the correlation coefficient multiple was R=0.335 and the p-value was 0.014. The p-value is smaller than 0.05, thus the correlation is statistically significant. That means that there is a significant positive relationship between the two levels. However, the decrease of ADR levels has a smaller influence on the level to which hotels have been affected by the coronavirus, since the p-value is greater in this case.

4.2.2 Relationship between OCC and ADR levels of decrease

The results in Table 3 (Appendix 3) indicate that there is a positive and significant correlation between reducing OCC levels and reducing ADR levels (R=0.315, p-value=0.022). Since the p-value is smaller than 0.05, then the correlation is statistically significant. It can also be concluded that the reduction in OCC has an impact on the reduction in ADR levels.

4.2.3 Relationship between the Number of Months in which the hotels have been operating since the Advent of the Coronavirus and their evaluation of their Current Situation

Table 4 (Appendix 3) presents the Pearson's correlation analysis. As can be observed, the correlation coefficient multiple was R=0.079 and p-value was 0.57. The P-value is bigger than 0.05, thus the correlation is not statistically significant. That means that there is no significant relationship between the two levels. Thus, the number of months in which the hotels remained open during the pandemic did not have any importance impact on their evaluation of their current situation.

4.2.4 Relationship between the evaluation of their Current Situation and the expected performance Rates in the next 12 months

The results, as illustrated in Table 5 (Appendix 3), indicate a correlation coefficient multiple of R=0.305 and a p-value of 0.026. Since the p-value is smaller than 0.05, then the correlation is statistically significant. That means that there is a significant positive relationship between

the two levels. It can also be suggested that the hotels' current situation has an effect on their expected performance rates over the next 12 months.

4.2.5 Relationship between RevPAR expectations and the expected Hotels' Performance Rates over the next 12 months

The relationship between the hotels' RevPAR expectations and the expected performance rates over the next 12 months, is presented in Table 6 (Appendix 3).

As noticed, the correlation coefficient multiple was R = 0.369 and p-value was 0.0064. Since the p-value is smaller than 0.05, then the correlation is statistically significant. That means that there is a significant positive relationship between the two levels. Thus, it can be argued that RevPAR expectations of the hotels for the next 12 months, are in line with their expected performance rates.

4.3 Relationship Between Background Information and the impact Covid-19 had on hotels

4.3.1 Location

In order to conclude whether there is a significant relationship between the location of the hotels and the impact Covid-19 had on them, ANOVA analysis was conducted. First of all, the OCC and ADR decrease levels from each country were collected and thus the mean and standard deviations were calculated, as indicated in Table 4.1. Subsequently, by using ANOVA statistic method, the relationship between location and the decreasing OCC levels was not found to be significant (p-value = 0.677, which is bigger than 0.05), as can be seen from Table 7 (Appendix 4). On the other hand, Table 8 (Appendix 4) indicates that there is a significant relationship between the location and decreasing ADR levels, as the p-value is smaller than 0.05 (p-value=0.0005).

Table 4.1 Descriptive Statistics of the item: "Decreasing OCC and ADR levels in terms of the Location of the hotels".

LOCATION	OCC decr	OCC decrease level		ease level
	Mean	Standard Deviation	Mean	Standard Deviation
Cyprus	3.15	2.943	0.65	0.745
Greece	4.555	2.007	0.778	1.093
Italy	3.625	2.825	0.625	1.061
UK	3.75	4.573	0	0.816
France	6.666	2.517	1.333	1.155
Spain	5	1	2.667	0.577
Germany	3.5	0.707	3	0
Austria	3.666	2.082	2	1.732
Czechia	5	n/a	3	n/a

4.3.2 Size of the Hotel

As can be observed from Table 9 (Appendix 4), the ANOVA analysis shows that the size of the hotels is not significantly related with the decreasing OCC level (p-value = 0.728). However, Table 10 (Appendix 4), shows that there is a significant relationship (p-value = 0.046) between the size of the hotels and the decreasing ADR levels. The mean scores and standard deviations of the two levels, in terms of the size of the hotels are illustrated in Table 4.2.

Table 4.2 Descriptive Statistics of the item: "Decreasing OCC and ADR levels in terms of the Size of the hotels".

SIZE	OCC decrease level		ADR decrease level	
	Mean	Standard Deviation	Mean	Standard Deviation
Small	3.438	3.812	0.5	1.095
Medium	4	1.837	1.47	1.328
Large	4.15	2.368	0.95	0.945

4.3.3 Type of the Hotel

The ANOVA analysis (Table 11, Appendix 4), which was used to measure the relationship between the type of the hotels and their decreasing OCC levels due to the impact of Covid-19, illustrates that there is a significant relationship between them (p-value = 0.011, which is smaller than 0.05). Furthermore, as Table 12 (Appendix 4) shows, the relationship between the type of hotels and their decreasing ADR levels is not proved to be significant (p-value = 0.795). Table 4.3 presents the means and standard deviations of the two levels, with regard to the type of the hotels. Finally, it can be stated that the type of the hotel has a statistically significant effect on their decreasing Occupancy rate, unlike the effect it had on the decreasing Average daily rate.

Table 4.3 Descriptive Statistics of the item: "OCC and ADR decrease levels in terms of Hotels' Type".

ТҮРЕ	OCC decrease level		ADR decrease level	
	Mean	Mean Standard Deviation		Standard Deviation
Beach Hotel	3.4	2.716	1.1	0.994
Chain Hotel	4.667	2.425	0.917	1.084
Resort	2	1.927	0.375	0.518
Hotel & Spa	1.6	1.673	1	1.871
City Hotel	5.167	1.722	1.333	1.366
Business Hotel	6	2.33	1.25	1.389
Bootique Hotel	3.25	4.113	1	1.414

4.3.4 The number of Years the Hotel has been operating

The results indicate that the number of years that the hotels were operating did not have a significant relationship with their decreasing performance rates due to the impact of Covid-19. Both Tables 13 and 14 (Appendix 4) present the ANOVA results with a p-value of 0.17 for decreasing OCC levels in terms of the years the hotel has been operating and a p-value of 0.088 for decreasing ADR levels in terms of the years the hotel has been operating. Both p-values are bigger than 0.05. This suggests that the hotels had similar decreasing levels regardless of their age. The means and standard deviations for the decreasing OCC and ADR levels in terms of the number of years that the hotel has been operating are given in Table 4.4.

Table 4.4 Descriptive Statistics of the item: "OCC and ADR decrease levels in terms of Hotels' Operational Years".

OPERATIONAL YEARS	OCC decrease level		ADR decrease level	
	Mean Standard Deviation		Mean	Standard Deviation
Less than 5	3	3.082	0.6	0.894
5 to 10	3	1	1.666	1.155
10 to 15	3.4	3.362	2.2	1.304
15 to 20	2.333	2.179	0.666	1.5
More than 20	4.645	2.665	0.871	0.991

Chapter 5 - Interpretation and Commentary on Results

In this chapter, the main focus is to further interpret the research findings. The answers given by hoteliers and managers will be analyzed for a proper understanding of the extent to which the Covid-19 pandemic has affected the hotel industry in Europe. First, the chapter discusses the effects of the pandemic on hotel performance indicators and their correlations. Then, the relationships of the performance rates with the background information of the hotels were further analyzed. Subsequently, the recovery strategies which were implemented by the hotels in an attempt to face the Covid-19 crisis were discussed. Finally, the expectations of the participants for their fully recovery are discussed along with their future concerns regarding the pandemic.

5.1 The impact of COVID-19 on the Hotel Industry

The findings related to the extent to which the hotel industry in Europe was affected by the pandemic were expected, given the enormous impact of Covid-19 on a global level. The level to which the hotel industry was affected can be ascertained in principle by the high average score M=4.23 (scale 1 to 5) where the participants answered that their hotels have been significantly affected by the coronavirus.

The results that could effectively describe the extent to which the hotel industry has been affected, are undoubtedly, the occupancy rates (OCC) and the average daily rates (ADR). In the relevant questions, the participants were asked to provide these rates before the pandemic and during the pandemic. The purpose of these questions was to derive the level of decrease for these rates, by calculating the difference between the two periods. The OCC rate before the pandemic was 86% (M=8.62) while during the pandemic was 47% (M=4.74), which proves that there was a significant decrease of about 40%. The ADR rate before the pandemic was M=4.49 (scale 1 to 7), which indicates an average level of the ADR rate of the participating hotels which stood from 101-150 euro. During the pandemic the ADR rate was M=3.46 which is allocated to the group of 76-100 euros. Therefore, it can be proved that the average daily rate

was reduced by approximately 40-50€. These two rates are very important for the performance of a hotel, because they can give us an insight into the Revenue Per Available room (RevPAR), which is calculated by multiplying the ADR by its OCC. Therefore, considering the level of reduction of the two performance rates, we could state that the OCC had a greater impact on the hotels' RevPAR, as it is the one that decreased the most.

An interesting question which helps understand the various effects of the coronavirus on the hotels was "The most challenging part as a hotel operation, during the pandemic". The most frequent answers were "Retaining the employees" and "Keeping the hotel running". These responses reveal the extent to which the hotel operations were severely affected during the pandemic, as they struggled to retain staff and remain open.

5.2 Correlation between performance rates and the impact of Covid-19

The results of the data analysis indicate that there is a significant correlation between the reducing OCC and ADR levels. One can expect this kind of relationship, as a lot of the hotels were forced to slightly reduce their room rental prices, in order to increase their occupancy rate. OCC levels of decrease were strongly correlated with the general level to which hotels have been affected by the pandemic. The same occurred with the relationship between ADR decrease levels and the general level to which hotels have been affected by the coronavirus, but in a minor degree. This confirms once more the high influence of the OCC rate on the hotel performance level, compared to the influence of the ADR, which is in line with prior studies (Ozdemir and Dogru, 2021).

5.3 Background information of Hotels and the impact of Covid-19

5.3.1 Location

The participating hotels are located in nine countries Cyprus, Greece, Italy, United Kingdom, France, Spain, Germany, Austria and Czechia. The relationship between location and the decreasing OCC levels was not found to be significant. Nevertheless, there is a significant relationship between the location and decreasing ADR levels of the hotels. This means that the location of the hotels has an impact on the ADR level. However, the majority of the participating hotels were located mainly in three countries. The most samples were collected from Cyprus

37.7%, Greece 17% and Italy at 15.1%. By comparing the means of these three countries we noticed that, both the OCC and ADR of Greece decreased more than those of Cyprus and Italy. This is a representative sample of the high degree to which the hotel industry in Greece has been affected. These findings are aligned with previous studies (Medová, Macková, Harmacek, 2021) on the Greek hotel industry.

5.3.2 Size of the Hotel

Hotel sizes were divided into three categories. Small hotels with 1 to 50 rooms constitute the 30.2% of the responds. Medium size hotels with 51 to 150 rooms constitute 32.1% of the responds while large hotels with more than 150 rooms constitute 37.7% of the responds. Size of the hotels was not found to be significant regarding their OCC decreasing levels. On the other hand, the relationship between the size of the hotels and the decreasing ADR levels, was found to be significant. As observed, the smaller hotels seem to have been less affected, according to the means of both OCC and ADR decreasing levels. The largest decrease in ADR levels is observed in the medium size hotels, while the largest decrease in OCC levels is found to be in the large hotels. The explanation possibly lies in the fact that large hotels are usually more luxurious hotels, with higher rental rates per room, therefore they were not popular with tourists in times of crisis and financial instability. This supports findings from previous study (Napierała, Napierała and Burski, 2020).

5.3.3 Type of the Hotel

The types of lodging property are separated in seven categories. The majority were beach hotels and chain hotels which accounted for around 50% of the responds. The rest of the participating hotels were resorts, hotel & spas, business hotels, city and boutique hotels. As observed, the most affected hotel types were city and business hotels with the largest decreasing levels of their OCC and ADR rates. Comparing the means for each hotel type, the less affected hotels were resorts, The relationship between the type of hotel and the decreasing OCC levels was found to be significant. Nevertheless, the decreasing ADR levels of the hotels in relation to their type was not found to be significant. This means that the type of the hotels had a statistically significant effect on their decreasing Occupancy rate, which is in line with prior studies (Jones, Mellen and Pierson, 2020).

5.3.4 The number of Years the Hotel has been operating

Most of the hotels 58.5% have been operating for more than 20 years. 17% of the hotels have been operating for 15 to 20 years, 9.4% for 10 to 15 years, 5.7% for 5 to 10 years while hotels with less than five years of operation accounted for 9.4%. The results showed that the number of years that the hotels were operating did not have a significant relationship with their decreasing performance rates due to the impact of Covid-19. By comparing the means for the decreasing OCC levels in terms of the number of years that the hotels have been operating we noted that the group of more than 20 years was affected the most. Concerning the ADR decreasing levels, we noticed that hotels with less than 5 operating years have the lower mean score, which means that, these hotels were less affected than the others. The largest ADR decrease was found in hotels which have been operating for 10 to 15 years.

5.4 Recovery Strategies applied by the Hotels

5.4.1 Strategies applied by the hotels in order to face the Covid-19 crisis.

The main strategies implemented by the hotels to manage the Covid-19 crisis are: 'Special offers', 'more flexible cancellation policies' and 'reduction of operating expenses'. This supports findings from previous research (Rodriguez and Almeida, 2020). Some of the hotels invested in new technologies, while some others, took the opportunity to carry out renovations to their property.

According to the survey, the majority of the hotels (percentage > 80%) increased the health and safety measures to a large extent during the pandemic and followed the new hygiene rules for the employees and the guests. All hotels were equipped with alcohol sanitizers and a large group (81%) was equipped with disinfectant sprays. Half of the participants were equipped with automated temperature scanners and a large number of hotels were equipped with air purifiers and a few others with anti-bacterial floor mats. Additionally, the hotels responded positively with a high percentage (85%) that they provided some training to the employees regarding the prevention of Covid-19. Similar results have also been reported by other studies such as Salem, Elkhwesky and Ramkissoon's (2021).

5.4.2 Actions taken by hotels to reduce costs and survive as businesses

The majority of the hotels (83%) responded that they received some funding from their government. These funds have helped many of the hotels to meet their financial obligations during the lockdowns, especially in terms of retaining their staff. Furthermore, as an alternative way to receive some income from the governments during lockdown periods, some of the hotels (20%) provided their facilities to accommodate people who were in mandatory quarantine.

In addition, more actions were taken by hotels to reduce costs and survive as businesses. The most frequently mentioned actions were 'lay off staff', 'reduced employees' working hours', 'reduced or stopped their marketing expenses', 'closed parts of the hotel or closed their restaurants'. Some other hotels defined the actions they have taken to reduce costs, such as 'closing the entire hotel for several months', 'successful cost management' and 'restructuring of the hotel staff'.

5.5 Expectations and future concerns for the Hotel Industry

5.5.1 Current Situation and Expectations

As derived from the data analysis, the hotels evaluated their current situation as average (M=3.36). Regarding the expectations for the next 12 months compared to the current situation, hotel manages responded that their performance rates will be better (M=3.68). As indicated in the results, there is a statistically significant correlation between these two values. RevPAR expectations for the next year were also derived, with the majority of participants (58.5%) responding that it will probably increase. Therefore, the same occurred with the relationship between the hotels' RevPAR expectations and the expected performance rates over the next 12 months, which were also found to be statistically significant.

Additionally, the expectations for the OCC and ADR levels for the next year, found to be at quite similar levels. Overall, the participants responded that both rates are expected to be better over the next year. The mean score (M=4) shows the hoteliers' belief that the OCC will be higher over the next year. It could also be stated that ADR levels are expected to be higher as well, but in a minor degree considering the lower mean score (M=3.66). These results are in line with recent studies on 2022 forecasting of the hotel market (Mandelbaum, 2021).

5.5.2 Estimation for the hotel industry full recovery

Results indicated that most of the participants estimated that the hotel industry will be fully recovered and able to return to pre Covid-19 levels until 2023 (38%) or until 2024 (36%). A few of the participants believe that hotels will return to pre-pandemic levels by 2022 and a few others replied that later than 2024 the hotel industry will have fully recovered. This finding is supported by prior studies (Russel, 2020). Using performance data from STR, Russel reported that Europe should have reached its 2019 performance rates by 2024. Furthermore, findings are in parallel with prior surveys by Hospitality Asset Managers Association (Fox, 2021).

5.5.3 Future Concerns

The most common answer (69.8%) of the hotels' biggest concerns regarding the Covid-19 crisis, was 'uncertainty in international travel', due to the unpredictable variants of the virus, which keeps alert the global travel industry. The second most frequent answer (47.2%) was 'rising costs of daily products' as costs have increased for everything since Covid (Calif 2021). 'Increase Revenue' was answered at a large percentage as well 37.7%. Furthermore, some of the participants are concerned about 'meeting changing guest expectations', 'demand of new bookings' and 'lack of staff'. Another big concern of the hotel managers could be obtained by analyzing the results of the question 'Hotel managers' opinion on whether they could afford a new lockdown in the future'. As can be observed, half of the participants (49%), answered that they will probably not afford a new lockdown in the future and a big number of them (32%), are in doubt about that. However, most of the hoteliers (62%) agree with the statement that they should feel more confident in facing a similar crisis in the future.

Chapter 6 - Conclusions

6.1 Summary of the findings

The main purpose of this study was to examine the impact of COVID-19 on the hotel industry by analyzing the hotels' performance before and during the pandemic and investigating the recovery strategies applied. In addition, the study defines the expectations of hotel managers for the future. Focusing on European hotels, the research method employed was a survey questionnaire, which was completed by 53 hotels from 9 European countries. The results showed that the hotel industry was severely affected by the pandemic. Most of the hotels mentioned that were trying to retain their staff and remain open during the pandemic and despite their efforts for recovery, they still have a long way in order to retrieve their prepandemic performance levels.

Statistical analysis of the results indicated that there is a significant correlation between the reducing OCC and ADR levels. In addition, the decreasing OCC and ADR levels, are strongly correlated with the general level to which hotels have been affected by the pandemic. By comparing the performance rates of the hotels before and during the pandemic, we concluded that the OCC had decreased more than ADR and hence it affected the RevPAR levels the most. The factor that appeared to be significantly related to the decreasing OCC levels, was the type of the hotel. As for the decreasing ADR levels, they were shown to have a significant relationship with the location and size of the hotel. The number of years that the hotels were operating did not have a significant relationship with their decreasing performance rates.

As can be drawn from the study, the main recovery strategies applied by the hotels to face Covid-19 crisis were special offers, more flexible cancellation policies, reduction of operating expenses, increasing health and safety measures, following the new hygiene rules for the virus prevention and equipping hotels with essential devices.

Based on the study, further actions were taken from the hotels to reduce costs and survive as businesses. Most frequently reported actions were laying off staff, reducing employees' working hours, reducing or ending their marketing expenses, closing parts of the hotel or the entire hotel for some months, restructuring the hotel staff and cost management system and receiving fundings by participating in some recovery programs of their government.

As reported in the study, the performance rates of the hotels were expected to be better next year compared to the current situation. The OCC, ADR and RevPAR rates were expected to be higher in 2022. Furthermore, the results analysis indicated that there is a statistically significant correlation between the current situation level and the expectations for their performance rates. However, the hotel industry will not be fully recovered and able to return to pre Covid-19 levels before 2023, as obtained from the survey.

Finally, as shown in the survey, the main future concerns regarding the Covid-19 crisis were the uncertainty in international travel, rising costs of daily products, increasing business revenue and demand for new bookings. Nevertheless, most of the hoteliers agree that they should feel more confident to face a similar crisis in the future, but they doubted whether they could afford a new lockdown.

6.2 Implications

Based on the study, implications for ensuring that a similar crisis will be appropriately addressed by the hotels in the future, are provided. It will propose ways in which hotels could address the main challenges of the industry in a timely manner, combining strategies intended to minimize the impact. Support from the government is required, but it is of utmost importance to have emergency plans that include immediate financial relief. This study also suggests many practical implications for crisis management in the hospitality industry and ways to protect employees, reduce costs and ensure survival of the businesses.

Following this research, the significance of investment in digital infrastructure in the hospitality industry, is implicated. As covid-19 restrictions will no sooner come to an end, customers will be more cautious and thus prefer less personal contact in hotels and higher standards of hygiene. These expectations will eventually lead to the need for investing in new technologies to attract customers and for the safety of both employees and customers.

Finally, it could be argued that the present study also provides interesting findings on the hotel industry in Europe, as the information gathered extended almost throughout all Europe.

6.3 Limitations and Further Research

There were several limitations in this study. First of all, the sample of participants was not enough to ensure high accuracy of the results. Conducting interviews was quite difficult, due to the restriction measures of the pandemic. The study employed only one method that of questionnaires with a very low response rate (5%). However, for future research it would be more fruitful to apply a combination of research methods. Secondly, although the survey participants were selected from 3 to 5-star hotels, the survey did not examine the relationship between the star ratings of each hotel and the pandemic consequences. Moreover, it did not compare the differences that may exist between their performance rates. Future research could be designed to collect data and categorise the hotels by their star ratings.

Bibliography

Aharon DY, Jacobi A, Cohen E, Tzur J, Qadan M, 'COVID-19, government measures and hospitality industry performance', PLOS ONE, from:

<u>https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0255819</u> (Viewed on 2nd of November 2021)

AHLA, State of the Hotel Industry Analysis: COVID-19 Six Months Later. American Hotel and Lodging Association,

https://www.ahla.com/sites/default/files/State%20of%20the%20Industry.pdf (Viewed on 27th of October 2021)

Amadeus Hospitality, 'Global hotel occupancy reaches two-thirds of pre-pandemic levels in April 2021, and hoteliers optimistic for the future according to new Amadeus research', https://www.hospitalitynet.org/news/4104387.html (Viewed on 15th of October 2021)

Baltescu, C. A., 2020, Health Protocols – An Instrument To Improve Hotels' Sustainable Products, Annals - Economy Series, Constantin Brancusi University, Faculty of Economics, vol. 5, pages 38-43

Baran, M., 2020, Europe Extends Its Travel Ban – and Americans Are Still Not Allowed In.AFA. https://www.afar.com/magazine/europe-finally-set-to-reopen-but-not-to-us-travelers (Viewed on 17th of October 2021)

Brown, P., Daigneault, A.J., Tjernstro"m, E. and Zou, W. (2018), Natural disasters, social protection, and risk perceptions, World Development, Vol. 104, pp. 310-325.

Buheji, M., da Costa Cunha, K., Beka, G., Mavrić, B., de Souza, Y.L., da Costa Silva, S.S., Hanafi, M. & Yein, T.C., 2020, The extent of COVID-19 pandemic socio-economic African Journal of Hospitality, Tourism and Leisure. American Economic Review, 10 (4), 213-224.

Calif J., 2021, Costs are rising for everything-post Covid-19. Should we be worried about prices increases. https://www.pennlive.com/news/2021/06/costs-are-rising-for-everything-post-covid-19-should-we-be-worried-about-price-increases.html (Viewed on: 21st November 2021)

Chatterji, S., & Dutta, A., 2020, Aviation industry may take a big hit: Govt note. https://www.hindustantimes.com/india-news/aviation-industry-may-take-a-big-hitgovt-note/story-pIS4Dhx3zpcYnRCSMd3AhI.html (Viewed on 22nd of October 2021)

De Micco, F. J., Cetron M. and Davies O., 2019, Strategic Management for Hospitality and Travel: Today and Tomorrow. Kendall-Hunt Publishers.

DeMicco F, Cetron M, Davies O, Guzman J., 2021, COVID-19 Impact on the Future of Hospitality and Travel. Journal of Hospitality & Tourism Research. 45(5):911-914

Erica Ann Sao Joao, 2021, 'COVID-19 and Hospitality Operations: What happened and what's next?', African Journal of Hospitality, Tourism and Leisure, Vol 10, Iss 1, Pp 318-322

ETHospitalityWorld.com.,2020, Hyatt to lay off 1,300 employees as pandemic cripples travel - ET HospitalityWorld. Retrieved from ETHospitalityWorld.com website:

https://hospitality.economictimes.indiatimes.com/news/hotels/hyatt-to-lay-off-1300-employees-aspandemic-cripples-travel/75696297 (Viewed on: 22th October 2021)

ETC (2020). European travel Commission. European Tourism: trends & prospects (Q2/2020). Brussels, July 2020 https://etc-corporate.org/reports/european-tourism-2020-trends-prospects-q2-2020/ (Viewed on: 29th October 2021)

Ghauri, P. & Gronhaug, K. 2005. Research Methods in Business Studies, Harlow, FT/Prentice Hall.

Facebook 2020, State of Small Business Report. Facebook & Small Business Roundtable. May 2020, https://about.fb.com/news/2020/05/state-of-small-business-report/ (Viewed on 18th of October 2021)

Fernandes, N. 2020, Economic effects of coronavirus outbreak (COVID-19) on the world economy, SSRN Electronic Journal.

Firuzi, M., Rahimov N., Mammadova G., Gadimov G., Mahmarza U., Salehzada U. 2021, 'Analyses of the Impact of COVID-19 on the Hotel Industry in Italy. Future Perspectives and Recommendations in the Post-Pandemic Period', European Journal of Economic Studies. 2021. 10(1)

Fox L., 2021, 'Hotel Professionals Eye a 2023 Recovery timeline, but too late for some' https://www.phocuswire.com/Hotel-professionals-predict-2023-recovery (Viewed on: 18th November 2021)

Freed, J. 2020, Asia-Pacific Countries Begin to Ease Pandemic-Related Travel Bands, But Hurdles Remain. Reuter, https://www.reuters.com/article/health-coronavirus-asia-travel/asia-pacific-countries-begin-to-ease-pandemic-related-travel-bans-but-hurdles-remain-idUSKBN26X0EG (Viewed on 23rd October 2021).

Fu, H., Okumus, F., Wu, K., Koseoglou, K. (2019). The entrepreneurship research in hospitality and tourism. International Journal of Hospitality Management, 78, 1-12

Giousmpasoglou, C., Marinakou, E. and Zopiatis, A., 2021, Hospitality managers in turbulent times: the COVID-19 crisis, International Journal of Contemporary Hospitality Management, Vol. 33 No. 4, pp. 1297-1318

Godovykh, M., Pizam A., Bahja F. 2021, Antecedents and outcomes of health risk perceptions in tourism, following the COVID-19 pandemic. Tourism Review. ISSN:1660-5373.p.737-748

Gruman, J. A., Chhinzer, N. & Smith, G. W. 2011, An exploratory study of the level of disaster preparedness in the Canadian hospitality industry. International Journal of Hospitality & Tourism Administration, 12 (1), 43-59.

Hall, C.M., Payag, M., Amore, A, 2017, Tourism and resilience. Individual, organisational and destination perspectives. Clevedon: Channel View Publications.

Ho, C.-Y.; Tsai, B.-H.; Chen, C.-S.; Lu, M.-T. 2021, 'Exploring Green Marketing Orientations toward Sustainability the Hospitality Industry in the COVID-19 Pandemic'. Sustainability, 13, 4348. https://doi.org/10.3390/su13084348

Hockings, M., Dudley, N., Elliott, W., Ferreira, M.N., Mackinnon, K., Pasha, M.K.S., Phillips, A., Stolton, S., Woodley, S., Appleton, M., Chassot, O., Fitzsimons, J., Galliers, C., Kroner, R.G., Goodrich, J., Hopkins, J., Jackson, W., Jonas, H., Long, B., Mumba, M., Parrish, J., Paxton, M., Phua, C., Plowright, R., Rao, M., Redford, K., Robinson, J., Rodriguez, C.M., Sandwith, T., Spenceley, A., Stevens, C., Tabor, G., Troeng, S., Willmore, S. & Yang, A. 2020, 'COVID-19 and protected and conserved areas', The Parks Journal, 26 (1), 7-24.

Humpries, J. E., Neilson, C., Ulyssea, G., 2020, 'The evolving impact of COVID-19 on small business since the cares act.' Cowles Foundation discussing paper no. 2230. April 2020

International Trade Centre 2020, SME Competitiveness Outlook 2020: COVID-19: The Great Lockdown and its Impact on Small Business. ITC, Geneva

Ivasciuc, 2020, Augmented Reality and Facial Recognition Technologies. Building

Bridges Between the Hospitality Industry and Tourists During Pandemic. Economic Sciences Vol. 13(62) No. 2 p. 75-92.

Johanson, M., 2020, Today's hotel is tomorrow's coronavirus hospital. CNN travel. Web. (Viewed on 2 October 2021).

Jones A., Mellen R. and Pierson J., 2020, 'The Impact of COVID-19 on Hotel Values' https://www.hvs.com/article/8745-the-impact-of-covid-19-on-hotel-values (Viewed on 21st November 2021)

Joshi, A. and Bhaskar P, 2020, Covid-19 Impact of Lockdown on Tourism and Hospitality Industry. Business Excellence and Management: Vol. 10 Special Issue 1: October 2020.

Korze, Sz. and Skabar, M., 2021, 'Covid 2019 Footprint to Tourism and Small Tourism Businesses in the first Period of Pandemic', Advances in Business Related Scientific Research Journal, 11(2):90-111

Lai, I. and Wong J. W. C., 2020, Comparing crisis management practices in the hotel industry between initial and pandemic stages of COVID-19. International Journal of Contemporary Hospitality Management 32(10) pp. 3135-3156

Lashley, C. and Morrison, A. (eds.) (2000). In Search of Hospitality: Theoretical Perspectives and Debates. Oxford: Butterworth Heinemann.

Mandelbaum R., 2021, CBRE: Major market growth to accelerate in 2022

https://www.hotelmanagement.net/operate/cbre-major-market-growth-accelerate-2022 (Viewed on 15th of November 2021)

Monson, C. 2020, 'What Small Businesses Need to Survive the Coronavirus Crisis? Harvard Business Review. 27. 3. 2020.

Mordor Intelligence, 2020, Hospitality industry in Italy –growth, trends, COVID-19 impact, and forecast (2021–2026). [Electronic resource]. URL:

https://www.mordorintelligence.com/industry-reports/hospitality-industry-in-italy (Viewed on 18th October 2021)

Napierała T., Napierała K., Bursk R. 'Impact of Geographic Distribution of COVID-19 Cases on Hotels' Performances: Case of Polish Cities', Sustainability 2020, 12, 4697; doi:10.3390/su12114697

Nikola Medova, Lucie Mackova and Jaromir Harmacek, 2021, 'The Impact of COVID-19 on Hospitality Industry in Greece and Its Treasured Santorini Island', Sustainability 2021,

Niewiadomski, P., 2020, Covid-19: from temporary deglobalization to rediscovery of tourism? Tourism Geography

Noel, M. D., 2021, 'Competitive survival in a devastated industry: Evidence from hotels during COVID-19', Journal of Economics and Management Strategy. p.1-22

Noy, I., Doan, N., Ferrarini, B. & Park, D.,2020, 'The economic risk of COVID-19 in developing countries: Where is it highest?. In S. Djankov. & U. Panizza(Eds.). COVID-19 in developing economies. London: CEPR Press, 38-52.

OECD, 2008, Globalisation, SMEs and Tourism Development. Tourism in OECD Countries 2008. Trends and Policies. OECD Publishing: Paris.

OECD, 2020 'Policy Responses to Coronavirus (COVID-19)': Tourism Policy Responses to coronavirus (COVID-19)

Oliver, D. 2020, 'About 80% of Hotel Rooms in the U.S. Are Empty Amid the Coronavirus Pandemic', NewData Says. USA Today. https://www.usatoday.com/story/
https://www.usatoday.com/story/
https://www.usatoday.com/story/
https://www.usatoday.com/story/
https://www.usatoday.com/story/
travel/hotels/2020/04/09/coronavirus-leaves-hotel-rooms-empty-str-data/5120441002
https://www.usatoday.com/story/
https://www.usatoday.com/story/
https://www.usatoday.com/story/
https://www.usatoday.com/story/

Ozdemir O., Dogru, M. Kizildag, M. Mody & C. Suess, 2021, 'Quantifying the economic impact of COVID-19 on the U.S. hotel industry: Examination of hotel segments and operational structure, Turism Management Perspectives, Volume 39

Peterson Ozili and Tankom Arun, 2020, 'Spillover of Covid-19_Impact on the Global Economy', Munich Personal RePEc Archive

Polit, D.F., & Beck, C.T., 2012. Nursing research: 'Generating and assessing evidence for nursing practice', (9th ed.). Philadelphia, PA: Wolters Kluwer

Rodríguez J. & Almeida M., 2020, COVID-19 Impacts and Recovery Strategies: The Case of the Hospitality Industry in Spain, Business Organization Department, Universidad Autónoma de Madrid, 28049 Madrid, Spain;

Rogerson, J. M.; Lekgau, R. J.; Mashapa, M. M.; Rogerson, C. M.. (2021) Covid-19 and Local Business Responses: Evidence from South Africa's most Tourism-Dependent Locality. African Journal of Hospitality, Tourism and Leisure; 10(1):388-405, 2021.

Russel K., 2020, 'The Impact of Covid-19 on the European Hotel Sector'

https://www.hvs.com/article/8876-the-impact-of-covid-19-on-the-european-hotel-sector

(Viewed on 17th of November 2021)

Salem I., Elkhwesky Z. and Ramkissoon H., 2021, 'A content analysis for government's and hotels' response to COVID-19 pandemic in Egypt', Tourism and Hospitality Research

The Data Appeal Company, 2020 – The Data Appeal Company. (2020). The Impact of Coronavirus on Italian Events and Hospitality. The COVID-19 Effect. [Electronic resource]. URL: https://www.datappeal.io/the-coronavirus-impact/ (Viewed on 12th of November 2021)

Toma A., 2018, 'Annals of 'Constantin Brancusi', *The* Internet – Secondary Data Source in Marketing Research', University of Targu-Jiu. Economy Series, Issue 6, p92-97. 6p

Torrell A., O., Alarcón A., J.P and Perez V., J. COVID-19: hotel industry response to the pandemic evolution and to the public sector economic measures, Informa UK Limited in Tourism Recreation Research. Tourism Recreation Research pp 1-10; https://doi.org/10.1080/02508281.2020.1826225 (Viewed on 9th of November 2021)

UNWTO (World Tourism Organization), 2011, Tourism Towards 2030. Global Overview UNWTO, 2020a, World Tourism Barometer N18. January 2020

UNWTO, 2020e, International tourist numbers could fall 60-80% in 2020, UNWTO reports. May 7, 2020.

UNWTO, 2020k, COVID-19: UNWTO calls on tourism to be a part of recovery plan. March 6, 2020.

UNWTO 2020n, A joint statement on tourism and COVID-19: UNWTO and WHO call for responsibility and coordination. Feb 26, 2020

UNWTO 2020f, Impact of COVID-19 on global tourism made clear as UNWTO counts the cost of standstill. July 28, 2020.

Wen, J., Kozak, M., Yang, S. and Liu, F., 2020, COVID-19: potential effects on Chinese citizens' lifestyle and travel. Tourism Review, doi: 10.1108/TR-03-2020-0110

WTTC (World Travel and Tourism Council) 2020a, Economic Impact Report 2019, https://wttc.org/Research/Economic-Impact (Viewed on 29th of October 2021)

Appendix 1: Draft of the Questionnaire

This questionnaire was designed to investigate the current needs, challenges, and concerns of your business and the hotel industry during the Covid-19 pandemic. It would be appreciated if you contributed to this research by completing this questionnaire as sincerely as possible. Your answers will remain confidential and will be used for academic research only. The completion of this questionnaire will only take a few minutes. Thank you very much for your contribution.

1.	What country is your hotel located?		
2.	What is your job title?		
	Owner		Sales and Marketing Director
	Hotel Manager		Reservations Manager
	Assistant Hotel Manager		Human Resources Manager
	Other (please specify):		
3.	What is the size of your hotel?		
	1-25 Rooms	51-100	Rooms 101-200 Rooms
	More than 200 Rooms		
4.	How many years is your hotel operati	onal?	
	Less than 5 years 5-10 years] 10-15	years 15-20 years
	More than 20 years		
5.	Which of the following best describes represent?	the typ	e of lodging property that you
	Chain Hotel Resort Motel	□ Но	ostel Suites Hotel & Spa
	Beach Hotel Business Hotel		Other (please specify):

6. Which	n Period of the year	r is the property	open?	
	All the year			
	March - October			
	October - March			
7. What	is the percentage o	f your direct boo	okings?	
0-2	20% 21-40%	√ ₀	61-80%	81-100%
8. What	is the percentage o	f online booking	s (OTA)?	
0-20	0% 21-40%	<u> </u>	61-80%	81-100%
9. How i	mportant are posit	ive online reviev	vs for your hotel?	
	Not important	Very		Slightly
	Important	Extrem	nely Important	
10. How h	nas your business b	een affected by	the coronavirus?	
	Not at all		Significantly	
	Slightly		Extremely	
	Moderately			
	nany months does navirus (approx. th	_	•	the advent of the
1-6 M	onths 6-9 Mo	nths 9-12 Mo	onths 12-15 M	onths 15-18 Months
12. From	1 to 5, how would	you evaluate the	current situation	of your business?
Extremely	y Bad	$\begin{array}{cccc} 2 & 3 \\ \hline \end{array}$	4 5	Extremely Good

13. How would you expect your business to evolve in the future compared to your current situation (over the next 12 months)?
Much worse Worse About the same Better Much better
14. From 1 to 5, to what extent did you increase the health and safety measures in the hotel, during the pandemic?
Slightly Increased $\begin{array}{cccccccccccccccccccccccccccccccccccc$
15. Following the new rules for the employees and customers hygiene in the hotels, the property equipped with (Select multiple if applicable):
Alcohol sanitisers Air purifiers
Automated Temperature Scanner Anti-bacterial floor mats
Other (please specify):
16. Did you provide any training to your employees regarding prevention measures against Covid-19, in a hotel business?
Yes No
17. Did your hotel serve as quarantine facilities?
Yes No
18. Did your hotel receive any funding from the government?
Yes No
19. Indicate your level of satisfaction with government's support to your business, during the pandemic period.
□ Very Unsatisfied □ Unsatisfied □ Neither □ Satisfied □ Very Satisfied
20. You are currently accepting only vaccinated guests?
Yes No

21. Should the hotels require vaccination from their guests?
Strongly Disagree Disagree Agree Strongly Agree
22. How was your occupancy level before the pandemic?
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
23. How was your occupancy level during the pandemic (the last 18 months)?
1 2 3 4 5 6 7 8 9 10 0%
24. How do you expect your occupancy to be developed the next year, compared to your previous answer?
☐ Much Lower ☐ Lower ☐ About The same ☐ Higher ☐ Much Higher
25. What was your average daily rate (ADR) before the pandemic?
Below 50 51-75 76-100 Euro 101-150 Euro
☐ 151-200 Euro ☐ 201-250 Euro ☐ More than 250 Euro
26. What was your average daily rate (ADR) the last 18 months, during the pandemic?
☐ Below 50 Euro ☐ 51-75 Euro ☐ 76-100 Euro ☐ 101-150 Euro
☐ 151-200 Euro ☐ 201-250 Euro ☐ More than 250 Euro
27. How do you expect your average daily rate (ADR) to develop the next year, compared to your previous answer?
Much Lower Lower About The same Higher Much Higher

28. What's the most challenging part as a	notel operation, during the pandemic?
Retaining the Employees Dea	l with a Coronavirus case at the hotel
Keep the hotel running Gai	n customers' trust
New Cleaning and Housekeeping Rules Oth	ner (please specify):
29. As a result of the Covid-19 crisis, did y strategies? (Select multiple if applicable)	-
New technologies investments	Special Offers
Reduction of operating expenses	Renovation
More flexible cancellation policies	Other (please specify):
30. What have you done to reduce costs an multiple if applicable)	d stay alive, as a business? (Select
Close Restaurants	Reduced or stop marketing expenses
Lay off staff	Close parts of the hotel
Reduced employees working	Other (please specify):
31. Do you expect your hotel's Revenue pe over the next 12 months?	r Available Room (RevPAR) to increase
Definitely Not Probably Not	Unsure Probably Yes Definitely Yes

THANK YOU!

Appendix 2: Final Questionnaire

This questionnaire was designed to investigate the current needs, challenges, and concerns of your business and the hotel industry during the Covid-19 pandemic. It would be appreciated if you contributed to this research by completing this questionnaire as sincerely as possible. Your answers will remain confidential and will be used for academic research only. The completion of this questionnaire will only take a few minutes. Thank you very much for your contribution.

Section A: Background details about the Hotel

1. What country is your hotel located?

2.	What is your job title?		
	Owner		Sales and Marketing Director
	Hotel Manager		Reservations Manager
	Assistant Hotel Manager		Human Resources Manager
	Other (please specify):		
1-2	What is the size of your hotel? 25 Rooms		Rooms 101-150 Rooms
4.	How many years is your hotel ope	erationa	1?
Le	ess than 5 years 5-10 years] 10-15	years 15-20 years
	ore than 20 years		

5. Which of the following best describes the type of lodging property that you represent?
Chain Hotel Resort Motel Suites Hotel & Spa
Beach Hotel Business Hotel Other (please specify):
6. Which Period of the year is the property open?
All the year October to March
March to October Other (please specify):
7. What is the percentage of your direct bookings?
□ 0-20% □ 21-40% □ 41-60% □ 61-80% □ 81-100%
8. What is the percentage of online bookings (OTA)?
□ 0-20% □ 21-40% □ 41-60% □ 61-80% □ 81-100%
9. How important are positive online reviews for your hotel?
Not important 1 2 3 4 5 Not important Extremely Important
Section B : Impact of Covid-19 on the Hotel Operation
10. How has your business been affected by the coronavirus?
Not at all Significantly
Slightly Extremely
Moderately

Coronavirus (approx. the last 18 months)?
1-6 Months 6-9 Months 9-12 Months 12-15 Months 15-18 Months
12. From 1 to 5, how would you evaluate the current situation of your business?
Extremely Bad 2 3 4 5 Extremely Bad Extremely Good
13. How was the online reviews for the hotel during the pandemic, compared to the pre-pandemic period?
☐ Much worse ☐ Worse ☐ About the same ☐ Better ☐ Much better
14. From 1 to 5, to what extent did you increase the health and safety measures in the hotel, during the pandemic?
Slightly Increased
15. Following the new rules for the employees and customers hygiene in the hotels, the property equipped with (Select multiple if applicable):
Alcohol sanitisers Air purifiers
Automated Temperature Scanner Anti-bacterial floor mats
Disinfectant sprays Other (please specify):
16. Did you provide any training to your employees regarding prevention measures against Covid-19, in a hotel business?
Yes No
17. Did your hotel serve as quarantine facilities?
Yes No
18. Did your hotel receive any funding from the government?
Yes No

19. Indicate your level of satisfaction with government's support to your business, during the pandemic period.
□ Very Dissatisfied □ Dissatisfied □ Neutral □ Satisfied □ Very Satisfied
20. Hotels should require vaccination proof or a proof of recovery from the virus, from their guests?
Strongly Disagree Disagree Neutral Agree Strongly Agree
21. You are currently accepting only vaccinated and coronavirus recovered guests?
☐ Yes ☐ No
22. What was your occupancy percentage level before the pandemic (during 2019)?
0 1 2 3 4 5 6 7 8 9 10 0% 0 0 0 0 100%
23. What was your occupancy percentage level during the pandemic (the last 18 months)?
0 1 2 3 4 5 6 7 8 9 10 0% 0 0 0 0 100%
24. How do you expect your occupancy to be developed the next year, compared to your previous answer?
Much Lower Lower About The same Higher Much Higher
25. What was your average daily rate (ADR) before the pandemic (during 2019)?
☐ Below 50 Euro ☐ 51-75 Euro ☐ 76-100 Euro ☐ 101-150 Euro
☐ 151-200 Euro ☐ 201-250 Euro ☐ More than 250 Euro

26. What was your average daily rate (AI pandemic?	OR) the last 18 months, during the
Below 50 Euro 51-75 Euro	76-100 Euro 101-150 Euro
151-200 Euro 201-250 Euro	More than 250 Euro
27. How do you expect your average daily compared to your previous answer?	rate (ADR) to develop the next year,
Much Lower Lower About T	he same Higher Much Higher
28. What's the most challenging part as a	hotel operation, during the pandemic?
Retaining the Employees Deal v	with a Coronavirus case at the hotel
Keep the hotel running Gain c	sustomers' trust
New Cleaning and Housekeeping Rules	Other (please specify):
Section C: Recovery Strateg	ies and Expectations
29. As a result of the Covid-19 crisis, did strategies? (Select multiple if applicab	
New technologies investments	Special Offers
Reduction of operating expenses	Renovation
More flexible cancellation policies	Nothing
Other (please specify):	
30. What have you done to reduce costs a multiple if applicable)	nd stay alive, as a business? (Select
Close Restaurants	Reduced or stop marketing expenses
Lay off staff	Close parts of the hotel
Reduced employees working	Nothing
Other (please specify):	

31. Do you expect your hotel's Revenue per Available Room (RevPAR) to increase over the next 12 months?
Definitely Not Probably Not Unsure Probably Yes Definitely Yes
32. If your answer is yes, to what extent from 1 to 5 do you think the RevPAR will increase in the next 12 months?
Slightly Increase 1 2 3 4 5 Slightly Increase Extremely Increase
33. How would you expect your hotel's performance rates to evolve over thenext 12 months, compared to your current situation?
Much worse Morse About the same Better Much better
34. What are your biggest concerns for your business as a result of the Covid-19 crisis?
☐ Increase Revenue ☐ Rising Costs of daily products
☐ Meet changing guest expectations ☐ Demand for new bookings
Uncertainty in International Travel Other (please specify):
35. Performance rates of the Hotel industry will return to pre Covid-19 levels until:
☐ 2022 ☐ 2023 ☐ 2024 ☐ Later than 2024
36. Do you believe your hotel will afford a new lockdown in the future?
Definitely Not Probably Not Unsure Probably Yes Definitely Yes
37. Hoteliers should feel more confident to face a similar crisis in the future.
Strongly Disagree Disagree Neutral Agree Strongly Agree

THANK YOU!

Appendix 3: Pearson's Correlations

Table 1. Pearson's Correlation between OCC Decreased level and level to which Hotels have been Affected by the Coronavirus

Regression St	atistics							
Multiple R	0.362691562							
R Square	0.131545169							
Adjusted R Square	0.114516643							
Standard Error	0.796790349							
Observations	53							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	4.90440103	4.90440103	7.724988564	0.00760723			
Residual	51	32.37861784	0.63487486					
Total	52	37.28301887						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	3.786769049	0.192353819	19.68647705	1.75051E-25	3.400602643	4.172935455	3.400602643	4.172935455
OCC Decrease Level	0.113112817	0.040697047	2.779386365	0.00760723	0.031410086	0.194815549	0.031410086	0.194815549

Table 2. Pearson's Correlation between ADR Decreased level and level to which Hotels have been Affected by the Coronavirus

Regression St	atistics							
Multiple R	0.334863577							
R Square	0.112133615							
Adjusted R Square	0.09472447							
Standard Error	0.805645998							
Observations	53							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	4.180679687	4.180679687	6.441075443	0.01424882			
Residual	51	33.10233918	0.649065474					
Total	52	37.28301887						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	3.988304094	0.145082414	27.48992091	3.03107E-32	3.697038993	4.279569194	3.697038993	4.279569194
ADR Decrease Level	0.242690058	0.095625296	2.537927391	0.01424882	0.050714266	0.434665851	0.050714266	0.434665851

Table 3. Pearson's Correlation between OCC level of decrease and ADR level of decrease

Regression St	atistics							
Multiple R	0.314560507							
R Square	0.098948313							
Adjusted R Square	0.081280632							
Standard Error	1.119853534							
Observations	53							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	7.023463243	7.023463243	5.600526597	0.021790459			
Residual	51	63.95766883	1.254071938					
Total	52	70.98113208						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.455010829	0.270344771	1.683076122	0.098473213	-0.087728946	0.997750604	-0.087728946	0.997750604
OCC Decrease Level	0.135361292	0.057197897	2.366543175	0.021790459	0.020531723	0.25019086	0.020531723	0.25019086

Table 4. Pearson's Correlation between Operational Months since the Advent of the Coronavirus and Hotels Current Situation Evaluation

Regression St	atistics							
Multiple R	0.079701722							
R Square	0.006352365							
Adjusted R Square	-0.013130922							
Standard Error	0.839687098							
Observations	53							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	0.229883683	0.229883683	0.326041727	0.570506894			
Residual	51	35.95879556	0.705074423					
Total	52	36.18867925						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	3.48177496	0.244785931	14.22375439	2.20028E-19	2.990346698	3.973203223	2.990346698	3.973203223
Operational Months								
since the Advent of Coronavirus	-0.049128368	0.086039077	-0.571000637	0.570506894	-0.221859022	0.123602287	-0.221859022	0.123602287

Table 5. Pearson's Correlation between Hotels Current Situation Evaluation and how the Hotels' Performance Rates will be Evolved over the next 12 months

Regression St	atistics							
Multiple R	0.305077659							
R Square	0.093072378							
Adjusted R Square	0.075289483							
Standard Error	0.647098785							
Observations	53							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	2.191591083	2.191591083	5.233814858	0.02633151			
Residual	51	21.35557873	0.418736838					
Total	52	23.54716981						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	4.505735141	0.372041093	12.1108534	1.27179E-16	3.75883148	5.252638802	3.75883148	5.252638802
Hotels' current								
situation evaluation	-0.246089677	0.107568278	-2.287753234	0.02633151	-0.462042007	-0.030137347	-0.462042007	-0.030137347

Table 6. Pearson's Correlation between RevPAR expectations and how the Hotels' Performance Rates will be Evolved over the next 12 months

Regression S	tatistics							
Multiple R	0.369786424							
R Square	0.136742							
Adjusted R Square	0.119815372							
Standard Error	0.631327309							
Observations	53							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	3.219887083	3.219887083	8.078514154	0.006425705			
Residual	51	20.32728273	0.398574171					
Total	52	23.54716981						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	2.534653465	0.411934453	6.153050434	1.17999E-07	1.707660543	3.361646388	1.707660543	3.361646388
Hotels' RevPAR								
expectations for	0.306380638	0.107794244	2.842272709	0.006425705	0.089974663	0.522786613	0.089974663	0.522786613
the next 12 months								

Appendix 4: ANOVA statistical analyses

Table 7. OCC decrease levels in terms of Hotels' Location

Groups	Count	Sum	Average	Variance	_	
CYPRUS	20	63	3.150	8.661		
GREECE	9	41	4.556	4.028		
ITALY	8	29	3.625	7.982		
UK	4	15	3.750	20.917		
FRANCE	3	20	6.667	6.333		
SPAIN	3	15	5.000	1.000		
GERMANY	2	7	3.500	0.500		
AUSTRIA	3	11	3.667	4.333		
CZECHIA	1	5	5.000	#DIV/0!	_	
ANOVA						
Source of						
Variation	SS	df	MS	F	P-value	F crit
Between Groups	44.09019916	8	5.511	0.715	0.6771345	2.15720778
Within Groups	339.2305556	44	7.710			
Total	383.3207547	52				

Table 8. ADR decrease levels in terms of Hotels' Location

					_	
Groups	Count	Sum	Average	Variance	_	
CYPRUS	20	13	0.65	0.555	_	
GREECE	9	7	0.778	1.194		
ITALY	8	5	0.625	1.125		
UK	4	0	0.000	0.667		
FRANCE	3	4	1.333	1.333		
SPAIN	3	8	2.667	0.333		
GERMANY	2	6	3.000	0.000		
AUSTRIA	3	6	2.000	3.000		
CZECHIA	1	3	3.000	#DIV/0!		
ANOVA					_	
Source of						
Variation	SS	df	MS	F	P-value	F crit
Between Groups	31.66724319	8	3.958	4.430	0.000545	2.157208
Within Groups	39.31388889	44	0.893			
Total	70.98113208	52				

Table 9. OCC decrease levels in terms of Hotels' Size

Groups	Count	Sum	Average	Variance	•	
SMALL SIZE HOTELS	16	55	3.438	14.529		
MEDIUM SIZE HOTELS	17	68	4.000	3.375		
LARGE SIZE HOTELS	20	83	4.150	5.608		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	4.8333	2	2.417	0.319	0.72817	3.1826
Within Groups	378.4875	50	7.570			
Total	383.3208	52				

Table 10. ADR decrease levels in terms of Hotels' Size

Groups	Count	Sum	Average	Variance		
SMALL SIZE HOTELS	16	8	0.5	1.2		
MEDIUM SIZE HOTELS	17	25	1.471	1.765		
LARGE SIZE HOTELS	20	18	0.900	0.726		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	7.8892	2	3.945	3.285	0.04566	3.18261
Within Groups	60.0353	50	1.201			
Total	67.9245	52				

Table 11. OCC decrease levels in terms of Hotels' Type

Groups	Count	Sum	Average	Variance	_	
Beach Hotel	10	34	3.400	7.378	_	
Chain Hotel	12	56	4.667	5.879		
Resort	8	16	2.000	3.714		
Hotel & Spa	5	8	1.600	2.800		
City Hotel	6	31	5.167	2.967		
Business Hotel	8	48	6.000	5.429		
Bootique Hotel	4	13	3.250	16.917	_	
ANOVA					_	
Source of						
Variation	SS	df	MS	F	P-value	F crit
Between Groups	111.47075	6	18.578	3.144	0.011465829	2.303508646
Within Groups	271.85	46	5.910			
Total	383.32075	52				

Table 12. ADR decrease levels in terms of Hotels' Type

Groups	Count	Sum	Average	Variance	•	
Beach Hotel	10	11	1.100	0.989	=	
Chain Hotel	12	11	0.917	1.174		
Resort	8	3	0.375	0.268		
Hotel & Spa	5	5	1.000	3.500		
City Hotel	6	8	1.333	1.867		
Business Hotel	8	10	1.250	1.929		
Bootique Hotel	4	4	1.000	2.000	_	
ANOVA						
Source of						
Variation	SS	df	MS	F	P-value	F crit
Between Groups	4.45613	6	0.743	0.514	0.79496558	2.303508646
Within Groups	66.525	46	1.446			
Total	70.98113	52				

Table 13. OCC decrease levels in terms of Hotels' Operational Years

Groups	Count	Sum	Average	Variance		
Less than 5 years	5	15	3	9.5		
5 to 10 years	3	9	3	1		
10 to 15 years	5	17	3.4	11.3		
15 to 20 years	9	21	2.333	4.75		
More than 20 years	31	144	4.645	7.103	_	
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	47.024	4	11.756	1.678	0.17053	2.56524
Within Groups	336.297	48	7.006			
Total	383.321	52				

Table 14. ADR decrease levels in terms of Hotels' Operational Years

Groups	Count	Sum	Average	Variance		
Less than 5 years	5	3	0.600	0.800		
5 to 10 years	3	5	1.667	1.333		
10 to 15 years	5	11	2.200	1.700		
15 to 20 years	9	6	0.667	2.250		
More than 20 years	31	27	0.871	0.983		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	10.831	4	2.708	2.161	0.08768	2.56524
Within Groups	60.151	48	1.253			
Total	70.981	52				