
Mohamed Ahmed¹, El-Hussein Ali¹ and Maha Y.K. Abdou²

¹Hotels Studies Department, Faculty of Tourism and Hotels, Fayoum University, Fayoum, Egypt
²Tourism Studies Department, Faculty of Tourism and Hotels, Fayoum University, Fayoum, Egypt

Abstract
Travelling is considered the main request for tourism and hospitality activities, for that any factor or behaviour which delays travelling will affect directly on tourism and hospitality industry such as Covid-19 pandemic. Also, the pandemic of Covid-19 had a powerful and varied effect on the tourism and hospitality industry around the world. Therefore, it is necessary to have well thought strategies for tourism and hospitality crisis management, to reduce the potential risks and strategies for recovery from this crisis. This research aims to identify the impact of Covid-19 on the tourism and hospitality sectors and to explore recovery strategies to reduce the negative effects of this pandemic by using the Delphi technique to reach a consensus between experts to judge the complicated issues. This research used a qualitative approach to achieve the research aim. Purposive and snowballing sampling was used in this research and data was collected by semi-structured interviews. This research recruited 48 experts in the Delphi panel. The consensus about the recovery strategy for Covid-19 on tourism and hospitality was reached from two iterations of the Delphi panel. Data analysis was organised and performed by using NVIVO-12 software for coding and identifying themes, then all interviews were collected in an Excel spreadsheet and analysed by SPSS modeler which can be used for qualitative data analysis.

The results indicated that the tourism and hospitality sectors in Egypt had been impacted by the Covid-19 pandemic. The results revealed the importance of the recovery strategy for Covid-19 on tourism and hospitality which including demand, health and hygiene, innovation and digitization, and sustainability. It showed that the respondents were completely agreed with a recovery strategy for Covid-19 on tourism and hospitality. This research suggests some strategies for tourism and hospitality policymakers to reduce the negative effect of the Covid-19 pandemic and reopen tourism and hospitality operations.

Keywords: Covid-19, tourism and hospitality, recovery strategy, hotels, travel agencies, Egypt.
Introduction
Tourism and hospitality sectors are directly and heavily impacted by the Covid-19 pandemic (Strielkowski, 2020), this crisis make tourism and hospitality businesses face many challenges (Fong et al., 2020; Raki et al., 2021). Covid-19 has made the tourism and hospitality sector suffer worldwide (Yeh, 2021). Additionally, the spread of Covid-19 made several travel restrictions that affect the international tourism and hospitality industry (Jiang & Wen, 2020). Travel restrictions around the world lead to reduce the level of occupancy and direct effect on customer demand (Yeh, 2021). The American Hotel & Lodging Association (2020) reported that the hospitality industry especially hotels are considered the first sector which has been negatively affected by Covid-19 and is the last sector to recover (Pillai et al., 2021). Accordingly, the World Travel and Tourism Council highlighted that many jobs in tourism and hospitality are at risk (Jiang & Wen, 2020).

Many crises have relatively short-term effects on the tourism and hospitality business, but the impact of Covid-19 is expected to be incomparable with previous epidemics (Pillai et al., 2021). As a result, the tourism and hospitality industry should develop a plan to recover from the pandemic (Jiang & Wen, 2020). Several authors suggest some recovery plans post-Covid-19 such as hygiene and cleanliness practices, artificial intelligence, health care, automated service, mobile technology, robot, and virtual/augmented reality (Hao et al., 2020; Jiang & Wen, 2020). On this point of view, hygiene and cleanliness practices should be considered as critical (Pillai et al., 2021). On the other hand, precautionary measures and social distancing are considered the most important factors for selecting hotel and travel agencies by customers (Yeh, 2021). As well, Shin and Kang (2020) mentioned that for attracting guests to visit the hotels, the management should improve guest perceptions of safety and hygiene in their hotels.

Moreover, there is little research explored the way to reduce and minimize the effect of Covid-19. The tourism and hospitality industry is the worst affected by this pandemic and requires carefully planned strategies to recover from it (Gursoy & Chi, 2020; Strielkowski, 2020; Ghaderi et al., 2021). Although tourism is considered a famous business in Egypt, a few previous types of research highlighted the effect of the Covid-19 pandemic on the tourism and hospitality sectors (Salem et al., 2021). Thus, this research aims to identify the impact of Covid-19 on the tourism and hospitality sector and suggest some recovery strategies to reduce the negative effects of this pandemic by using the Delphi technique.

Literature review
The impact of Covid-19 on the tourism and hospitality industry
The tourism and hospitality industry is considered the most affected sector of the international economy by the pandemic of Covid-19 (Sobaih et al., 2021).
The unexpected influences of Covid-19 on tourism and hospitality have created several challenges that led many tourism and hospitality businesses to close for months (Kreiner & Ram, 2020; Bartik et al., 2020). Crises and disasters regularly occur in tourism and hospitality (Dolnicar & Zare, 2020). Most tourism destinations are affected by natural and human crises and over the years developed strategies to recover (Bartik et al., 2020). The crisis of Covid-19 is different and unique in several ways including; the activities of travel and hospitality decline around the world; the economic collapse, and finally, the modification in the tourism and hospitality sectors (Kreiner & Ram, 2020).

The tourism and hospitality business has faced many challenges and crises in recent decades (Ghaderi et al., 2021). International crises such as; Covid-19 have had consequences and negative impacts on the tourism and hospitality business and can make damage to the tourism system because of their effect on customer behaviour and confidence (Yang et al., 2020). The previous research reported that movement restriction is considered the best process to control the spread of Covid-19 (Chinazzi et al, 2020; Sohrabi et al, 2020; Fabei et al., 2020). Additionally, the strategies to confront Coronavirus which include social distancing, stay at home travel restrictions, and community lockdowns have decreased the demand for tourism and hospitality business (Bartik et al., 2020). The tourism and hospitality sectors were asked to reduce their operations (Gursoy & Chi, 2020). The restriction of travel and stay at home led to a declining tourism and hospitality operation that directly affected revenue (Bartik et al., 2020).

**Covid-19 Effect on the Egyptian tourism and hospitality industry**

Today, international tourism is considered a very important source of the Egyptian economy. In 2019, the tourism and hospitality business in Egypt achieved revenues of around $13billion (Salem et al., 2021). The Egyptian government has closed its borders during the pandemic of Covid-19. This led to a decrease in the number of tourist arrivals from foreign tourist markets, which led to a decrease in the income of tourists coming to Egypt as mentioned in the following figure1.
Salem et al. (2021) mentioned that around 7 million employees are worked in hotels and foodservice operations in Egypt. Tourism and hospitality have downturns during the pandemic of Covid-19 (OECD, 2020). In March 2020, around 70% and 80% of hotel bookings were cancelled and the pandemic shutdown of all tourism and hospitality sectors in Egypt led to the loss of one million American dollars every month (Salem et al., 2021). The Egyptian government cancelled all flights, hotels, restaurants, café, and tourism attractions and has set regulations as the WHO recommended (Salem et al., 2021). Additionally, the Egyptian government put restrictions on travel and implemented procedures to help small enterprises such as financial support and stimulation of tourism investment operations (El-Khishin, 2020). Also, it provided human and financial support to prevent the spread of this pandemic (Hasab et al., 2020).

The Egyptian tourist market is characterized by the diversity in the number of arrivals from different countries in the world, especially European countries. The proportion of arrivals from these countries is more than 50%, although Russia was considered the most important source of tourists to Egypt since 2000, since the plane accident in Sinai in 2015, the incoming tourism movement from Russia has stopped (Selim et al., 2020). Table (1) reflects the impact of multiple and different crises on the income from international tourism to Egypt.

**Table 1: Egyptian crises and the international tourism income**

<table>
<thead>
<tr>
<th>Year</th>
<th>Crisis</th>
<th>Number of tourists</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2011</td>
<td>Revolution(2011)</td>
<td>-13.3%</td>
<td>-8.6%</td>
</tr>
<tr>
<td>2013-2014</td>
<td>Revolution(2013)</td>
<td>-8.2%</td>
<td>-11%</td>
</tr>
<tr>
<td>2015-2016</td>
<td>Terrorist attack on the Russian plane (2015)</td>
<td>-34.8%</td>
<td>-48%</td>
</tr>
<tr>
<td>2019-2020</td>
<td>Covid-19 2020 year</td>
<td>-58.6%</td>
<td>-48.9%</td>
</tr>
</tbody>
</table>

(Sources: Selim et al., 2020:1150)
Recovery strategies for Covid-19 on tourism and hospitality

Before looking for the recovery strategy to reduce the effect of the pandemic, it is crucial to identify crisis types namely, gradual threat, periodic threat, sudden threat. The crisis of Covid-19 can be classified as a “sudden threat”, which happened suddenly and affected not only in tourism and hospitality sectors but also the whole economy (Fabeil et al., 2020). According to Jiang and Wen (2020), there is an effective strategy used against the Covid-19 pandemic which includes social distancing, adaptation of artificial intelligence to reduce the contacts between customers and staff, and finally, hygiene and cleanliness are important issues for successful tourism and hospitality operation.

For recovery of the Covid-19 pandemic, tourism and hospitality businesses have to make changes in their operating environment to ensure employees and customer health and safety (Gössling et al., 2020). There are several issues considered the most important safety precautions customers or travellers expect from aviation, restaurant, and hotels such as temperature check; take Covid-19 vaccine; hand sanitizers at the entry; staff wearing gloves and masks; social distancing; rigorous and frequent cleaning of touch surfaces; training in health and safety (Gursoy & Chi, 2020).

It is necessary to use technologies in service delivery as a recovery strategy for Covid-19 to reduce human contact which include artificial intelligence, robots, automated service, digital menu, digital payment, keyless entry, touchless elevators (Gursoy et al., 2020). On the other hand, sustainable tourism is a crucial trend to deal with this pandemic and future crisis (Hall et al., 2020). Tourism village modelling for sustainable development must continue to creatively develop new identity or characteristics of the village to achieve the goal of solving problems related to the economic crisis in rural areas, especially during the Covid-19 pandemic period (Karim, 2020).

The UNWTO presented three strategies and tactics to deal with the pandemic of Covid-19. The first strategy is “managing the crisis and mitigating the impact, secondly, “providing stimulus and accelerating recovery”, and the third strategy of “Preparing for Tomorrow” (Kreiner & Ram, 2020; p578). One of the most important recovery strategies for the tourism and hospitality business depends on the people who have antibodies against Covid-19 to travel and stay at hotels for free. As well, hotels, restaurants, airlines, and tourist destinations should give these people discounts (Strielkowski, 2020). Overall, the travel and hotel sector should use the tools of smart quarantine to determine the health and risk travellers, this technology will help to decrease the spread of the Covid-19 pandemic (Strielkowski, 2020).

Since the pandemic of Covid-19 makes travel impossible, accommodation and tourist attractions started to reckon on virtual reality (VR). VR in tourism and hospitality is growing and allows visitors access to all information about
tourist attractions. It helps visitors to visit different attractions virtually from their homes. So, VR is a recovery strategy that should be continuing after the Covid-19 pandemic (Youssef et al., 2020). As well, Ivanov et al. (2017) reported that the adoption of robots and automated service in tourism and hospitality play a critical role in increasing work effectiveness, service quality, and reducing operating costs. During the Covid-19 pandemic, robots and automated services help to maintain social distance have also been shown to the public. Robots and automated services can achieve tasks related to logistics, disinfection, and provide Covid-19 information to people and reduce the spread of the pandemic (Zeng et al., 2020).

Methods

This research is based on a qualitative approach. A modified Delphi process was used to reach the expert consensus and developed the consensus statement for the Covid-19 pandemic recovery strategies for tourism and hospitality sectors in Egypt. All the recovery statements were selected and developed from the literature review and experts’ options on these statements till consensus was achieved. In this research, 48 participants were invited from five-star hotels and travel agencies and experts. The panel comprised 10 hotel managers, 12 assistant hotel managers, 18 travel agency managers, and 8 experts were selected from academic career and the top travel agencies and five-star hotels in Egypt. In this research, consensus achieved from two rounds were held between 20 May 2021 and 24 July 2021. In the first round, there are four indicators drawn from the literature review presented to the participants, and all participants were asked to add and suggest new items for the next round.

Delphi technique

The Delphi technique relies on gathering information from a group of experts through discussion of particular issues (Sahal et al., 2011; Hsu & Sandford, 2007). It is a critical method for gaining judgements on difficult issues, which have suffered from a paucity of information (Sahal et al., 2011). According to Hsu and Sandford (2007) and Sobaih et al. (2012), the aims of the Delphi technique include: gathering knowledge from different experts; judging complicated issues; generating consensus. There are many issues that relate to ensuring the right judgement including the definition and selection of experts; participant anonymity; recognising consensus and the number of iterations (i.e., the number of rounds required to reach consensus) (Meyrick, 2003). Figure 2 shows the stages of the Delphi technique.
Define the research problems

Develop the research questions (conceptual model) and the research design

Select experts to participate (based upon specific criteria)

Transmission of Delphi statement to expert participants

Analysis of responses

Transmission of a revised Delphi statement to the experts

Consensus achieved

Yes

Preparation of final report and consensus statement

Figure 2: Delphi technique process (Adapted from Sobaih et al., 2012: 891)

Justification for using the Delphi technique in this research

The Delphi technique has been selected as a tool for identifying the impact of Covid-19 on the tourism and hospitality sector and exploring recovery strategies to reduce the negative effects of this pandemic.

1. The Delphi technique is considered appropriate for getting experts’ opinions about a phenomenon without necessarily bringing them together (Okoli & Pawlowski, 2004);
2. This technique depends on iteration which allows the researcher to add or remove information to establish a consensus (Hsu & Sandford, 2007; Sobaih et al., 2012).

3. The Delphi technique is considered an efficient method for judging research data (Sobaih et al., 2012), by exploring the diverse experiences and the backgrounds of the experts that have worked on similar problems.

**Sampling**

The quality of outcome from a Delphi technique does not rely on the number of experts but relies on the extent to which the experts are willing to participate and their knowledge, skills, and experience (Sobaih et al., 2012). So, the definition of the experts for the expert panel for a particular Delphi study is very important. The inclusion and exclusion criteria are extremely important in identifying the experts (Meyrick, 2003). Moreover, there is no consensus in the literature review about the number of respondents in the Delphi study (Hsu & Sandford, 2007). Consequently, there is a range of different opinions related to this issue, e.g., the number of participants ranges from seven to fifteen (Sobaih et al., 2012); fifteen to twenty participants (Hsu & Sandford, 2007); ten to eighteen participants (Okoli & Pawlowski, 2004).

This research recruits 48 experts in the Delphi panel. The criteria of selecting Delphi panel depend on the professionals in tourism and hospitality and who have knowledge and experience or publish research in tourism and hospitality in Egypt. There are two types of sampling used in this research as below;

**Purposive sampling**

Purposive sampling helps the researcher to select the experts to give the researcher the best answer to his/her research question, as well as providing accurate information about the studied phenomena as mentioned by Saunders et al. (2009). Purposive sampling was used to target practitioners: Hotel managers or assistant hotel managers in five-star hotels and travel agency managers in Cairo due to their geographical convenience for the researchers.

**Snowball sampling**

According to Magnani et al. (2005), snowball sampling is used to recruit: hidden or hard-to-reach populations, which can be characterised as follows; the size of the population is unknown; the members of the population are extremely private individuals. The sample size in snowball samples is usually small (Cohen & Arieli, 2011). The snowball sampling technique has the advantage of allowing the researcher to add other participants in their study by asking experts to suggest other people who might match the inclusion/exclusion criteria and be willing to participate. The current research used this technique to reach the experts in academic careers or professionals in tourism and hospitality who have knowledge and experience or publish research in tourism and hospitality in Egypt.
Data collection

Semi-structured interviews were used in the current research (Five-star hotels=22; travel agency= 18; Experts= 8), with ten hotel managers (codes: HM-1 to HM-10) and twelve assistant hotel managers (codes: HAM-1 to HAM-12). Eighteen travel agency managers (codes: TAM-1 to TAM-18). Five experts were selected from the top travel agencies and five-star hotels in Egypt (codes: HTE-1; HTE-2; HTE-3; HTE-4; HTE-5). As well, three experts were selected from academic careers (codes: AEX-1 to AEX-3). The questions in the interviews were modified and developed from the literature review and the studies of (Bhandari et al., 2020; Dias et al., 2021; Salem et al., 2021). The interviews were conducted in Arabic language and the researchers transcribed and translated them in to the English language. All participants were initially contacted by telephone and e-mail to ensure that they were ready to participate in the current research. Validity and reliability were achieved in this research. Validity was achieved through discussing issues in more detail with interviewees and this was reflected in the research results. Various procedures were used to measure the reliability of the collected data including the recording of all interviews to provide evidence of what the participants said and to prevent any subjectivity interpretation. During data collection, the researcher anonymised participants and encourages them to say what they want to minimizing bias. The questions in the interviews were designed to support the study objectives and notes were taken during the interview to ensure the reliability of this research. Therefore, data analysis was organised and performed by using NVIVO12 software for coding and identifying themes, then all interviews were collected in an Excel spreadsheet and analysed by SPSS modeler which can be used for qualitative data analysis.

Results and Discussions

The effect of Covid-19 on tourism and hospitality

In terms of the impact of the Covid-19 pandemic in the tourism and hospitality business, all the participants indicated that there is a significant impact of the Covid-19 crisis on the tourism and hotel sector worldwide, not only in Egypt. As they commented:

Definitely, the Egyptian tourism and hospitality sectors have been exposed to many crises during the past years, but we consider the Corona pandemic as one of the crises that led to the suspension and shutting of the tourism and hotel sector in general (HTE-1).

The spread of the Coronavirus caused damage to the Egyptian tourism sector, and then this sector incurred great losses, as the movement of tourism and aviation stopped completely (TAM-2).

Unfortunately, the emergence of the Coronavirus in most countries of the world and its appearance in Egypt in March 2020 led to a reduction in expectations regarding the increase in the number of
tourists and to taking many precautionary measures related to the tourism sector to confront the effects of this pandemic (AEX-3). The Egyptian tourism sector suffered severe damage amid the outbreak of the "Corona" pandemic, after the number of foreign tourists who visited Egypt decreased from 13 million tourists in 2019 to about 3.5 million tourists last year (HM-15).

Despite the negative effect of this pandemic on tourism and hospitality sectors in Egypt, one of participant mentioned that the return of movement regularly and gradually hotels and positive future prospects for tourism in Egypt. As the participants quoted;

"The tourism sector in Egypt started at better levels than the year 2020, after the first quarter of this year 2021 and the movement may begin to return gradually again, especially in tourist areas such as Hurghada and Sharm El Sheikh" (HM-9).

In terms of the effect of Covid-19 on the aviation sector The International Air Transport Association (IATA) has estimated losses in the aviation sector between 63 billion and 113 billion US dollars in revenue due to declining numbers of passengers. The union has estimated revenue losses of nearly $30 billion, and here the focus is on the extent of the damage to the travel sector and the global economy, eliminating 46 million jobs worldwide. As one participant said:

In Egypt, foreign air traffic stopped after the beginning of the Coronavirus has reached Egypt Air losses of 1.2 billion pounds per month from April 2020, which has influenced these procedures on the company's economics (TAM-4).

The Corona pandemic imposed a new reality on the movement of travel and aviation in the world, as the trends of closing borders and stopping air transport increased to limit the spread of the virus. At a later stage, countries began formulating new measures to resume tourism and travel through policies, such as travel bubbles, immune passports, travel mechanization, and redesigning aircraft and airports to adapt to post-Corona changes, which are the so-called safe travel protocols (TAM-8).

The aviation sector has suffered a decline due to the spread of the Coronavirus. The aviation sector revenue is expected to decline by approximately 40% by the beginning of 2021, with a loss of approximately $3 billion, as well as the expected recovery of the aviation sector in Egypt once again (AEX-1).

With the closure of the airport, all their operations were suspended, and all reservations cancelled resulting in significant financial burdens. While many tourism companies have benefited
from the refund of their membership fees by the Ministry of Tourism and the Tourism Board, there is great concern among all the tourism offices regarding their cash flow (HTE-1).

In Egypt, hotel and restaurant business was severely damage by the pandemic of Covid-19. All reservations were cancelled, and the occupancy rates fell during this crisis. As the participant commented:

*The most prominent crisis facing hotel and tourism establishments is the decline in the occupancy rate in hotels, especially those owned by the government, and some of these hotels have reduced occupancy to less than 10 percent (HM-11).*

*As the Covid-19 pandemic mostly caused people to stay locked up, the restaurant business is one of the major sectors in the countries affected by the pandemic and many employees are out of work (HM-7).*

As mentioned earlier, these results were reflecting the literature that the pandemic of Covid-19 affected all tourism and hospitality sectors. All airplanes stopped, hotels closed and travel restrictions were implemented leading tourism and hospitality industry to become one of the most affected sectors since the very start of the virus spread. The pandemic has stopped international tourist arrivals in the first quarter of 2020 to a fraction of what they were the previous year (Uğur & Akbıyık, 2020).

**Recovery strategies for Covid-19 on tourism and hospitality**

Fourthly eight participants were formed the consensus panel. A total of 30 statements were used for the Delphi panel. The consensus for the statements will be agreed if at least 80% of the participants agreed or strongly agreed (Bhandari et al., 2020). A five point scale (strongly agree, agree, neutral, disagree, strongly disagree) was used for determining the agreement level. Twenty-three of 30 statements were achieved the consensus (80% of agreement) in the first round. But seven statements did not reach the general consensus, these statements were modified and resent to the participant in the second round. The general rate of consensus was 30/30 from two rounds (see Table 2).

**Table 2: The consensus of recovery strategies for Covid-19 on tourism and hospitality**

<table>
<thead>
<tr>
<th>Statements</th>
<th>Consensus round 1</th>
<th>Statement modification</th>
<th>Consensus round 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Promoting/encouraging domestic tourism.</td>
<td>96.8%</td>
<td>Dismiss</td>
</tr>
<tr>
<td>2</td>
<td>Re-build trust with tourists.</td>
<td>97.3%</td>
<td>Dismiss</td>
</tr>
<tr>
<td></td>
<td>3: Discover new tourism content and enrich existing tourism content.</td>
<td>80.4%</td>
<td>Dismiss</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>4</td>
<td>Marketing and promotional activities that lead to early recovery of the inbound market.</td>
<td>66.8%</td>
<td>All tourism and hospitality sectors should use new marketing methods to attract tourists from different markets, whether internal or external.</td>
</tr>
<tr>
<td>5</td>
<td>Intelligent collaborative marketing.</td>
<td>80.9%</td>
<td>Dismiss</td>
</tr>
<tr>
<td>6</td>
<td>Participation in digital forums.</td>
<td>70%</td>
<td>It is necessary to participate in digital forums Whether at the local, regional, or international level.</td>
</tr>
<tr>
<td>7</td>
<td>Determine tourism product priorities and involve local communities.</td>
<td>99%</td>
<td>Dismiss</td>
</tr>
<tr>
<td>8</td>
<td>Providing competitive prices and offering discounts.</td>
<td>100%</td>
<td>Dismiss</td>
</tr>
<tr>
<td>9</td>
<td>Encouraging concessional financing for tourism and hospitality sectors.</td>
<td>94.6%</td>
<td>Dismiss</td>
</tr>
</tbody>
</table>

### Health and hygiene

<table>
<thead>
<tr>
<th></th>
<th>10: Continuous communication about health procedures for incoming tourists.</th>
<th>69%</th>
<th>All customers coming to the hotel/travel agency should have a clinical history taken to diagnose active Covid-19 or contact any infected person in the past 2 weeks.</th>
<th>91.1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Adopting the sanitary arrangements to re-opening tourism and hospitality operation.</td>
<td>97.2%</td>
<td>Dismiss</td>
<td>97.2%</td>
</tr>
<tr>
<td>12</td>
<td>Contracting with qualified doctors.</td>
<td>82.5%</td>
<td>Dismiss</td>
<td>82.5%</td>
</tr>
<tr>
<td>13</td>
<td>Providing masks and gloves for employees.</td>
<td>75%</td>
<td>All staff should be wearing masks and gloves at all times in service areas within the hotel/travel agency.</td>
<td>100%</td>
</tr>
<tr>
<td>14</td>
<td>Develop hygiene standards and disinfection practices.</td>
<td>86%</td>
<td>Dismiss</td>
<td>86%</td>
</tr>
<tr>
<td>15</td>
<td>Collaboration with international experts in the field of infection prevention.</td>
<td>85.3%</td>
<td>Dismiss</td>
<td>85.3%</td>
</tr>
<tr>
<td>16</td>
<td>Developing health and safety procedures for tourism service providers and travellers.</td>
<td>68%</td>
<td>Hotel and travel agencies should receive the appropriate training in infection control practices.</td>
<td>97.6%</td>
</tr>
</tbody>
</table>
## Innovation and digitization

| 18 | Using signage in lobbies to allow more space in distancing. | 72% | All staff should observe adequate social distancing at all times in service areas within the hotel/travel agency. | 97.3% |

| 19 | Installing electronic disinfection gates. | 100% | Dismiss | 100% |

### Sustainability

| 26 | Maintaining employee and employer support. | 83.9% | Dismiss | 83.9% |

| 27 | Stimulating sustainable tourism development practices. | 99.8% | Dismiss | 99.8% |

| 28 | Strengthening partnerships between the public, private, and community sectors. | 90.6% | Dismiss | 90.6% |

| 29 | Promotion of sustainable forms of tourism and hospitality activities. | 94% | Dismiss | 94% |

| 30 | Promotion of environmentally friendly activities and products. | 97.1% | Dismiss | 97.1% |

As noted in the literature review, to achieve the best recovery scenario in Egypt after the Covid-19 pandemic, it is necessary to adopt programs that will help the sector to survive and adapt, and then start recovery measures. Short and medium-term programs are essential and can be achieved through
several pillars. Egypt has appeared in many international media channels as one of the most desirable tourist destinations in 2020 and 2021, and it is one of the countries that many put on the list of the most important destinations they want to travel. This research indicated that the recovery for the tourism and hospitality sectors will be based on four strategies as follows.

**First strategy: Demand**

It is clear from studying the behaviour of travelers and tourists after the pandemic of Covid-19 that they prefer the trend towards the familiar, the results of which can be predicted and trusted. Accordingly, the choices of short-term travelers will be towards areas close to their place of residence, where outdoor activities predominate (Salem et al., 2021). Therefore, continuous communication with travelers with complete transparency regarding the epidemiological situation and travel procedures for the chosen tourist destination will be of paramount importance in motivating travelers to travel to Egypt as an international tourism destination (Sobaih et al., 2021). Although the extent to which these shifts in demand development will continue is still unclear, the travel and tourism sector has a unique opportunity to rethink and develop the prevailing way of working in a more sustainable way and cooperation with local communities (El-Khishin, 2020). On the other hand, the Egyptian tourism sectors have the experience dealing with different crises through increasing the domestic tourism and returning international tourists (Selim et al., 2020).

The results in table (2) showed that the consensus of respondents about the demand as a Covid-19 recovery strategy for the tourism and hospitality business. Most respondents agreed and strongly agreed with the demand variables. The rates of consensus for the demand variables ranged from 100% to 80.4%. (100%) the consensus of respondents was agreed and strongly agreed with the statement (8) providing competitive prices and offering discounts. (99%) the consensus of respondents was agreed and strongly agreed with the statement (7) determine tourism product priorities and involve local communities. (97.3%) the consensus of respondents was agreed and strongly agreed with statement (2) re-build trust with tourists. (96.8%) the consensus of respondents was agreed and strongly agreed with the statement (1) promoting/ encouraging domestic tourism. (94.6%) the consensus of respondents was agreed and strongly agreed with the statement (9) encouraging concessional financing for tourism and hospitality sectors. (94%) the consensus of respondents was agreed and strongly agreed with statement (6) participation in digital forums. (88.2%) the consensus of respondents was agreed and strongly agreed with the statement (4) marketing and promotional activities that lead to early recovery of the inbound market. (80.9%) the consensus of respondents was agreed and strongly agreed with statement (5) intelligent collaborative marketing. (80.4%) the consensus of
respondents was agreed and strongly agreed with statement (3) discover new tourism content and enrich existing tourism content. The results were matched with the study of Salem et al. (2021) who reported that domestic tourism should receive the necessary support from the government to build confidence in the local tourism product, to ensure the highest standards and provide the necessary information and resources for people to facilitate movement, experience different tourism products, and programs, and support local communities. Additionally, The Egyptian Tourism Authority should take a leadership role by providing data related to customer behaviour and trends in international tourism to build comprehensive collaborative marketing programs that will encourage hotels and tourism companies to market for Egypt as a tourist destination with minimal risk to their financial resources (El-Khishin, 2020). These results reflect the literature review which revealed the tourism sector must continue to work through various communication networks, participate in digital forums and organize online business meetings to enable the sector to survive and maintain existing partnerships and find new opportunities to build new partnerships with the global tourism market, especially the target and exporting markets for tourism (Hasab et al., 2020). For that, tourism and hospitality businesses should increase the demand for their product and services to suit their customers’ requirements (Gössling et al., 2020).

Second strategy: Health and hygiene
The adoption of hygiene protocols and improvement is critical and has an added value to the tourism sector which helps to ensure the preservation of the safety of tourists and gain confidence in the level of Egyptian measures and protocols (Salem et al., 2021). The results in table (2) showed that the consensus of respondents about the health and hygiene as recovery strategies for Covid-19 on tourism and hospitality. Most respondents agreed and strongly agreed with the health and hygiene variables. The rates of consensus for the health and hygiene variables ranged from 100% to 82.5%. (100%) the consensus of respondents was agreed and strongly agreed with the statement (13) providing masks and gloves for employees and the statement (19) installing electronic disinfection gates. (97.6%) the consensus of respondents was agreed and strongly agreed with statement (16) developing health and safety procedures for tourism service providers and travellers. (97.3%) the consensus of respondents was agreed and strongly agreed with statement (18) using signage in lobbies to allow more space in distancing. (97.2%) the consensus of respondents was agreed and strongly agreed with statement (11) adopting the sanitary arrangements to re-opening tourism and hospitality operation. (96.8%) the consensus of respondents was agreed and strongly agreed with statement (17) installing new technologies for cleaning. (91.1%) the consensus of respondents was agreed and strongly agreed with the statement (10) continuous communication about health procedures for
incoming tourists. (86%) the consensus of respondents was agreed and strongly agreed with the statement (14) develop hygiene standards and disinfection practices. (85.3%) the consensus of respondents was agreed and strongly agreed with the statement (15) collaboration with international experts in the field of infection prevention. (82.5%) the consensus of respondents was agreed and strongly agreed with statement (12) contracting with qualified doctors.

Health and hygiene are very important in the workplace (El-Khishin, 2020), the current results mentioned that the Egyptian government has put policies and procedures related to cleanliness practices in the tourism and hospitality sectors (Selim et al., 2020). This result matched with the study of Salem et al. (2021) reported that health and hygiene practices were adopted in tourism and hotel activities during the Covid-19.

On the other hand, there are several issues considered the most important safety precautions customers or travellers expected from aviation, restaurant, and hotels such as temperature check; take Covid-19 vaccine; hand sanitizers at the entry; staff wearing gloves and masks; social distancing; rigorous and frequent cleaning of touch surfaces; training of health and safety (Gursoy & Chi, 2020).

**Third strategy: Innovation and digitization**

Although the disadvantages, Covid-19 has proven to be unexpected support in the travel and tourism industry’s effort to innovate and integrate new technologies into their operation (Ivanov et al., 2020). Stay at home procedures, consumption, and digital adoption have increased, and the consumer is now looking for new technologies that consider the rules of social distance, including biometrics and others, as a prerequisite for a safe and smooth travel experience (Bartik et al., 2020). Digitization has become more important, especially since remote work has become the basis in the short to medium term (Pillai et al., 2021). While digitization offers tremendous opportunities, it is essential to ensure that all stakeholders are involved with these developments and employees and local communities are not left on the sidelines of this technological revolution (Ivanov et al., 2017).

The results in table (2) showed that the consensus of respondents about innovation and digitization as recovery strategies for Covid-19 on tourism and hospitality. Most respondents agreed and strongly agreed with the Innovation and digitization variables. The rates of consensus for the Innovation and digitization variables ranged from 100% to 85.2%. (100%) the consensus of respondents agreed and strongly agreed with statement (22) digitizing entry tickets/booking to different sites. (99%) the consensus of respondents was agreed and strongly agreed with statement (20) adoption of robots and service automation in the tourism and hospitality sector. (96%) the consensus of respondents was agreed and strongly agreed with statement (23) develop a support program for innovative ideas and partnerships in the field.
of tourism and hospitality. (94.3%) the consensus of respondents was agreed and strongly agreed with statement (24) encouraging business incubators in the tourism and hospitality sector. (88.3%) the consensus of respondents agreed and strongly agreed with statement (21) Accelerating the digitization of the tourist process to ensure it is fully online. (85.2%) the consensus of respondents was agreed and strongly agreed with statement (25) partnerships between the tourism/hospitality sector and other sectors to help guide the workforce during a crisis.

The results are in line with Ivanov et al. (2020) who highlighted that automation technologies were used in tourism and hospitality within different department whether the front of the house or back of the house. As well, during the Covid-19 pandemic, robots, and automated service help to maintain social distance have also been shown to the public (Gursoy et al., 2020). Robots and automated services can achieve tasks related to logistics, disinfection, and provide Covid-19 information to people and reduce the spread of the pandemic (Zeng et al., 2020).

**Fourth strategy: Sustainability**

Sustainability is becoming important for travellers and tourists (Gössling et al., 2020). Tourism and hospitality employ lots of employees than other sectors, giving the travel and tourism sector a unique ability to protect and engage vulnerable groups while reducing poverty and inequality (Elmo et al., 2020). Salem et al. (2021) mentioned that a round 7 million employees are worked in hotels and foodservice operations in Egypt. However, this does not reflect the situation in Egypt and the region, providing an opportunity for the tourism sector to accelerate targeted changes that will support future growth (Karim, 2020).

The results in table (2) showed that the consensus of respondents about sustainability as a recovery strategy for Covid-19 on tourism and hospitality. Most respondents agreed and strongly agreed with sustainability variables. The rates of consensus for the sustainability variables ranged from 99.8% to 83.9%. (99.8%) the consensus of respondents was agreed and strongly agreed with statement (27) stimulating sustainable tourism development practices. (97.1%) the consensus of respondents was agreed and strongly agreed with the statement (30) promotion of environmentally friendly activities and products. (94%) the consensus of respondents agreed and strongly agreed with statement (29) promotion of sustainable forms of tourism and hospitality activities. (90.6%) the consensus of respondents was agreed and strongly agreed with statement (28) strengthening partnerships between the public, private, and community sectors. (83.9%) the consensus of respondents was agreed and strongly agreed with statement (26) maintaining employee and employer support.

In this regard, this result matched with Hall et al. (2020) who claimed that sustainable tourism is a crucial trend, and it should be having an international
commitment, this sector will become more flexible to deal with this pandemic and future crisis.

Conclusion, limitations, and future research
The present research has identified the impact of the Covid-19 pandemic on Egyptian tourism and hospitality and tries to suggest or address various recovery strategies for Covid-19, to help the tourism and hospitality sectors reopen and return to their activities. To reduce the negative effects of the epidemic, tourism and hospitality are slowly starting again, for example, hotels, attractions, restaurants, and transportation in Egypt. This research is considered one of the few types of studies in the Egypt context that have identified the effects of the Covid-19 pandemic on all tourism and hospitality sectors and recovery strategies to reduce the negative effects of this pandemic by using the Delphi technique. The results indicated that the pandemic of Covid-19 influenced the tourism and hospitality sectors in Egypt. The results of this research suggest some strategies to help policymakers to reduce the negative effect of the Covid-19 pandemic. The first strategy is related to demand, the participants were completely agreed with the demand variables (e.g., promoting/encouraging domestic tourism, re-building trust with tourists, providing competitive prices, and offering discounts). The second strategy is related to health and hygiene; the results revealed that Egyptian tourism and hospitality adopted good practices in health and hygiene (providing masks and gloves for employees, disinfection practices, continuous communication about health procedures for incoming tourists, and developing health and safety procedures for tourism service providers and travellers). The third strategy is related to innovation and digitization; the research participants were completely agreed with the innovation and digitization variables (e.g., digitizing entry tickets/booking to different sites, adoption of robots and service automation in the tourism and hospitality sector and accelerating the digitization of the tourist process to ensure it is fully online). Finally, the fourth strategy is related to sustainability, the participants were completely agreed with sustainability variables (e.g., stimulating sustainable tourism development practices, promotion of environmentally friendly activities and products, and promotion of sustainable forms of tourism and hospitality activities). The current research found that the application of suggested strategies will have an impact on the tourism and hospitality sector by reducing the negative effects of the Corona pandemic, building confidence with tourists and encouraging them to visit Egypt. This research will increase and contribute to the literature and research reviews for the development of tourism and hospitality activities during and after the Covid-19 era. Nevertheless, this research has some research gap the access for getting primary data was not easy for the study. Therefore, future research should try to test the findings of this research with
other countries and tourism and hospitality destinations to identify how to generalize the finding of this research.

References

- ETAA. (2018). Egypt Travel Agents association, URL [https://www.etaa-egypt.org/SitePages/CompaniesEn.aspx](https://www.etaa-egypt.org/SitePages/CompaniesEn.aspx)


- Estrategia de recuperación de la pandemia de COVID-19 -19 en la industria turística y hotelería en México

- من جائحة كوفيد-19 في صناعة السياحة والضيافة في مصر

- Technology

- محمد أحمد1

- الحسين علي1

- يحيى كمال عبده2

1 قسم الدراسات الفندقية، كلية السياحة والفنادق، جامعة الفيوم

2 قسم الدراسات السياحية، كلية السياحة والفنادق، جامعة الفيوم
الملخص

يعتبر قطاع السياحة من أهم القطاعات الاقتصادية على مستوى الاقتصاد العالمي وأكثرها
ديناميكية، لقد تركت جائحة كوفيد -19 جميع قطاعات الاقتصاد العالمي في مواجهة تحديات كبيرة.
ومما لا شك فيه أن قطاع السياحة هو الأكثر تضررا بين القطاعات الأخرى، فقد تسبب إغلاق الحدود
في جميع أنحاء العالم، وتشي العواء بشكل خطير في العديد من الأسواق الرئيسية المصدرة للسياحة
الدولية في تحديد حركة المسافرين سواء لمصر أو للدول المستقبلة الأخرى. وسبب هذه الجائحة يعاني
قطاع السياحة في العالم حالة من الشلل التام. و من المتوقع الا يتمكن
قطاع السياحة من التعافي إلا بعد
السيطرة على هذا الفيروس. لذلك أصبح من الضروري وضع إستراتيجيات وخطط لإدارة أزمة كوفيد -19
في قطاع السياحة والضيافة. لذا، تهدف هذه الدراسة إلى التعرف على تأثير جائحة كوفيد -19 على
قطع السياحة والضيافة واستكشاف استراتيجيات التعافي للحد من الآثار السلبية لهذا الوباء باستخدام
تقنية دلفي. تستخدم تقنية دلفي للوصول إلى إجماع بين الخبراء للحكم على استراتيجيات التعافي.
إعتمدت هذه الدراسة على المنهج الوصفي التحليلي لتحقيق الهدف الرئيسي للدراسة. وتم استخدام أسلوب
العينة الهرمية وعينة كرال الثلج (Snowball sample) وجمع البيانات من خلال المقابلات شبه
المنظمة. تم اختيار عينة من المدراء أو مساعديهم بالفنادق خمس نجوم (عدد
22) ومدراء وكالات السفر بالقاهرة (عدد 18)، بالإضافة إلى مجموعة من الخبراء والأكاديمين (عدد
8) وعمل مقابلات معهم للوصول إلى أكبر قدر ممكن للإجماع على إستراتيجيات التعافي للحد من
الآثار السلبية لهذا الوباء. فقد تم استخدام برنامج NVIVO-12 والفرع من التسجيلات والملاحظات المجمعة، ثم تم وضع المقابلات الشخصية في جدول بيانات
Excel وتحليلها بواسطة مصمم SPSS الذي يستخدم لتحليل البيانات الوصيفية. أشارت النتائج إلى تأثير
قطاع السياحة والضيافة في مصر بوباء كوفيد- 19. كشفت النتائج عن طرح إستراتيجيات للتعافي
من هذه الجائحة في السياحة والضيافة والتي تشمل: الطب، الصحة والنظام، الابتكار والرفاه،
الاستدامة. يقترح هذا البحث هذه الاستراتيجيات للمستقبلين في قطاع السياحة والضيافة للحد من التأثير
الساسي لأزمة كوفيد- 19 وإعادة نشاط السياحة والضيافة في مصر. ساهمت هذه الدراسة في وضع
الاستراتيجيات التحليلية من كوفيد-19 قطاع السياحة والضيافة.

الكلمات المفتاحية: كوفيد-19، السياحة والضيافة، إستراتيجية التعافي، الفنادق، وكالات السفر،
مصر.