

Applying the Integrated Model of Tourism to Study Impact of COVID-19 on Algerian Tourism Industry

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Abstract:

Algeria possesses huge and distinct tourism potentials, whether they are natural such as the desert and beaches, historical such as landmarks and events, or modern such as tourist resorts. This is what the government has been exploiting recently to strengthen the Algerian tourism industry. However, the spread of the COVID-19 epidemic had a sudden impact on all economic sectors, including the tourism sector. So that is why this study sought to determine Impact of COVID-19 on Algerian Tourism Industry. In this study, we have adopted the systemic approach via integrated model of tourism, which means study of tourism is as a set of integrated layers to determine the different impacts of COVID-19 on Algerian Tourism Industry.

To achieve the above objectives, we have taken the statistics of Algerian tourism during period of 2015-2020, from ministry of Algerian tourism. After analyze the data, the study has reached the following conclusion:

- 1. Because of COVID-19, the most affected Layer in the integrated model of tourism is the travelers layer;*
- 2. Declining the layer of travelers does not necessarily lead to the decline of all layers of the integrated model of the Algerian tourism industry.*

Keywords: *Tourism; Integrated Model; Algeria; COVID-19*

Jel Classification Codes : *Z31 ; Z32*

1. Introduction:

Algeria is an unknown and fascinating country, Algeria has huge physical and natural tourism potentials. There is alongside the Mediterranean sea, there is a coast bordered by beaches and coves, there is also the Sahara, its rock plateaus, its arid plains, its sand areas, the great Western erg, the great Eastern erg and its oases like Zibans, ...It was crossroads of the Mediterranean, Moslem and African worlds, Algeria inherited a number of Numidia and Romans sites, as well as Islamic sites and buildings. The government has reformed its legislation to ease foreign and local investments in the tourism industry. First results have been generated on the establishment of many touristic projects. In addition, the national hotel park is made up of hundreds establishments representing thousands beds. Besides the ministry of tourism has done many Advertising and promotional campaigns to attractive the touristic.

But the unexpected happened; an epidemic appeared that no one expected to appear. He imposed quarantine on everyone, state and people, citizens and foreigners. There was no solution to confront him except to stop completely. This caused complete paralysis in all sectors. It is called COVID 19, The tourism sector is the most sensitive sector to epidemics and diseases.

The tourism sector is the most sensitive sector to epidemics and diseases. Therefore, the effects of this epidemic will be achieved, and therefore this study came to determine the effects of the Corona epidemic on the tourism sector in Algeria, according to the integrated model. The latter does not view the tourism sector as a group of tourists only, but rather as a group of integrated elements that complement each other to form the tourism industry. The problem of this study is:

What is the impact of COVID-19 on Algerian tourism industry in perspective of the integrated model of tourism?

To answer this problem, we propose the following hypotheses:

1. Because of COVID-19, there is a decline in all layers of the Algerian tourism industry model;
2. Declining the layer of travelers will inevitably lead to the decline of all layers of the integrated model of the Algerian tourism industry.

Importance this study

- This study has a great importance because it deals with a sensitive sector in a sensitive circumstance, which is the tourism sector in the context of the Covid 19 epidemic.
- Using a new perspective to study the Algerian tourism sector by applying the integrated model to analyze the tourism industry.
- Utilizing recent data to develop the tourism sector.
- Evaluation of the major reforms undertaken by the government in this sector.
- Proposing some recommendations to stimulating and promoting the tourism sector in order to improve its contribution to the national economy.

Objectives

- Applying the integrated tourism model to Algerian tourism.
- Determining the number of existed layers in the Algerian tourism industry according to the integrated model.

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- Knowing the impacts of Covid-19 on each layer of the model: tourists, tourism agencies...
- Knowing the size of the impact of the layer of tourists, as it is the most important layer and the main pillar, on the other layers.

Methodology:

The study was conducted over the period 2015 to 2021, where it was divided into two parts, the period 2015-2019, which is the period of the actual advancement of the tourism sector by the government, and the period 2020-2021, which is the period of the emergence and intensification of the Covid-19 epidemic.

The quantitative approach has been adopted. Therefore, descriptive method and the case study method have been also used via reading various data and statistics across specific time periods, and trying to highlight the relationships between them in order to come up the results.

2. Discussing concept of Tourism Industry and its elements:

2.1. Defining Tourism Industry

To understand tourism as industry, firstly we need to understand the meaning of ‘tourism’. It is said that the needs of travelers worldwide—tourism! Tourism is the business of hospitality and travel. However, as we begin our study of tourism, it is important to know that these activities make a significant economic impact on almost every nation in the world! (Cook, Hsu, & Taylor, 2017, p. 4) In beginning, we will know what industry means, then knowing tourism as industry.

An industry is defined as a set of businesses that share in the production of a common product. A set of businesses must meet three criteria to be considered an industry: (Lew & Timothy, 2008, p. 24)

1. They produce essentially the same product;
2. They use essentially the same technology;
3. The product output is large enough to warrant data collection and reporting.

In these terms, an industry is a collection of firms that use similar processes to produce relatively homogeneous goods and services. On the other hand, the tourism product is an amalgam of a multiplicity of goods and services that is configured to meet visitors’ demands and drawn from a range of industries, from transport to retailing. (Fletcher, Fyall, Gilbert, & Wanhill, 2018, p. 8)

Services are growing at a faster rate than all agricultural and manufacturing businesses combined. In fact, tourism-related businesses are the leading producers of new jobs worldwide. (Cook, Hsu, & Taylor, 2017, p. 4) Since the middle of the last century, **the tourism industry** has emerged as an essential driving force in enhancing income levels for both developed and developing economies. The tourism industry presents a pivotal role in the economic development of countries with a tourism-related infrastructure. (Balsalobre-Lorente, Driha, & Shahbaz, 2021, p. 2)

Tourism is one of the largest service industries in the world. International tourism expenditures and receipt account for 30 percent of all international trade in services. The industry of tourism includes a large part of the recreation activities that occur on the planet, especially anything that is considered an attraction, as well almost all of the hospitality industry (hotels, restaurants and related businesses), and a good chunk of the transportation industry (especially airplanes, intercity buses and trains). Demand for travel and tourism continues to increase, especially as leisure time and economic well-being increase in the newly developing economies of Asia, Latin America, Eastern Europe and elsewhere. (Lew & Timothy, 2008, p. 24)

In establishing, the UNWTO (2001) decided to label tourism as a sector made up of a number of industries as defined by international standards (Fletcher, Fyall, Gilbert, & Wanhill, 2018, p. 8). By the way, according to UNWTO the term tourism industry includes those industries that

typically produce tourism characteristic products. The following list identifies such industries. The first ten are used for international comparability purposes: (UNWTO, 2021)

1. Accommodation for visitors;
2. Food and beverage serving activities;
3. Railway passenger transport;
4. Road passenger transport;
5. Water passenger transport;
6. Air passenger transport;
7. Transport equipment rental;
8. Travel agencies and other reservation services activities;
9. Cultural activities;
10. Sports and recreational activities;
11. Retail trade of country-specific tourism characteristic goods;
12. Other country-specific tourism characteristic activities.

Some researchers state ‘tourism is a relatively new industry that has grown rapidly becoming one of the world’s largest providers of employment and contributing 9.1 per cent of the world gross domestic product’. This large growth is due to tourism products needing to be consumed at the destination and involve an experience. (José, Braga, & Vanessa, 2020, p. 1) Tourism activities have historically demonstrated a general upward trend in numbers of participants and revenues. Tourism is one of the few industries that is sensitive to economic ups and downs, and yet at the same time rebounds quickly from any negative economic conditions or other environmental impacts. Even in the face of a dramatic credit crunch, an economic slump, and political uncertainty, the impact on international tourism was not as severe as the downturn experienced in foreign trade and industrial production.³ “Over the past six decades, tourism has experienced continued expansion and diversification, to become one of the largest and fastest-growing economic sectors in the world” (p. 2). (Cook, Hsu, & Taylor, 2017, p. 4)

The tourism industry is currently undergoing extensive change due to the strong market growth and the demand for more experience-based products and services. This transformation places great demands on tourism firms to adapt and develop new products. (Correia, Kozak, Gnoth, & Fyall, 2017, p. 4) The Austrian economist Josef Stradner (1890) highlighted the economic power of tourism when he stated that the range of snow-covered mountains that were once a barrier to Austria’s economic development had become part of the national wealth, and that ‘its income is represented by the amount of money that tourism brings to the country each year’ (Lohmann & Panosso Netto, 2017, p. 26).

2.2 Tourism Industry Elements

Tourism Industry includes the following elements: elements of movement (**transportation**), of remaining temporarily in one place (**accommodations**), consuming food and drink (which could be an attraction), and participating in activities (**attractions**).

The transportation sector generally includes airlines and airports, trains, buses, taxis, private automobiles, boats and ferries, the servicing and repair of these transportation modes, and travel agents and tour companies that facilitate transportation. **The accommodations** sector can include hotels, motels, resorts, campgrounds, the homes of friends and relatives, cruise ships, accommodation booking agencies and businesses that service these different accommodations.

Food and beverage consumption is often closely related to accommodations, though not always. The food and beverage industry includes all forms of restaurants and eateries (including those in hotels and at attraction sites), other providers of food and drink to tourists (including grocery stores), wholesalers who sell food and drink to restaurants, and businesses that provide other

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services to restaurants and food providers. The challenge in identifying **the attraction** sector further complicates definitions of the tourism industry. (Lew & Timothy, 2008, p. 25)

These four sectors (transportation, accommodations, food and beverage and attractions) contribute to providing a product called tourism. They are all service industries, which they market to a common clientele (tourists). Even though they are among the largest industries in the world, there is no clear and simple way to meaningfully aggregate their diverse products into a single generic product that can be compared to more traditional industries. This is because tourism is not a material product, but an experience that is purchased and kept more in your memory than in your living room. (Lew & Timothy, 2008, p. 26)

There is another classification of Components of the Tourism Industry that we can summarize it in the following table.

Table (1): Components of the Tourism Industry

Accommodation Services
Food and Beverage Services
Railway Passenger Transport Services
Road Passenger Transport Services
Water Passenger Transport Services
Air Passenger Transport Services
Transport Equipment Rental Services
Travel Agencies and Other Reservation Services
Cultural Services
Sport and Recreational Services
Country-Specific Tourism Goods
Country-Specific Tourism Services

Source: (Cook, Hsu, & Taylor, 2017, p. 5)

3. The Tourism product and The integrated Model of Tourism:

To understanding the integrated Model of Tourism we need to know the tourism product which is the common factor between all layers of the integrated model.

3.1. The Tourism product

3.1.1. Definition of Tourism product

Anything that can be purchased is a commodity. By creating tourist attractions, the tourism industry tends to commodity almost all aspects of the contemporary world. This is known as commodification. The UNWTO has defined a tourism commodity as any good or service for which a significant portion of demand comes from persons engaged in tourism as consumers. Significant portion is not defined, however, if we assume that this is more than 50 percent, and then a tourism commodity is any product or service for which at least 50 percent of the buyers are tourists. (Depending on the product, service and place, the tourist demand could be less than 50 percent.)

(Lew & Timothy, 2008, p. 27) Furthermore, almost anything can become a tourist attraction, with the right marketing. Attractions can include forms of transportation (e.g., Cable Cars), food and beverage (e.g., food).

In general, recreation activities become tourists activities (or tourism products) when they are provided by private sector companies who mostly service non-resident visitors. They are considered recreation products when visiting tourists comprise a minority of the clients served. (Lew & Timothy, 2008, p. 23)

3.1.2. Tourism and Non-Tourism Commodities

The major challenge in measuring the economic magnitude of tourism can be summed up as four dilemmas: (Lew & Timothy, 2008, p. 27)

1. Visitors consume both tourism and non-tourism commodities;
2. Residents consume both tourism and non-tourism commodities;
3. Tourism industries produce tourism and non-tourism commodities;
4. Non-tourism industries produce tourism and non-tourism commodities.

Many commodities that are purchased by tourists are also purchased by non-tourists. Food and drink, for example, is a product that is widely used by both tourists and local residents. They are a tourism commodity, they are a recreation–leisure–entertainment commodity and they are a basic needs commodity. In addition, the balance in the proportion of tourist and non-tourist consumption of food and drink will often vary among communities and neighborhoods, from one season to another, and on different days of the week.

3.1.3. The Characteristics of Tourism product

There are many characteristics of tourism product, but Holloway & Humphreys (20016) suggested four characteristics: Intangibility, Heterogeneity, Inseparability and Perishability. (Holloway & Humphreys, 2016, pp. 10-11) We will explain them as follows:

a. Intangibility

The first characteristic to note is that this is a service rather than a tangible good. This intangibility poses particular difficulties for those whose job it is to market tourism. The purchase of a package tour is a speculative investment, involving a high degree of trust on the part of the purchaser. It has often been said that ‘selling holidays is like selling dreams’. When tourists buy a package tour abroad, they are buying more than a simple collection of services, such as an airline seat, hotel room, three meals a day and the opportunity to sit on a sunny beach; they are also buying the temporary use of a strange environment, incorporating what may be, for them, novel geographical features – old world towns, tropical landscapes – plus the culture and heritage of the region and other intangible benefits, such as service, atmosphere and hospitality. The planning and anticipation of the holiday may be as much a part of its enjoyment as is the trip itself.

b. Heterogeneity

The challenge for the marketer of tourism is to match the dream to the reality. The difficulty of achieving this is that tourism is not a homogeneous but a heterogeneous product – that is, it tends to vary in standard and quality over time and under different circumstances, unlike, say, a television set. A package tour or even a flight on an aircraft cannot be consistently uniform: a bumpy flight, or a long technical flight delay, can change an enjoyable experience into a nightmare, while a holiday at the seaside can be ruined by a prolonged rainy spell. Because a tour comprises a compendium of different products, an added difficulty in maintaining standards is that each element of the product should be broadly similar in quality. A good room and fine service at a hotel may be spoilt by poor food or the flight may mar an otherwise enjoyable hotel stay. An element of chance is always present in the purchase of any service and, where the purchase must precede the actual consumption of the product, as with tourism, the risk for the consumer is increased.

c. Inseparability

One of the factors influencing the heterogeneity of the product is that often people are involved in the delivery of the service and this human involvement may not be consistent in behavior or demeanor. The interaction between the service provider – a waiter in a restaurant, for instance, or the holiday representative at a resort – and the customer can be influenced by the moods and emotions of each. But this highlights another characteristic of tourism: that it cannot be brought to the consumer. Rather, the consumer must be brought to the product and be present for the delivery of the service. This inseparability also means that the tourism product cannot be ‘manufactured’ at a place and time convenient to the supplier. For example, if the holidaymaker has been sold a guided tour then both the tour guide and the tourist need to be present at an agreed time and place for the transaction to take place.

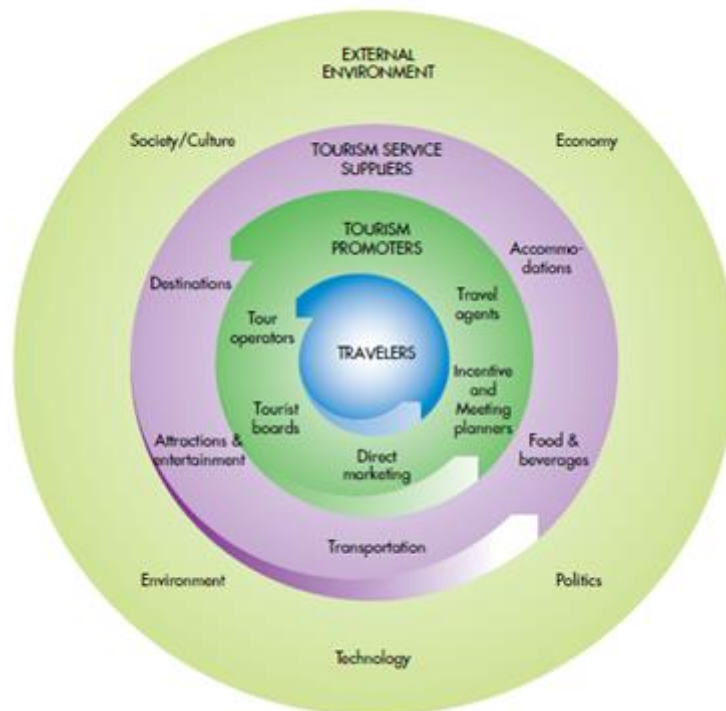
d. Perishability

A fourth characteristic of tourism is its inability to be stockpiled for future use. If the hotel room is not sold for a particular night then that ‘product’ is lost forever – no one would buy a hotel room for use last month! Similarly, the unsold aircraft seat cannot be stored for later sale, as is the case with tangible products, but is lost forever once the plane is airborne; hence the great efforts that must be made by those in the industry to fill empty seats.

3.2. The integrated Model of Tourism

The following figure presents an integrated model of tourism:

Figure (1): An Integrated Model of Tourism



Source: (Cook, Hsu, & Taylor, 2017, p. 6)

In an attempt to overcome some of the problems encountered in describing tourism, the model presented in Figure 1 was developed to highlight important participants and forces that shape the tourism industry.

This model includes three layers. When it have study this model, notice its open nature and how each of the segments is related to the others. Let's begin our study of tourism by looking at travelers (tourists), who serve as the focal point for all tourism activities and form the center of our model. Radiating from this focal point are three large bands containing several interdependent groups of tourism participants and organizations. Individual tourists often rely on the professional services provided by tourism promoters shown in the first band of our model. Tourism promoters, such as travel agencies and tourist boards, provide information and other marketing services. Moving to the next band of our model, we see key tourism suppliers who provide transportation, accommodations, and other services required by travelers. (Cook, Hsu, & Taylor, 2017, p. 7)

Tourism suppliers may provide these services independently; they may compete with each other; and, at times, they may work together. For example, airline, bus, railroad, cruise ship, and car rental companies may compete individually for a traveler's business. However, they may also team up to provide cooperative packages. Hotels and resorts may also compete against each other for the same traveler's patronage yet cooperate with transportation providers to attract tourists to a specific location. Service providers representing all segments of the tourism industry may often work together to develop promotional packages designed to attract tourists to destinations. (Cook, Hsu, & Taylor, 2017, p. 7)

How closely these individuals and organizations work together is ultimately influenced by the forces shaping the face of tourism activities. As our model shows, the tourism industry does not operate in a vacuum. All of the participants, either individually or as a group, are constantly responding to a variety of social/cultural, political, environmental, economic, and technological forces. These forces may range from subtle changes, which are noticeable only after many years, to more dramatic changes, which have immediate and visible impacts. Examples of these forces can be found all around us (Cook, Hsu, & Taylor, 2017, p. 7). For example, a country that was once avoided may suddenly become a popular tourism destination because it is more affordable or accessible. Conversely, a once-popular destination may be avoided because of a recent natural disaster or political upheaval.

4. Introduction to Algerian Tourism Industry:

4.1. Overview on Algerian tourism:

As it is known, Algeria is the largest Arab and African country. The Algerian people, with their customs, traditions, and glorious history, have many advantages that appeared in their clothes and delicious food. In addition, Algeria has huge, diverse and even contradictory tourism potentials. We find its north suitable for beach and forest tourism and mountain tourism. In the south, we find a vast, picturesque and impressive desert suitable for desert tourism.

Algeria is an unknown and fascinating country, Algeria's tourism potential is much greater than its natural resources and it's underestimated: (TOURISM ALGERIA, 2022)

- 1200 kilometers of coastal area.
- Mountains with an unspoiled nature offering the possibility of skiing in winter in some places.
- The Sahara, the largest desert in the world, most of which is located in Algeria.
- Vestiges of the Roman era for which Algeria was the granary of the Roman Empire.
- Non-standard art museums (fine arts among others).

Briefly, Algeria offers a huge number of diverse opportunities for the tourist (national and foreigner), with the possibility to swim in the Mediterranean sea in the morning, to ski in the Algerian ski resorts in the north, and to drink a mint tea in the Algerian Sahara in the afternoon.

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Moreover, the majority of airlines now serve Algeria, as well as ferries. The hotel industry in Algeria includes either luxury hotels or modest hotel rooms. On the other hand, car rental with or without driver has developed well in Algeria, mainly thanks to the private sector which has contributed also in developing a plenty of other touristic products. In general, the tourist can enjoy many wonderful tourism products such as: (TOURISM ALGERIA, 2022)

- Beach hotel resorts.
- Service apartments.
- Algerian Bed and Breakfast.
- Camping.
- Ski station.
- Flight services.
- Train services.
- Car rental.
- Ferries.
- Museum.
- Restaurants.
- Mosque visit (the world's tallest minaret and is the third-largest mosque in the world).
- Tour the Sahara by camel.

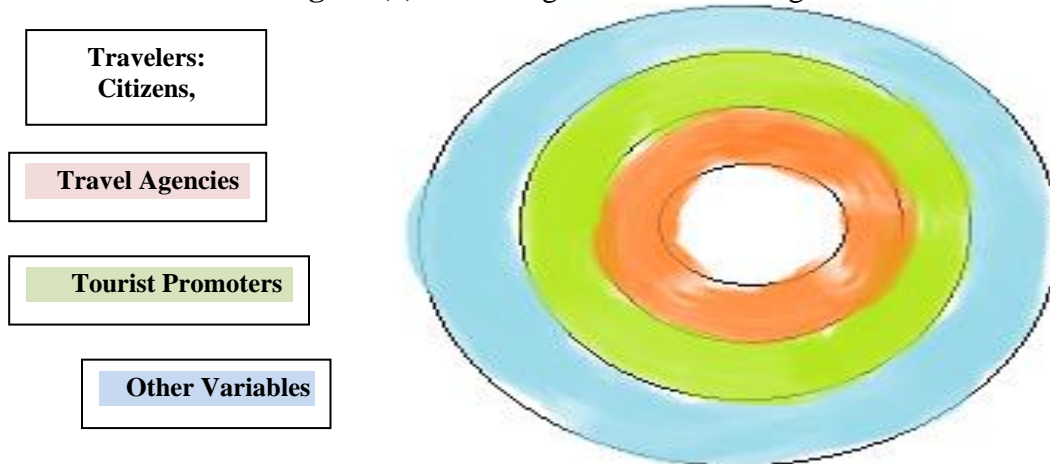
4.2. Applying the integrated model of tourism on Algerian case

According the integrated model of tourism that the tourism industry is set of elements which are as follows:

1. **Travelers:** include citizens and foreigners, as well as emigrates.
2. **Tourism promoters:** such as travel agencies and tourist resorts.
3. **Tourism suppliers:** such as transportation and hotelier
4. **Other variables:** they all variables which have indirect effects to tourism industry such as political or economic variable or diseases in our case

The following graph presents the case of Algerian tourism industry according the integrated model of tourism:

Figure (2): The Integrated Model of Algerian Tourism



In following element, we will study effects COVID-19 on each element of the integrated model of tourism.

5. Analyze the integrated model of Algerian tourism:

5.1. Effects on travelers:

The most prevalent tourist products in Algeria are summer tourism, Saharan tourism, and thermal tourism; therefore we will study each one alone.

5.1.1. Summer Tourism

The following table summarizes the numbers visitors to beaches in Algeria during the period 2015-2021.

Table (2): statistics summer season

	2015	2016	2017	2018	2019		2020	2021	
Beach visitors (unity= millions)	121,5	119,3	132	108	95		39	26	
Mean	115.16					-82.66	32.5		-71.78%

Source: (Ministry, 2022)

According to table, we have noted that numbers visitors during the period before the COVID-19 which is 2015-2019; the Algerian beaches received millions of vacationers at a rate 115.16 million vacationer per season. The max number of vacationers was 132 million in 2017, and the min number of vacationers during this period was 95 million in 2019. Perhaps the reason for this decline during this year is due to economic conditions and the conditions political.

As for the Corona period in the years 2020 and 2021, the beaches recorded 39 and 26 million vacationers, respectively, at a rate of 32.5 million vacationers per year, a decrease from the normal period by 82.66 million vacationers, i.e. a decrease from the average of the previous period by: 71.78%, which is a Huge percentage, reflecting the great impact of COVID-19 on the tourism industry in the aspect related to summer tourism.

5.1.2. Saharan Tourism

The following table summarizes the numbers visitors to desert in Algeria during the period 2015-2021.

Table (3): the evolution number of desert visitors

السنة	2015	2016	2017	2018	2019		2020
desert visitors	234 877	140 103	130 339	326 014	264428		140 275
						124.153-	%46.95-

Source: (Ministry, 2022)

We note from the above table, which represents statistics on the number of visitors to the Algerian desert during the period from 2015 to 2020. The period before COVID-19, i.e. the period from 2015 to 2019, the Algerian Sahara received thousands of arrivals, at a rate of 219,152 thousand visitors. The largest number that was registered was 326,014 thousand visitors in 2018, followed by 264,428 thousand visitors in 2019. The lowest number of arrivals during this period was in 2017, which was

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130,339 thousand. Perhaps the reason for this decline during this year is due to purely economic conditions.

As for the Corona period in the year 2020, the Algerian Sahara recorded 140,275 thousand arrivals, i.e. a decrease from the previous year by: 124.153 thousand arrivals, i.e., the percentage decrease is -46.95%, which is a high percentage that reflects the great impact of COVID-19 on the tourism industry in an aspect related to visiting the desert, i.e. Saharan tourism.

5.1.3. Thermal Tourism

Algeria possesses enormous natural capabilities to develop natural medical tourism, which is known as recreation tourism and physical health care. Perhaps among its most important components is Algeria’s possession of about 282 natural mineral baths. (Ministry, 2022) The following table summarizes the numbers visitors to the mineral baths in Algeria during the period 2015-2021.

Table (4): the evolution number of the mineral baths visitors

السنة	2015	2016	2017	2018	2019		2020	2021	
Visitors to the mineral baths	3 691 851	3 846 396	3 214 172	3 368 853	1 030 686		828 536	1 335 734	
	/	3030391.6				1948256.6-	1082135		-44.45

Source: (Ministry, 2022)

We note from the above table, which represents statistics about the number of tourists or what is known as visitors to the mineral baths during the period from 2015 to 2021. The period before COVID-19, i.e. the period from 2015 to 2019, the Algerian mineral baths received millions of visitors at a rate of 3.03 million visitors. The largest number of visitors recorded was 3.8 million visitors in 2016, followed by 3.6 million visitors in 2015. The lowest number during this period was 1.03 million visitors in 2019. Perhaps the reason for this decrease during this year is due to economic and political conditions.

As for COVID-19 period in the years 2020 and 2021, the Algerian mineral baths received 0.8 million and 1.3 million visitors, respectively, at a rate of 1.08 million visitors per year, a decrease from the normal period by 1.9 million visitors. That is, the percentage decrease from the average of the previous period is: -44.45%, which is a high percentage that reflects the great impact of COVID-19 on the tourism industry in the aspect related to visiting the mineral baths. Thermal tourism

5.2. Impact COVID-19 on Tourism promoters

Tourism promoters include two essential agents: Travel agencies and tourist Resorts.

5.2.1. Travel agencies

In Algeria, there are 4,267 accredited Tourism and travel agencies, including 716 branches, they provide 11,506 jobs. (Ministry, 2022) The following table illustrates the evolution of this agent.

Table (5): the evolution number of travel agencies

السنة	2015	2016	2017	2018	2019		2020	2021	
Travel Agencies	1643	2041	2220	2626	2942		3546	4267	

Source: (Ministry, 2022)

Tourist agencies are considered the basis of the tourism industry because they play the role of catalyst and mediator between all tourism activities, as they are the mediator between tourists and tourism products.

We note from the table that Algeria has thousands of tourism agencies, as the number of agencies was 2,942 agencies during the pre-COVID-19 stage in 2019. It is noted that tourism agencies are constantly increasing, even during the COVID-19 period, they did not decline, but rather their number increased in the first year of COVID-19 to reach 3546, and in the second year, i.e. year 2021, it became 4267 tourism agencies. This does not mean that tourism agencies were not affected by the COVID-19 crisis, but that the number of new agencies was much greater than the failed agencies, and this is due to the attractiveness of this sector. Thus, we can say that, in general, the tourism industry has not been affected by the COVID-19 on the side of tourism agencies. Even if some tourist agencies failed, they were compensated with new ones and more.

5.1.2. Tourist Resorts

Tourist resort means the use of land for one or more commercial accommodation units together with a wide range of recreational and/or cultural facilities in a resort style setting. It may also include associated facilities such as a restaurant (Dictionary, 2022). The following table illustrates the evolution number of Projects for Tourist Resorts in Algeria.

Table (6): the evolution number of Projects for Tourist Resorts

	2015	2016	2017	2018	2019		2020	2021	
Projects for Tourist Resorts	1 270	1 602	1946	2210	2455		2579	2585	

Source: (Ministry, 2022)

Tourism projects represent resorts and places of entertainment and spending fun times. It is considered as a tourist attraction, which is one of the most important components of the tourism industry according to the integrated model.

It is noted that the launch of new projects has witnessed a continuous upward pace, both in the period before COVID-19, which reached its maximum in 2019 with 2455 tourism projects. Or even during the two years of COVID-19, tourism projects did not stop. Whereas, the tourist resort projects were 2579 projects in the year 2020, and 2585 projects in the year 2021. This reflects the political will towards developing the tourism sector in Algeria, to overcome the epidemiological conditions.

We can say that the government is planning for the long term, which inevitably went beyond the COVID-19 stage, and this has led to the continued pace of launching and constructing new tourism projects in the sector.

5.2. Impact COVID-19 on Tourism suppliers

When we talk about tourism suppliers, we must talk about accommodation. The most important element to achieve accommodation is the hotels. In Algeria, the national hotel park is made up of 1,502 establishments representing 132,266 beds. (Ministry, 2022) The following table illustrates the evolution of this sector.

Table (7): The situation of national hotel park

السنة	2015	2016	2017	2018	2019		2020	2021	
Total Number of Beds	102 244	107 420	112 264	119 155	125 676		127 614	132 266	
Growth Rate	/	5.06	4.50	6.13	5.47		1.54	3.64	

Source: (Ministry, 2022)

Hotels are one of the most important criteria for evaluating the tourism potential and capabilities of a country. And even the hotels themselves have become a tourist destination because of the amenities and entertainment they offer, or for what characterizes some hotels, whether in their urban structure or cultural character.

Algeria has thousands of beds in various types of hotels (see Appendix No. 1), where the total number of beds before the COVID-19 period was 125,676 beds in 2019. It is noted that hotels have experienced continuous growth, and even during the COVID-19 period, they did not decline, but rather the number of their beds increased. In the first year of COVID-19, it was 127,614 beds, and in the second year, i.e. year 2021, it was 132,266 beds. This means that hotels have not been affected by the Corona crisis. Even most of them were used as quarantine accommodations, whether for cross-border travelers or temporary residences for health workers who were fighting the epidemic.

5.3. Impacts COVID-19 on Other variables:

There are many variables that have indirect relation with the tourism industry like as social and political variables, but in this study we will focus only in economic variables because its importance. The most important indicators to evaluate the state of any economy are balance of payments and Gross domestic product (GDP).

5.3.1. Evolution of the balance of payments – travel item

Balance of payments presents neat and clear picture to situation external trade of the country. Balance of payments includes tourism in travel item. The following table illustrates evolution travel item during.

Table (8): Evolution of the balance of payments – travel item

	2015	2016	2017	2018	2019		2020	
Revenues	304	209	140,5	169	165		42.9	
Expenses	677	475	580	494	500		232.6	
Difference	373-	266-	439.5-	325-	335-		189.7-	

Source: (Ministry, 2022)

From the perspective of the balance of payments, the travel item or the so-called foreign tourism item has always been considered a debit account, meaning that its expenditures are greater than its revenues. But to get a clearer idea, we calculated the difference between revenues and expenses,

which was always in favor of expenses. Where the highest differences were recorded in the period before COVID-19, where it was 677 million dollars in 2015 and 500 million dollars in 2019. But in the year 2020, which represents the first year of the emergence of the COVID-19 epidemic, the difference was 189.7 million dollars, which is the lowest difference recorded. This means that COVID-19 contributed to reducing the negative effects of the tourism sector on the national economy, as it was a consumer of wealth rather than a generator of value. This is due to the fact that most of the tourism was outbound and not inbound.

5.3.2. The evolution of tourism's contribution to GDP:

GDP is abbreviation of gross domestic product which means the total value of goods produced and services provided in a country during one year. The following table illustrates the evolution of tourism's contribution to GDP in Algeria.

Table (9): The evolution of tourism's contribution to GDP

السنة	2015	2016	2017	2018	2019		2020	
GDP (%)	1,3	1,4	1,6	1,7	1,8		1,1	

Source: (Ministry, 2022)

As for the contribution of the tourism sector to the gross domestic product, it was increasing in the period before COVID-19. The best contribution to this sector was 1.8% in 2019. However, the upward pace witnessed a decline for the first time during the COVID-19 period in the year 2020. This means that the direct reason for the decline in the contribution of this sector to the gross domestic product is the Corona epidemic.

6. Conclusion:

6.1. Results:

We have recorded several general results, including:

- A significant decrease in the number of beach vacationers;
- A significant decrease in desert tourists;
- A significant decrease in visitors to the mineral baths;
- The drop in vacationers is much greater than that of other tourists, perhaps because it is more famous;
- The increase in the number of tourism agencies despite the epidemic;
- A rise in tourist resorts despite the epidemic;
- A rise in the hotel sector;
- Decrease in the balance of payments - travel item;
- Decreased contribution of tourism to GDP;
- The most important tourism products in the tourism industry in Algeria are traditional tourism products.

As for the results related to the hypotheses, we conclude the following:

- The first hypothesis, which is that: 'Because of COVID-19, there is a decline in all layers of the Algerian tourism industry model.' is partially accepted, i.e. it have achieved only in the first and fourth layers;
- As for the second hypothesis, which says: 'Declining the layer of travelers will inevitably lead to the decline of all layers of the integrated model of the Algerian tourism industry', it is

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wrong. This is due to the attractiveness of the tourism industry, in addition to the importance of innovation in achieving adaptation, by offering products suitable for every circumstance.

6.2. Suggestions:

Based on the results obtained through this study, we suggest the following:

- Adapting to the crisis, even if it lasts forever, there is always a need for luxury and comfort, i.e. a need for tourism;
- Promoting and spreading the culture of health tourism to confront epidemics, as well as health tourism as an alternative to quarantine;
- Encouraging luxury tourism at lower prices;
- Transition from mass tourism to selective tourism;
- Strengthening cooperation between different layers of the industry;
- Promoting sustainable tourism;
- Promote and support cultural tourism.

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