INTRODUCTION

Air Transport and Regional Development is a rapidly growing process, promoting Air Transport, tourism and connectivity.

In this context, it is important to find out the influence of Aviation on the Tourism Industry, critical issues as benefits and cooperation in Air Transport and Tourism. Additionally, the data arrivals by world region, travel facilitation-measures, connectivity and tourism demand in the Air transport industry, tourism towards 2030 and further expectations are elements of a great importance generating subject of serious scientific consideration.

Air Transport and Tourism are two interlinked areas with important interdependencies.

The implications for Air transport in tourist destinations are subject to a wide range of specificities that design the operational, technical, economic and regulatory framework in which relevance and compatibility are segments of high importance that generate a level of quality services within the global world as a whole.

Air transport facilitates integration into the global economy, provides vital connectivity on a national, regional and international scale, and offers a safe, convenient, reliable, frequent, and consumer-centered service.

Air transport industry generate trade, promote tourism and create employment opportunities.

Tourism was a driving factor and enabler of many developments in air transport as new business models like charter emerged. On the other hand air transport did lay the grounds for entirely new destinations or tourism forms like long haul excursions.

In this contribution these interlinks are going to be analyzed based on a system model. As a key influential factor the type of business model turned out to be decisive for the influence of a destination as well as for an airline.

For the strategic development of destinations a clear airline policy and air access strategy seems to be necessary. By shaping the external regulative environment of air traffic, the government may influence air traffic and tourism.  

1. AIR TRANSPORT

Air transport is an important enabler to achieving economic growth and development. Air transport facilitates integration into the global economy and provides vital connectivity on a national, regional, and international scale. It helps generate trade, promote tourism, and create employment opportunities.

The specifics of Air transport:

- main mode for international tourism,
- plays a dominant role in inter-regional movements of tourists,
- attractive package tours,
- competitive airfare attract tourists,
- requires efficient infrastructure.

1.1. LOW COST CARRIERS AND DEMAND

The Low Cost Carriers-LCC often set up bases in nearby countries as their brand awareness becomes more established. The main aim of the LCC is focusing:

- at stimulating demand particularly from fare conscious leisure and business travelers to widen existing markets,
- to develop markets neglected by competitors.

LCC opens more routes and offers flights at a

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1. A. Wittmer,T.Biege, Air transport and tourism-Perspectives and challenges for destinations, airlines and governments,governments,Journal of Air Transport Management 12(1)DOI:10.1016, January 2006,
higher degree of frequency. It is essential to mention that the emergence of LCC has created a gradual evolution in European tourism.

The recent growth of low-cost carriers have had a definite impact on the economic growth of the entire territory, where those choices could determine the life or the death of firms and, inevitably, their annual incomes.3

1.2. CRITICAL ISSUES IN AIR TRANSPORT AND TOURISM

In respect of the air transport and tourism and their mutual connectivity, three salient issues facing International commercial Air transport and their resulting implications for global tourist follows:

1. The wider aero political environment is reviewed,
2. Recent developments in airline operations,
3. Carbon pricing on aviation.

Air transport and tourism are based on interdependence and interconnectedness

Air transport is an integral part of the tourism industry. Interdependence and connectivity between Air transport and Tourism research especially from the destinations point of view.

The airline industry today ranks first in the list of leading business sectors in the Tourism Industry in terms of revenues generated by air transport, followed by the hotel industry and tour operators

Air transport characterized by growing interest which includes:

- Destinations,
- Air routes,
- Service development,
- Passenger rights,
- Carriers and their impact on tourism etc.

Air transport is an integral part of the tourism industry

Interdependence and connectivity between Air transport and Tourism research especially from the destinations point of view.

The development of Air transport and tourism is subject of higher consideration which:

- Relies heavily on each other,
- Lead to both positive and negative outcomes.

This interrelationship is taken into account, either implicitly or explicitly:

- In the business models adopted,
- In some cases airlines get involved in the planning and development of tourist destinations,
- In advertising initiatives and the planning of airport access facilities.

2. ROLE OF AIRLINES IN THE TOURISM INDUSTRY - THE ATTRACTIVENESS OF TOURIST DESTINATIONS

The concept discuses approach to assess travel attractiveness of a tourist destination. It is based on calculating the link number of the official websites of the tourism attractions within the destination and analyzing the spatial distribution of the links. The approach is extended to the destination scale and a new travel attractiveness appraising method based on link analysis is proposed. The process includes four steps:

1. Ascertaining the range of a tourist destination;
2. Confirming the tourism attractions in the range of the tourist destination. The common confirming methods include confirming by the local tourist guide to determine the attractions, by the determination of the local commercial companies and by the determination of the administration;
3. Calculating the travel attractiveness of each tourism attraction. Guided by the previous research conclusion the travel attractiveness of a tourism attraction can be indicated with the link account of its official website;
4. Confirming the travel attractiveness of the tourist destination by the travel attractiveness

of each tourism attraction. Because every attraction has its own influence toward the attractiveness of the tourist destination, the travel attractiveness of the destination is not simply equal to the summation of the attractiveness for each tourism attraction, but must be calculated with its own weight.4

2.1. DESTINATIONS

No destination in the world can become a tourist destination if there is no proper access to it. The lack of adequate access to one destination is one of the biggest drawbacks for tourism development and investment in the destination. The important factors are:

- accommodation,
- activities offered by the destination,
- attractions,
- local amenities (traditional offer).

Tourist destinations are a central feature of tourism and the focus of much tourism research. Destinations have been studied from diverse perspectives using multiple concepts and a range of approaches. As a result, destination research today has become increasingly fragmented as studies have become more specialized.

There is a need for a more integrated approach, one which systematically draws together these different research threads to provide a comprehensive and coherent picture and a fuller understanding of destinations, their structure and how they function.

The tourist destination concept is drawn together around two major structural themes: spatial and organizational structure.

Spatial structure concerns the physical location, distribution, configuration and interconnectedness of products, services and actors and the factors which underlie the resultant patterns of these.

Organizational structure focuses on the diverse configurations and the ways in which multiple actors, collectively and individually, come together, interact and behave to produce the experiences sought by tourists.

Destination research today has become increasingly fragmented as studies become more specialized. This book provides a systematic examination and combines spatial and organizational structure across destinations from the national to the local scale to produce a comprehensive understanding of destinations and a complete integrative framework of them.5

The tourist destinations have specifics defined within transport policies and decisions of governments. Air transport is far advanced than the transport mode and has revolutionized the geographical aspect of distances. The most remote areas can now be attained, any journey around the world can be measured in terms of hours of traveling.

It is important to be underlined that the International tourism is no longer an ongoing adventure.

In this respect it is worth noting that the tourist destinations often have an incentive to invest in local (regional) airports.

Various reasons have been increased the value component of air traffic and new emerging models of tourism expressed through destinations becoming more accessible, level of reasons to travel, sightseeing - historical, cultural, social, technological sights, relaxation - beach and mountain resorts, sport - mountain, climbing, skiing, surfing, scuba diving, special Interest - Study tours on art, history, religion, culture and science, shopping - personal and professional, business Governmental - political, cultural, social and scientific reasons.

Destinations offering important natural or man-made attractions (such as historic cities) are traditionally served by network carriers that find them a suitable base for their mixed traffic streams.

Destinations with large number of decentralized managed second homes, and thus a need for flexible traffic connections, provide a good market for LCCs, including the following:

- Traditional hotel destinations,
- Provide a good basis for charter services-

4 Lili Song; Lina Qi; Ji Qi; Kun Wang; Xiaojing Liu, IEEE Xplore, Evaluation of the attractiveness of tourism destinations based on link analysis, DOI: 10.1109/GEONFORMATICS, 2010

5 D.Pearce, Victoria University of Wellington, New Zealand, Torist destinations, Tourist Destinations: Structure and Synthesis, 2020
especially in exclusive segments for network carriers and regional airlines,

- Provide a good basis for charter services—especially in exclusive segments—for network carriers and regional airlines.

**KEY POINTS**

Natural resources -beauty or local culture combined with the man-made infrastructure that is available, including:

- Hotels,
- Restaurants,
- Shopping centers,
- Entertainment venues.

**Interlinked elements**

Natural resources can make an excellent basis for the development of:

- Infrastructure;
- Beach resorts,
- Skiing centres,
- Ecotourism,
- Leisure purposes,
- Infrastructure can be integrated with the natural resources or local culture to generate synergies that stimulate demand from tourists even further.

**Important elements**

Destination from the conceptual framework:

- The essential tool for planners, economists, analysts and researchers regarding the business relationship of Air transport and tourism industry,
- Role of Air Transport in tourism,
- Destination research today has become increasingly fragmented as studies become more specialized. This book provides a systematic examination and combines spatial and organizational structure across destinations from the national to the local scale to produce a comprehensive understanding of destinations and a complete integrative framework of them.

## 2.2. TOURISM ACCESSIBILITY

Air transport has made traveling more affordable and convenient for destinations, evolved and became very much commercialized and developed. Indicator for tourist arrivals, which increases tourist receipts to the country. One of the many factors that influence the development of tourism in a region.

Physical and market access to the destination are important and contribute to the attractiveness of a region able to reach areas that have been previously seen to be inaccessible or remote.

Internationally based in terms of its network across countries. The efficient network of air travel provides access to remote regions and is considered as tourist destinations.

**The importance of accessible tourism**

“Accessible tourism” enables people with access limitations in mobility, vision, hearing and cognitive dimensions to function independently and with equity and dignity by delivering universally designed tourism products, services and environments (Darcy and Dickson, n.d.). According to the European Network for Accessible Tourism (ENAT, n.d.) accessible tourism includes:

- Barrier-free destinations: infrastructure and facilities.
- Transport: by air, land and sea, suitable for all users.
- High-quality services: delivered by trained staff.
- Activities, exhibitions, attractions: allowing everyone to participate in tourism.
- Marketing, reservation systems, websites and services: information accessible to all.  

**The increase in tourist arrivals is result of:**

- Market diversification,
- Liberalization of air access,
- Increased seat capacity.

**Stakeholders**

Stakeholders to take part to develop tourism in their regions:

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• Government,
• Local community,
• Business sector,
• Advertising companies,
• Tour operators,
• Tourism sector is one of the main important sectors of the economy,
• Difficult to think of the tourism sector without transport.

Influence of Air transport on Tourism Industry

Tourism depends on Air transport to bring visitors and the Air transport depends on Tourism to generate demand for its services.

2.3. THE FACTORS STIMULATING THE DEVELOPMENT OF AVIATION TOURISM

Benefits for the airline industry resulting from the elimination of these barriers will be significant. This will expand the whole aviation sector, and as a result of these activities the effects shall be the following:

• development of the entire sector, and as a result of these activities there will be more and more air carriers offering services between States concerned,
• improvement services quality,
• the increase of the general level of security,
• the modernization and expansion of the airports to adapt to handle increased demand, thanks to increased demand for travel by air;
• at the same time there will be a decline in the unemployment rate caused by the increase in employment in various companies of the aviation sector.

We can find a lot of benefits for the development of tourism coming from liberalization. Thanks to competitive prices and continually increasing offers of air connections to various places in the world, demand for tourism is growing. At the same time it should be pointed out that the elimination of the barriers mentioned above may have a positive effect on the development of tourism. It should be noted the example of the Member States of the European Union, which have abolished the visa requirement between themselves, and the institution of internal border controls was abolished in the prevailing area.

Thanks to this facilitation, tourism is being developed between Member States, i.e. the Schengen area. More and more tourists are travelling by air; as it has become easier and without cumbersome control procedures.

Tourist activities include benefits for many hotel companies, catering, transport. Many countries in the world are bent on the development of tourism, as it is an important factor consisting in the Gross Domestic Product (GDP) of each State.

Tourism in many countries can grow almost exclusively on the basis of the air transport sector; as it is almost the only means of transport for tourists who are visiting the country.

Another factor stimulating the development of aviation tourism is the safety of this mode of transport.

Air transport is one of the most secure means of communication. Accidents, though sometimes very spectacular and causing the death of all or many of the passengers, are extremely rare, taking into account the degree of intensity of the number of journeys. This is due to at least two main reasons:

1. The technological quality of manufactured aircrafts is becoming more perfect. The aerospace industry uses all the latest technical solutions in order to increase the safety of passengers and crew.
2. A large degree of aviation safety is due to the existence of modern forms of satellite navigation.

With this technology it is possible to more secure control and air traffic management. The most important satellite navigation systems include: the American system GPS (Global Positioning System), Russian Glonass and European Galileo, which is currently being implemented. Galileo should be available for all civil users not until 2020, after all 30 navigation satellites are put on geostationary orbit.

This will be the breakthrough of the navigation system for the world, as it will cut the monopoly of the present American GPS system. Europe will have its own independent navigation
system with more benefits for users, including tourism.

2.4. RULES FOR THE ORGANIZATION OF AVIATION TOURISM

Today the market of aviation tourism organizers in the world is a network of many enterprises, institutions and organizations who are interrelated. Organizers of air travel must provide attractive services at a suitable level of quality. Both national and international organization of trips by air, requires formal qualifications of personnel and expertise (specialization) in this area.

Thanks to this mutual connections of the tourism industry and air transport also increases employment in these sectors. The proper functioning of the system of air tourism organization is indispensable, to minimize or exclude the hazard of human factors in the preparation of the tourism trip.

The main tasks of air tourism providers include:
- to provide tourists with a comprehensive offer of events (the creation, promotion and sale),
- attention to the relationship with the consumer when concluding contracts for the supply of tourist services based on air transport at a proper level,
- consumer rights' protection arising out of contracts for the supply of tourist services,
- responsibility for the implementation and organization of services (air packages),
- taking into account any additional services and benefits that make up the comprehensive tourist event related to air transport.7

3. DIGITAL TOURISM: INFLUENCE OF E-MARKETING TECHNOLOGY

Tourism is an activity of immense socio-cultural and economic phenomenon, as it facilitates economic growth and regional development. The advancements in the communication process, technology and transportation facilities, progress in the educational standards, changes in public lifestyle and spending habits, and increased stress in life make people have more empathy towards tourism. Tourism is a dynamic source of income to the economy as it complements a country’s Forex reserves.

A significant development in the tourism sector boosts the economy of a country, and, in return, it improves the infrastructure and creates employment opportunities. Besides good infrastructure, tourism also needs developments in specific areas, such as hotels and roads, efficient telecommunication, banks, health care, and security facilities, which seems promising enough to attract tourists across the world (Katta & Patro, 2019).

In tourism, the primary goal of marketing is to capture tourists’ attention in a particular destination and further assist them by creating interest in the destination by showing their mythical stories, scenic beauty, or any other cultural aspects. Once the interest is formed, the desire to visit that particular destination is created, and it becomes quite easy to take the tourist to the destination with an appropriate action plan and attractive deals. Thus, tourism’s marketing process begins from encouraging the tourist to visit the destination to perceiving his experience and suggestions after the tour/trip ends. Yasmin, Tasneem, & Fatem (2015) stated that digital marketing includes the elements such as online promotions, e-mail marketing, social media marketing, affiliate marketing, search engine optimization and pay per click (Mkwizu, 2019).

In today’s competitive environment, marketing is much more important than the production and sale of the product/service. Despite much potential and possibilities, lack of attention towards tourism marketing and mode of promoting the packages, the tourism sector is not achieving considerable progress (Lamsoo, Niroomand, & Rafsanjani, 2013). An extensive range of media is available for promoting the tour packages which includes print media such as newspapers, magazines, banners, etc., and electronic media including radio, television, and the Internet (digital marketing). Information

Technology (IT) has made the marketing of products/services easier and cheaper, where a person from anywhere in the world can check the tourist’s destinations.

The expectations of the public are rising day by day. These new aspirations are the driving force behind the transformation of public service delivery, primarily in high-impact areas, such as health, education and social benefits. The Internet made convenient for certain services like travel bookings, food orders with mobile apps, comparison among these services, and government services have become inevitable. People expect more awareness, agility, and responsibility from government services. The digital revolution in governance and public service delivery with the improved information and communications technology (ICT) is increasing the productivity and efficiency of the tourism sector. It is enhancing digital customer experience and also promoting connectedness with users (ASSOCHAM-PwC, 2017).

The rapid growth of the Internet, technological infrastructure and the social network have redefined the rubrics of marketing worldwide.

The economic globalisation and privatisation have increased the competition in every sphere of life. In the digital era, the marketing of products and services have also been more important to the service providers (Sharma & Hazarika, 2017).

Before the launch of a product, it is necessary to determine its marketing and promotional strategies. At present, digital marketing has become the key focus area for the tourism sector all over the world. From convenient booking engines to creating customised experiences, e-marketing has helped the tourism sector reach out to a wider audience, which was not possible with traditional marketing. People can easily access the required information of the tourism services such as accommodation, travel, food and activities, among others, by connecting to the Internet through desktops, laptops, mobiles and other devices.

Tourism is one such affected segment with digital development.

The travel and accommodation segment use digital marketing systems to engage the public and make sure their customers have the best possible retreats (Yolodigital, 2019). Therefore, digital marketing is the unsurpassed means to influence a large audience faster and at a lesser cost.8

4. AIR CONNECTIVITY AND BUSINESS SECTORS AS TOURISM

Air transport development is a key driver for growth in national and international scale. The key objective of this paper is to quantify the socio-economic impact of air transports on regions heavily dependent on tourism. By a top-down analysis, the trends and characteristics of tourism and aviation are highlighted, providing the linkage between these two industries. According to a systemic approach the concept, the methodology and the results are analyzed, providing the framework for similar applications.

The numerical application is Greece, which is a very attractive tourist destination on one hand; and suffers from economic stress on the other. Conventional wisdom is to provide an easy to handle tool appropriate for relevant applications; and highlight key messages to decision makers and stakeholders. In this paper a socio-economic impact assessment modeling framework is constructed.

The methodology based on income-expenditures concept used to quantify the direct-indirect-induced effects of air transports and the spillover effects of air transports to the tourism industry and, finally, to the local or national economy.

The spillover economic effects involve identifying the key supply chain linkages in the transportation sector and the quantification of air transport in enabling tourism activity and inducing spending by visitors in the domestic economy, referred to as catalytic impact. Finally, the analysis provides results regarding the impact of aviation on key economic indicators and business sectors at a regional or national scale.9

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8 Chandra Sekhar Patro (Gayatri Vidya Parishad College of Engineering (Autonomous), Impact of New Media in Tourism, 2021, Pages: 21 DOI: 10.4018/978-1-7998-7095-1.ch018 Benefits of Air Transport,

9 Dimitriou J., Dimitriosa, Mourmouris C.Johnb, Sartzetaki F. Mariac, Published by Elsevier B.V. Peer-review under responsibility of WORLD CONFERENCE ON TRANSPORT RESEARCH SOCIETY, Elsevier, 2017
4.1. AIR CONNECTIVITY AND ECONOMIC REGULATION

While there is no universally agreed definition of ‘air connectivity’, the general understanding is that it is an overall measure of the level of service - the range and economic importance of origins/destinations, the reliability and frequency of flights and connections - available through a country’s aviation system linkage to the global air transport network. The higher the level of connectivity, the greater will be the level of access to the global economy.

Policies limiting air connectivity present one of the major barriers to growth of travel and tourism.

This was recognized by UNWTO’s Executive Council which decided that promoting increased air connectivity shall be one of the priorities of the Organization.  

4.2. AIR CONNECTIVITY AND BUSINESS SECTORS AS TOURISM

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4.3. COOPERATION- AIR TRANSPORT AND TOURISM

Condition for sustainable planning and development.

Actors choose to cooperate establishing relation-based cooperation occur jointly or in substitution, depending on the context and the subject of research.

Tourism and connectivity are strictly related, thus showing deficiencies of the area in terms of accessibility, as well as the trade-offs between the different government (central and local) investment policies and the specific benefits emerging from the airport in the regional mobility.

**International arrivals by Country**

The map shows the number of tourists by country. France is today the country that receives the most tourists.

**Travel facilitation-measures**

A solid networking protected mechanism has been created in order to enable transportation and tourism providing of services. Mainly, the framework is consisting as follows:

- Border protection agencies, airlines, airport authorities and destinations,
- Taxes and duties,
- Consumer protection,
- Climate Change.

**Travel Industry- Factors**

Factors changed which fundamentally altered the dynamics of the travel industry.

1. Distribution
   - Tour operators,
   - Travel agents.


5. TOURISM TOWARDS 2030

The number of International tourist arrivals worldwide is expected to increase by an average 3.3% a year over the period 2010 to 2030.

**International tourist arrivals will:**

- Long-term outlook and assessment of future tourism trends
- Increase by some 43 million a year, compared to an average increase of 28 million a year during the period 1995 to 2010.
- UNWTO’s recently updated.

**Expectations - Global tourism transport towards 2030**

UNWTO Tourism Towards 2030 is a broad research project in continuation of UNWTO’s work in the area of long-term forecasting initiated in the 1990s and aims at providing a global reference on tourism future development.

Following the long-term forecast series of reports

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10 UNWTO (2012), Executive Council- Ninety-third session, Madrid, Spain
Tourism 2020 Vision, the Tourism Towards 2030 - Global Overview report updates international tourism projections through 2030.11

Emerging economy destinations of Asia, Latin America, Central and Eastern Europe, Eastern Mediterranean Europe, the Middle East and Africa will grow at double the pace (+4.4% a year) of advanced economy destinations (+2.2% a year).

Forward planning by tourism destinations that include reviews of the external operating environments faced by airlines. Assist with securing accessibility and connectivity

- 57% of International arrivals will be in emerging economy destinations (versus 30% in 1980),
- 43% in advanced economy destinations (versus 70% in 1980).

Air transport will continue to increase its market share, but at a much slower pace.

**Forecast - by regions**

The biggest growth will be seen as follows:

- Asia and the Pacific, where arrivals are forecast to increase by 331 million to reach 535 million in 2030 (+4.9% per year),
- The Middle East and Africa are also expected to more than double their arrivals in this period, from 61 million to 149 million and from 50 million to 134 million respectively.
- Europe (from 475 million to 744 million),
- America (from 150 million to 248 million) will grow comparatively less.

### 6. CONCLUSION

Most of the travel destinations rely almost entirely on air services for their visitor traffic. Air transport facilitates integration into the economy and provides vital connectivity on:

- National,
- Regional,
- International scale between countries,
- Promoting tourism growth,

Create employment opportunities in tourist destinations.

Over time, the rate of growth will gradually slow down, from 3.8% in 2011 to 2.5% in 2030, but on top of growing base numbers. The total economic impact of travel and tourism can be assessed by measuring current and capital expenditures in each of the fields including those by:

- consumers,
- businesses,
- government.

The adequate system of Air transport is an essential requirement for the successful development of tourism to many destinations. The emergence of LCCs contributed to the increase in tourist arrivals.

There is a powerful synergy between the development of International Air transport and International tourism.

Air transport contributes to consumer welfare and travel and tourism provide substantial social benefits, including:

- Increasing understanding of different cultures and nationalities which facilitates closer international integration,
- Improving living standards by widening choice

Air transport contributes to sustainable development and makes a major contribution to sustainable development by supporting and promoting international tourism.

Tourism helps reduce poverty by generating economic growth, providing employment opportunities, increasing tax collection, and by fostering the development and conservation of protected areas and the environment.12

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