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Introductory Chapter: Managing an Unprecedented and Extraordinary Growth

Arif Sikander

1. The stage

Air travel remains a large and growing industry. There is no doubt that aviation has helped accelerate economic growth. With a booming population in Asia and with more reliable and comfortable aircrafts in the air, air travel is expected to rise exponentially across the world and particularly Asia. Flying which used to be a myth is now becoming affordable and as such growth in aviation is extraordinary [1].

The entry of China in the development of new aircraft, e.g. C919, will bring the competitive field to a playing level which is currently dominated by Airbus and Boeing. This competition is supposed to reduce the cost of travel further and make air travel more affordable, thus further accelerating the growth. The growth in the number of flights and as such the aircrafts will also result in the growth of airports and jobs. This will bring a radical change in the aviation industry. The government and the private sector will see new opportunities and challenges. This will require new sets of management tools and expertise and provides opportunities in academics to develop such instruments to exploit the opportunities.

2. Contributory factors

The inevitable growth in aviation is attributed to a variety of factors. A major factor contributing to this has been the rise of the middle class in countries like Brazil, Russia, India and China (BRIC). The affordability of the middle class has supported the airline industry in terms of leisure and business travel. This has been mainly due to reduction in the cost of air travel among intense competitions. The low-cost airlines have been a vital source in making this travel possible for those who never dreamt of travel.

Improvement in safety due to more reliable aircrafts, engines, aircraft components has eliminated accidents and provided impetus to air travel by people in villages and rural areas who were fearful to travel in the past. The fatality rate has been drastically reduced making scheduled passenger airline service more safe. The year of 2017 was safest year for air travel as fatalities fell to 79 deaths compared to 1000 deaths in 2005 [2].

Increase in routes due to both reliable and fuel-efficient short-distance and long-distance aircraft availability has provided impetus to this growth in air travel [3]. The establishment of industries by the USA and other countries in China has also been a major factor in terms of establishing new routes to and from China for the people from these countries working over there.

With the financial crisis still looming over many countries, tourism has been adopted as a tool for economic growth. This has tempted people to travel to countries (affordable travel cost) which they would have avoided previously. Even the countries which either have not seen the financial crisis or are well-off have been marketing tourism, thanks to the availability of new routes and the cheaper airfares. Many long-distance direct flights are being planned in the coming years towards tourism to boost their economies.

Another factor providing boost to this sector is the code sharing. Major airlines are partnering with domestic airlines to fly their customers to local destinations.

3. The future

By 2025, annual air travel is predicted to double with Asia-Pacific region dominating and China is expected to leave the USA behind in less than 10 years [1]. Such a tremendous growth will imminently result in the increase of air traffic. With air traffic growth, issues like airspace congestion, airport congestion and greenhouse emission need to be carefully looked into by all stakeholders. There will be a pressure on the governments to achieve emission control targets set by Carbon Offsetting Reduction Scheme for International Aviation (CORSIA). This growth in air travel and airports will place more demand on real-time security. With the recent incidence of Gatwick airport being inoperative with hundreds of flights cancelled due to drone sightings, a new challenge on “obstacle data management” has emerged [4]. A surge in demand for aviation personnel, pilots, engineers, cabin crew, etc. would need investments in the training systems. Research in developing better and greener fuels for the jet engine will need to be enhanced. Unfortunately due to a shortage of the human resources in this sector, it is envisaged that a lot of efforts would need to be expended in the training and development of these human resources. This sub-sector (aviation training) provides a huge challenge and opportunity.

4. Conclusion

Aviation growth provides both social and economic benefits. The demand of air services increases the influence of air transport in the global economy, thereby providing opportunities for people and goods movements ([5], p. 4). The growth of aviation has spillover effects as well, thereby uplifting other sectors of the economies. Aviation brings economies and people nearer and as such brings communities together, thereby enhancing cultural cohesion. Air travel is by far the most preferred mode and is no more a dream. The predicted growth of aviation sector over the next decade has provided both opportunities and challenges for the governments, airlines, and other stakeholders. It is imperative that academics explore and develop new tools in ‘business and management’ specifically for this sector so that this complex activity is understood and managed effectively. The list of issues to be explored is huge, but the important ones include airline marketing, airline management, airline economics, airport and airlines, environmental and sustainability issues, green and smart airports, climate change and aircraft performance, technology and automation, cargo management, air traffic management, air capacity constraints, airport congestion, new airport designs, aviation safety, new large aircraft design, small aircraft transportation systems, drones and their impact, advanced flying techniques, real-time condition monitoring, global aviation data management, passenger comfort enhancing new aircraft systems and new

integrated training systems. This book is an attempt to visit these issues and is the first one in the series to follow.

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