

## Summary

Liberalization and deregulation of the airline industry increased the passenger market competition and led to the development of low-cost carriers (LCCs). Privatization of the airport business shifted airports from being public utilities to modern businesses, what contributed to the growth of low-cost carriers. Airlines that have chosen a low-cost approach achieved this through simplicity of product design, processes and organization. LCCs are operating on a simple short-haul point-to-point basis, serving mainly secondary or regional airports to bypass hubs and avoid constraining connections. Their main goal is to reduce costs and fares as much as possible. This is achieved by minimizing turnaround times, maximizing aircraft utilization, using uniform narrow-bodied aircrafts, and abolishing in-flight services and retail facilities. The development of LCCs is a significant factor in the evolution of airline networks, competition and demand trends. LCCs have to keep introducing new routes in order to develop a broad network that is capable of competing with other low-cost carriers and full-service carriers (FSCs).

When deciding if an airport is suitable to operate from, a number of different factors are considered by LCCs. These factors include high demand for LCCs, low aeronautical charges, quick turnaround time, convenient slot times, accessibility and efficient passenger facilities. Airports have to meet these requirements to be attractive to new low-cost airline operators. However, some airport characteristics can become constraints for different airline operations. These characteristics are difficult to modify or expand in order to meet the requirements. When airline managers make decisions whether to enter or exit a route, it is very helpful for them to investigate what airport characteristics of different kinds of airports can constraint new route operations on short and long term.

The most important factor for LCCs to consider is the demand for low-cost point-to-point travelling, because without demand airlines have no business. Geographical variables that define demand are population, tourism, catchment area and distances to large cities. Fast and efficient access to the airport is necessary to increase the catchment area. The availability of different ground transportation modes is significant for an easy accessible airport.

Capacity constraints are the most concerning problems at airports. Air traffic capacity, runway capacity, apron capacity and passenger throughput capacity are the main initiators of slot restriction, delays and high aeronautical charges. The airport operations and facilities are the internal cause of airport capacity. Slow turnaround times reduce aircraft productivity and apron capacity and increase ground handling and aircraft parking fees. While insufficient and inefficient passenger handling facilities decreases the passenger throughput capacity and increases passenger fees. To ensure a high level of security involves additional labour, equipment, and terminal space which reduces the

passenger throughput capacity and increases the security fees. Other factors that can influence capacity and aeronautical charges are the baggage handling system, environmental regulations and government regulations.

Airports that are close to capacity are only interested in serving LCCs during off-peak hours. To increase capacity most airports have to modify or expand their infrastructure, however due to land availability, environmental and political regulations this is often problematic and involves large investments. It is cheaper, faster and easier for airports to optimize operations or convert their terminals and facilities into low-cost terminals.

Some airports do not even have the required infrastructure or terminals to handle the demand for air travel. Especially the runway length can be an obstruction in handling some types of aircrafts. Investments either from the private companies, airlines or local governments is needed to make these airports operate.

Airports have also integrated marketing and non-aeronautical services in their core business to attract new users. Marketing support can be done by advertising, supply of advertising space and providing discount. These can help airlines develop their route and increase demand. Airports are also focusing more on non-aeronautical revenue so they can lower the aeronautical charges in order to maintain and attract airlines.

By vertically integrating their activities to achieve higher efficiencies on all these variables and factors, airports and airlines are forming strategic alliances to resolve constraints and reduce uncertainties for both partners. A long-term commitment of the airline to the airport and vice versa, increases competitive advantage, reduces financial risks and increases their passenger market in terms of punctuality, quality of services, value for money, reliability, functionality, economical efficiency, cost-effectiveness, profitability and safety.

To provide a ranking of the most important airport constraints, an exploratory survey of LCCs is recommended to ask airline managers which of the airport conditions exist, and if so, to what extent they constraint their company from operating at that airport.

The survey and this literature review can provide more insight on the importance of airport constraints when low-cost airline wants to enter new routes.