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Management strategies for regional aiports: A study applied to Lleida-Alguaire Airport

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Abstract

Purpose: The main objective of this article is to analyse the current situation at Lleida-Alguaire Airport and propose possible actions to increase its profitability.

Design/methodology/approach: This study presents the method as a research tool applied to regional airports, in particular, Lleida-Alguaire Airport.

Findings: The study shows the importance of air transport and the current situation of Spanish airports, specifically in Catalonia, exposing the main air traffic imbalances between different airports and their effect on tourism. Finally, it describes and analyses the situation of Lleida-Alguaire Airport.

Originality/value: This article is one of the first works to focus on regional airports and it seeks ways to improve their economic and social efficiency.

Practical Implications: Some actions in relation with aeronautical traffic are presented in order to improve and increase the efficiency of the system.

Keywords: Airport, tourism, marketing, air transport, AENA

1. Introduction

Air transport has been a fundamental element in the development of mass tourism. Aviation became the main conveyance to travel long distances and to isolated places. Nevertheless, the progressive change in the consumption of tourist products (Cabeza, 2000; Florido-Benítez, 2016), has given rise to the fact that currently, air transport is also considered a transport of great importance over medium distances. These changes focus on new trends in tourism; holidays spread out in reduced periods and the decrease of seasonality with the evident projection of other types of tourism. We can find this diversification on inland or rural tourism (Valdés & Valle, 1999; Albaladejo & Díaz, 2003), healthy and cultural tourism (García Sánchez, Artal & Ramos, 2002) or urban tourism (Bacci, 2007). Besides, we could talk about new motivation on tourist, the appearance of charter and low-cost airlines and their online marketing (Cristóbal, Daries & Martín, 2013; Piga & Filippi, 2001).

In the last fifty years, air transport has undergone major transformations which have improved its safety, speed and comfort, becoming an irreplaceable means of transport in the modern world (Albert-Piñolé, 1999; Moreira, 2014). The development of air transport is strongly linked with tourism, and therefore, the increase in airline frequencies and destinations means an increase in the number of travellers travelling to a destination (Hernández Luis, 2008). The impact of an airport on a region is undeniable, as is demonstrated by the economic development of the area where it is located (Button, Lall, Stough & Trice, 1999; Brueckner, 2003; Bel & Fageda, 2008). Even inequalities and forms of economic integration between different regions around the world can be observed on the basis of their airport terminals (Cárdenas, 2011).

Air transport is considered as being any activity whose purpose is the transfer of passengers or cargo by an aircraft, from one place to another (Blasco, 2001). Also, air transport is the most regulated means of transport in the world (Seguí & Martínez Reynés, 2004). In 1944 the Chicago Convention was signed, forming the ICAO (International Civil Aviation Organization). According to the ICAO annual report (2014), about 3.1 billion passengers in 2013 (5% more than in 2012) used global air transport for commercial or tourism reasons. If we consider our country, in 2013 we received some 60.6 million foreign tourists, a figure which represents 5.6% more than in 2012. Specifically, according to the data of Frontur (2014), 80.4% of these international arrivals were by plane (48.7 million tourists).

So, the importance of air transport in international travel, and especially in leisure travel for tourism, is more than proven. More than 80% of tourists who visit our country arrive by air.

The autonomous regions of Catalonia, the Balearic Islands, the Canary Islands, Andalusia, the Community of Valencia and the Community of Madrid accumulated more than 90% of foreign

tourists who arrived in Spain during last year, while the rest of the regions (Aragón, Asturias Castilla la Mancha, Castilla y León, Extremadura, Galicia, La Rioja, Murcia, Navarra and the Basque Country) barely received 10%.

These imbalances between areas show, first of all, that Mediterranean coastal areas (including the Balearic Islands) receive a large amount of international tourism (mainly seasonally); secondly, that the Canary Islands and Madrid attract international tourists throughout the year; finally, that Atlantic areas, Murcia and inland regions (excluding Madrid) have very little weight in international tourism to Spain (Frontur, 2014).

2. Spanish airports current situation

Spain currently has 52 airports; 47 operated by AENA and 5 airports managed by private companies or public institutions (Castellón, Ciudad Real, Lleida, Regions of Murcia and Teruel).

Public Administrations have the capacity to build or expand airports, but in order for them to function and fulfil the work for which they have been designed, air traffic is required. And this is where the problem lies. The main business centres (Madrid, Barcelona) and the established tourist destinations (Balearics, Canaries, Costa del Sol...) have airports with a lot of traffic due to their attractiveness as business or tourist destinations, but inland regions and the Atlantic coast have airports with little traffic.

During the first 10 months of 2014, 170 million commercial passengers used Spanish airports, an increase of 4.7% over the same period for previous year. The good trend continues in terms of the evolution of commercial traffic. Commercial operations increased 3.7% in relation with the same period for 2013. From January to October, 1.4 million operations were carried out. Commercial freight transport increased by 7.8% compared to January-October of the previous year. At Spanish airports, 537 million kilogrammes of cargo were transported (AENA, 2014).

In the movement of commercial passengers, regular traffic predominates with 92% of the total. Catalonia, Madrid & the Balearics were the autonomous communities with the greatest movement of commercial passengers in the period from January to October 2014. These communities together represent 59% of the total. Although Spain has 47 commercial airports, air traffic is concentrated in the main Spanish airports.

Madrid and Barcelona airports together accounted of almost half (42%) of the total share of commercial traffic in the period from January to October. During this period, there were increases in the main Spanish airports compared to the same months of the previous year.

Despite the good trends and growth experienced in the period, it should be noted that only 19 of the 52 Spanish airports exceeded one million passengers in 2013. This information confirms the differences between territories respect to tourism in Spain.

| | Euros/passenger, ordered highest to lowest in 2012 | | | | | | | |
|--------------------|--|------------|------------|-----------|--|--|--|--|
| Years | 2009 | 2010 | 2011 | 2012 | | | | |
| MADRID | 3.68 | 4.51 | 6.83 | 9.01 | | | | |
| BARCELONA | 2.97 | 3.12 | 5.60 | 8.45 | | | | |
| TENERIFE SUR | 3.50 | 4.68 | 5.47 | 6.04 | | | | |
| PALMA DE MALLORCA | 3.10 | 3.80 | 4.18 | 5.88 | | | | |
| GRAN CANARIA | 2.49 | 3.27 | 3.99 | 5.11 | | | | |
| ALICANTE | 4.82 | 5.21 | 5.67 | 4.95 | | | | |
| MÁLAGA | 3.31 | 2.90 | 4.16 | 4.72 | | | | |
| FUERTEVENTURA | 1.96 | 3.44 | 4.09 | 4.42 | | | | |
| BILBAO | 4.16 | 4.83 | 5.26 | 4.34 | | | | |
| IBIZA | 1.30 | 2.37 | 2.78 | 4.10 | | | | |
| VALENCIA | 3.02 | 4.23 | 4.87 | 3.65 | | | | |
| SEVILLA | 2.04 | 2.67 | 3.60 | 3.25 | | | | |
| LANZAROTE | 2.23 | 2.74 | 3.14 | 2.77 | | | | |
| SAN JAVIER | 3.27 | 2.03 | 1.69 | 2.75 | | | | |
| GERONA | 4.03 | 4.30 | 2.26 | 2.27 | | | | |
| MENORCA | -1.84 | 0.19 | 0.54 | 0.96 | | | | |
| TENERIFE NORTE | 0.68 | 1.11 | 1.14 | 0.89 | | | | |
| ASTURIAS | 0.21 | 1.08 | -0.33 | 0.89 | | | | |
| SANTANDER | -1.17 | -1.55 | 0.16 | -0.49 | | | | |
| SANTIAGO | -0.70 | 0.70 | 1.60 | -1.79 | | | | |
| A CORUÑA | -1.36 | -2.13 | -1.71 | -2.80 | | | | |
| ZARAGOZA | -3.99 | -3.20 | -3.37 | -3.30 | | | | |
| VIGO | -0.83 | -1.71 | -7.93 | -3.58 | | | | |
| REUS | -1.78 | -0.48 | -1.36 | -3.79 | | | | |
| ALMERÍA | -4.05 | -3.02 | -3.52 | -4.66 | | | | |
| GRANADA | -1.22 | -1.92 | -2.97 | -4.96 | | | | |
| IEREZ | -5.67 | -3.82 | -3.62 | -5.12 | | | | |
| JA PALMA | -6.71 | -6.52 | -6.85 | -5.94 | | | | |
| VALLADOLID | -6.21 | -4.81 | -8.26 | -12.10 | | | | |
| SAN SEBASTIÁN | -11.61 | -11.82 | -14.11 | -15.67 | | | | |
| MELILLA | -21.04 | -19.69 | -19.25 | -18.71 | | | | |
| BADAJOZ | -15.26 | -16.67 | -42.82 | -19.04 | | | | |
| HIERRO | -29.09 | -25.97 | -27.49 | -26.78 | | | | |
| PAMPLONA | -13.71 | -15.30 | -20.88 | -30.16 | | | | |
| LEÓN | -27.10 | -25.38 | -25.08 | -54.49 | | | | |
| CEUTA | -85.60 | -58.02 | -31.23 | -70.53 | | | | |
| BURGOS | -106.80 | -96.74 | -75.04 | -76.93 | | | | |
| ALGECIRAS | | -111.83 | -37.52 | -84.27 | | | | |
| LA GOMERA | -114.15 | -109.58 | -80-09 | -105.13 | | | | |
| TORREJÓN | -96.05 | -111.64 | -132.73 | -134.44 | | | | |
| SALAMANCA | -44.64 | -53.04 | -102.53 | -187.97 | | | | |
| CÓRDOBA | -169.32 | -351.50 | -315.09 | -191.15 | | | | |
| LA RIOJA | -104.87 | -181.43 | -250.04 | -237.24 | | | | |
| ALBACETE | -133.54 | -175.33 | -215.09 | -429.23 | | | | |
| VITORIA | -250.17 | -226.27 | -310.52 | -682.68 | | | | |
| HUESCA-PIRINEOS | -309.89 | -362.34 | -693.99 | -1,104.34 | | | | |
| SON BONET (*) | | | | -1,561.59 | | | | |
| CUATRO VIENTOS (*) | -26,157.21 | -23,457.63 | -14,338.75 | -3,128.67 | | | | |
| SABADELL (*) | 20,107.21 | 20,107.00 | 1,550.75 | -8,737.54 | | | | |

Table 1. AENA Airports: EBITDA per passenger 2009-2012 (current currency units) (AENA, 2014)

Analysing the financial information of AENA airports between 2009 and 2012, we could also observe significant differences. In 2012, only 8 airports were profitable after paying taxes. If we take into account EBITDA results, this number increases to 18 (AENA, 2014).

The meaning of EBITDA (*Earnings Before Interest, Taxes, Depreciation, and Amortization*) is the gross operating profit calculated before the deduction of financial expenses. EBITDA measures the capacity of the company to generate profits considering only its productive activity.

Relative profitability analysis considers that traffic volume at airports allows us to establish a new taxonomy of Spanish airports: in the first group (shaded darker) appear 18 airports with EBITDA per positive traffic unit; the rest of the groups include the cases in which EBITDA per unit of traffic is negative, evolving from a whole digit to two digits, three digits or more. It should be noted that the evolution of the results has improved, which is reflected in the sustained growth of EBITDA for all airports in the period reviewed and in the appearance of positive operating results as of 2011, however the situation of the airports remains worrying.

In this context there is a clear need to urgently review the airport ownership model in Spanish airports, and to do so by adapting the best decisions from the economic and social points of view, that is, taking into account the principle of accessibly and territorial rebalancing.

3. Current situation in Catalan airports

ACurrently operative commercial airports in Catalonia are found in Barcelona, Girona, Reus (province of Tarragona) and Lleida.

First of all, we find Barcelona Airport, which is currently the ninth on the European scale, the second in Spain, and the first in Catalonia. In spite of having a significant volume of passengers in absolute numbers, as we have already described, if qualitative analysis is carried out, it can be seen that Barcelona presents an important deficit of long-haul routes. The challenge of consolidating Barcelona as an airport with long-haul connections is still the main challenge to be achieved for these facilities. On the other hand, Girona Airport is an example of a leading airport where most of the companies which operate are low-cost on a European scale, with important fluctuations since the arrival of Ryanair. In 2002, demand went from being stable at about 500,000 passengers a year to more than 5.5 million passengers in 2008, but it has now dropped to 2.7 million (Ministerio de Fomento, 2014). The current situation of the airport, combined with the powerful operation of the Ryanair base has been the best alternative to increase the activity of this facility, from the point of view of its regional environment and the air traffic itself.

Reus Airport is and infrastructure with a great potential for development thanks to a very attractive geostrategic position, synthesized in the combination of the tourist strength of the regions of Tarragona (Costa Dorada), the industrial area around Tarragona and Reus, its proximity to metropolitan Barcelona and intermodal connectivity.

The current volume of activity, which is almost one million passengers per year, must be considered as an initial starting point, a benchmark that would have to be quickly surpassed. According to the plan for Catalonia's airports, the goal of Reus airport is to become an international airport and reach 7 million passengers by 2020 (Generalitat de Catalunya, 2009).

| | Barcelona- el Prat | Girona- | Reus | Lleida- | Catalonia | Spain | % Cat./Esp. |
|-----------------------|--------------------|-------------|-------|----------|-----------|----------------|-------------|
| | | Costa Brava | | Alguaire | | - F · · | ····, ··· |
| Aircraft | 270,987 | 20,900 | 6,825 | 404 | 299,116 | 1,544,294 | 19.4 |
| Domestic | 81,362 | 715 | 383 | 264 | 82,724 | 613,974 | 13.5 |
| Regular flights | 77,754 | 576 | 336 | 264 | 78,930 | 578,478 | 13.6 |
| Non-regulated flights | 3,608 | 139 | 47 | 0 | 3,794 | 35,496 | 10.7 |
| International | 189,625 | 20,185 | 6,442 | 140 | 216,392 | 930,320 | 23.3 |
| Regular flights | 178,052 | 18,796 | 4,610 | 140 | 201,598 | 79,3861 | 25.4 |
| Non-regulated flights | 11,573 | 1,389 | 1,832 | 0 | 14,794 | 136,459 | 10.8 |
| Passengers (1) | 35,175 | 2,721 | 960 | 29 | 38,885 | 186,438 | 20.9 |
| Inside | 10,172 | 70 | 39 | 8 | 10,289 | 57,395 | 17.9 |
| Regular flights | 10,062 | 69 | 39 | 8 | 10,178 | 56,335 | 18.1 |
| Non-regulated flights | 110 | 1 | 0 | 0 | 111 | 1,060 | 10.5 |
| International | 25,003 | 2,651 | 921 | 21 | 28,596 | 129,043 | 22.2 |
| Regular flights | 23,978 | 2,561 | 635 | 21 | 27,195 | 112,648 | 24.1 |
| Non-regulated flights | 1,025 | 90 | 286 | 0 | 1,401 | 16,395 | 8.5 |
| Goods (t) | 97,675 | 46 | 0 | 0 | 97,720 | 609,501 | 16.0 |
| Inside | 5,733.2 | 0 | 0 | 0 | 5,733.2 | 108,241.0 | 5.3 |
| Regular flights | 4,445 | 0 | 0 | 0 | 4,445 | 78,144 | 5.7 |
| Non-regulated flights | 1,288 | 0 | 0 | 0 | 1,288 | 30,097 | 4.3 |
| International | 91,941 | 46 | 0 | 0 | 91,987 | 501,260 | 18.4 |
| Regular flights | 80,983 | 0 | 0 | 0 | 80,983 | 442,570 | 18.3 |
| Non-regulated flights | 10,958 | 46 | 0 | 0 | 11,004 | 58,690 | 18.7 |

Table 2. Current situation of Catalan airports (Ministerio de Fomento, 2014).

Notes: (1) Miles. Not included passengers in transit.

Lleida-Alguaire Airport is the first commercial airport promoted by the Catalan Government. Its construction was justified by three main reasons: a) to support the territorial rebalance in Catalonia; b) to be one of the engines of the economy of the province of Lleida; and c) to be the axis of connection with the Pyrenees.

The Catalan Government opted for these facilities in order to achieve a higher level of territorial cohesion through the provision of transport infrastructures to meet the mobility needs of the main areas of demand and to promote the efficient economic development of the territory in the context of a global economy. This airport was also intended to boost tourism, presenting culture, historical heritage and gastronomy: in short, to make the region more attractive.

Lleida-Alguaire Airport was inaugurated on 17th January, 2010. The infrastructure has a regional character. The Government of Catalonia estimated annual traffic of 395,000 passengers during the next decade. With regard to employment, it was planned to create 60 direct and 900 indirect jobs. This forecast has never been reached. In the first three years since its inauguration, it had only 115,043 passengers. This figure represents one tenth of the initial estimate (Government of Catalonia, 2009).

Initially, an amount of 42.5 million euros was budgeted for the project. The construction of the airport began in the spring of 2007 and the works were completed at the end of 2009. The final cost of the building was 90 million euros, fully paid by the Catalan Government. The type of airport management is mixed, both public and private.

Estimations that were made to evaluate the economic profitability of an airport facility of these dimensions affirmed that to achieve sustainability, the annual traffic should be around half a million passengers. Therefore, to ensure airport operation, it must be subsidized by the Public Administration (Graham, 2009). The airport generates losses of between 4 and 5.3 million euros per year.

As we have already mentioned, the works of the new Lleida Airport were completed in the second half of 2009. During its first year of operation, companies like Vueling Airlines and Ryanair were the first to show their interest in operating at this airport.

In February 2010, the first commercial flights operated by Vueling Airlines to Paris-Orly (France) and Palma de Mallorca were inaugurated. Then, in April of the same year, first commercial flights to Bergamo (Italy) and Frankfurt-Hahn (Germany) began. During that year the agreement with Air Nostrum was reached to operate during the summer to destinations such as Ibiza and Menorca. This agreement is still in place. Finally, in October, Vueling scheduled one flight per week with Barcelona El Prat, easing connections with the rest of flights which operate from the latter airport.

In turn, the tour operator Pyrenair also launched tour packages which included flights to or from Lleida Airport throughout 2011 so as to attract tourists to Lleida ski resorts and the Principality of Andorra. Nowadays it operates only one weekly flight with Air Nostrum to Palma de Mallorca, two flights in summer to Ibiza and Mahón, a winter season route offered by Thomas Cook from England with five flights per week; finally, since early last year, it operates with Arkia Airline from Tel-Aviv (Israel).

The number of passengers that have passed through Lleida-Alguaire in the terminal's five years of existence is 185,922. During the first year, the number was 57,665, and last year it reached 32,607. This decrease in the number of passengers has not been constant, since the second year it fell to 27,735, while in 2012 and 2013 the figure went back up to 35,513 and 32,402 passengers, respectively.

Therefore, the balance of the last five years can be said to be bittersweet as passenger volume has fallen by half compared to the initial figures. Even so, and as a positive, the Government of Catalonia has managed to halve the deficit of the management of the facilities, which has gone from 6.5 million euros in 2011 to about 3.5 million in 2014. Unlike the first year when the Government subsidized empty seats with amounts ranging from 20 to 60 euros, current operating flights are no longer fully subsidized and a far more restrictive expenditure policy has been applied; practically all staff work parttime and revenues from other non-airport activities such as advertising and renting facilities have increased significantly.

| Destinations | Companies | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------------------|---------------------|--------|--------|--------|--------|--------|
| Barcelona El Prat | Vueling | 225 | 283 | | | |
| Mallorca | Vueling | 15,388 | 7,137 | 5,446 | 6,827 | 7,287 |
| Paris | Vueling-Air Nostrum | 9,845 | | | | |
| Frankfurt-Hann | Vueling | 13,367 | 6,659 | | | |
| Milan Bergamo | Ryanair | 12,902 | 6,636 | | | |
| Ibiza | Ryanair | 711 | 586 | 495 | 703 | 915 |
| Mahon | Air Nostrum | 865 | 628 | 1,497 | 879 | 1,163 |
| Vigo | Pyrenair | | 295 | | | |
| Madrid | Pyrenair | | 357 | | | |
| London -Gatwick | Nelson-Thomas Cook | | 1,016 | 11,165 | 7,973 | 6,140 |
| Manchester | Nelson-Thomas Cook | | 488 | 5,903 | 4,842 | 5,034 |
| Belfast | Nelson-Thomas Cook | | 212 | 4,083 | 2,743 | |
| Bristol | Nelson-Thomas Cook | | | 2,174 | 2,665 | 2,523 |
| Birmingham | Nelson-Thomas Cook | | | 2,177 | 2,583 | 2,409 |
| Southampton | Nelson-Thomas Cook | | | | 228 | 1,558 |
| Tel-Aviv | Arkia | | | | | 1,662 |
| Total commercial | | 53,303 | 24,297 | 32,940 | 29,443 | 28,691 |
| Total general | | 4,362 | 3,438 | 2,573 | 2,959 | 3,916 |
| Total commercial + general | | 57,665 | 27,735 | 35,513 | 32,402 | 32,607 |

Table 3. Commercial operations of Lleida-Alguaire Airport

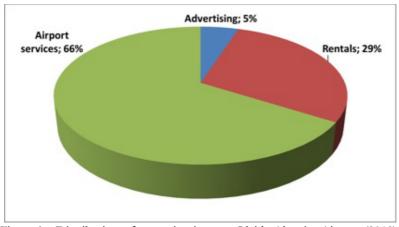


Figure 3. Distribution of operating income. Lleida-Alguaire Airport (2013) (Dirección General de Aeropuertos de Cataluña, 2014)

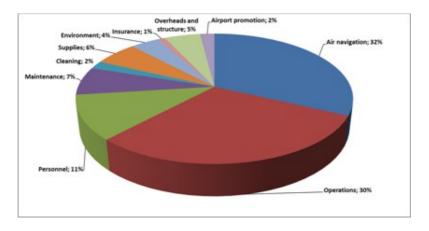


Figure 4. Distribution of operating expenses. Lleida-Alguaire Airport (2013) (Dirección General de Aeropuertos de Cataluña, 2014)

4. Developments strategics at Lleida-Alguaire airport

Lleida-Alguaire was designed as an airport for cargo and passenger transfer operations. But, given the current situation, it has tried to diversify its business models. Below we will explain which activities are currently being carried out.

4.1 Aeronautical industry

The company Singular Aircraft has manufactured a prototype of an unmanned remote-controlled amphibious aircraft called UAV-SA03. It is a drone in its development phase, designed for hazardous tasks and the company is conducting ground tests at Lleida-Alguaire Airport. The intention of the company is to manufacture about 300 remote control devices per year and hire about one hundred

people in the next two years. It is currently negotiating flight permits for the prototype with the State Air Safety Agency. This initiative would represent revenues from renting offices and those resulting from the use of airport facilities.

Following this line, Lleida competes with Teruel and Castellón as a possible low-weight aerial launching base, using a Mig-29 aircraft, which put into orbit the nanosatellites attached to deactivated missiles which will shoot into space.



Figure 5. UAV-SA03 Aircraft at Lleida-Alguaire Airport

4.2 Commercial aircraft parking and maintenance services

Another line which Lleida-Alguaire Airport is finalizing is the creation of a new platform that will offer parking and maintenance services for commercial airplanes, as well as the scrapping and recycling of aircraft which have ended their useful life. The company Air Hoster has begun the conditioning works with the aim of starting the operations as soon as possible on a 26,000m2 surface area with capacity to accommodate approximately twenty commercial airplanes. In the following months, and depending on demand, new land will be adapted to reach the 13 hectares planned in the first phase of this project, with a total capacity of between 60 and 70 large aircraft.

4.3 Exploitation of available space around the airport to attract logistics operators

Available areas at Lleida-Alguaire Airport could be an interesting opportunity to attract the activity of logistics operators, who would carry out cargo transport operations on airplanes assigned with this work. Information leaflets have already been made and marketing is under way.



Figure 6. Image of a leaflet to attract logistics operators to the Airport

4.4 Training centres for pilots and hostesses

Lleida-Alguaire Airport runway meets the appropriate conditions with training tracks to practise fundamental manoeuvres for aircraft control.

The company Dream Flyers has its operations base in Sabadell and it also uses Lleida-Alguaire to practise instrumental and visual manoeuvres in the field. The "commercial triangle" flights are programmed and they consist of trips of more than 300 miles in which landings and take-offs are performed at three different airports: Lleida-Alguaire, Huesca-Pirineos and Pamplona. These practices contribute to airports with low traffic by providing them with more activity beyond accepting take-offs and landings of commercial flights and transport.

4.5 Outdoor locations for the making of commercials

Lleida-Alguaire Airport has been the scene of some advertising spots. We can highlight the Scandinavian sports products company XXL All Sports United or the EX1 model of Peugeot automobile brand, among others. The first ad had a great impact in the social networks, with more than two million hits on its YouTube channel. The viewing of the spot, in turn, allowed seeing each and every one of the facilities, promoting the airport.

5. SWOT analysis fo Lleida-Alguaire airport

After analysing the implementation of Lleida-Alguaire Airport, its economic and financial situation and the activities it performs, we now carry out a SWOT analysis to be able to propose new actions or strategies in order to increase its profitability.

The SWOT technique responds to the acronyms of Strengths, Weaknesses, Opportunities (internal characteristics) and Threats (external situation). It is a tool to find out an organization, company or project's real situation, and to plan future strategies. This methodology is useful when it is intended to promote structural transformations, to revitalize the change and to draw up economic and social projects (Bigné, Font Aulet & Andreu Simó, 2000).

5.1 Weaknesses

First of all, we must point out that this airport is located in the least populated province with the lowest population density in Catalonia.

The terminal's sphere of influence is rather limited as Lleida is 160 km from Barcelona Airport, 150 km from Zaragoza and only 100 km from Huesca-Pirineos and Reus. Therefore, the competition is very intense, for a population of almost 400,000 inhabitants.

On the other hand, there are meteorological limitations that sometimes prevent air traffic due to thick fog which concentrates in the area during the winter months and force air traffic to change course to other airports.

The current flow of air operations is insufficient and this makes it nowadays the least profitable airport with the biggest losses in Catalonia.

5.2 Threats

One of the clearest threats is the existing high-speed rail network, not only because it is an element of necessary competition of the first order, but also due to the fact that it does not link directly with the airport. In addition, there are no good connections between the AVE Station in Lleida and the Airport.

Another element that is beyond the competence of airport managers are the tactical changes of key airlines. On the other hand, a significant percentage of passengers who arrive at Lleida-Alguaire Airport go to other destinations such as Andorra and do not generate wealth for the territory.

Additionally, the current situation of economic crisis is an major hindrance when it comes to finding new businesses, programming new routes, or strengthening existing ones, not to mention, as noted in the previous point, the direct competition from airports as close as Zaragoza, Huesca, Reus or Barcelona.

5.3 Strengths

The first characteristic to highlight is that we can consider Lleida-Alguaire Airport as a developed infrastructure and it has great support from society and institutions which are widely committed.

On the other hand, we are talking about airport facilities with a large capacity and that it has an important agro-food business in this region.

If we consider its visual impact, the design of Lleida-Alguaire Airport is integrated into the landscape and has been awarded several architectural prizes.

Finally, it is the only Spanish regional airport with authorization to carry out commercial flights with countries outside the so-called Schengen Area, so it is a facility designated as a border post.

5.4 Opportunities

The main opportunities for an airport like Lleida-Alguaire we can emphasize are its organic growth and the new air traffic that could saturate the major airport installations needing to divert some of their new traffic.

Another opportunity is the development of new tourism products that reach new niches for exploring, such as Second World War tourism, which we will explain later. We will also discuss new opportunities related with development of aeronautical activities like launching satellites.

Finally, we would like to comment the rise of experiential and specialized tourism, such as space tourism, ornithological or adventure tourism, among others.

6. Future proposals for airport facilities exploitation

When SWOT analysis is carried out, possible strategies to optimize Lleida-Alguaire Airport facilities are described.

6.1 Different functions realized with the purpose of alleviating non-regular activities at Barcelona Airport

Lleida-Alguaire Airport could act as complementary airport for non-regular activities managed by Barcelona Airport. It is considered that in the not very long term, charter flights will have to be transferred to tourist infrastructures and/or facilities that have the capacity to be able to manage non-regular operations. In this context, in addition to Girona or Reus, which are currently well positioned, Lleida could also act as a complement in this sector, especially in the summer months when climatic conditions are very favourable and, in addition, air traffic concentration and congestion at the major airports are much greater. Furthermore, with the aim of attracting a larger number of tourists and tour operators there could be a proposal to change the name of the airport to, for example: Barcelona West or Barcelona Pyrenees.

6.2 Creation of new tourist products with the aim of generating flows of travellers

Taking into account that regional institutions are committed and there is a sufficient business and professional structure, the necessary conditions are in place to create new tourist products which generate flows of travellers and which publicize tourism and heritage resources, creating wealth in the region.

On the other hand, it would be necessary to take advantage of the growth in experiential tourism and create specific products for specific target publics, in an attempt to intensify relations with current tour operators and new ones, even in summer periods, such as routes of the Jewish refugees' evasion during the Second World War. Products are also being developed on ornithological or agro-industrial tourism, focusing on oleotourism. Finally, we would also comment the possibility of using the terminal as a platform for space tourism, due to the little commercial activity that it hosts.

6.3 Using the airport as a tourism resource

Given the media repercussion of the infrastructure design, the airport could be used as a tourist resource and showcase for the presentation and promotion of products and/or events, fairs, films, photos shoots, aerial exhibitions, acrobatic gatherings, celebrations, among others.

7. Conclusions

Although Spain has 47 commercial airports, air traffic is highly concentrated at the major airports. By regions, Catalonia, Madrid and the Balearic Islands represent 59% of commercial passenger movements. On the other hand, and analysing the financial data of AENA airports between 2009 and 2012, we observe that during this last year only eight airports were profitable after paying taxes. If we take the EBITDA into account, this number is 18 (AENA, 2014). Therefore, the need to look for new business models that represent new ways of income is more than evident.

Lleida-Alguaire Airport activity in passenger numbers is above 14 of the airports of AENA's network. Currently, Air Nostrum airlines operates offering its routes throughout the year; during the winter period, Arkia Airline (Israel) and Thomas Cook flights focus their activity between Lleida and five British cities. Despite this, it is an underutilized facility and it needs to develop new activities to justify the investment economically and socially.

Those responsible for the terminal state that the profitability of the facility will be seen in the long term. Current strategies are based on attracting British and Israeli operators; boosting goods transport and making the airport an industrial facility. With regard to this last point, we are working with aeronautical industry agents to offer parking and maintenance services for commercial aircraft, and to take advantage of the available space around the airport to attract logistics operators.

In addition, different activities are proposed, such as: acting as a reliever of non-regular activities of Barcelona's Airport; implementing pilot and hostesses schools; using the facilities for different events; the presentation of new products; acrobatic concentrations, or attracting tour operators in summer for travellers to discover the area's tourism heritage and remain to generate wealth for the region.

In conclusion, in order to obtain optimum efficiency of small-scale airport installations, in a highly competitive environment, we not only have to rely on attracting new operators to ensure air traffic, but we must also diversify economic activities and innovate in new models to secure new revenue.

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