

STRATEGIC FLEXIBLE PLANNING AND REAL OPTIONS FOR AIRPORTS TO GAIN COMPETITIVE ADVANTAGE

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Abstract

The commercialization and privatisation of airports in combination with the deregulation of the aviation market has introduced new possibilities for competition among airports. This in turn has meant that there are increased opportunities for airports to develop new strategies to gain competitive advantage. This paper takes a broad overview of the strategies which airports have developed. The paper begins by undertaking a competitive analysis of the airport industry from both the airline and passenger viewpoint. The competing forces are found to be very different but cannot be considered entirely separately because of the interdependence of airline and passenger demand. The paper then questions the relevance of Porter's generic competitive strategies to airports – particularly the cost leadership strategy. This is followed by an assessment of the strategic directions which airports have pursued and the strategic methods which they have used. Airport privatisation has allowed for options such as horizontal integration to be adopted, although the benefits are not always that clear. The paper concludes by discussing the options available to low cost carriers which are providing new challenges for both small and medium sized airports in the area of competitive advantage.

Introduction

The paper provides a broad overview of the strategies which airports have adopted to gain competitive advantage. It does this by firstly undertaking a competitive analysis of the industry and assessing the extent of influence which an airport operator has over the factors which affect an airport's competitiveness. The relevance of these factors are then examined within the context of the different strategies which airports have chosen to adopt, and the directions and methods which the airports have chosen to pursue these strategies. The paper concludes by considering the case of low cost carriers (LCCs) and the choices of strategic direction which are available to address the needs of these types of airlines.

This paper has attempted to relate the situation at airports to general competitive strategy theory. This is in order to assess whether the characteristics of the airport industry are so unique that necessitate airports being still treated as a special case or whether at this stage in the evolution of the airport industry, it is

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has become relevant to look to successful practice in other sectors outside of the airport industry when formulating competitive strategies.

Competitive analysis of the airport industry

The traditional view of most airports acting as natural monopolies is increasingly being questioned primarily because of the improved forces of competition which have occurred due to increased airline liberalisation and airport commercialisation. Therefore a competitive analysis of the airport industry has been undertaken before attention is turned to the actual strategies which airports have adopted. This has been undertaken by applying Porter's widely used five forces framework of competitive analysis which considers the threats of new entrants and substitutes, the power of buyers and suppliers, and the rivalry amongst existing organisations. It is the airport's key role to sell aeronautical services and facilities (i.e. the provision of runways, taxiways, aprons and terminals) to airlines. The airlines then sell their own product onto the passengers. The airport also sells services such as shops, catering and car parks, usually through concessionaires, direct to the passengers, local residents and other customers. It is useful to make this distinction when considering the five competitive forces. The analysis will start off by looking at the services provided to the airlines.

Threat of new entrants

The threat of new competing airports is generally low because of the large investment which is needed for the new infrastructure and because of the long and complex planning and regulatory processes which frequently have to be followed in order for approval of any new development to be given. Moreover it is increasingly difficult to find suitable locations for new competing sites, especially those which can offer sufficient surface transport links. In many other industries, barriers to entry also tend to be high because of the existence of increasing returns to scale. However within the airport industry, some evidence suggests that economies of scale tend to disappear once the annual output of an airport reaches around three million passengers and as airports grow much larger there may in fact be diseconomies of scale (Pels et al, 2000). This is probably due to airport operations becoming that much more complex. Overall this suggests that although there are certainly substantial barriers to entry, they are not related to economies of scale (Starkie, 2002).

Threat of substitutes

The threat of substitutes is also relatively low for most airports with probably the greatest threat being high speed rail. For regional airports, the introduction of high speed rail services can have a significant impact on air services to major airports. However at major capacity constrained airports increased usage of high speed rail for short haul trips may free up capacity for other long-haul services – although this may have a detrimental impact on the

airport's ability to act as a hub and attract transfer passengers. Improvements to the road and rail infrastructure to major airports may also reduce the necessity for feeder services from regional airports. However the recent growth of the LCC sector has changed the economic balance between rail and air travel and in many cases has made air the much more attractive and cheaper option. This is working in the opposite direction to encouraging more travel by train which is the objective of many European governments but may well be reducing the threat of substitutes for airports.

Power of suppliers

Many of the services which make up the composite airport product, such as air traffic control, security, ground handling and commercial facilities, can be provided either by the airport operator or by a third party. The way in which they are offered, and whether there are competing services, can have an impact on an airport's competitive situation. An extreme case is the management of entire terminals by different operators or suppliers. For some of the operational services, such as air traffic control and security, the airport operator may have no choice over suppliers as this will be determined by government policy. However the airport operator may not have to pay for all suppliers. Looking specifically at ground handling there may be specific regulations, as with the European Ground Handling Directive, which stipulate the number and nature of suppliers which must be used. The situation is made even more complicated since in some cases the suppliers, for example air traffic controllers or ground handlers, will charge the airline direct.

Power of buyers

The relative strength of the airlines can vary significantly. This power may influence the charging practices of the airport either directly through governmental pricing control or more indirectly through some type of economic regulation process. In lesser developed areas a national carrier can often have strong political power if its broader role in encouraging trade or tourism is taken into account. Moreover as airline alliances become larger and more established the balance of power could appear to be shifting much more in favour of the airline. However the real relative power of the airlines and airports is not really related to the relative size of the organisations but whether the airline has the ability to switch to an alternative airport. For many network carriers this may not be possible but it may well be so for the more footloose LCCs, charter and freight operators.

Rivalry amongst existing airports

The amount of rivalry amongst existing airports varies considerably. – if airports are located on small islands or remote regions, the scope for competitive rivalry is very limited or non-existent. It also tends to be weak at airports which have a high concentration of both short-haul and long-haul services. These airports appeal most to the traditional scheduled carriers who have networked

services. In these cases it is difficult for other airports to provide effective competition. However if the airports are physically close, their catchment areas may overlap and the competitive rivalry will be greater particularly for point-to-point services (ACI-Europe, 1999; Starkie, 2002; Cranfield University, 2002). This may be in an urban situation, for example London which is served by a number of different airports, or in the regions where catchment areas can be continually expanded or contracted, depending on the nature of air services and surface links on offer at neighbouring airports. As regards competitive rivalry major airports serving a distinct catchment area with a wide network of services are also not likely to be subject to much competition unless they are competing as a hub. However if the airports are physically close, the competitive rivalry will be more intense. A different set of competitive forces exist as regards the commercial services which airports sell to passengers and other consumers. Moreover airport operators are likely to be in a relatively strong position with their suppliers because of the attractiveness of their captive and often fairly affluent passenger market. However there are threats of substitutes, for example from high street and internet shopping.

Thus a different picture emerges as regards the competitive forces affecting the provision of aeronautical and commercial services. However these cannot be considered entirely independently since the services together contribute to the airport business and will both depend on the airlines offering flights at the airport as the passengers come to the airport to use the services of the airlines.

Controllability of the sources of competitive advantage

This competitive analysis can now be related to the amount of control or influence which an airport operator has over the two fundamental sources of competitive advantage, namely price and product characteristics. There are some areas where the airport operator has significant control and somewhere where there is very little control. Meincke (2002) defined these as self determinable and externally determined competition parameters.

Most control

The area where an airport operator has the most control is in the pricing and provision of non aeronautical services and facilities in the airport terminal and on the surrounding land. Hence most airports have become very experienced in taking advantage of the relative weak position of the suppliers and buyers and have exploited many of the non-aeronautical or commercial opportunities which exist. This has been achieved by increasing the number and mix of retail operators and caterers, introducing more branding and competition, expanding the space allocated to commercial and generally becoming more experienced in dealing with the growing level of expectations of the passengers and other airport customers. Although these enhanced commercial facilities may well make the airport more attractive, they will play a very minor role in influencing the passenger's choice of airport. However whilst single till

regulation may be attractive to the airlines, it may not be in the best interest for the airport operator in the long-term if it inhibits the pressures for diversification, innovation and business development which could potentially bring additional competitive advantage.

Partial control

The exact amount of control which airports have over the aeronautical aspects of operations is much more difficult to define. Not only do the forces of competition vary between different types of airports but there also numerous rules and regulations, which exist primarily for safety and security reasons, which airport operators need to follow. As regards aeronautical charging, the amount of freedom which airports have in this area will depend on the extent of direct government control or the nature of economic regulation if it exists. Clearly this will be influenced by the real power of the airline. Moreover the impact that pricing will have on demand, and hence ultimately an airport's ability to compete, will also differ depending on what type of airline is being considered and their relative degree of price sensitivity. Airport charges can be substantially more important for short-haul operations as they are levied more frequently. For LCCs and charter operators they can be even more significant because these airlines will have minimised many of the other airline costs. An airline will consider all the costs at an airport, not just the airport charges, but also other charges.

Least control

Finally there are some aspects of the airport product which the airport operators has very little or no control over. This includes slot availability and also location which is undoubtedly one of the most important factor which affects an airport's competitive position (For example see Park (2003) for evidence in Asia). The factors which will determine the attractiveness of the location include the size of the population and its propensity to fly, the economic strength of the area and its importance as a tourist or business destination (Favotto,1998). This means that the competitive position of specific hub airports which are developed primarily for transfer traffic, without a natural local market due to economic factors or tourism, may be fairly weak. The same may be the case of certain remote secondary airports which have been chosen for their operations by LCCs. Although an airport cannot alter its location, its catchment area will not be fixed and will vary. The catchment area will also change depending on the air services being offered at the airport and its neighbours, and also the relative nature and quality of the surface access links. LCCs have been particularly successful in attracting passengers from much wider catchment area than other airlines (Barrett, 2000).

Airport strategic options

Having now assessed the influence which airport operators can have over the price and product features, it is now possible to consider how this relates to

the actual competitive strategies which airports have developed. A starting point is to consider the relevance of Porter's generic competitive strategies. These acknowledge that price (or at least cost) and product characteristics or differentiation are the only two sources of competitive advantage but also that the competitive scope of target customers can vary. These ideas have come under increased criticism because of their simplistic nature and logic, particular in service industries, but nevertheless provide a useful starting point for considering strategy options.

Cost leadership

The cost leadership strategy aims to place the organisation amongst the lowest cost producers. This is realised by reducing costs, such as low cost inputs, low distribution and location costs, by offering a standardised product, and by achieving high volume of sales and economies of scale. This will then enable the organisation to offer lower prices than its competitors. There is little evidence of such strategies within the airport industry. On the cost side, the ability of the airport to achieve many cost savings is fairly limited because of its fixed location and also because of the apparent lack of economies of scale beyond a certain size. More generally, the relevance of such a strategy to airports has to be questioned given the relative price insensitivity of many of the markets and thus the lack of competitive pressures to produce a reduction in costs. Moreover the issue is complicated by the weak relationship between airport costs and prices at some airports.

Differentiation

The next generic strategic option is differentiation when an organisation will develop a product or products which are perceived as being different or unique from its competitors. This is more appropriate for a more price insensitive market. This may be achieved through enhanced service features, brand image, promotion, technology, distribution or other dimensions. In other words it can be achieved if there are real (by product design) or perceived (by advertising) differences between its products and those of its competitors. Within the airport industry, there appears to be some scope to pursue differentiation strategies. Alternatively the uniqueness could be the airport's design which enables it to handle transfer passengers in a very short period of time, or its lack of environment restrictions compared to neighbouring airports which enables it to operate for 24 hours. Interesting Zurich airport actually rebranded itself as 'Unique Zurich Airport' in 2002 to reflect a new management structure, partial privatisation and expanded facilities but does not really seem to follow a true differentiation strategy. There may be a number of differentiated products to suit the needs of different customer groups. The 'fast track' concept, when first class and business passengers are given preferential treatment through various airport processes, is a good example which is used at BAA London airports and others. Typically larger airports with more than one terminal have separated services for different types of passengers or airlines, for example short-haul and long-haul,

domestic and international, or by alliance members. However the quality standards do not usually vary significantly between terminals. There is also the option of having competing terminal products offered by different operators. However in recent years there has been growing interest, particularly with LCCs, in the possibility of having different terminals with varying quality standards and facilities, either under common or different ownership (see Section 6).

Focus or niche

The third generic strategy, in addition to cost leadership and differentiation, is the focus or niche strategy which is built around satisfying a particular small target market. With airports, this could be with a particular type of airline (e.g. charter, low cost, freight) or services to a particular geographic area. This is suitable for organisations which are not large enough to target the whole market. These strategies can either have a cost or differentiation focus. Within the airport industry, secondary airports which offer price deals to LCCs are examples of organisations pursuing a cost focus strategy which seeks a cost advantage in its target segment. There are also examples of airports who are following a differentiation strategy for instance by providing specialist cargo facilities such as Liege airport in Belgium or facilities for short-haul business such as at London City Airport. Porter defined such organisations that do not conform to one of the strategies as 'Lost-in-the-Middle'. In reality this is very much related to the less competitive environment within which these types of airports operate.

Therefore whilst these generic models are of limited use within the airport industry, they do have some relevance when considering the strategic directions and methods which airports need to adopt.

Airport strategic directions and methods

Strategic direction relates to which products and services should be developed and for which markets. The main directions are market penetration, market development, product development and diversification. Market penetration involves increasing market share of existing products in existing markets whilst market development entails introducing existing products into new market areas. Product development involves developing existing or new products for existing markets and diversification is concerned with developing new products for new markets. These directions can be summarised in the well known Ansoff positioning matrix which distinguishes between the degree of market and/or product development involved. At the one extreme, market penetration can be criticized for ignoring new opportunities whilst at the other extreme there may be many opportunities for diversification but at least some of these may come with a high degree of risk.

Internal growth

For all these directions there are different methods by which a particular strategy may be developed. Firstly there is internal or organic growth. This is the

approach that airports traditionally adopted since they really had no option because of public sector ownership and the strict regulatory air transport environment. Market penetration can be achieved internally with a typical example being a regional airport offering discounts on new regional services to encourage the use of the airport. For the passenger market there is the example of the development of loyalty cards (Jarach, 2002). Market penetration directions may be particularly relevant for airports following a niche strategy will be particularly interested in market penetration. A product development strategy could be encouragement of long-haul services to an airport that has previously only offered short-haul services. Vienna airport is a useful example of an airport which is using financial incentives to encourage services to Eastern Europe and support its role as a West-East hub (Vienna Airport, 2004). Product development can also occur internally with the non-aeronautical side of the business. For instance a number of airports include Changi Singapore and London Heathrow have developed internet booking of various of the commercial services on offer, such as car booking or foreign currency. New product development strategies also had to be devised in Europe after the abolition of duty and tax free sales in 1999 with the introduction, for example, of the Travel Value concept (Freatly and O'Connell, 2000). For airports following differentiation strategies product development is necessary to maintain differences as competitors imitate previous innovations Market development can be achieved internally by encouraging better surface access to extent the catchment area. This could include supporting local road and rail improvements through the planning process or perhaps providing financial support to bus or rail surfaces. It could also be argued that the practice of certain airport companies such as BAA, Schiphol, Fraport, Aeroport de Paris and the former Aer Rianta company in providing consultancy and management contracts in specialist areas such as engineering, construction, handling or commercial facilities is also an internal way of achieving market development. The most common way that airports have internally followed related or concentric diversification strategies is through developing shopping or leisure facilities for local residents and/or business facilities or services (such as conference facilities, offices and warehousing) for local businesses. Airports can then not only be considered as modal interfaces but attractions in their own right—Jarach (2001) calls such airports 'multipoint service-provider firms'. Schiphol is a good example of this with its Airport City concept. BAA's operation of the Heathrow Express rail link could also be considered to be related diversification. Unrelated or conglomerate diversification is also possible to achieve internally but is fairly rare because of the narrow role which public sector owners usually define for their airport operators. Aer Rianta's ownership of the Great Southern Group of Hotels in Ireland is an example of an unrelated or conglomerate diversification strategy which has been developed internally.

Integration

Airport privatisation has enabled other strategic methods to be used. This is partly because it has enabled airports to buy other airports and also because it

has given private airports more freedom to pursue other methods of strategy development. Horizontal integration, which occurs when organizations combine with other organisations in the same industry, is an important strategic development method which is used in other industries. Within the airport industry there is now the situation where established airport operators such as BAA or Schiphol or new airport operators such as Hochtief or TBI are now operating other airports (Graham, 2003). Such developments can bring about market development in that they involve introducing existing products (i.e. the established commercial product) into new market areas which could include new geographical areas but may also allow for product development as new products will be acquired. For many industries, including travel-related businesses such as hotels, travel agents and tour operators, clearly a key motive for horizontal integration is to create market power and brand strength and hence to reduce competition. This is not really the case with the airport sector. Neither are the airports marketed under a common brand although Schiphol does try to promote its Airport City concept.

The exception to all this is the airport group Plane Station which has acquired a number of old military or disused regional airports primarily in Europe and are aiming to develop an integrated network of airports with common standards, processes and tariffs. This airport operator is very different that all the other operators which are expanding and is very much following a niche strategy by focusing on low cost and freight traffic. There are a few situations where horizontal integration has enabled airports to achieve market penetration by taking control of neighbouring airports. For instance this is the case with Manchester which has acquired both Nottingham East Midlands and Humberside airport in the North of England. Fraport buying Hahn airport and Schiphol likewise owning some of the small regional Dutch airport has caused a similar effect. In this case the competitive advantages of horizontal integration will be much clearer in that such a strategy is reducing the number of competitors which exist. This leads on to the whole issue of whether different airports in relative close proximity or in the same geographical region should be operated as individual entities or as a group or system. Arguments favouring group ownership and operations include economies of scale and enhanced career opportunities for employees, a stronger financial structure which can support the investment peaks and troughs at different airports and a more consistent strategic planning and investment policy. On the other hand, supporters of individual operations claim that separation would produce more competition and choice and superior local management. The argument has recently been lost in Ireland where the former airport company Aer Rianta has been split into three independent airport companies.

Then there is vertical integration, either forward integration when organisations seek increased control of distributors, or backward integration when organisations seek control of suppliers. This is not a common strategic

method which the airport industry has generally decided to follow. However In the UK there are examples of two regional airports, namely Cardiff and Norwich airport, who developed local travel agency business in an attempt to increase awareness and thus flight bookings through the airport. This forward integration can cause market development from a passenger perspective since new passengers may be persuaded to fly from the airport. It could be argued that backward integration has always really existed within the airport industry by nature of the fact that some airport operators themselves will choose supply part of the composite airport product, for example with handling or air traffic control services. However there are very few examples of airport operators who have consciously decided to grow their company by buying into a vertical integrated organisation rather than just historically maintaining an interest in an activity which has always been provided by the airport company. BAA's development of World Duty Free is one such example. Within the context of vertical integration, some airports have decided that it is favourable to adopt a strategy of developing much stronger links and partnerships with the airline - which is in effect 'the supplier' for the passenger product. This is common practice with LCC operations and also in the USA where long-term airport-airline contracts have been the norm for many years. Elsewhere airlines have usually not entered into long term pricing agreements with airports and instead have just tended to pay charges such to a published tariff with associated conditions of use. However there are now examples of airline-airport agreement in Copenhagen, some of the major Australian airport and Frankfurt where there is a risk sharing element (Klenk, 2004). This is seen by some to be a more attractive and appealing option rather than the often confrontational and defensive approach which tends to be adopted when there is a more formal regulation process. The UK regulator, the CAA has also recently suggested that the airport and airlines could negotiate more closely with each other (Civil Aviation Authority, 2004). A few airports have even gone one stage further than this with their relationship with their airline customers. For example in the UK, Norwich airport has chartered its own aircraft over recent years to prove to tour operators that there was a demand for charter flights. Planestation has also acquired the new LCC EUJet primarily to secure its existence Planestation's Manston airport. Interestingly, in a somewhat reverse situation, Coventry or West Midlands airport has recently been acquired by the travel company TUI which operates Thomsonfly.

Alliances and franchises

There are other methods of strategic development which provide for some of the benefits of collaboration without the transfer of ownership or operational control. This includes alliances and franchises. Airports quite often informally get together for example for information exchange or marketing support but Pantares, the alliance which was set up between Schiphol and Fraport in 1999, is really the only example of a more official and widely focused alliance. However unlike airline or other alliances, airport alliances cannot be driven by network

effects, or with the aim of increasing market accessibility, but instead may reap benefits from shared knowledge, expertise and financial resources and joint bidding for international projects. To date these benefits for Pantares have proved very limited but potentially there could have been some advantages. It could also reduce some of the competitive pressures which exist when the two airports are involved in the bidding process for a privatized airports as these two former rivals have agreed that they will also co-operate in this area. Franchising, which is used in other industries to gain the competitive advantage through benefiting from rapid market development of a well known brand without the need for investment, is not a practice which is used in the airport industry. This development method is only relevant if it could be proved that being branded as part of a successful airport group can substantially improve the market potential and image of a smaller airport. This does not currently seem to be the case.

Retrenchment and divesture

Since the airport business is still generally a growth industry which has yet to reach maturity all of the strategic directions and methods which have been discussed so far are associated with growth. However clearly there are some instances when competitive advantage may well be maintained only if retrenchment strategies are adopted. Zurich and Brussels airport are two airports which had to follow retrenchment strategies such as following the collapse of their two major airlines, namely Swissair and Sabena. There then are divesture strategies which again are not very common.

Competitive strategies for LCC customers

The rapid growth of LCCs has created new challenges for airports in the area of competitive advantage. In terms of the forces of competition, for the smaller regional and secondary airports who are very dependent on this traffic, these airlines can have very strong bargaining power and a number of existing rival airports for the products very often exist. Such airports will be following a niche strategy – both in terms of offering low prices through deals negotiated with the LCCs and maybe also in terms of the simplified and uncongested product on offer. For these airports it makes much sense to attract this type of traffic as it will often use the spare capacity at under-utilised existing infrastructure. It may well act as a catalyst for additional air services and encourage economic development and tourism within the surrounding area which will be particular interest to publicly owned airports. However such a strategy will run into problems if demand grows to such a level that new facilities are needed but the LCCs are not prepared to pay for them as has happened with Ryanair at Dublin and easy Jet at Luton. At medium sized airports which serve other conventional airlines as well, the LCCs power is less as these airlines will make up a smaller share of the total traffic. Many of these airports have also encouraged the development of low cost traffic to supplement their other more traditional traffic base. However there is a danger that the LCCs

will instead act as substitutes for the conventional airlines. This will probably not be financially beneficial to the airport operator and may cause a loss in choice of hub links. Dennis (2004) cites the example of the Belfast airports where local accessibility has improved in terms of price but global accessibility has very much deteriorated because of the shift from conventional to low cost services. There are other issues to consider for medium size airports which are serving both conventional and LCCs. The conventional approach is to offer a standardised product for all its airline customer. However the LCCs have very different needs from the conventional carriers including quick turnaround time, quick check-in, fast handling services and no airline lounges (Barrett, 2004).

This is causing a number of airports to consider unbundling their services and to offer a differentiated product to different airline types Other options are possible (Pitt and Brown, 2001). This has been fiercely opposed by Air France and some other airlines who feel that the projects discriminates again them – but the regulator ComCo does not feel that this the case and has approved the development (Air France, 2004: Geneva Airport, 2004). Although experience of low cost terminals is very new, it is difficult to see how dedicated terminals, particularly when they are new facilities, can really have costs low enough to satisfy the needs of the LCCs. Another option is to have a competing terminal. Ryanair has lobbied for a separate terminal for its operations in Dublin for many years. In 2002 the Irish Government asked for expressions of interest from organisations which might wish to develop a competing terminal at Dublin, possibly for LCCs—but this does appear to have been taken very much further to date (Department of Transport, 2003). Finally for airport groups there is an alternative option of directing the traffic to one specific airport as with Stansted and the BAA London airports (although Gatwick now has LCC traffic well), Hahn in Frankfurt and Ciampina in Rome.

Conclusion

This paper has identified a number of airport competitive strategies which have been adopted. The focus has been intentionally broad and for any of the strategies which have been mentioned, a much more thorough analysis is needed to gain a full understanding of their effectiveness. However in general terms this paper has aimed to demonstrate that there are some characteristics of the airport product, for example, the existence of more than one key customer and the nature of composite product, which makes the task of formulating competitive strategies that much more complex and difficult. In addition there are many airports which still exist in a fairly uncompetitive environment and for whom the relevance of the whole concept of competitive advantage at this stage in time must be questioned. Nevertheless there are many other airports which are now operating in a much more competitive manner for whom knowledge of competitive strategy in other industries could provide additional insight for achieving that vital competitive edge.

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