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End of the free lunch? The responses of traditional European airlines to the low-cost carrier threat

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ABSTRACT

The short-haul operations of traditional European airlines such as British Airways and Lufthansa have come under increasing pressure from the growth of low-cost carriers. This paper examines their competitive responses. These are found to include reductions in labour costs, greater use of regional aircraft and a run-down of secondary hubs. Minimum stay requirements on cheap fares have been axed in many markets, while changes to the on-board service and a move to direct-sell bring these airlines closer to the low-cost carrier product. The network strength is largely maintained however, which appears a better strategy than setting up a low-cost subsidiary.

KEYWORDS

Airline, competition, cost, fare, service, network

1. Introduction

The established European airlines have all come under pressure in the last few years, with a collapse in profitability and doubt cast over their traditional business model. Meanwhile, there has been dramatic growth by the low-cost airlines and other new entrants. Although much has been written of the low-cost carriers' performance - for example, see Lawton (2002), Gudmundsson et al (2005), Doganis (2006), Civil Aviation Authority (2006) - relatively little research has taken place on the reactions of the traditional airlines.

Some of the European majors such as British Airways (BA), Aer Lingus and Lufthansa face low-cost competition across a substantial part of their short-haul network. Others such as Air France, Austrian or TAP Air Portugal only have significant exposure on routes to the UK at the present time.

This paper aims to assess the strategies adopted by the major airlines in reaction to the competitive threat from low-cost carriers. These include means of reducing labour costs or increasing productivity within the mainline airline operation. There is also the possibility of transferring services to regional partners, franchises or alliances and even setting up a low-cost carrier subsidiary. Services and procedures have also come under scrutiny. Areas such as distribution costs have been brought closer to the low-cost airline model by reducing or scrapping commission payments to travel agents. British Airways and bmi have revised their fare structures to remove minimum stays on the cheaper tickets for most European sectors. Catering in economy class is generally on a downward spiral with airlines such as

Aer Lingus, bmi and SAS moving to paid for refreshments and some others offering only non- alcoholic beverages. Charter airlines such as Monarch have moved into the scheduled business while Thomsonfly offers seat only charters on a range of new routes.

The success of these approaches has been rather variable. In particular, few of the low-cost subsidiaries have been very successful, suggesting it is difficult to run two brands under the same roof. British Airways is generally accredited with having the most realistic strategy for dealing with the low-cost airlines, perhaps alongside Aer Lingus who are the only real example of a traditional network airline converting much of the way into a low-cost carrier (Aviation Strategy, 2004b). Others have done the minimum by changing strategy only where head-to-head with either a low-cost airline or BA. Some have adopted aggressive tactics through legal procedures or control of slots, facilities or capacity to keep new entrants out.

2. Raise labour productivity and outsource more services

One area where the low-cost airlines have made significant savings over the traditional carriers is in terms of labour costs. The major airlines have tried to revise their wage costs downwards through various measures including increasing productivity, freezing or reducing salaries or benefits, hiring new staff on less generous terms and conditions and outsourcing more activities, including selling off or transferring to third parties support services that were previously done in-house (catering, ground handling etc). Employment with the major airlines was historically a comfortable existence. Once easyJet, Ryanair etc found there were staff willing to work in the airline industry for much less, it became difficult to justify maintaining these generous conditions.

Table 1 shows the changes over the last five years for major UK scheduled airlines and a selection of other European carriers.

It can be seen that traffic has generally grown faster than employee numbers. In many cases the number of staff on the books has actually gone down. This has led to a superficially improved productivity indicator (RPK/employee). These have to be treated with caution however. Stage length is a critical factor in determining the absolute RPK/employee figures. Some of the largest changes have been achieved by selling off whole departments (e.g. ground handling at bmi). easyJet and Ryanair have achieved their dramatic growth in productivity by taking on the bare minimum of extra flight and cabin crew to support their vastly expanded operations. This has spread administrative staff over more passengers, while everything else is contracted out. The UK and Irish airlines have generally moved further in this direction than their European counterparts. Staff at BA ought to be worried by the changes Willie Walsh instituted during his time at Aer Lingus! The first signs of this came with a cull of managers in Winter 2005/06, reducing this group of staff by about a third. The KLM/Air France figures are hard to explain and may be down simply to changes of definition.

Unlike the low-cost carriers, the major airlines have not generally tried to shift any flight and cabin crew to lower cost economies. They still put a large number of crew in expensive accommodation away from home to operate early morning flights from other countries, rather than setting up a local crew base. BA even does this on domestic sectors where a particular fleet is based at the opposite end of the route (e.g. 737 crews overnight away from Gatwick at Edinburgh).

Support services such as catering, cleaning and ground handling have come under much more severe pressure (Stewart and Michaels, 2003). These providers may rue the day they did a deal with Ryanair or easyJet on a marginal cost basis. At that time, these airlines were small players and it was seen as useful incremental extra business. The assumption was that the traditional airlines would continue paying 'normal rates' which covered the full cost of the service plus a profit margin. However the majors have been forced to renegotiate their contracts to remain competitive, in some cases reducing service standards as well. Caterers are in the bleakest position as food provision has generally fallen across the board. Gate Gourmet's revenue fell 30% from 2000-04 despite a growth in passenger numbers (Ott, 2005). Low-cost airlines now account for a large part of the market and along with those traditional carriers selling refreshments have complicated procedures while shifting the risk of wastage onto the suppliers. The high profile dispute at Gate Gourmet which crippled BA's Heathrow operation in Summer 2005 is indicative of the problems in the industry. Contract prices have fallen well below costs as supply exceeds demand leading to huge losses (Lufthansa's LSG Sky Chefs is in a similar predicament). Staff - many of whom may have once worked for BA's own catering operation under much better terms and conditions before it was outsourced - have taken the brunt of the pain. Handling companies are barely in a healthier position (witness recent industrial disputes at Aviance, for example). Aircraft maintenance is in somewhat better shape. The going rate for routine maintenance is fairly static as skilled engineers in a country such as the UK come at a price and everyone has to pay up. The main area where maintenance costs can be cut is through conducting heavy maintenance in lower cost economies, particularly eastern Europe. Lufthansa Technik for example, now has a base in Budapest for such activities.

Growth provides an alternative means for traditional airlines to improve productivity without reducing staff numbers. Lufthansa have favoured this course of action, adding new capacity faster than average in recent years (Flottau, 2005). BA on the other hand has been more ruthless in holding capacity down and conceding market share in an aim to avoid yields plummeting further. It is debatable as to how sustainable lower cost levels are. The majors are likely to be blighted by industrial action if they try to cut further while if the third party providers go out of business, contracts will have to be re-tendered at a higher level - which may turn the pressure onto the low-cost airlines. Nevertheless, it is still viewed as essential for the major carriers to reduce their cost-base if they are to stand any chance of remaining competitive in the future commercial environment (Franke, 2004).

3. More use of regional aircraft

In the United States, one of the most noticeable impacts of the increased competition faced by the 'legacy' carriers has been the transfer of many short-haul routes to regional partner airlines. There are two main reasons behind this. Where market share has been eroded by low-cost carriers such as Southwest it enables the major airline to maintain frequency (an important competitive weapon, especially when linked to frequent flier programmes -FFPs) whilst reducing capacity. In theory, this also enables yields to be maintained as it is the less valuable passengers on lower fares that will be turned away. The second reason is that the regional partners operate under a much lower labour cost regime than the majors have been able to achieve. Thus although aircraft such as the CRJ200 inherently have higher unit costs than a Boeing 737, for example, this has distorted the market, making the regional jets lower-cost to operate overall (Table 2). The recent surge in fuel prices means that many of these routes would be more efficiently served with a turboprop or large jet but the amount of regional jet flying has grown too large to unwind.

In Europe, there has been much less shift to regional jets due to capacity constraints at the major hub airports. The opportunity cost of using a precious slot for a 50 seater aircraft is enough to tip the balance in favour of the larger jets. At locations such as Manchester, however, which have seen their traffic base for traditional scheduled services eroded by low-cost operations at nearby airports, particularly Liverpool, there has been a considerable amount of trading down to smaller aircraft. This has been facilitated by the extra runway capacity available since the opening of a second runway in 2001.

Table 3 shows that British Airways has replaced 737s on routes such as Dusseldorf, Frankfurt, Geneva and Paris with regional jets, at similar or higher frequency but offering much less capacity. BA also has been squeezed on some of these sectors by the foreign carrier strengthening service into its hub (Manchester-Paris, for example, is a hub feeder for Air France but a point-to-point route for BA). On Manchester-Amsterdam the combined forces of KLM and three nearby low-cost routes have led to BA withdrawing. Belfast International and Knock are the other routes that BA has abandoned to the low-cost airlines. A number of new services have been added; some like Lyon or Oslo are business type routes with no direct competition whilst BA has also pitched in to places such as Nice and Venice which are dominated by the low-cost sector. BA however launched a further round of cutbacks in the Manchester operation (Crawshaw, 2005) and it is particularly the newer routes with low-cost competition that have received the axe. At the end of 2006, news came that BA was planning to transfer its regional operations (BA Connect) to flybe.

4. Run-down of secondary hubs

The major airlines have retrenched onto their main hub airports, reducing or abandoning secondary hubs and point-to-point services. This process was already underway due to hub domination, which made it difficult to compete with carriers flying from a hub at the other end of the route (as in the Manchester-Amsterdam case above). The low-cost industry has rapidly identified any other free-standing point-to-point services of the majors as the softest targets. Lufthansa (major hubs Frankfurt and Munich) and SAS (major hub Copenhagen) are particularly exposed here because of their large European networks from cities such as Dusseldorf, Hamburg, Berlin and Stuttgart (Lufthansa); Oslo, Gothenburg and Stockholm (SAS). Swiss has also largely withdrawn at Geneva and Basel. Table 4 shows how at Geneva, Swiss has cut from 25 routes to 7 in the last 8 years.

Some secondary hubs have continued, at least so far. Air France, for example, faces little competition out of Lyon and has actually redeployed resources here at the expense of some of its other airports. It is operated as a proper hub with waves of connecting flights, unlike other second tier cities (e.g. BA at Manchester), which offers a degree of protection. Barcelona appears to be a sufficiently thriving centre that it can support growth from Iberia as well as booming low-cost services, including Ryanair's base at nearby Gerona.

5. Revise pricing and remove minimum stays on low fares

Traditional airlines developed a very sophisticated system of yield management that aimed to minimise consumer surplus and divide the market according to different degrees of willingness and ability to pay (Tretheway, 2004). The consequence was a wide range of different fares for essentially the same product. The cheaper fares were surrounded with conditions, the most onerous of which was the requirement to spend a Saturday night away in order to obtain a discount tariff. The cheaper fares were hence sold only on a round-trip basis. This neatly divided the market on the assumption that anyone returning before the weekend must be a business passenger and hence have low elasticity to price as they would not be paying their own fare. Cheap fares were hence reserved for leisure passengers who stayed away over the weekend. Flexibility was only available at the higher fares, again making cheap tickets unattractive to business passengers whose travel plans may change frequently.

The low-cost airlines, particularly easyJet in Europe, started offering one-way fares. They still operated differential pricing but the only relevant factors now were the time of travel (peak/off-peak etc) and how far ahead the ticket was purchased. Initially the major carriers lived in denial, believing that business passengers would continue to buy expensive full-fare tickets in order to benefit from high frequency service from convenient airports with FFP credit. Business passengers started leaching away to the low-cost airlines, as did leisure passengers who wanted the ability to make a cheap midweek trip. When the damage could be contained to one or two routes, the risks of dilution (business passengers who would have paid a full fare trading down) outweighed the traffic being lost. Once British Airways was facing low-cost competition on most of its short-haul network however this couldn't be ignored any longer. In 2002, BA abandoned the minimum stay requirement for cheap fares on short-haul travel originating in the UK. They did not go as far as the low-cost airlines however. BA still requires a return journey which enables some sophistication in changing the fare of the return flight depending on the outward flight that has been chosen. It also means that the cheap flights are not necessarily the same for passengers starting at opposite ends of the route. For example, an 0800 flight on Wednesday morning may be cheap if booked as a return sector but high as an outbound sector. A 1700 return flight on Monday evening may be cheap if the passenger flew out the previous week but high if flying out the same Monday morning. BA still requires a minimum stay of 2 nights for cheap fares from certain European countries, where it is effectively matching the local carrier (e.g. Iberia or Swiss) rather than easyJet. The low-cost airlines generally base their aircraft in Britain and so cannot offer competitive timings for short trips from Europe to the UK. bmi went a step further by pricing on a single journey basis. This means that on routes where BA and bmi compete the one way fares are often more expensive on BA (as constrained by the highest pricing quoted as part of a return journey). BA made some one-way seats available at lower fares through consolidators - typically on routes from Gatwick where they go head-to-head with easyJet (e.g. Gatwick-Amsterdam; Unijet were quoting a one-way fare of £59 on BA in January 2005 as against a published fare of £158). Cheaper one-way fares are now available on ba.com - but typically only on off-peak or Gatwick flights. From Heathrow, to discourage mixing a one-way with the foreign airline to get the preferred timings, single flights at business times remain high.

The response of the other European airlines on pricing has been variable. Table 5 summarises the latest position on short-haul international routes within Europe. Some such as Air France have matched BA for bookings in the UK but continue to cling to their beloved Saturday night rules and no flexible tickets other than business class on the rest of their European network. Others such as KLM haven't even matched BA where they are head-to-head. Lufthansa has some cheap flights on Germany-UK routes without a minimum stay requirement but typically at very poor times. SAS has recently moved towards pricing the legs of a return journey separately (Travel Trade Gazette, 2005) but this is hardly the achievement it is made out to be - merely emulating BA's structure - it is still not possible to buy cheap one way tickets. easyJet made all tickets flexible as a response to the lower fares with fixed reservations introduced by the major airlines. However, the difference in price still has to be paid between the original fare and the selling rate on the new flight at the time the change is made, as well as an administration charge. As fares are increased dramatically close to departure this is not a realistic option for many passengers.

British Airways, Aer Lingus, Lufthansa, Iberia and Alitalia have now adopted similar tactics, as it represents a means of increasing revenue from low-fare passengers rather than simply having them not travel or buy a new ticket elsewhere.

Table 6 provides a snapshot of pricing strategies for a midweek day return trip, booked three weeks ahead on routes to/from London. This was chosen to see where the major carriers have become more competitive for advance booking on short duration midweek trips and where they still have minimum stay rules in place. Restricted tickets were permitted in the analysis, although in some cases only an unrestricted ticket at a very high fare was offered. On London-Amsterdam, the KLM fare is over £300 without a two night minimum stay. VLM on the City Airport route is much below KLM. BA or bmi are available for just over £100 return. easyJet offers a significant price advantage over all the other airlines on this route (around half the BA rates). It is difficult to see who would choose KLM for a day trip unless the company is paying and they want the FFP miles or they require a flexible ticket and the KLM flight is at the most convenient time.

On London-Paris there is less inter-airline competition. Air France matches BA and bmi from Heathrow. The main alternative comes from the train (Eurostar). Booking at least 3 weeks ahead Eurostar offers £59 return to 'leisure travellers only' (what happens if you turn up with a suit and briefcase?!). Otherwise they don't go below £199 return for a day trip midweek, making the airlines potentially cheaper. Air France makes no attempt to match BA out of Paris and easyJet offers less price advantage - presumably no-one chooses Luton to travel to Paris unless it is more convenient than the other airports and Waterloo, in which case they have a captive market. bmi (and also Air France on the LCY route) can't offer a viable day trip schedule if starting in Paris. Airline pricing behaviour in the London-Paris market was studied in more detail by Pels and Rietveld (2004).

For London-Geneva the most interesting feature is BA's differential pricing depending whether one starts from the London or the Geneva end of the route. Swiss have a medium fare of £220 return from Geneva - the flight is ironically operated by BA who charge at least £395. easyJet is not much cheaper for London originating passengers - indeed BA beats them by £3 out of Gatwick!

Finally, Madrid-London perhaps raises the greatest competition concerns. BA has an alliance with Iberia and for Madrid residents making a day trip to London, it is still the good old days here for the airlines with BA charging £688 and Iberia £697. easyJet can only offer a day trip if starting from London and once again they are more expensive than BA out of Gatwick. bmi only offers one flight per day.

6. Charge for catering or reduce free provision

Economy class passengers making international journeys within Europe have traditionally been served a hot or cold meal depending on the time of day and length of route. The first attempt to adapt this came when BA introduced the separate Club and Tourist products more than twenty years ago. Club passengers received upgraded catering whilst Tourist had a carry-on sandwich bag on longer flights and nothing on short hops. Few carriers matched

BA's provision (indeed British Midland made a virtue out of its 'diamond service' for all) so for competitive reasons, the airline was forced to return to a conventional food service in economy. Non-alcoholic beverages have always been free and during the 1980s the move towards free drinks across the network meant that most European airlines started offering complimentary wine or beer as well. Domestic catering has traditionally been minimal in some countries (France, Spain, Italy). In the UK, BA only operated one cabin and so enhanced catering with hot meals was available to all passengers. Until recently, most of these routes were dominated by business traffic.

It was not until the last five years that the growth of the low-cost carriers, which either offered no catering or a basic paid-for service ('no frills'), forced a revaluation of the short-haul product by the traditional airlines. The difference over the 1980s was that passengers then saw no price incentive for foregoing the food and drink. Now with fares half or less those of the major airlines available from Ryanair or easyJet, the free catering (which many passengers never much liked anyway) suddenly became the most visible symbol of difference between the two sectors.

There has since been a gradual drift to reducing provision in economy class by the traditional airlines. As well as saving money, this has the added benefit of allowing the business class product to become more differentiated, encouraging the 'service seekers' to trade up. The argument is that no-one buys an air ticket because of the food. Therefore if the ticket price can be cut by £5 through cutting out the food, that will be more commercially successful. The danger for the traditional airlines however is that they can never match the cost levels - and hence the average fares - of Ryanair or easyJet. If inclusive economy class catering is eliminated, passengers may then see no reason for using these airlines.

The evidence however is less supportive of traditional services. In the US, all the legacy carriers have rushed to strip out catering provision on short-haul flights. They believe the Frequent Flier Programme is the only 'frill' valued by the passenger (and perhaps in-flight entertainment on longer routes, a major selling point of Jet Blue). Most of these airlines have been doing extremely badly however, not helped by the negative passenger perception that comes from no in-flight service, disillusioned staff and fares that are still often higher than Southwest or Jet Blue.

In Europe, Aer Lingus has gone to paid for catering only. Prices are reasonable and the menu comprehensive compared to the low-cost carriers. A Full Irish Breakfast is available until 1000 hours at 7 euro. At other times a hot ham and cheese panini is 5 euro (Aer Lingus, 2005). Maersk of Denmark (now part of Sterling Blue) was another airline that made an early move in this direction, their style being copied shortly afterwards by SAS. Iberia, Swiss and Austrian subsequently shifted to paid for food and drink also.

The problem with paid for catering however is that it is a rather inefficient process. Axing all food saves money because turn-around is speeded up as the aircraft does not need to be cleaned and catered, galley space can be replaced with seats and cabin staff can be reduced in number to the safety minimum. If the same free sandwich is provided to everyone than it is only necessary to load the requisite number then dash round the aircraft handing them out. Once passengers are given an option of purchasing items then cabin staff have to waste time going to and from the galley, collecting money and giving change in different currencies and with a choice of items, either some passengers will be disappointed or a lot of wastage will occur. The take-up will be variable from flight to flight making it difficult to plan efficiently.

The complications coupled with the negative image it conveys prompted Lufthansa to reinstate free catering on Swiss a few months after taking them over. This brought the Swiss product back into line with Lufthansa.

Amongst the airlines still offering free catering within Europe, BA has trimmed back provision on shorter routes to only biscuits between 1000-1200 and 1400-1700 with a sandwich from the 'All Day Deli' at other times. On domestic routes, hot breakfast is still available until 1000 (continental breakfast to Europe and Ireland). Hot paninis are favoured on longer routes. A full range of free drinks is offered from the bar. KLM and Lufthansa basically offer a sandwich and a drink (KLM did not offer alcoholic drinks even for payment in economy but has now reinstated these for consistency with Air France). Air France is generally a bit sparser on food, with only biscuits on domestic routes and between main meal times. SN Brussels are slightly more generous with some of the traditional frills such as sweets before take-off, hot croissants, chocolates offered with tea/coffee and hot freshen-up towels.

bmi has recently moved to paid for catering in economy class from Heathrow and axed business class except to Edinburgh, Glasgow, Belfast, Dublin and Brussels. bmi regional flights are all economy class and continue to provide free refreshments however (unless travelling to the Channel Islands or Ireland). The phrase 'dog's dinner' found some resonance with journalists and (at least before the Gate Gourmet crisis), BA hoped to attract higher yield passengers who became fed up with the uncertainties and inconsistencies that bmi were creating (Jamieson, 2005). The future of catering on BA short-haul flights must be under a cloud with Willie Walsh having superceded Rod Eddington. Whereas Eddington had tried to differentiate the carrier with a 'value' proposition, Walsh's approach at Aer Lingus was that cutting cost by cutting frills was the way to move forward: 'if you can't beat 'em join 'em'. At Dublin, Ryanair's HQ is just across the car park from Aer Lingus and the passengers are mainly holidaymakers or visiting friends and relatives. Whether this applies at Heathrow (when Ryanair operate from Stansted) is still open to debate. The carrier that BA has tended to benchmark itself against over the years is Lufthansa and as long as they are still providing free catering, there is at least some pressure to maintain the status quo. In March 2006 however, the regional services of BA CitiExpress (from Manchester, Birmingham, Edinburgh etc) were re-branded as BA Connect, with reduced fares and a single cabin offering paid-for food and drink. As with Aer Lingus the menu is extensive and good value, perhaps reflecting the need to continue to find productive use for the on-board galley facilities and staff. BA still maintains its traditional product on Heathrow and Gatwick based aircraft and also the four routes from London City, despite the latter being operated by BA Connect. Franchises have maintained the full product from the London airports but GB Airways has matched BA Connect with charges for food and drink out of Manchester and Loganair charges for alcoholic beverages in Scotland.

7. Abandon business class

Whereas in long-haul markets there will always be some passengers willing to pay more for sleeper seats, it is difficult to offer passengers additional comfort features that add significant value on short-haul European routes. Business class significantly increases unit costs but for most of the major airlines there remain several rationale for continuing to offer it. Firstly, it is necessary to provide passengers connecting to first and business class long-haul flights with a segregated product on the short-haul feeder routes. Otherwise they are likely to desert to rival carriers and these travellers are valuable for their long-haul revenue. Secondly, many of the European airlines still do not face low-cost competition on much of their short-haul network. Thus they can maintain traditional practices on pricing, forcing trips without a Saturday night stay into business class. Thirdly, some passengers (or their employers) are still willing to pay for the highest level of service available and if the additional revenue received more than offsets the marginal costs of providing the premium cabin then it is sensible to do so.

Almost all European 'flag carriers' still offer a two-class cabin on short-haul international routes with aircraft of Boeing 737 size or larger. Aer Lingus is the only exception to this rule. It now operates a single class in Europe but with all passengers able to purchase a range of hot and cold food.

Some airlines also offer business class on the 100 seater equipment such as the Avro RJ or Fokker 100. On aircraft in the 50 seat range there is typically only one class.

Many airlines only offer one-class on their domestic network. These routes are usually short-sectors with either a semi-monopoly position (e.g. Alitalia) or a large proportion of business passengers (e.g. BA). SAS effectively offers a three class arrangement with free refreshments for full-fare economy passengers as well as a separate business class.

For independent European airlines without a long-haul network to support, business class is now effectively dead. Whereas the traditional flag carriers remain wedded to this concept, almost all the independent airlines have got out. bmi was one of the last to maintain a two-cabin arrangement but this is now reduced to a handful of routes (see section 6 above). Nevertheless, with the cost levels of the traditional airlines, the opportunity to obtain a few passengers paying £300 each way, for the sake of putting up a curtain and buying in a few hot meals, still seems attractive compared to taking dozens down the back at £30.

8. Reduce distribution costs

One area where the low-cost airlines have managed to reduce expenses with negligible impact on standards of service, as perceived by the passenger, is through axing commissions to travel agents. The view of traditional airlines was that travel agents were necessary to distribute their product as widely as possible, particularly in areas away from the home market. If one airline stepped out of line then the agents would push all the business to their rivals, losing them much more than the 9% commission. This assumption began to change for several reasons however. By turning price into the major selling point - with fares 50% or more below the traditional airlines - the low-cost airlines found passengers would book the low fares even if it meant using different distribution channels. Internet penetration was growing rapidly, providing the ability for customers to book their own flights using automated systems. A short-haul airline selling simple point-to-point flights didn't require complex GDS equipment or yield management.

The network airlines could no longer afford to pay commissions for a service the passenger didn't value. There was little incentive for passengers to book direct with the airline when the price was the same. Pass the money back to the passenger however and suddenly many more people will book direct. It was easiest to do this in the home markets where the airline typically has a dominant position through high frequencies/network coverage, FFP membership etc. Airlines also needed to incentivise passengers to book through their own website by offering the lowest total payment by that method. In overseas markets and for smaller airlines however there may be too low a level of awareness for airlines to generate much business direct. Many UK passengers, for example, will examine the websites of easyJet, Ryanair and BA but overlook carriers such as Air France or Lufthansa. This tends to reinforce the national bias among airline customers. Travel agents (including the on-line agencies such as Expedia) may still be the best option in these circumstances and even low-cost airlines have to spend heavily on advertising.

British Airways commission payments as a proportion of sales have fallen from 14% in the financial year ended 1997 to 9% in 2002 and 6% in 2005. Travel agents (including internet intermediaries) have been forced to add service fees to maintain their income. This has the consequence of driving more customers to book direct and on-line. Table 7 shows the going rates for commission in Europe. It is mostly long-haul airlines from other parts of the world that still pay generous terms. Another benefit of direct internet sales is the ability to automate associated aspects of the travel process such as check-in (Aviation Strategy, 2004a).

9. Increase aircraft utilisation

The constraints of hub operations do not make it easy to maximise aircraft utilisation. Aircraft often have to be left on the ground for longer than the minimum time period in order to synchronise with other flights at the hub. Traditional airlines have also scheduled longer turn-arounds to allow for catering and cleaning of the aircraft and provide a contingency allowance to improve the chance of on-time departure. Passengers find it less stressful to stroll onto the aircraft 20 minutes before departure and relax in their seats rather than having to wait in the gate area for a last minute boarding call. The use of loading bridges provides a higher level of passenger service, particularly in inclement weather conditions and for disabled passengers. However it also slows down boarding and alighting. This is primarily because only the front entrance/exit from the aircraft can be used whereas with steps onto the apron, passengers can board and alight through both the front and rear doors, potentially halving the time taken to load or unload. Allocated seats are another delaying factor in the boarding process. Passengers take longer to find their designated seat than simply going into the first one available. In the process they may block the aisle accessing the overhead bins. The pressure from passengers behind creating a scrum to secure the best seats is also removed. The trend amongst low-cost airlines to encouraging cabin baggage and minimising the number of checked bags will however have a negative impact on turn-around times as passengers take longer trying to stow hand baggage. Indeed the UK Department of Transport was threatening to legislate on cabin baggage (Travel Trade Gazette, 2006) after security search points became bogged down by passengers taking as much as possible on-board due to charges for checked-in bags (e.g. Ryanair or flybe) or reduced restrictions on carry-on bags (e.g. easyJet). This saves the airline money on ground handling but simply moves the cost somewhere else. Traditional airlines are needless to say unhappy that their passengers should be delayed in queues at security behind these low-cost travellers.

The traditional European airlines have generally increased the aircraft utilisation of their short-haul fleets in response to the low-cost threat (Table 8). This is particularly marked with BA, Lufthansa, Iberia and SAS while KLM's utilisation appears to have gone down. These figures must be treated with some caution however as fleet renewal and network changes mean aircraft types are not necessarily used on the same mix of routes as five years previously. British Airways has made some of the greatest strides at Gatwick to emulate the low-cost model with earlier starts, later finishes and tighter scheduled turn-arounds (Table 9) but have retained features such as allocated seats, cleaning and catering and use of airbridges which make it difficult to achieve a 30 minute turn-around particularly with a full flight.

Anecdotal evidence suggests that BA often still take 35-40 minutes to turn the aircraft around so an on-time departure is only possible if the aircraft actually arrives early. There is some contingency in the en-route schedule which may permit an on-time arrival, although even this has been pared back by about 5 minutes per sector from the old timetable. Whether the yields on the first and last flights exceed the marginal cost of operating at these times is an interesting question. With higher fuel prices it must be more difficult. BA regularly have their lowest fare on-sale for the very late evening flights, in many cases still bookable up until a week or so before departure.

10. Set up a low-cost subsidiary

Numerous attempts have been made by traditional airlines in North America and Europe to set up subsidiary carriers on the low-cost/no-frills model as a competitive response to the growth of new entrants. The objectives of these carriers are somewhat varied and in many cases have not enjoyed great success (Morrell, 2005; Graham and Vowles, 2006).

British Airways set up go to fly from Stansted and subsequently other airports such as Nottingham East Midlands and Bristol. They were eventually sold off to a consortium involving the management and subsequently taken over by easyJet.

Lufthansa has an interest in germanwings through eurowings. Research in Germany suggests this is an efficient approach to serving different market niches (Lindstadt and Fauser, 2004). SAS set up Snowflake to take-over low-yield/leisure type routes. Snowflake suffered the worst of all worlds - with aircraft and crews seconded from the parent company it didn't achieve much cost saving but yields plummeted as feeder traffic to the SAS network disappeared and large numbers of seats had to be filled by stimulating the point-to-point markets. Snowflake is now merely a booking class on flights that are back within the SAS operation.

Another variation on this theme involves handing routes to franchise partners with lower cost levels. Most franchises are in the regional sector of the market where the use of smaller aircraft is the primary motivation. One notable exception however is GB Airways, the British Airways franchise that operates mostly between Gatwick and holiday destinations in southern Europe. GB has cost levels (stage length adjusted) around 20% below BA. This means that it can operate viably on lower yields and compete more closely on price with the low-cost airlines. It nevertheless provides a full BA branded product with the network benefits of through fares, interlining and schedule co-ordination, FFP participation. GB uses A320 and A321 aircraft. This has been manageable largely because it serves destinations that were not in the BA network at all in recent times. Attempts to transfer routes from BA mainline to GB with similar size aircraft are likely to meet with union resistance.

11. Conclusions

Although some of the European flag-carriers such as Alitalia and Olympic continue to rack-up huge losses, the financial recovery of airlines such as BA, Lufthansa, KLM/Air France, Aer Lingus and Iberia provides some evidence that the traditional network carrier model can still work. Indeed, apart from Ryanair which has enjoyed very large and perhaps somewhat unrealistic profit margins in recent years, the majors are doing as well as anybody. easyJet typically makes about a 5% surplus, similar to BA. The other low-cost carriers are loss making in many cases and in 2004, Virgin Express became the first to surrender to what is effectively a take-over by a traditional airline, SN Brussels.

The most successful strategy for the network carriers in the short-haul market involves concentrating on their major hub or hubs and off-loading peripheral routes. Cost reductions can be achieved in the first instance by increasing crew and aircraft productivity and outsourcing services. The passengers will usually notice little negative impact from such changes. Low-cost subsidiaries only appear to be a successful diversification in markets away from the main hub cities, although for some of the 'second tier' flag carriers with mainly point to point traffic this may effectively mean reinventing the whole airline - as in the case of Aer Lingus. In contrast, franchising could be more widely exploited throughout the short-haul network. A need to avoid damaging labour disputes may inhibit all these cost-reduction measures however.

The most successful product specification appears to be based on retaining full-service business class and a more basic but still free-service economy class. This provides a differentiator to the low-cost airlines while being compatible with the long-haul product for connecting passengers. Paid for food and drink is not a very efficient option as Lufthansa identified with Swiss. Pricing for local passengers needs to be brought in-line with the terms and conditions of the low-cost carrier offering, although it should be possible to command a premium for a more convenient service (in terms of airports, schedules and 'frills'). It is becoming increasingly unfeasible to operate a differentiated pricing structure with unrestricted and quite possibly loss-making fares where there is competition from low-cost airlines, while retaining traditional controls on cheap fares in other markets. This also raises issues of unfair competition and abuse of monopoly power. Network pricing of connecting flights still remains an important competitive weapon for the hub operators, which in turn necessitates a GDS presence, although much short-haul traffic can be encouraged to book direct.

The European majors are generally in better shape than their US counterparts (the so-called 'legacy' carriers). They have more emphasis on long-haul travel which is a growing but currently less competitive part of the market. They also have a protected position at their major hub airports due to capacity constraints. Nevertheless, many of the mainland European airlines have not yet felt the full thrust of the low-cost carrier onslaught. There is little evidence that operators such as Air France have moved far enough to compete with these new entrants. Given the large number of aircraft that easyJet and Ryanair have on order and the increasing saturation of the UK and Ireland markets, the most interesting battles may be yet to come.

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Table 1

Change in traffic and employment levels for European airlines 1999-2004

Airline	Change 1999-2004			2004
	Traffic (RPK)	Employees	RPK/employee	RPK/employee
Ryanair	+330%	+ 78%	+142%	8765
easyJet	+356%	+117%	+110%	6685
GB Airways	+ 70%	+ 34%	+ 27%	3808
Virgin Atlantic	+ 3%	+ 5%	- 2%`	3657
Aer Lingus	+ 27%	- 36%	+ 99%	3131
Lufthansa	+ 17%	- 9%	+ 29%	3011
British Airways	- 8%	- 21%	+ 17%	2077
Iberia	+ 15%	- 2%	+ 17%	1745
bmi	+ 56%	- 40%	+162%	1686
Alitalia	- 18%	- 1%	- 18%	1639
KLM/AirFrance	+ 10%	+ 23%	- 10%	1592
Flybe	+ 85%	+ 26%	+ 46%	1233

RPK: Revenue Passenger Km

Source: Compiled from IATA, Flight International and Airline Business data

Table 2

Unit costs of regional jets and Boeing 737

Aircraft type	Typical seats	Cost per Available Seat Mile US cents	Cost per Flight US$ (averaged to 500 miles)
Canadair CRJ-200	48	7.86	1592
Embraer 145	50	6.93	1590
Boeing 737-300	126	4.09	2912

Stage length varies from 330 to 640 miles

Source: costs from Avmark Aviation Economist/Airline Monitor (based on US DoT data)

Table 3
Change in British Airways short-haul operations at Manchester 1997-2005
Routes with at least 1 weekday frequency; only non-stop frequencies shown
Excludes code-shares not operated by BA or franchises

Route	July 1997 weekday service	July 2005 weekday service	Low-cost competition 2005
Aberdeen (-)	4xATP	3xDH8	
Amsterdam (END)	4x737		Jet2 MAN-AMS easyJet LPL-AMS Jet2 LBA-AMS
Belfast City (+)	4xATP	6xDH8	Flybe LPL-BHD Flybe LBA-BHD
Belfast Intl (END)	4xATP		bmibaby MAN-BFS easyJet LPL-BFS Jet2 LBA-BFS
Berlin Tegel (-)	2xER4	1xER4	AirBerlin MAN-TXL easyJet LPL-SXF
Billund (+)	2xJ41	1xATP, 1xD38	
Brussels (-)	3x737	2x146, 1xER4	
Cardiff (END)	2xSH6		
Cork[a] (+)	1xATP, 2xJ41	1xAR1	bmibaby MAN-ORK Ryanair LPL-ORK
Dusseldorf (-)	3x737	3xER4	AirBerlin MAN-DUS
Edinburgh (+)	5xATP	1xAR1, 5xDH8	Jet2 MAN-EDI Flybe LPL-EDI
Frankfurt(-)	3x737	5xER4	
Geneva (-)	1x737	2xER4	easyJet LPL-GVA
Glasgow (-)	5xATP	1xER4, 5xDH8	Flybe LPL-GLA
Guernsey (END)	1xATP		
Hanover (+)	1xATP	2xER4	
Isle of Man (NEW)		5xDH8	
Jersey (-)	2xATP	1xAR1	bmibaby MAN-JER
Knock (END)	1xATP		bmibaby MAN-NOC
London Gatwick	2x757, 4x737	2x319, 5x737	Jet2 MAN-LGW
London Heathrow	2x767, 7x757, 2x737	3x757, 8x320	
London Stansted	2xATP, 1xJ41		Ryanair BLK-STN
Londonderry (+)	1xJ41	1xSF3	
Lyon (NEW)		1xER4	
Madrid (-)	2x737	1xAR1, 1xER4	Monarch MAN-MAD easyJet LPL-MAD
Malaga (NEW)		1x320	Monarch MAN-AGP bmibaby MAN-AGP Jet2 MAN-AGP easyJet LPL-AGP

			Jet2 LBA-AGP
Milan (-)	2x737	1xAR1, 1xER4	Ryanair LPL-BGY
Nice[a] (NEW)		1x146	Jet2 MAN-NCE Jet2 LBA-NCE
Oslo (NEW)		1xAR1	
Paris CDG (-)	5x737	5xER4	easyJet LPL-CDG Jet2 LBA-CDG
Rome Fiumicino[a] (NEW)		1xAR1	Ryanair LPL-CIA
Shannon[a] (+)	2xJ41	1xDH8	Ryanair LPL-SNN
Southampton (+)	2xATP, 1xJ41	1xER4, 4xDH8	Flybe MAN-SOU Flybe LPL-SOU Flybe LBA-SOU
Stuttgart[a] (NEW)		1xER4	
Venice[a] (NEW)		1xER4	Jet2 MAN-VCE Ryanair LPL-TSF Jet2 LBA-VCE
Vienna (NEW)		1xER4	
Zurich[a] (NEW)		1xAR1, 1xER4	

[a] route discontinued from Autumn 2005
+ increase in seat capacity 1997-2005
- decrease in seat capacity 1997-2005
NEW route newly operated by BA
END route no longer operated by BA
Source: Compiled from OAG data

Table 4
Swissair/Crossair/Swiss routes from Geneva 1997 and 2005
Short-haul routes with at least one weekday frequency non-stop
Excludes code-shares not operated by SR or LX

1997: Alicante, Amsterdam, Athens, Barcelona, Basel, Berlin Tempelhof, Bilbao, Brussels, Dusseldorf, Lisbon, London Heathrow, London City, Lugano, Marseille, Moscow, Nice, Paris CDG, Prague, Rome Fiumicino, Seville, Stuttgart, Toulouse, Vienna, Zurich

2005: Athens, Barcelona, Lisbon, London City, Moscow, Rome, Zurich

Source: OAG

Table 5
Conditions attached to cheapest round trip excursion fares on traditional European airlines, March 2007

Airline	From UK		Most other European intl markets	
	Minimum stay (nights)	Changes possible (fee)	Minimum stay (nights)	Changes possible (fee)
British Airways	0	Yes	0	Yes
Air France	0	No	Sat	No
Lufthansa	0	Yes	2 or Sat[a]	Yes
KLM	2 or Sat	No	3 or Sat	No
SAS	0	No	0	No
Iberia	0	Yes	Sat	Yes
Swiss	0	No	2 or Sat	Yes
Alitalia	0	Yes	Sat[a]	Yes
Aer Lingus	0	Yes	0	Yes

[a] 0 nights to UK
Source: airline websites

Table 6
Cheapest fares for a day return trip on Wednesday 31st August 2005 (booking Wednesday 10th August 2005)
Outbound flight must depart by 0900 and return flight must leave from 1700
Tickets may be non-refundable/non-changeable
Rounded to nearest GBP

London-Amsterdam-London		Amsterdam-London-Amsterdam	
KL-LCY	354	KL-LCY	335
KL-LHR	308	KL-LHR	256
VG-LCY	128	VG-LCY	134
BA-LGW	117	BA-LHR	105
BA-LHR	112	BD-LHR	102
BD-LHR	94	BA-LGW	100
U2-STN	55	U2-LGW	59
U2-LGW	53	U2-LTN	48
U2-LTN	53		
London-Paris-London		**Paris-London-Paris**	
AF-LCY	136	AF-LHR	270
BA-LHR	126	BA-LHR	150
AF-LHR	105	U2-LTN	68
BD-LHR	91		
U2-LTN	78		
London-Geneva-London		**Geneva-London-Geneva**	
LX-LCY	218	LX-LCY	519
BA-LHR	178	BA-LHR	395
LX-LHR[a]	166	BA-LCY	395
BA-LCY	144	BA-LGW	395
U2-LGW	115	LX-LHR[a]	220
BA-LGW	112	U2-LGW	119
U2-LTN	95		
London-Madrid-London		**Madrid-London-Madrid**	
IB-LHR	188	IB-LHR	697
BA-LHR	148	BA-LHR	688
IB-LGW[a]	147		
U2-LTN	140		
U2-LGW	125		
BA-LGW	112		

AF-Air France, BA-British Airways, BD-bmi, IB-Iberia, KL-KLM, LX-Swiss, U2-easyJet, VG-VLM, [a] operated by BA
Source: airline websites

Table 7

Commission rates in Europe 2004

9%:	Air China, BWIA, Emirates, Garuda[a], Gulf Air, Korean[a], Mexicana, Olympic, Qatar, VLM
7%	ANA[a], EVA, Garuda[b], JAL, LOT, Monarch, South African, US Airways, Virgin Atlantic (Economy)
5%	ANA[b], DBA, Eastern, Korean[b], Malaysia[b], Virgin Atlantic (Premium Economy)
4%	Air Canada, CSA Czech, Delta, Finnair, Lan Chile, Maersk, Qantas, Scot Airways, Singapore, Thai, Varig, Virgin Atlantic (Upper Class)
1%	Standard Rate: All other major airlines
0%	SAS (in Scandinavia), 'Low-cost' airlines, British Airways (from May 2005)

[a] international, [b] domestic

Source: Travel Trade Gazette

Table 8

Changes in aircraft utilisation 2000-2005 (selected short-haul aircraft)

Airline	Aircraft type	Daily utilisation 2000 (hours:min)	Daily utilisation 2005 (hours:min)
British Airways	A319	6:56	8:45
	737-400	8:04	9:01
Lufthansa	A319	7:52	9:42
	737-500	7:22	7:55
Air France	A319	7:52	8:59
	A320	7:58	8:10
KLM	737-300	8:26	7:18
	737-400	8:11	7:36
Iberia	A319	6:10	8:59
	A320	7:05	8:10
SAS	737-800	7:06	8:09
	737-700	7:36	8:29
Swissair/Swiss	A319	8:18	8:34
	A320	8:48	9:40

Source: IATA World Air Transport Statistics

Table 9

Changes in aircraft scheduling and utilisation - an example

OLD 2002 Gatwick 0700 Edinburgh 0830 Edinburgh 0910 Gatwick 1035 Gatwick 1130 Glasgow 1300 Glasgow 1345 Gatwick 1515 Gatwick 1605 Edinburgh 1735 Edinburgh 1815 Gatwick 1945 Gatwick 2025 Glasgow 2150 10:20 utilisation 7 sectors 14:50 start to finish of day average turnaround 45 min
NEW 2005 - stretch the day and shorter turn-arounds Gatwick 0625 Edinburgh 0750 Edinburgh 0825 Gatwick 0950 Gatwick 1025 Glasgow 1155 Glasgow 1225 Gatwick 1350 Gatwick 1445 Manchester 1545 Manchester 1615 Gatwick 1715 Gatwick 1750 Newcastle 1900 Newcastle 1930 Gatwick 2045 Gatwick 2120 Glasgow 2240 11:30 utilisation 9 sectors 16:15 start to finish of day average turnaround 35 min