A FRAMEWORK FOR ASSESSING THE LOW-FARE MODEL IN THE AIRLINE INDUSTRY

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Abstract. *Despite the popularity of the "low-fare" (or sometimes called "no-frills") airline business model, no comprehensive framework has ever been developed to evaluate the level of implementation of this business model. In the paper, we propose a framework for evaluating the extent to which an airline has implemented a "low-fare" business model. The framework (SFC) consists of three dimensions: (a) strategic direction factors; (b) pricing factors; (c) cost structure factors (COFA).*

Strategic direction factors primarily focus on the top-level strategic decisions of an airline: growth concepts, the range of flights, spatial strategy and target group selection. These factors serve to differentiate the "low-fare" airlines from more traditional rivals on a strategic level.

Pricing factors evaluate differentiators at the level of market offer: relative ticket prices, the number of booking classes, ticket restrictions, interlining, penalties, non-ticket income and target load levels. These factors differentiate the "low-fare" business model on the value proposition level. Cost structure factors focus on internal cost-saving measures designed to significantly reduce the average costs per passenger: outsourcing, aircraft type homogeneity, levels of aircraft utilization, labour factors, airport costs, distribution and in-flight arrangements.

The SFC framework allows academics and practitioners to coherently analyze and identify gaps between current and desired levels of the "low-fare" business model implementation.

Key words: *low-fare, low-budget, strategy, Ryanair, southwest*

Introduction: the low-fare approach

The business concept of a "low-fare" airline is based on specific costs-minimizing elements which were originally invented by the U.S. airline Laker Airways in the early 1970s. Airlines copying this strategy are presently considered to be "following the Southwest termed Southwest Airlines strategy", as the Texas-based airlines were the first ones trying to make flights so cheap that airlines were able to compete with alternative forms of surface transportation (Buyck, 2008). This requires that airline managers reduce service standards to a minimum, cut costs, and increase efficiency wherever possible. On the other hand, friendly and highly motivated employees should balance out the lower standards by focusing on the essentials (Franke, 2004). Herb Kelleher, the former

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CEO of Southwest Airlines, developed an organizational culture with a strong focus on service-orientation. Employees should not perceive their company as "an airline with great customer service, but as a great customer service that happens to be an airline" (Laszlo, 1999). This is in contrast to the European low-cost leader Ryanair, which purely focuses on reducing costs to the absolute minimum by disregarding the service aspects (Huettinger, Giedraitis, 2010).

The importance of low-cost model acceptance has spilled over to a variety of industries. McKinsey's survey of 3500 executives world-wide in 2006 revealed that "more low cost competitors" was the key factor to increase the overall competitiveness in the business environment of a variety of industries from banking to business services. The growing global competition, low-cost manufacturing and service locations around the world and the economic crisis have converged to accelerate the development of low-cost business models.

Airline industry is one of those most heavily affected by switching to the low-cost business model; 167 million European airline passengers traveled via low-cost airlines during the period from July 2009 to June 2010. Low-cost airlines saw an increase of 12% in passenger traffic (an over 1.9% decrease for the industry overall) and now represent 35% of scheduled intra-European air traffic (ELFAA, 2010). Despite low fares, Southwest Airlines and Ryanair have consistently been the most profitable airlines (Ryans, 2009. p. 6).

At the same time, secondary effects of low-cost competitors tend to put additional pressure on incumbents. Ryans (2009) described the market dynamics in the European airline industry in four stages:

1. Industry without low-cost competitors, where traditional airlines employ old models of competition.
2. When some low-cost carriers appear. They start taking business from traditional airlines, attracting new customers to the industry, and competing with other low-cost players.
3. Over time, low-cost players that did not go bankrupt and are unable to sustain direct competition with low-cost leaders are forced to "move up" into traditional airline business.
4. As traditional airlines attempt to adjust by implementing portions of the low-cost airline model, reduced service offerings and service coverage tend to polarize customers and cause them to switch either to high-end services (such as "business class" only flights) or to low-cost offers. Mid-market offers lose their attractiveness.

Consequently, the low-cost approach has fundamentally challenged the air transport industry, as traditional carriers started adapting various elements of low-fare airlines. Based on the degree to which airlines have implemented Southwest's product and

operational features, airlines can be categorized as modest or strong Southwesternized. Based on the research of Doganis, the authors propose to distinguish between the cost-related and strategic factors.

Low-fare strategy factors

Doganis explains the basic principle of the low-fare system on the no-frills model of the U.S. company Southwest Airlines. He summarizes the key features by categorizing them into product and operational features (Fig. 1). This system has been used, adapted and modified by several other scholars in the last decade.

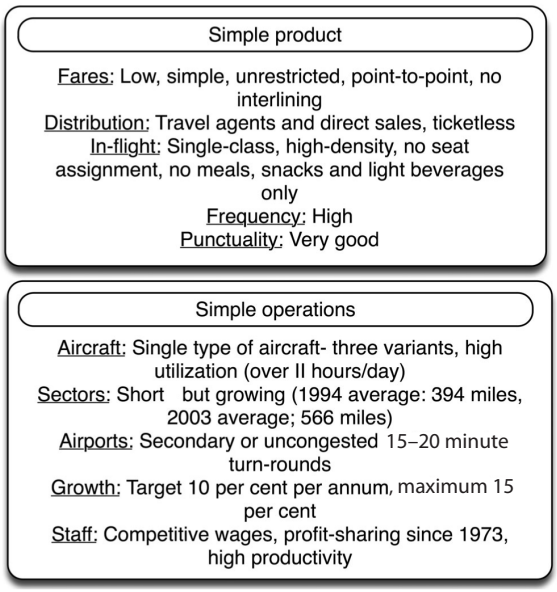

FIG. 1. **The Southwest Airlines low-cost, no-frills model (Doganis, 2006)**

According to Doganis, Southwest product features are fares (low, simple and unrestricted, point-to-point oriented, and without interlining), distribution system (sale via travel agents; direct sales; ticketless traveling), in-flight factors (single class with a high density and without seat assignment, no free meals on board, and only snacks and light beverages), a higher frequency, and a very high punctuality. Operational features, on the other hand, are: a single type of aircraft with only few variants, a high utilization of the aircraft by serving only short to below-average distances, and the exclusive usage of secondary airports with a short turn-round time. Furthermore, Southwest aims at 10–15% growth rate / year and has a very employee-oriented policy (competitive wages, profit sharing, and high productivity). Campbell and Kingsley-Jones suggest that the cost differences between low-fare and traditional carriers fall into three categories: service, operational, and overhead savings. The latter can be achieved by using a new technology in sales management, or a more efficient administration (Campbell, Kingsley-Jones, 2002).

In Europe, Ryanair is the only low-fare airline so far to try to implement as many of the Southwest elements as possible (Lawton, 2000). Lawton lists 'Ryanair's cost reduction techniques', which are indeed similar to those of Southwest (Fig. 2).

Most of these aspects are still valid today – others have developed or been partly changed and modified. Purchasing or leasing used aircrafts, for example, is practically

impossible in times of roaring air travel. As several interviews with airline managers showed in the European case, additional factors have to be added. According to Guild, infrastructural problems such as the European air-traffic control or higher landing fees, challenge the adaptation of low-fare elements (Guild, 1995). Ryanair contributes, for example, to this challenge by concentrating on the improvement of employee productivity, (Lawton, 2000). The initial Southwest model is relevant, but it must be modified and updated in order to be applicable to the Nordic and Baltic areas. Nevertheless, in order to distinguish the degree of low-fare implementation for each airline, the Ryanair / Southwest classification will be used.

Ryanair's Cost Reduction Techniques

1 Secondary airports (lower charges and less congestion means the airline can increase punctuality rates and gate turnaround times)

2 Standardised fleet (lower training costs and cheaper parts and equipment supplies)

3 Point-to-point services (direct, non-stop routes, through-service with no waiting on baggage transfers)

4 Maximise aircraft utilisation (fewer aircrafts used to generate a higher revenue) leads to a higher passenger capacity and greater staff productivity

5 Cheaper product design (no assigned or multi-class seating; no free food or drink)

6 No frequent flyer programme (costs money to manage and to implement)

7 Non-participation in alliances (code sharing and baggage transfer services lower the punctuality and aircraft utilisation rates and raise handling costs)

8 Minimise aircraft capital outlay (purchase used aircrafts of a single type)

9 Minimise persennel costs (increase staff–passenger ratio; employee compensation linked to productivity-based pay incentives)

10 Customer service costs (outsource capital-intensive activities, e.g., passenger and aircraft handling; increase direct sales through telephone reservation system)

11 Lower travel agent fees (reduce associated travel agent commission from 9% to 7.5%)

12 Pilots and flight attendants are forced to pay for their own training and certification

'This cost reduction technique is no longer valid in light of Ryanair's 1998 order for 45 new aircrafts.

FIG. 2. **Ryanair's cost reduction techniques (Lawton, 2000)**

After a thorough analysis of the elements, it could be concluded that the factors can be grouped according to their strategic, pricing and cost-saving character. The quantification of the factors is a challenge, but so is identifying which of the factors are central to the low-fare idea. Three factors of the SFC framework were given the following weights: the cost structure factor 50%, the strategic direction factor 25% and the pricing factor 25%.

For the cost-structure factor (COFA), Doganis calculated the impact of cost-saving measures on costs per seat. The data are based on the observation of low-fare and traditional airlines in the United Kingdom and were constantly updated (Doganis, 2006; 2001). In addition to the core cost-saving factors of the Southwest system, Doganis identified lower administration costs, the outsourcing of maintenance and a reduction in sales and agent costs as significant contributors to the overall cost savings. The fare-related factors are included in the pricing-related factors, whereby a typical low-fare strategy is forming the strategic direction dimension.

Strategic direction factor

Besides the cost-related factors discussed above, there are several other issues that help to differentiate low-fare airlines from traditional ones; however, most of them are not directly associated with cost saving.

Strategic directions constitute four elements: 'growth concepts', 'range', 'spatial strategy', and 'target group'. All four are basically determined by an airline's choice between the following: either the 'high cost, full service', or the 'low cost, no frills' model. Both are accepted globally as the two main competing business models in aviation. Gillen adopted Korol's model to provide a broad overview of the possible characteristics of both groups (Fig. 3).

Traditional flag carriers operate mostly with a 'hub-and-spoke network' by offering a broad and flexible selection of services (Gillen Morrison, 2005). A 'hub and spoke' system is an efficient way to fill an airplane, but it has a negative impact on aircraft utilization. Furthermore, they have to meet the task of covering a bigger geographical area with many destinations. Their mission statement is to bring any passenger from the place of departure – often via a third airport – to the final destination.

On the other hand, the low-cost strategy is predominantly pursued by airlines with a point-to-point strategy. The focus is on specific routes, without considering the individual travel plans of passengers. The aim is to offer transport for the lowest possible fare, and is therefore often described as value-based. Moreover, the point-to-point

Strategy	High cost, full service		Low cost, no frills		
Network type	Hub-and-spoke, scheduled service	Point-to point, scheduled service	Point-to point, charter / scheduled	Point-to point, charter	Point-to point, scheduled
Characteristics	High fixed costs	Moderate fixed costs	Low fixed costs	Low fixed costs	Low costs
	High labour costs	Moderate labour costs	Moderate labour costs	Low labour costs	Low labour costs
	Inflexible job tasks	Moderate job tasks	Moderate job tasks flexibility	Flecible job tasks	Flecible job tasks
	Full service	Flexibility	Low-end full service	Low-end service	No frills service
	Miltiple classes	Full service	Single and multiple classes	Single class (few wider seats)	Single class
	High frequencies	Multiple classes	Low frequencies	Low frequencies	Increasing frequencies
		Low frequencies			

FIG. 3. **Description of strategies in the airline industry (Gillen, Morrison, 2005)**

strategy offers indirect cost advantages. Considering the European restrictions on flying hours and working hours for a working shift, crew planning therefore becomes much easier and more effective for airline managers.

In addition, most low-fare airlines concentrate on occupying the short-haul sector, as cost saving can mainly be achieved on the ground rather than in the air. Evaluating the low-fare techniques, it becomes visible that most cost advantages would be significantly weaker on a long-haul range. Passengers are willing to sacrifice lots of amenities saving money, but on a transatlantic flight they might demand more legroom, for instance (Lawton, 1999). In 2005, Dobruszkes calculated that European low-fare carriers have a median distance of 634 km and an average flight time of 1.4 hours (Dobruszkes, 2006). Furthermore, about 70% of the flights are below 1000 km in distance. The range might slightly increase due to heavy competition in saturated markets, but will hardly reach the level of traditional carriers. Airline specialists argue that the lack of a network to feed traffic, lack of slots at international airports, and the inability to take advantage of quick turns will make it impossible for European low-fare carriers to succeed (Flint, 2008).

Low-fare airlines go along with the market-based growth approach, whereas state-controlled airlines follow the strategic interests of political decision makers. Doganis originally suggested that low-fare airlines may be identified quickly, as they operate with moderate growth concepts (Doganis, 2006). Pels and Rietveld, on the other hand, argued that this concept does not apply anymore in Europe, as European low-fare carriers are investing heavily in new aircrafts (Pels, Rietveld, 2004). However, to a limited extent this diversification might still work, as flag carriers often have to serve national interests.

By implementing a certain business concept, each airline automatically chooses a specific target group. Most managers are faced with the overall question: Do I want to serve tourists or business travelers in future? Tourists and students were the biggest target group for low-fare companies in the early stages. However, this initial classification has changed over time. Recent studies have shown that the share of leisure travelers will tend to rise, and the demands of business travelers and tourists are becoming more and more similar (Dresner, 2006). No-frills oriented airlines might as a result concentrate on business travelers of SMEs, as these passengers are more likely to focus on lower fares. Mason also argues that the shift of business travelers is not merely of a temporary nature (due to the 9/11 incident and the SARS crisis), as corporate travelers

Strategic directions (25% of the SFC framework)	Elements
	Growth concepts (strategic vs. market-based)
	Range (long vs. short haul)
	Spatial strategy (hub-and-spoke vs. point-to-point)
	Target group (tourists vs. business passengers)

FIG. 4. **Strategic direction factor elements (compiled by the authors)**

value the good value for money that low-fare carriers offer (Mason, 2005). Even under the assumption that SMEs are signing global deals with strategic airline groups, travel managers estimate that up to one-third of the short-haul flights will be low-fare based. Figure 4 illustrates the elements of the strategic direction dimensions.

Pricing factor

Most passengers, however, define low-budget carriers as airlines which offer tickets at a below-average price. For most travelers, 'below average' means that the price per ticket is significantly lower than the average ticket price of the traditional competitors. In the early stages of the European low-fare wave, most customers seriously believed that low-fare airlines gave out all tickets for an extremely low fare. Meanwhile, passengers are aware that the share of the lowest category fare is relatively small and differs from airline to airline. From a neutral point of view, it is therefore essential what percentage of the tickets is sold in the lowest fare category, and what the price range of this lowest category is. Studies have revealed, furthermore, that the presence of a low-cost carrier in a region / route has a significant impact on the implementation of low-fare elements of the competitors and, finally, on the price level of the entire market. The pricing strategy consequently has a significant impact on the public perception of an airline and might be the deciding factor in whether low fare-seekers visit the airline's homepage or not. This sub-factor is thus weighted with one-third.

Besides the pure pricing strategy, the fare-related strategy is also weighted with one-third. One of the main innovations by European no-frills carriers was to focus only on low fares; they were the first to offer one-way tickets without specific restrictions (e.g., the need to stay over Saturday night) (Doganis, 2006). According to Tretheway, the introduction of the one-way fee structure was probably the most important innovation in the airline industry, as it undermined the discrimination abilities of the national flag carriers (Tretheway, 2004). Low-fare airlines usually neither offer interlining with other carriers nor transfer between their own flights. On the contrary, passengers are even requested not to book a transit connection (as two separate flights), as the airline cannot guarantee that passengers will reach their connecting flight. The reason is that interlining, or transfer, requires additional logistics, which leads to higher costs. Furthermore, passengers who might miss their connecting flight due to a delay of the first one could sue the airline.

As low-fare-oriented airlines solely concentrate on selling as many seats as possible, the average load factor is significantly higher than those of their competitors, which need to consider transit passengers as well. The load factor is directly related to the pricing and the variable fare classes, as these factors help to maximize the overall aim. Automatic booking systems are used to adjust the demand of passengers to the supply of free seats for each specific route. This is mainly achieved by lowering the flight price to a level which creates additional demand.

Load factor management is in clear contrast to the culture of yield management which aims to maximize the average revenue generated per seat (Lawton, 2000). A low-fare airline, however, can even survive by operating with negative marginal transportation costs. Under specific circumstances, it might even be profitable for the airline to offer the tickets for free, as incremental customers generate almost no additional costs. Moreover, every passenger is a potential target for secondary revenues. The customer might buy a drink and a small snack, and read the advertising in the in-flight magazine, for which the airline charges money. Consequently, secondary revenues are of particular interest to low-fare airlines. Low-fare airlines make their living by operating with a considerable share of ancillary (non-ticket) revenues. For instance, Ryanair even motivates their flight attendants to sell duty-free and other gift items on a commission basis (Kangis, O'Reilly, 2003)

Low-fare airlines operate with less booking classes than traditional airlines, reflecting the separate fares they offer on an individual route (Doganis, 2006). As only one ticket price is available at any one time for each flight, yield management is simplified and less complicated.

If a flight is cancelled or delayed, low-fare airlines do not usually provide compensation to travelers (Dobruszkes, 2006). Furthermore, in case of a no-show, a booking change is not usually possible. As a result, most low-budget airlines do not comply with IATA standards and consequently do not even apply for membership. In Europe, however, the European Union has regulated and improved the rights of passengers, mainly to guarantee compensation in cases of denied boarding, long delays, or cancellations (European Commission, 2004). Figure 5 illustrates the final sub-dimension STRAFA.

Pricing factors (25% of the SFC framework)	Weight factors	Elements
	Pricing strategy	Average ticket price
	Fare-related strategy	Number of booking classes
		Ticket restrictions
		Interlining possible
		Penalty for no-show passengers
		Share of non-ticket income
		Load factor

FIG. 5. **Pricing factor elements (compiled by the authors)**

Cost factor (COFA)

Cost factor (COFA) represents the key elements of cost structure of an airline (FIG. 6). It evaluates how far an airline has implemented the "low fare" business model. COFA consists of seven elements: 'outsourcing', 'aircraft types', 'daily aircraft utilization', 'labour-related costs', 'airport related costs', 'distribution', 'in-flight'.

COFA factor elements (50% of the SFC framework)	Subfactors	Weight	Weight factors	Elements
	Outsourcing	2%	Outsourcing maintenance / single aircfat type	Level of outsouring of maintenance
	Aircraft types			Number of different aircraft variants in use
	Daily aircraft utilization	2%	Higher aircrat utilization	Seat assignment procedure
				Frequency level
				Punctuality
				Turn-round time
		4%	Secondary airports	Kind of airport (seconday vs. primary)
	Labour-related costs	3%	Saller administration costs	Employees in administration per passenger
		3%	Lower flight and cabin crew expenses	Salary level
				Cabin crew per passenger
				Performance-related salary
	Airport-related costs	7%	Minimal station costs and outsourced handing	Reduced handling costs
				Outsourcing of ground service
				Own airport lounges
				Cleaning of aircrafts
	Distribution	6%	No agents commission	Usage of travel agents
				Share of direct sale
		3%	Reduced sales reservation costs	Ticketless
				Loyalty program
	In-flight	16%	Seating density	Seating density in inches
				Number of classes
		5%	No free in flight catering	Free meals
				Importance of secondary revenue
				In-flight entertainment

FIG. 6. **COFA factor elements (compiled by the authors)**

The first two subfactors, counting for 2% of the ticket price together, are the 'level of outsourcing of maintenance' and the 'number of different aircraft variants in use'. Standardization seems a general principle for cutting costs, but in the case of airlines, the benefits are even more significant, as each pilot is only allowed to fly the one kind of plane (type rating) he is licensed for, due to legal restrictions. Consequently, for the airline management it is a challenge to guarantee that there are a minimum of two pilots available for each operating plane at any time – therefore increasing the number of pilots employed by the airline.

Outsourcing may reduce the costs for providing services, as specialized companies will be able to benefit from economies of scale. For that reason, low-fare-oriented

companies aim to keep the number of aircraft variants down and, in the best case, only operate aircrafts from a single product family. Running a company with only one kind of machine (in our case planes) reduces the regular scheduled maintenance costs, as a lower number of specialists are required. In order to reduce the variable costs and to keep the stock of spare parts low, most airlines opt for cost-efficient aircrafts (Boeing 737 or Airbus 319) (Franke, 2004). A homogenous fleet additionally helps to negotiate favourable conditions with contractors for heavy maintenance and, consequently, limits exposure to irregular cost fluctuations (Kangis, O'Reilly, 2003). A concentration on a single type of aircraft allows to achieve higher negotiating power with airplane manufactures, especially if purchases are timed during recession. For example, Ryanair times its purchases during terrorist attacks on US in 2001 and Iraq war in 2003, achieving discounts of up to 50% .

'Higher aircraft utilization' contributes to the cost savings by another 2%. A plane which stands at the airport not only generates direct and indirect costs – it also earns no money. Airlines, therefore, try to maximize the operational hours of their aircrafts (e.g., Ryanair and Easyjet have approximately 11 flight hours per day, British Airways only about 9 hours (Dobruszkes, 2006)). Besides using a plane from the morning until late at night, significant savings can be achieved by minimizing the turn-round time and continuously improving the punctuality rate. For example, Germanwings requires a guaranteed turn-round time of 25 minutes from airports and EasyJet even a maximum of 20 minutes. One way to minimize passenger boarding time is to relinquish pre-assigned seating for passengers. If all procedures are perfectly optimized, the measures allow an extra 45 minutes' flying time per day. Higher efficiency is furthermore one of the necessary elements to make higher frequencies on major city pairings possible. Besides contributing to the demand side of economies, they also guarantee a bigger pool of potential travelers.

Most low-fare seekers believe that low-budget carriers choose smaller and secondary airports due to the lower airport and service fees. This is, however, only partly true, as less congested airports successfully compete with fewer air-traffic control delays and significantly lower taxiing time (Doganis, 2006).

If an airport is smaller and not saturated, even a young low-fare carrier might be one of the most important customers, and airline managers may be able to negotiate more favorable conditions. Besides lower landing fees, better station conditions and guaranteed fast-serving contracts are often granted as conditions of binding long-term contracts (Franke, 2004). Ryanair, for example, has used its bargaining power at several European airports. At the Brussels South Charleroi Airport (Belgium) the airline negotiated a 50% lower landing fee (in comparison to the airports standard rate) and a fixed one euro handling fee per passenger (about 10% of the basic rate) (Gillen, Lall, 2004). Moreover, they agreed on providing additional services for lower or zero rates, such as financial

marketing support, recruitment help, cabin-and-cockpit crew training, or contribution to accommodation costs. The benefits were exclusively granted to Ryanair and reached an extent (€ 30 per passenger) that challenged the EU competition policy. Competitors of Europe's leading low-fare carrier therefore pushed the EU institutions for a decision on this case.

In 2004, the EU Commission disallowed the financial contributions, officially due to a lack of transparency (European Commission, 2004).[1] However, besides these direct financial savings, there are several other aspects questioning the traditional airline business. Using smaller and secondary airports became more than a philosophy for no-frills operators – it is meanwhile an economic necessity. Punctuality, a main element of commoditized time, is therefore not only related to the quality of the airline management, it is a question of the size and utilization of the chosen airport. Often airports are located close to each other, and metropolitan airports especially compete heavily for airlines and passengers (Pels, Rietveld, 2000). Smaller airports may offer rapid check-in facilities via simple terminals, as well as good and easy-to-access passenger facilities. Doganis calculated that the usage of secondary airports might lower the unit costs (costs per passenger) by around 4%.

As airlines turned into more service-oriented businesses, the weight of the labour-related factors has been constantly increasing. In the last few decades, under the pressure of rising labour costs per employee, traditional airlines have been forced to reduce the total labour costs by increasing productivity and consequently lowering the unit labor costs. According to Doganis, another 6% of the possible cost advantages of no-frills airlines may be attributed to this key subfactor. Half of these savings can be achieved by a slimmer and more effective administration. The other 3% target the cabin and cockpit crews.

Human resources are a preferred factor for cost cutting in any company, although restrictions imposed by legislation and on-board restrictions limit the extent to which this is possible. No-frills carriers consequently try to reduce the number of cabin-crew members to the absolute minimum. Airlines providing a higher level of on-board service consequently have a higher demand for flight attendants, resulting in higher staff costs. Cabin crews from low-fare airlines, therefore, have to be more flexible in regard to time and tasks. It is not unusual for flight attendants to be responsible for cleaning the plane and loading luggage if necessary. Moreover, compensation schemes focused on performance encourage maximum productivity. In case of Ryanair, over 56% of staff is compensated based on performance (Ryans, 2009).

For young pilots, the possibility of flying the maximum number of hours, and consequently being promoted earlier, became the main incentive to start their career

[1] Discriminatory state aid because the airport is owned by province.

with low-budget airlines. However, they have to accept about 25% lower wages along with 25% more working hours (European Cockpit Association, 2002). The lower basic salaries are balanced by a performance-related pay scheme (Kangis, O'Reilly, 2003). This compensation system leads to a younger, flexible work force but, on the other hand, results in a higher employee turnover.

At 7%, airport-related costs such as 'reduced handling costs', and 'minimization of station costs' may contribute to the overall cost advantages. Traditionally, airlines operated the ground service with their own personnel, and even employed their own work force abroad. Being able to provide all the necessary services under the company tent was very comfortable, but inefficient, and usually very costly for the airlines. As a consequence, change managers working for airlines started to cut costs by outsourcing whatever they could. Outsourcing may start with catering, handling of baggage, and include check-in, boarding, and ticketing services. In many cases, other airlines or service providers were even keen on the extra turnover to dilute their overheads (Kangis, O'Reilly, 2003).

Lowering the level of station expenditures has been a focal point in tough negotiations between airport and airline managers, particularly in Europe. Ryanair is trying to reduce these airport fees by as much as 8% compared to the industry average. Instead of employing their own cleaning staff to tidy up the airplanes during the turn-rounds, this task falls to the cabin crew. Lower station costs can furthermore be achieved by limiting the airport office space used to the absolute minimum. In many cases it is cheaper to rent office space if it is only needed for a short time. Furthermore, low-fare oriented airlines cut costs by neither running nor supporting business lounges at airports. At some airports, low-fare-carriers even cooperate with other airlines, and passengers may be granted access to the existing lounges for an extra fee.

Alamdari argues that about 17% of the operating costs are attributed to commissions, credit card fees, promotions, ticketing, or travel agent fees (Alamdari, 2002). The IATA even estimates a figure of up to 20%, making it the second largest cost item after labour. Traditionally, consumers bought their tickets through travel agents, which was a costly and sometimes even time-consuming procedure. A study by Morgan shows how airline distribution costs are related to the distribution channel (Morgan, 1999). In the last decade, new promising distribution channels appeared, which were backed up by the global distribution systems (linking consumers and airlines together electronically). Consumers were asked to book their flights directly via the airline Internet homepage or via newly established airline call centers. Soon, online portals such as opodo became very popular. Larger companies and cooperations even started to employ their own corporate travel managers to book tickets.

The share of tickets sold via the Internet is significantly higher for cost-sensitive low-fare carriers than for traditional airlines. Technical possibilities of reservations via

Internet and 'ticketless traveling' have been used extensively by young airlines. Easyjet was able to cut costs by about 25% with these measures (Rigby, 1997). One main pitfall is the perceived risk involved by Internet sales. One relevant issue is the lower Internet penetration rate in Europe (particularly in Eastern Europe) compared to the United States. Therefore, European airlines are less encouraged and pushed than their American counterparts to provide additional services / facilities on their web sites (Law, Leung, 2000).

Doganis splits this subfactor into two elements which together comprise 9% of the possible cost savings. If the ticket is bought over the Internet instead, agent commissions alone count for 6%. Further savings in distribution can be achieved by introducing a ticketless travel system. It is estimated that printing and issuing a ticket on paper amounts to up to €6. Furthermore, several people have to check and administer the ticket at different stages. Low-fare airlines have therefore eliminated the paper ticket, often even making the Internet check-in obligatory for the lowest fare category.

Most low-fare airlines do not participate in loyalty programs that normally offer additional benefits for regular customers. These 'frequent flyer programs' (FFPs) were initially introduced in the hotel sector and were extended to the transport business by American Airlines in the 1980s. The concept was to bind business customers to their airline or network by rewarding them individually for their choice. Meanwhile, it has gained such a value position for corporate travelers that no airline which runs loyalty schemes would risk being the first to discontinue the program and lose market share. According to Thornton and Thornton, the introduction of FFPs has led to poor service and resulted in a reduction in the number of airlines, as consumers are locked to a single brand (Thornton, Thornton, 1997). Despite the fact that loyalty programs require financial resources, and counter the no-frills idea, it might make sense for low-fare airlines to run at least a watered-down FFP.

The biggest cost savings, however, can be achieved by lowering the level of in-flight services (Fig. 7). No free drinks / meals on board and a higher seating density are a consequent implementation of the low-fare philosophy. Removing the galleys and decreasing the pitch (distance between two seats) to 28 inches allow a higher seating density (Doganis, 2006). Recent studies have shown that passengers are in fact not willing to pay higher fees for additional legroom (Darin, Luengo-Prado, 2004). Furthermore, higher seating densities have positive indirect effects on the fixed costs. Insurance rates, en-route charges, and fuel costs accrue per plane and, as a result, can be divided among a higher number of passengers.

Furthermore, high load factors (percentage of seated places) and the elimination of the business class system have increased efficiency. Doganis estimates that these subfactors are responsible for up to 16% of the total costs.

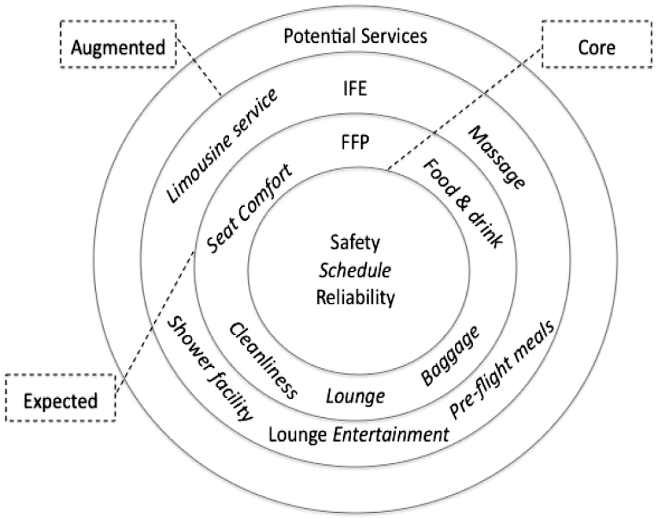

FIG. 7. **Position of IFE on passengers' map of airline product (Alamdari, 1999)**

As low-fare carriers only serve food for a high surcharge to passengers who are willing to pay the relatively high prices, the smaller amounts of waste produced on board help to reduce the cleaning time required during the turnarounds. Besides not providing catering for free, the secondary revenues generated by selling drinks, priority seat assignments, or other products have even become an essential source of income for the airlines. They partly help to cover the costs of the obligatory cabin crew. Alamdari, however, argues that revenues charged for or generated by technical in-flight entertainment would not be enough to cover the installation and running costs (Alamdari, 1999). According to Doganis, in-flight services account for 5% of the total costs.

Conclusions

The low-cost carrier model has been successful among passengers and will continue to grow. The last years have shown the impact of the business model on traditional airlines, undermining their strategy which was based on providing full service.

The proposed SFC framework provides a comprehensive tool for the evaluation of the low-fare business model implementation in airlines. It is specifically designed for the airline industry. Conceptually, similar frameworks could be developed for other industries while using similar principles. The increasing importance of the "no-frills" business models in other industries (such as hospitality, tourism industry, financial services and FMCG) requires comprehensive assessment frameworks.

The SFC framework contains three main factors: strategic direction factor, pricing factor and cost structure factor. The three elements with their various sub-dimensions

allow scholars to determine the degree to which an airline is Ryanized, i.e. has implemented the main low-fare elements of the Irish Airline Ryanair.

The key academic contribution is comprehensiveness and industry specificity which allow for a fine degree of business model analysis. For practitioners, it offers a structured way to evaluate the current business model and find areas for further improvements. Further research is necessary to empirically validate the proposed framework.

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