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Low cost airlines in Europe: an analysis of service

Nízkonákladové aerolinky v Evropě: analýza služeb

BP – PE – KFÚ – 2007 03

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RESUMÉ

Nízkonákladové linky během poslední dekády dramaticky změnily trh s leteckou přepravou. Byl vyvinut úplně nový model, který umožnil leteckým společnostem přepravovat pasažéry za cenu tak nízkou, že před lety by se dalo jen stěží představit. Úspěch tohoto modelu se také projevil tím, že mnoho z jeho znaků adoptovaly tradiční aerolinky. Tajemství úspěchu je v nízké ceně, za kterou je pasažérům nabídnuta základní avšak pro cestující stěžejní služba – přeprava z požadovaného místa do cílové destinace.

Cílem této práce bylo popsat nízkonákladový model aerolinek, analyzovat jejich služby a spokojenost zákazníků s nimi. Poté, na základě získaných údajů, určit nejdůležitější faktory pro nízkonákladové linky a doporučit možnosti pro další zlepšení.

V primárním výzkumu byla použita triangulace dvou metod (kvalitativní a kvantitativní). Jako první byl proveden rozhovor s manažerem českých nízkonákladových aerolinek SmartWings. Jeho výstup byl následně použit při vytváření dotazníků. Dotazník, který byl vyplňován zákazníky nízkonákladových linek, přinesl hlavní data pro výzkum.

Výsledky studie naznačily spokojenost zákazníků se službami nízkonákladových aerolinek. Nicméně, některé služby byly považovány za více, některé za méně důležité. Nejdůležitější faktor při výběru aerolinek je pro zákazníky cena letenky. Oproti tomu jejich spolehlivost byla pro respondenty méně důležitá než vyhovující letový řád nebo váhový limit pro zavazadla. Na základě těchto výsledků se potvrdilo, že nabídka občerstvení zdarma není pro zákazníky vůbec důležitá. Namísto toho cena letenky v kombinaci s poptávanou letovou destinací a vyhovujícím letovým řádem jsou největší výhodou.

Klíčová slova:

nízkonákladové aerolinky, operační management, služby, náklady, kvalita

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3. Analýza služeb a operační management
4. Primární výzkum služeb nízkonákladových linek
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Low cost airlines in Europe: an analysis of service

By

Katerina Hlucha

**Dissertation submitted to University of Huddersfield for the degree,
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ABSTRACT

Low cost airlines change dramatically aviation market during the last decade. The new business model was developed enabling to operate them below costs not conceivable before and in some elements also inspiring the legacy airlines. The secret of success is the low price for which is offered the core aspect of airline service – transportation to desired destination. The aim of this study was to analyse the low cost airline business model and low cost airlines services and also to find out customers' satisfaction with them. Then, on the basis of it determine the most important factors for success of LCAs and developed some recommendation.

The triangulation of two methods of primary research was used. As the first the interview with manager of customer service in SmartWings Lukas Klein was conducted. The results from interview were used to help design questionnaire and to support the acquired results from it as well. The questionnaires, which were given to customers of LCAs, brought the main data for study.

The study find out that services are consider quality by customers, however, the results suggested that some of them are more important and some of them not at all. The important factor for customers when deciding about LCAs, which they would use, is price and on the contrary the reliability was the less important than good schedule or weight of luggage allowed. On the basis of this result the research suggested that the free offer of refreshment is not important for LCAs at all and instead of it price in combination with attractive destination and appropriate schedule are the biggest advantage for LCAs.

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INTRODUCTION

Low-cost airlines can be considered phenomena of contemporary travelling. It changes form of the aviation during the 1990s and extend the possibilities to travel for many people. Most studies in the field of low-cost airlines have only focussed on describing this model and little attention engage in the topic from the view of customers and his preferences and satisfaction with low-cost airlines services. Low-cost model and his success captured many authors in their studies such as Mason et al. (2000) or Francis et al (2006), where they for example analysed the influence of them on airports or aviation market.

The aim of this study was, therefore, to find out customer satisfaction with low cost airlines services and on the basis of it to determine the most important factors for success of low-cost airlines and developed some recommendation. To help answering this question was analyse the low cost airline business model and low cost airlines services. The recommendations intend to find out, if there are some possibilities to improve, change or extend the service according to preferences of customers and on the base of customer satisfaction determine what is the most important for them, and thus the most important objective for low-cost airlines.

The literature states several terms for low-cost airlines. The low-cost airlines and low-cost carriers are the most common. The other term used is no frills airlines, because they abandoned frills such as offer of refreshment and classes of seats. In this dissertation the term low-cost airlines with abbreviation LCAs will be mostly used.

For primary research is chosen method of triangulation, where questionnaires intended to customers of low cost airlines will be supported by interview with Manager of the Czech low-cost airlines Smart Wings.

The overall structure of the study takes the form of five chapters. Chapter two begins by laying out the theoretical dimensions of the research, and looks at main features of low cost airlines. To help better understand to low-cost airlines issue, Southwest airlines model as first pioneer of low-cost airlines' followed by many European airlines is explained. Further it is focused on European low-cost airlines. Liberalisation of aviation market was crucial moment for development LCAs in Europe; therefore, the process of

liberalisation is described shortly. Before the low cost airlines business model is investigate the history of development LCAs in Europe is explained. Further the research has been confined to operational management and then the theory concerning the services is revised to understand service specifics in term of marketing, service quality and customer satisfaction. The second chapter is concerned with the methodology used for this study. The findings of research are presenting in Chapter 3 and the discussion of the findings and recommendations are drawn further in following Chapters 4. Finally, the conclusion gives a brief summary and critique of the findings, and includes a suggestion for further research into this area.

1. LITERATURE REVIEW

1.1.Characteristics of low-cost airlines

1.1.1. Features of low-cost airlines

Doganis (2001) thinks that there are two possibilities to make money in the airline industry. The first is through a network approach based on hub and spoke operations. It is exemplified by the development of alliances aimed at linking hubs. The second way is through a low-cost approach, which can be divided into two distinct models. The traditional low-cost model has been that of the charter or non-scheduled airlines. The second model is low-cost, no-frills scheduled airlines introduced into Europe in the late 1990s.

The general concept of low-cost, no-frills airlines is that costs are reduced compared to traditional scheduled airline operations in a number of ways. Although Francis et al (2006) make remarks that there are many variations of the model and a great difference between airlines, both authors (Doganis, 2001; Francis et al., 2006) are in agreement that the core characteristics are: high aircraft utilization, internet booking, use of secondary airports, minimum cabin crew, lower wage scales, lower rates of unionisation among employees, one class of seating, thus allowing more seats per aircraft than traditional airlines (who offer alternative seat pitches for different classes of travel), short 'on the ground' turn around times, no cargo carried to slow down turn around times, a simple fare structure and pricing strategy, e-ticketing, no seat allocation, passengers having to pay for food and drink, flexible working terms and conditions for employees relative to traditional airlines, point to point services and no connections offered (Doganis, 2001, Williams, 2001 and Mason et al., 2000). Combination of this features enable low cost airlines to offer lower prices in comparison to traditional airlines (Francis et al., 2006).

1.1.2. Dividing low-cost airlines

Francis et al. (2006) have developed a typology of low cost carriers under which it is possible to conceptually categorise five broad types of low cost carriers:

1. *Southwest copy-cats*: these airlines have an example in 'Southwest model', they minimise costs through operating mainly point to point services, a single type of aircraft and high aircraft utilisation.
2. *Subsidiaries*: these airlines include subsidiaries of long established major airlines that try to operate under the similar manners as Southwest copy-cat. They are often established as consequence of market entry copy-cat.
3. *Cost cutters*: are long established legacy airlines that are now reducing their operating costs. In many cases they do not offer frills that they did, for example in-flight food. They have also introduced low fares, one-way fares and internet booking, but they continue to operate a short and long haul network to major airports.
4. *Diversified charter carriers*: These are low cost subsidiaries established by charter airlines in order to operate low cost scheduled services. According to Doganis (2001; cited by Francis et al. 2006) a distinct feature is that their costs are low because their parent airlines have long been considered to have the lowest costs within the airline industry.
5. *State subsidised competing on price*: These airlines are not true low cost carriers as such, because they are financially supported by Government in order to offer low fare to develop tourism or to promote particular airport.

1.1.3. The Southwest model

The Southwest Airlines' successful model has been adopted by Ryanair and easyJet at the first and afterwards they were followed by most of other LCCs in Europe (OAG, 2006). In order to understand how low-cost airlines operate it is necessary to look closely at business model developed by Southwest.

The low-cost formula is not new to United States. While established in Europe in the mid- 1990s many new airlines have selected low-cost strategy in the US since the early 1970s. However, Southwest Airlines is the only one to have been consistently profitable for the last thirty-five years even during the industry's cyclical downturns. That is why many new established airlines follow its example and try to use Southwest Airline's model.

Southwest Airlines were set up to operate within Texas in 1967, but they could not start flying yet. They had to win court trial brought by its local competitors who argued that there was not enough demand to support a new entrant. In result of it was able to operate 4 years after establishing.

As home airport it has chosen Love Field, which was only 10km (6mils) from Dallas. Although, in contrast to traditional scheduled frills, they did not offer meals, pre-assigned seats or connecting flight they were successful. They developed a brand image of "flying is fun" and concentrated on a strategy of operating short sectors offering low and unrestricted fares, high-to-point frequencies and excellent on time departures. With this strategy not only they diverted passengers from other carriers, they also attracted leisure and business passenger to fly rather than drive the relatively short distance between most of the cities it served.

When US domestic deregulation came in 1978, Southwest was well placed to expand. They wanted to avoid the calamitous over-expansion of the new start up carriers of the 1980s and it is the reason why it took 12 years to grow its fleet to fifty aircraft. Traditionally, Southwest has chosen markets where no one else was operating, or which were under-served or over-priced. Southwest was dominant airline in 90 of its top 100 markets by July 1993 and it was same after 10 years. This growth over thirty-five years

has been connecting with continuing profitability in every year of operations even during three major cyclical downturns in the early 1980s, the early 1990s and again in 2001-3. In 2003, Southwest's shares of US domestic capacity was 11, 5 per cent in comparison to 14, 4 per cent for all the other low-cost carriers. By 2003 it had grown into the third largest United States airline in terms of domestic passengers or fourth largest in terms of domestic passenger-kms. This success was continuing during early 2000s, when other US major airlines made losses Southwest was profitable in each of years 2000-2004 (Doganis, 2006).

Key of Southwest's growth over thirty-five years is according Doganis (2006) based on:

- Ability to operate at costs which are consistently below its revenues
- Achievement of operation at cost levels 28-50 per cent below those of its major competitors
- Its unique service and product feature that have enabled it both to generate relatively high average yields and to operate with below-average costs
- Its key product feature is its low, unrestricted fares, enters new markets it prices not just to compete with other airlines but also against ground transport – pricing 60 per cent or more below prevailing air fares in these markets
- Low, simple and unrestricted (no complex conditions attached to them) fares combined with high frequencies and excellent punctuality
- Tries wherever possible, to use smaller, less congested airports to serve major cities

This could Southwest airlines achieve with its unique low-cost, no-frills model, which can be summarized subsequently (composed from Doganis 2006):

Crew: high motivated, more productive staff, also benefits from 10-years agreement signed with its pilot in 1994 (wage freeze for five years followed by annual increase of 3 per cent), pilots are more productive because of single aircraft type, only 3 steward on

board (minimum needed to meet safety rules), because of no catering and single class

Fleet: a single aircraft type in its fleet, the Boeing 737 make substantial savings, flying longer than most carries spread fixed annual costs over more hours, packing more seats into its aircraft which increases the seat-kilometres generated per block hour

Airports: where is possible Southwest trying to use secondary airport, airport charges and related costs for gates and so on lower; productivity of ground staff is also increase by using less congested airports and by ensuring high frequency of departures at each airport, also allow high daily utilization through scheduling 15- or 20- minute turn-rounds

Tickets: no pre-assigned seating, first US airline introduce direct online booking, direct sales (no agents commissions)

1.2.A low-cots model in Europe

The first chapter reviewed low cost airlines' core characteristics, how they can be divided and also the Southwest Airlines' model, which has been implemented by many Europeans' low cost airlines, was described. This chapter will focus on the business model adopted by low cost airlines in Europe, which brought them success and thus caused the "low cost revolution".

Although first European low cost airlines RyanAir started to operate in 1985, the low cost carries expansion really started with the creation of the single European Aviation Market. It made a possibility for low cost carries to extend their services of low fares and high frequencies. Another factor allowing further development of LCCs was the growth of Internet and finally progresses in technology such as yield and capacity management systems which enable huge cost savings for airlines to move on passengers. This brought about a boom in flight capacity (OAG, 2006).

1.2.1. Liberalisation of aviation market within EU

Situation before liberalisation

Most European countries had only one airline before deregulation of aviation market. These airlines agreed on capacity in various routes and as a result, the competition among airlines did not exist. In consequence, airline industry was characterised as low productive with high per unit costs and high fares (Sinha 2001).

Process of liberalisation

The liberalisation process in Europe was influenced by fact that there are many countries and governments with different ideas. Thus, it was difficult for them to agree on the optimal amount of deregulation.

Although the civil Aviation Memorandum Number 1 recommending liberalisation of aviation market in Europe was published in 1979 by the European Commission, the deregulatory process did not start until April 1986. The deregulation started with the ruling of the European Court of Justice in April 1986. The Court decided that the air transportation would be subject to the competitive rules as proposed in the Treaty of Rome.

The first phase of liberalisation started in December 1987 when the Council of Ministers adopted a number of measures aimed at opening market access, relaxing price controls and introducing new competition rules (Sinha 2001).

Graham (1997; cited by Sinha 2006) summarises the three phases of deregulation:

The first package came into effect from 1 January 1988:

- Allowed multiple designations, fifth-freedom rights, and automatic approval of discount fares.

The second package was implemented from 1 November 1990:

- Double disapproval rule applied to full fares.

The implementation of **the third package** started from 1st January and ended on 1st April 1997:

- No restriction on pricing on all fares, full access to all routes including cabotage
- Abandonment of distinction between charter and schedule carriers
- Protection for routes designated as public service obligations
- EC retention of right to intervene against fares, predatory pricing and seat dumping

As a result of the third package, by April 1997, all EEA carriers gained access to all routes within the EC (Sinha 2001).

The time of the main elements of deregulation was also determining factor for development of low-cost airlines in Europe (Francis et al, 2006). As can be seen in the following table (Tab.1.1), the biggest market share of market has the UK and Ireland where market deregulation took place as first.

Table 1.1: Market deregulation and beginning of low-cost operations

Region	Year low cost operations began	Year(s) in which market deregulation took place	Share of overall market (%)
UK/Ireland	1995	1993	40
EU	1999	1995	20
EU expansion	2002	2004	<1

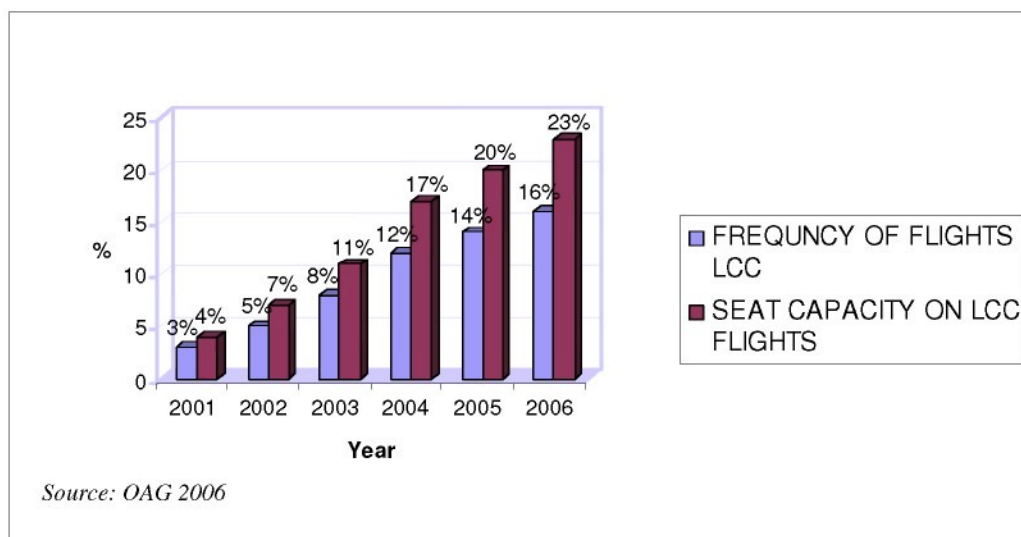
Source: Francis et al., 2006

1.2.2. Development of low-cost airlines in Europe

In only one decade, low-cost airlines have changed the European aviation scene beyond recognition. They have changed people's leisure and travel habits, opened up direct services between EU city pairs that were not available through the legacy airlines. They forced established airlines and tour operators to change their business models and also popularised regional airports “by breathing life into otherwise under utilised airports” and changed forever the image of air travel. “Perhaps though, the most significant achievement for the LCCs, especially in the EU, is that they have brought air travel within easy reach of everyone across Europe.”(OAG, 2006).

According OAG (2006), 40 low-cost airlines now operate within Europe and they are still developing. Several of them are expanding from their home countries. Also enlargement of EU in May 2004 brought new expansion of new services starting in Central and Eastern Europe as a result of the deregulation that EU membership brings.

Figure 1.1: Frequency of flights and seat capacity on LCCs : LCCs vs TOTAL ON ALL CARRIES



History of low-cost airlines

The first low-cost, no-frills European airline was Irish airline **Ryanair** launched in 1985. At the beginning Ryanair offered traditional type of service with a two-class cabin, but at lower fares than traditional airlines. These low fares caused growth of passenger traffic across the Irish Sea, however Ryanair was not profitable even its unit costs were lower than those of Aer Lingus (traditional Irish airlines). Huge losses and serious cash flow problems in 1991 led to changing of their strategy. The management decided to adopt low-cost Southwest model. As a result of this they released all frills and changed airport. This strategy was successful and one year later Ryanair achieve a small pre-tax profit that was increasing during next years.

Success of Ryanair encourages others to enter European market with low-cost, no-frills model as well as deregulation of international air services within the EU in January 1993 (see above). **EasyJet** and **Debonair** started to operate from London's fourth airport at Luton in October 1995 and in June 1996. **Virgin Express** was established an year later at Brussel (from Eurobelgian Airlines). In reaction to this progress British Airways established its own low-cost subsidiary **Go** in May 1998, operating form Stansted, followed by KLM in January 2000, which established low-cost subsidiary **Buzz**. This situation led to increasing competition and as a result of this in September 1999 Debonair stopped flying.

Apparently, most of low-cost airlines were developed in the UK. Doganis (2001) saw the reason for it: "New starts up airlines were attracted by huge London market, the light-handed regulatory environment and the entrepreneurial culture. UK costs were also lower, especially labour costs, because of substantially lower social charges than elsewhere in Europe."

By 1999 were established **AirOne** in Italy, **ColorAir** in Norway and **AirEuropa** in Spain. In addition, some charter airlines became offer scheduled service with low fares. The example can be **Air Europa** or Greek airline Cronos, which Doganis (2001) called 'hybrids'. The boom of low-cost airlines was in 2002-3, when more than twelve new airlines started to operate as low-cost. This boom is linked with increased proportion of seats offered by low-cost airlines from 8,5 per cent in 2002 to 25 per cent in 2003.

Renewed impetus has been given to European airline market in May 2004, when 10 new countries join EU. Many new low-cost airlines started to operate in Central and Eastern Europe as a result of deregulation that EU membership brings (OAG 2006).

The dominant low-cost airlines in Central and Eastern Europe are Wizz Air, with bases in Hungary and Poland and SkyEurope, operating out of Hungary, Poland and Slovakia. Also Ryanair, easyJet and many others low-cost airlines based in EU15 are making inroads to EU 10 (OAG 2006).

Although according OAG (2006), the Czech Republic declared open skies in the 1990s and thus creating a huge leisure market for Prague, the first real step to liberalisation of aviation market was made by the Czech and Slovak Governments, who both liberalised their bilateral agreements in 2002 and thus allowed low cost carries to operate with the UK. They took advantage of the inbound tourism market for the benefit of the economy as well as they prepared for joining the single European aviation market together with eight other states in May 2004. UK low cost airlines started to operate to Prague and it gave incentive to SkyEurope to start operating first low cost airlines in Eastern Europe. By 2003, they offered flight to Amsterdam, Paris, London and Vienna.

Full membership of 10 new members has led to expansion of low cost carries in Central and Eastern Europe supported with the relative success of SkyEurope. SkyEurope was followed by Whizz Air and Air Polonia in Poland or SmartWings in the Czech Republic (Francis et al. 2006).

According AEA (2005a) research on the development of capacity between EU15 and EU10 the growth in the number of seats on offer was 82% in two years period, between 2003 and 2005, and number of flight increase 68% in the same period in EU10. The three largest markets within new members are Poland, the Czech Republic and Hungary.

1.2.3. Low cost business model

The first European low cost airlines RyanAir and EasyJet adopted the Southwest airline's model and many other European carriers have followed them (OAG, 2006).

The key components of LCAs' model are mentioned above and the aim of this section is to explain how it is modified and developed in European environment.

Tickets

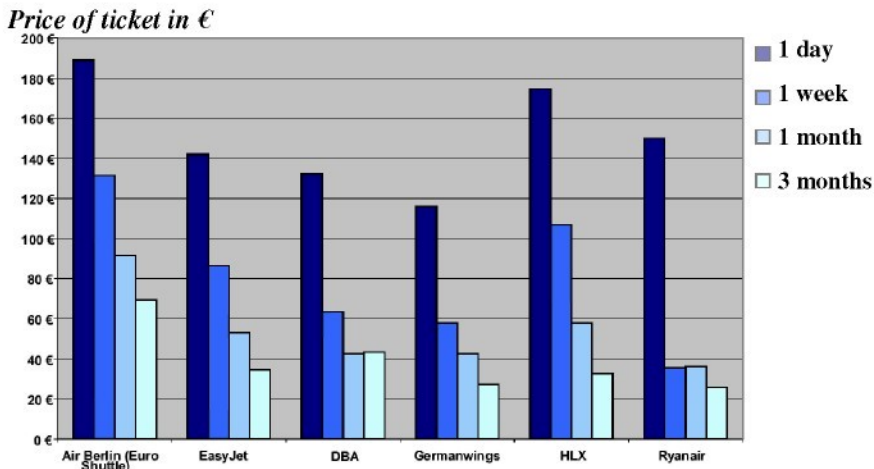
In comparison to the full service airlines offering wide range of services options at any one time, LCCs have no class differences on seats, and fares charged tend to raise as the date of a departure approaches (Button, K., 2004).

There can be recognized some typical features in LCCs' ticket policy. Only a small proportion of tickets is sold at the low price, which has been advertised. It is usually less than 20 percent (Button, K., 2004). LCCs divide their aircraft in parts, where the first set of seats are sold for the lowest price. When they are sold, the next set of seats is sold for higher price. As the date of flight is coming, seats are progressively more expensive. Typical low cost flight is differentiated up to ten price buckets. One-way fare can increase from 30£ to 210£, but the highest price is often cheaper than for the legacy airlines (Economist, 2001).

In comparison to legacy airlines there is little flexibility: to get lower price it is necessary to buy ticket up to three weeks before, ticket is not reimbursable and the change of ticket is charged, however, sometimes is not possible at all (Mirza, 2006).

Booking of tickets is made directly with the airlines – by telephone or via Internet. Customers are often encouraged to buy ticket online, where price is cheaper (Mirza, 2006).

Figure 1.2 – Low cost carriers’ average offered price depending on the time of booking before flight – example of Germany



Source: Deutsches Zentrum für Luft- und Raumfahrt (2006)

Yield management

Operations with fixed capacities need to use whole capacity of airplane to maximize revenue to full potential. Yield management is one of the possibilities and use set of methods to reach potential to make profit. Yield management is particularly useful where capacity is relatively fixed, the market can be fairly clearly segmented, the service cannot be stored, the services are sold in advance, and the marginal cost of making a sale is relatively low. These criteria fully comply with airlines. They use following methods (Slack et al, 2004):

- **Over-booking capacity**

Not everyone who bought a ticket will come and empty seat in airplane represent lost revenue. Therefore, airlines usually book more passengers in one flight than is its capacity (Slack et al, 2004).

- **Price discounting**

When demand is too low to fill in capacity, the airline will sell air tickets for lower price to agent, who will sell them at their own risk. The lower price can influence demand.

- **Varying service types**

When there is adequate demand for one type of service there is no reason to make discount. On the other hand, demand does not have to cover one type of service sufficiently and there will be a place for a price discount.

LCCs do not apply this method in combination with the price discount because they do not offer more types of services, for example business- and economy-class seat.

Airports

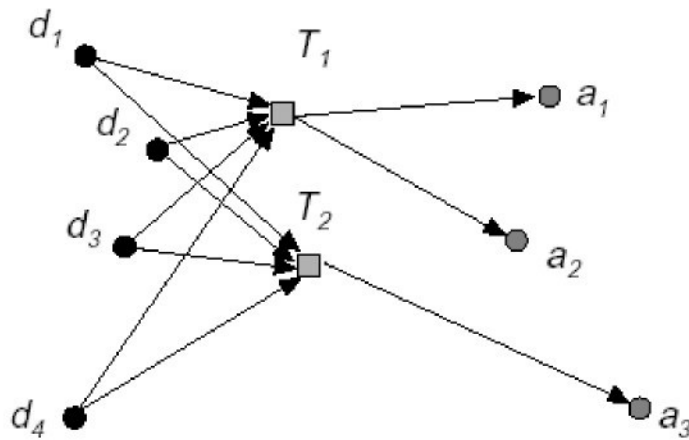
The low cost strategy involves using of secondary airports (OAG, 2006). Secondary airports often have free capacity. Air terminal costs, such as baggage and passenger handling, landing and parking charges, are lower at these airports. The example can be Geneva, where landing charges were reduced from 11 euros to 6 euros per passenger. At some airports is planned self-service baggage handling, which enables further reducing of charges. Case in the point is Marseille where the charge is reduced from 6 to 1 euro per passenger (Cole, 2005).

Secondary airports are usually close to metropolis. Typical example can be Frankfurt Hahn at 120km distance, or Stockholm Skavsta at 88km distance from the city advertised. It has aroused criticism by describing Charleroi in Belgium as "Brussels" and Gerona in Spain as "Barcelona" (OAG, 2006).

Hub-and-spoke network

It is an airline operating structure. Traffic in this network is collected from a number of spoke airports and consolidated at the hub point before redistribution traffic out of hub to connect with flights to another destination (Button, 2004). Most of airlines adopt some variation of a hub-and-spoke system. Major airlines can operate five hubs; smaller ones can have only one (Bazargan, 2004). Hub-and-spoke model is based on the need of setting up capacity utilisation by links to feeder routes at the hubs and thus is more typical for traditional airlines (Hunter, 2006).

Figure 1.3: Example of airline network with two hubs



Source: Lumsden et al., (1999)

Even LCCs are typically avoiding hub and spoke system in order to faster turnarounds, the case of EasyJet at London Gatwick is an example of exception. The price-sensitive but relatively high-yield business traffic gives the reason for it (Holloway, 2003).

Aircraft

One of the main efforts of LCCs is maximal utilisation of aircraft. The most profitable routes for them are no more than two hours' duration (OAG, 2006). LCCs' business model is in short turn around time, which is usually just 25 to 30 minutes after landing. Crucial for high-aircraft utilisation is enabled by (Capell, 2006):

- Avoiding congested hubs
- Minimal or none catering
- Quick passenger loading procedure
- No cargo
- No interlining
- Single type fleet
- Single cabin operating system

Also high floor-space utilisation is typical for LCCs' aircraft, where is higher seating density and lower seat pitches (Holloway, 2003).

There are also economies from a standardisation fleet of aircraft, especially when point-to-point structure is applied. The reduction of costs is because of identicalness of spare parts, maintenance procedures and flight crews (Button, 2004). Crews can be trained for only one type of aircraft and thus operational problems in the logistic of crew scheduling are groundless (Cole, 2005). Some airlines also use second-hand market to purchase airplanes (Button, 2004).

Labour

Labour costs are generally the second largest cost item for an airline (Bazargan, 2004). LCCs try to develop strategy that can improve their labour costs. The evidence suggests that there are some typical differences between low cost carries and traditional airlines human resources policies (Hunter 2006). According ITF Survey (2002) the human resource model in LCCs in comparison to traditional airlines can be identified in following points:

- Lower wages and poorer working conditions (estimated at between 5% and 40%).
- Monthly block hours for aircrew and for ground staff are higher (respectively 10–35% and 10–20%); Days off and vacation entitlement are reduced by 5–20%
- A majority of LCCs employ a mix of approximately equal numbers of workers on unlimited contracts and on fixed term contracts.
- In LCCs is built loyalty to the employer by propagating 'us against the others' mentality

New possibilities for cost reductions

The low cost model has kept the same in the main components for 10 years, but now some changes are being considered. It is indicated that costs can be reduced further. One of the ways is banning hold baggage and thus reducing loading and turnaround times

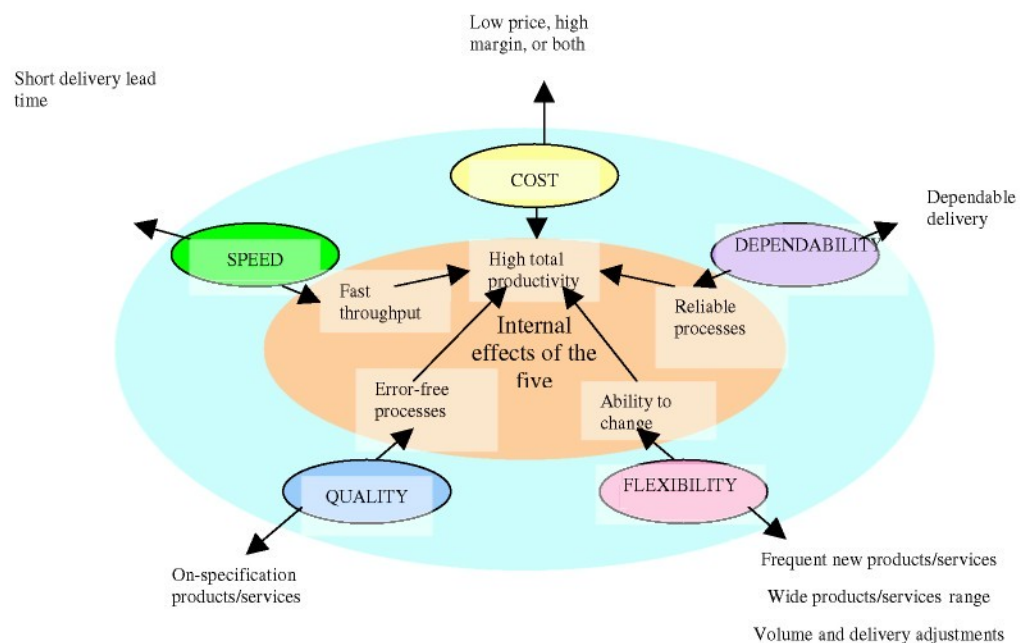
even more and enabling totally automated check-in. This system has been already introduced by Ryanair. EasyJet has also developed this model (OAG, 2006). Ryanair stated that the waiting time at the airport can decrease halve and costs can be cut by up to \$38 million by getting passenger to check in online and travel with only carry-on luggage. Thus, some airlines have already introduced charges for each bag checked in the hold (Capell, 2006).

1.3. Operations management – operational efficiency

“The low cost airline business is still outperforming the old-school carriers to turn record profits at South West, Ryanair and EasyJet.” The way how can achieve this success is according Slack et al. (2007) mainly because of operational efficiencies. According to Rhoades (2006) the low-cost no frills concept fit in well with operational efficiency that is explain in the following chapter.

Cost reduction is enabled through internal effectiveness. Operations of organisation need to define objectives that are in connection to its basic task of satisfying stakeholders. There can be found five basic performance objectives that relate to all types of operation - **quality, speed, dependability, flexibility** and **cost**. These performance objectives bring internal and external benefits. Internal benefits are various and all of them affect the cost. Thus, way to improve performance is through the improving of all operations objectives. This is shown in following figure (Fig.1.4).

Figure 1.4: External effects o the five performance objectives



Source: Slack et al, 2007

1.3.1. Quality

It is “consistent conformance to customers’ expectations”. Operations concerning quality are important because they are most visible part of operations for customers. They can easy evaluate it. In consequence quality has a big impact on customer satisfaction or dissatisfaction.

Quality can reduce cost because less mistakes mean less time will be spend on correction of mistakes (Slack et al., 2007).

1.3.2. Speed

It is “the elapsed time between customers requesting products or services and their receipt of them”. In many cases when customers can get product or service faster, he is willing to pay more for it.

Speed inside the operation is also necessary, because it helps to faster deliver of product or service to customers. Speed can also bring down inventories and reduce risks.

1.3.3. Dependability

It means ”doing things in time for customers to receive their goods or services exactly when they are needed, or at lest when they were promised”. Dependability is primarily not evident for customers, because they can evaluate it after the product has been carried out. However, it can influence the customers in further decision.

Dependability is also important inside the operation. There are several reasons for it: dependability can save time, money and gives stability.

1.3.4. Flexibility

It means ability to change the operation in term of what the operation does, how it is doing or when it is doing it. There can be found four types of requirement to operation change. The product or service flexibility is ability to introduce new of modified products and services; mix flexibility is ability to produce a wide range or mix of products or services; volume flexibility is ability to change its level of output or activity

to produce different quantities or volumes of products and services over time; and delivery flexibility is ability to change the timing of the delivery of its services or products.

Mass customization means that the organization is able to offer products and services customized for individuals and in the same time produce it in bulk, therefore to hold cost down. As a market is changing an organization should be able to respond quickly and at low cost, in other words to have agility.

As previous operational performances, the flexibility has also advantages inside the operation. Flexibility is necessary for quick respond to every situation. It can bring a time savings, because flexible organisation is able to change quickly from one task to another. Internal flexibility help to keep everything on time, even some unexpected situation emerges (Slack et al., 2007).

1.3.5. Cost

This operation objective is most important for companies, which are competing directly on price and thus important for LCCs. However, costs are important for every company even it is not competing directly on price. How can be cost influenced depend on where they are developed. Money can be spent on staff, facilities, technology, equipment or materials (Slack et al., 2007). The table 2 shows which costs savings were LCCs able to achieve as a percentage of total savings.

Table 1.2: LCCs major savings as a Percentage of total savings

Costs	Savings (%)	Sum (%)
Station costs	24%	24%
Commission	14%	37%
Airport Charges	11%	49%
Passenger services	10%	59%
Cabin/flight crew	9%	68%
Aircraft rentals	8%	75%
Sales/reservations	5%	80%
General and administration	5%	85%
Depreciation	4%	89%
Fuel	4%	93%
Maintenance	3%	96%
Handling	2%	97%
Other	1%	99%
Advertising/promotion	1%	99%
Insurance	0%	100%
En-route	0%	100%

Source: Doganis (2001) – cited in Eurocontrol (2002)

As was mentioned before each of performance objectives has internal and external effects. The internal effects are those, which affects costs. Therefore, the way how to improve cost performance is to improve performance of the other internal objectives (see Table 1.3).

Table 1.3: Summarizing of LCCs' operating model

Service design	High-frequency service
	Predominantly short-haul point-to-point service
	Use of secondary airports (in preference to major hubs)
	High-density, single class cabin configuration
	No assigned seating
	No catering or limited
	Few onboard amenities, limited airport customer service
	Simple tariff structure , one-way fares
	No frequent flyer programme
Process design	Direct sales, preferably via Internet
	E-ticketing
	No hubbing (no online connection, baggage is not transferred between flights)

	Lean administrative process
	Outsourcing of no-core processes
Productivity	Maximisation of resource utilisation (staff, aircraft)
	High cabin planning factor (targeted load factors)
Fleet structure	Single aircraft type

Source: Doganis, 2001; Lawton 2002 (cited in Holloway, 2003)

1.4.Services

1.4.1. The demand for airline service

Some characteristics of demand are typical for airline services. Most of the people use airline services not for flight itself but to achieve other purpose. Only a tiny fraction of passenger is travel for sake of flying. This is why air transportation is called intermediate good and the demand for it derived demand. As a result, when estimating demand it is necessary to consider many aspects that make destination attractive (O'Connor, 2000).

Passenger's demand varies also according to time, day of the week and season. This is called variability and it is one of the main problems of airline management in term of planning the best utilisation of aircraft, flight crews, ground personnel and so on (O'Connor, 2000).

1.4.2. Marketing mix

The service marketing mix is defined as “the set of tools and activities available to an organization to shape the nature of its offer to customers”. Product, price, promotion and place are aspects developed by Borden (1964). They are based on analysis of manufacturing industry. Thus, marketing mix for services is distinguished from this model as a result of different features of services. The core differentiate characteristics of service are intangibility, inseparability, perishability and heterogeneity.

Intangibility

Services have tangible aspects, for example airline seats, as well as intangible aspects. The intangible aspect is service performance, which leads to customers' experience. Thus, it is often difficult for customers to evaluate or compare services as a result of intangible disposition of services. In consequence price or personal information sources may be used for assessing quality.

Inseparability

The most services are influenced by customers and sellers in the same time. Thus, customers are also involved in the production of services as well as the other consumers, who can influence the provided services, when the products are consumed by more people at one time. These conditions are causing difficulty in control of the quality of services.

Perishability

The services cannot be neither inventoried nor stored because of their intangibility. Therefore it is very important to have enough opportunity to deliver service.

Heterogeneity

Heterogeneity means that standardization and quality is difficult to control. The reason is again intangible nature of services. This aspect confirms that evaluation is dependent on attitudes, opinion and expectation of customers (Gilmore, 2003).

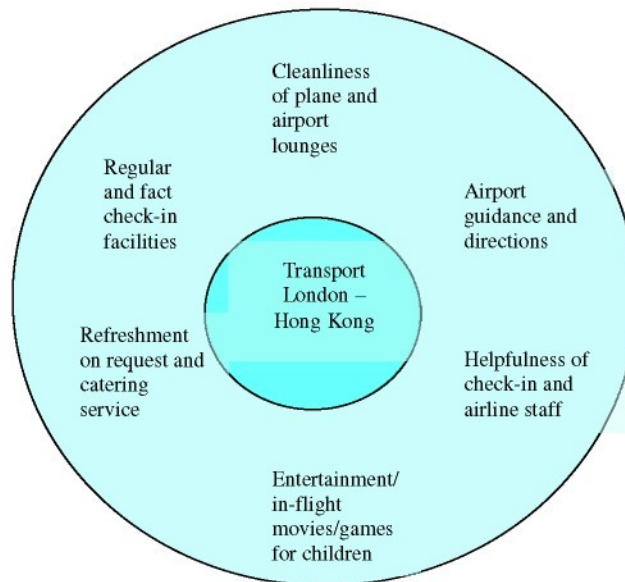
Because of these differentiate aspects marketing mix is more complex for service marketing:

The 'product' dimension

As mentioned before, the services are mainly intangible; therefore marketers need to define some tangible substitutes. These substituted may be some tools helping to get to know product (Gilmore, 2003).

Tangible substitutes enable to illustrate what is on offer, thus allow customers to understand 'service package'. Service package has usually one core prevailing aspect and the others are auxiliary to service. They are considered as secondary. There is an example of airline industry in figure 1.5. Transport of customer from London to Hong Kong is the core aspect of service, refreshment or on board entertainment is less important, although it is also part of the service.

Figure 1.5: Core and secondary aspects of an airline service product



Source: p.19 Gilmore (2003)

Sometimes it is not easy to distinguish between core and secondary service. In competitive environment the companies have often similar core service and secondary aspects are different in order to distinction from competitors (Gilmore, 2003).

The product dimension is also depending on human influence, it means how the service is delivered (Gilmore, 2003). Rhoades (2006) states that the success of Southwest airlines was enabled because of high motivated employees. They were encouraged to be creative, innovative, nonconformist, and risk taking.

The ‘pricing’ element

Customers’ perception of value is predominantly different and it is difficult to evaluate it. Therefore costing is usually difficult and imprecise.

The ‘promotion’ dimension

The ‘promotion’ dimension is close to the product features. Service product relies heavily on promotion, which should be focus on spreading and creating demand.

The ‘place or distribution’ aspect

This aspect should be considered as little bit ‘virtual’, because there is no physical distribution system. However, services need to have some suitable environment for their performance. For example agents should be necessary where service is delivered within more than one geographical region (Gilmore, 2003).

1.4.3. Service quality and customer satisfaction

Service quality is defined as “the ability of an organization to meet or exceed customer expectations” and customer expectations are defined as “the desires or wants of consumers or what they feel a service provider should offer”.

The literature states that the measurement of the performance is essentially a measure of perceived performance. The consumers’ perception of performance is considered rather than the ‘reality’ of performance. In consequence the perceptions are reality as far as service quality concerned.

Customer has usually some expectations about particular service and on the basis of this expectation is comparing service’s performances. It is crucial to know with which expectation is comparison done. However, relationship between performance and satisfaction may change depending on the standard used and the customers can also use several standards simultaneously.

Parasuraman et al. (1985, cited by Gilmore, 2003) defined perceived service quality “as the discrepancy between what the customer feels that a service provider should offer and his or her perception of what the service firm actually offers”. If performance will be clearly perceived it will be a contributory factor in influencing overall satisfaction and intention to re-buy. There still exist some important differences between ‘perceived service quality’ and ‘satisfaction’. According to Parasuraman et al.(1985; cited in Gilmore, 2003) “perceived service quality is defined by the customer’s attitude or overall judgement of a service over time while satisfaction is considered to be connected to a specific transaction”.

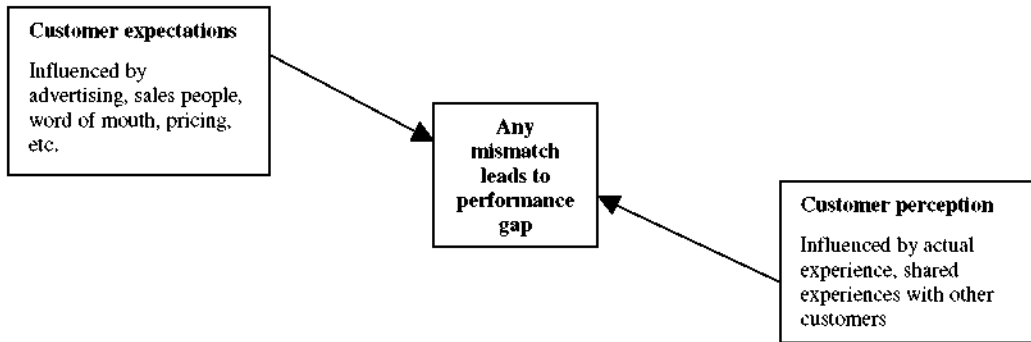
Measuring services and customer satisfaction

SERVQUAL was developed as an instrument for measuring service quality and to enable compare customer satisfaction with their expectations. Other researchers focused on development different models based on customer perceptions, expectations and attitudes. Taylor (1994, cited by Gilmore 2003) developed instrument SERVPERF, which is based on SERVQUAL and is “performance-based conceptualization of service quality. To summarize this approach, the customers do not always buy the highest quality services, but their satisfaction is influenced by convenience, price or availability of service and it does not necessarily influenced their perceptions of service quality (Gilmore, 2003).

Concept of the performance gap

Many people are involved in planning, delivering and consuming services, therefore there exist many opportunities for failure. Human errors cause performance gap when customers receive poorer service than expected. It is graphically demonstrated in the following figure (Fig.1.6).

Figure 1.6: Performance gap



Source: Gilmore (2003), p.22

Parusaman et al. (1985; cited in Gilmore, 2003) develop a gap model “focusing on the identification of the key components of service quality management and delivery based upon customer expectations and perceptions and the service delivery associated with these.” He supposed that gap exist between customer expectation and perception and the actual delivery of service.

1.5.Summary

This chapter reviewed literature concerning low cost airline with aim to explain how they operate and how they can achieve low costs. Some theory on services and operations management was set out.

Firstly was explained what the low cost airlines’ features are, and how the LCAs are divided. Explanation of the Southwest airline model was given in order to show first low cost model which many Europeans LCAs followed. At the same time this model helped to understand LCAs’ features.

Further low cost model was analysed closer. The literature proposed that LCAs model differs within each airline. The important event for developing of LCA was liberalisation of airline industry in Europe. It is described here with aim to narrow what the liberalisation brought to aviation market. Low cost model business was than expand in term of how LCAs operate to achieve low cost and be successful. There was lack of competition among airlines before liberalisation and literature support LCAs’ model success with fact, that many traditional airlines adopted some features of LCAs’

business model. Short history of development was also introduced to understand how LCAs started to operate in Europe and their path to success.

The operations management is important for LCAs to operate efficiently, thus some theory was reviewed. Theory on services was covered as well as theory on customer satisfaction which provide basis of primary research.

2. RESEARCH METHODOLOGY

2.1.Objective of study

- Analyze low-cost airlines business model.
- Investigate services provided by European LCCs.
- Find out what is important for customers, when they are deciding for particular airlines.
- Examine customer satisfaction with LCAs' services

2.2.Research Philosophy

Research philosophy and understanding to it is very useful for several reasons. It helps to clarify research design, help to differentiate between designs, which will work and which not and finally it can help to design research according consider subject or knowledge structure.

Basically, there are two main philosophies – positivism and phenomenology. Each philosophical course has own assumptions and methodological implications, however, authors usually do not ascribe all facets of philosophy's constituent element. They do not hold perpetually one position and in practical research many of them even combine methods from both philosophies.

Positivism is significant with paradigms that the world is external and objective and observer is independent of what is being observed. According Easterby-Smith et al. (1991) researcher should “focus on facts, look for causality and fundamental laws, reduce phenomena to simplest elements and formulate hypotheses and then test them.”

On the contrary to positivism phenomenological paradigm assumes that the “world is socially constructed and subjective, observer is part of what observed and science is driven by human interests”. In the case of this philosophy, researcher should “focus on meaning, try to understand what is happening, look at the totality of each situation and develop ideas through induction from data”.

Positivism and phenomenology have also different approaches to research methods. Positivism prefers taking large samples and such a concepts, which can be measured. On the contrary phenomenological paradigm uses “multiple methods to establish different views of phenomena” and small samples (Easterby-Smith et al., 1991).

2.3. Research techniques

2.3.1. Questionnaire

Questionnaire is list of questions designed to collect information, which can be used as data for analysis. It can be distributed via mail, electronically or by asking people directly (Denscombe, 1998). If questionnaires are sent by email or mail the questions should be simple and detailed instructions should be provided because it is self administrated by respondents (Malhotra et al., 2003).

Design of questionnaire

Multiple choice questions: the question is provided with more choice of answer, respondents are asked to choose one or more alternatives. Limitation of these questions is that respondents have tendency to tick particular answer because of occupying particular position (particularly the first).

Dichotomous questions: It has only two alternatives of answer, usually yes or no (resp. agree or disagree). The answers can be supplemented by a neutral answer such as ‘don’t know’ (Malhotra et al., 2003). Proportion of neutral answer from respondents is expected small therefore as Malhotra et al.(2003) suggest neutral answer is not included in the questionnaire.

Scales: Scaling is the process, where respondents indicate an attitude to something on scale. For example on scale 1-2-3, where 1 is indicating unfavourable attitude, number 2 neutral attitude and number 3 is indicating favourable attitude (Malhotra et al., 2003).

Sampling

Sampling is the process of choosing a sample from the sampling population to get basis for estimating or predicting a fact, situation or outcome complying with fact of population from which is sample drawn (Kumar, 1999).

Sampling design process

Sampling design is conducted in following six steps (Malhotra et al., 2003):

- Define target population
- Determine the sampling frame
- Select sampling techniques
- Determine the sample size
- Execute the sampling process
- Validate the sample

Target population is collection of elements or objects that involve the information being investigated and about which can the researcher make deduction. Target population should be defined precisely to get effective research.

Sampling frame is “a representation of the elements of the target population”. It is a list of the target population or set of directions for identifying the target population (Malhotra et al., 2003).

The basic decision about **sampling technique** is, if would be used probability or non-probability sampling. Probability sampling is based on chance in comparison to non-probability sampling, which relies on the judgement of researcher (Malhotra et al., 2003).

Non-probability sampling

When probability sampling is used, each member of the research population has an equal chance of being included in the sample. On the contrary non-probability sampling has one crucial characteristic, which distinguish it from probability sampling, that the choice of people or events is not a random selection (Denscombe 1998).

Convenient sampling

This method of sampling is based on the adventitious selection of respondents. They are usually chosen because they are “in the right place on the right time.” Such a sample of convenient elements can be for example use of students or street interviews without qualifying the respondents (Malhotra et al., 2003).

Sample size is number of respondents included in the research. Researcher need to consider several quantitative and qualitative decisions to determine sample size. The qualitative considerations are for example the importance of decision, the nature of the research or the number of variables (Malhotra et al., 2003).

According to Kumar (1999) is one of the important principles of sampling, that “the greater the sample size is, the more accurate will be the estimate of the true population mean”. The aim of this research will be to get as many responds as possible within target population.

For execution of the *Sampling process* is required to specify how the sampling design decision in term of the respect to the population, sampling unit, sampling frame, sampling technique and sample size are to be implemented. Execute sampling process is necessary where there is more then one researcher involved to ensure that the process will be carried out in a consistent manner (Malhotra et al., 2003).

The objective of *sample validation* is to prevent sampling frame error by screening the respondents in the data collection phase (Malhotra et al., 2003).

2.3.2. Interview

Interview is according to Kumar (1999) “any person-to-person interaction between two or more individuals with a specific purpose in mind”. Interview can be unstructured, when the interviewer formulate questions as they come to mind, or structured, when questions are prepared before asked (Kumar 1999). Interview can be also semi-

structured. The questions are prepared before, however, the researcher is prepared to be flexible and ask more about the topics, which are considered (Denscombe 1998).

Interview can be used in many ways for many purposes. It is “an information-gathering tool”, it enables to use it together with other methods to supplement data or adding details. Interview can be helpful in preparation for a questionnaire or complement a data obtained from questionnaires (Denscombe 1998).

The combination of qualitative and quantitative method is called **methodological triangulation**. Easterby-Smith et al. (1991) are advising researcher to combine different methods from within the same paradigm whenever possible but with care.

2.4. Justify choice of research method

It was decided that the best method to adopt for this investigation was to collect data with the assistance of **questionnaires**. Denscombe (1998) identify several advantages of the questionnaires, they can cover many respondents for a low costs in short time and structured questions also enable speed of collection and analysis of data. **Non-probability sampling** was chosen because “the number of elements in a population cannot be individually identified” (Kumar 1999). Convenient method of sampling was applied because it is “least expensive and least time consuming method of all sampling techniques” (Malhotra et al., 2003). Due to lack of time and money it seems to be most appropriate method for this study.

Respondents were any customers of LCA, who travelled with LCA based in the Europe. To obtain more respondents questionnaire was translated to Czech and thus it was possible to distributed among Czech friends.

It was considered that **qualitative analysis** would usefully supplement and extend the quantitative measures and interview with representative of one Czech LCCs was conducted. Interview was also carried out with aim to analyse services on one particular LCA and to what extent follow the low cost model describe in literature review.

2.5.The limitations of primary research

The most of the questionnaires were collected among students studying in the UK, therefore there existed some possibility that their travel experience with low-cost airlines will be limited because of travelling from the same destinations. Thus, extend of number of LCCs involved can be influence as a result of dominance of some LCCs in this regions. The services provided on airport are also limited with particular airport as well as location of airports in the regions should be considered.

Limitations also emerge from method of sampling. The sample chosen according convenience sampling is not representative sample of population (Malhotra et al., 2003).

2.6.Pilot testing

Pilot study was conducted in order to find out, whether the questions included in questionnaire are clear and understandable.

The questionnaire was given to two respondents to fill it in. The aim was to find out whether are questions understandable and to check the layout and function of electronic document.

Following suggestions were consider:

The term “frills” was not understandable clearly, therefore it was not rather used to not confuse respondents.

Scales 1 - 5, 5 - 20, 20 - 40, 40 - more were used in questions, which was intended to find how many flight with LCA respondent approximately experienced, were changed to 1 - 5, 6 - 20, 21 - 40, 41 – more to be clear for respondents, which possibility they should tick.

2.7.Hypotheses

1st hypothesis

When customers are deciding about purchase of air ticket, the most important factor for them is low fare. Thus, costs are the most important operational efficiency for LCAs.

2nd hypothesis

There is some possibility of delay or cancellation of flight with LCAs. Thus, there will be connection between number of flights and experienced delay and cancellation.

3rd hypothesis

Customers are overall satisfied with LCAs' services. However, male customers are less satisfied with seats because of smaller space for leg. On the other hand women are less satisfied with weight of luggage allowed.

4th hypothesis

New established LCAs offer often some "frills" in comparison other LCAs to get some competitive advantage.

Methods used for data processing'

Data were obtained from two main sources. The first one was interview with Mr. Klein, Manager of Customer Service of Czech low cost airlines SmartWings. The interview was conducted with purpose to get information about the services of LCAs. The information helped to design questionnaire and to further analyze LCAs' services.

The second source of data for primary research was questionnaire analysing customer satisfaction and services of LCA as well. SPSS were used for quantitative analysis of this data. At the first, descriptive statistic were used to analyse questionnaire. Frequency

tables were used the most often. The hypotheses were tested to obtain some further findings from questionnaire. As the most of obtained data were categorical or nominal data, the most appropriated test was Chi-Square to determine if the relationship between variables is significant. The advantage of this test is that it is appropriate for almost any kind of data. Test of hypothesis about relative was also conducted in one case.

3. RESULTS

3.1. Personal details

Table 3.1: Age of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15 - 35	162	91,0	91,0	91,0
	36 - 55	15	8,4	8,4	99,4
	56 - more	1	,6	,6	100,0
	Total	178	100,0	100,0	

Figure 3.1: Age of respondents

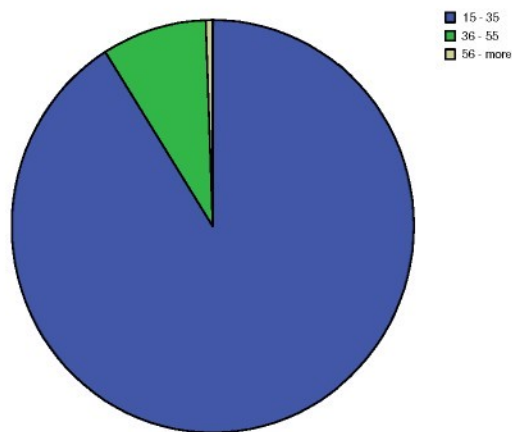
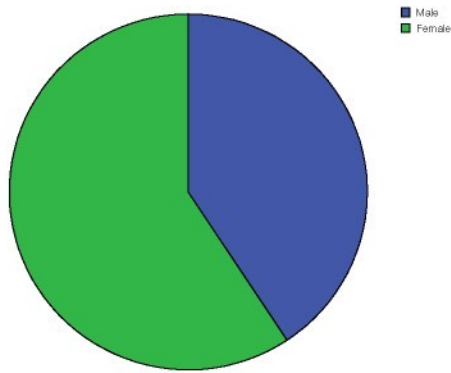


Table 3.2: Gender of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	73	41,0	41,0	41,0
	Female	105	59,0	59,0	100,0
	Total	178	100,0	100,0	

Figure 3.2: Gender of respondents



Tables 3.1 and 3.2 are showing age respective gender of respondents. It was already mentioned in methodology chapter that one of the limitation is age of respondent, which is in 91, 5 per cent between 15 and 35 years. Perception of this age group can be different to perception of another age group.

Table 3.3: Number of flights with low cost airlines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - 5	103	57,9	57,9	57,9
	6 - 20	63	35,4	35,4	93,3
	21 - 40	9	5,1	5,1	98,3
	41 - more	3	1,7	1,7	100,0
	Total	178	100,0	100,0	

This question is finding approximately number of flights with LCA. The number of flights influences for example the probability of delay or cancellation, which will be tested in one of hypotheses.

3.2.Services of LCA

Table 3.4: Which way use the respondents to buy ticket

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Internet	166	93,3	93,3	93,3
	Phone	3	1,7	1,7	94,9

Travel agent	9	5,1	5,1	100,0
Total	178	100,0	100,0	

As was supposed the most common way how to buy air ticket is via Internet (93,3 per cent of respondents, tab.7). The reason is that the LCA try to promote this way of purchase and therefore the air ticket bought on websites is often cheaper or phone link where you can buy air ticket is more expensive than usual phone call and it can take time to find appropriate flight, thus phone call is expensive. The way of purchase is tested later in one hypothesis.

Table 3.5: Convenience of way how respondents buy tickets

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	175	98,3	98,3	98,3
	No	3	1,7	1,7	100,0
	Total	178	100,0	100,0	

98, 3 per cent of respondents (tab.3.5) were satisfied with way of purchase air ticket.

Table 3.6: Do they mind that ticket is not paper based

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	6,7	6,7	6,7
	No	166	93,3	93,3	100,0
	Total	178	100,0	100,0	

Most of respondents also do not mind that ticket is only in electronic form (93, 3 per cent, tab. 3.6) .However, it is the fewer respondents than for who was the way of purchase convenient.

Table 3.7: Important characteristic for travellers when they are buying ticket

Good schedule		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	69	38,8	38,8	38,8
	Yes	109	61,2	61,2	100,0
	Total	178	100,0	100,0	

Price of ticket		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	177	99,4	99,4	99,4
	No	1	0,6	0,6	100,0
	Total	178	100,0	100,0	
Location of airport		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	10,7	10,7	10,7
	Yes	159	89,3	89,3	100,0
	Total	178	100,0	100,0	
Weight luggage allowed		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	115	64,6	64,6	64,6
	Yes	63	35,4	35,4	100,0
	Total	178	100,0	100,0	
Reliability		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	147	82,6	82,6	82,6
	Yes	31	17,4	17,4	100,0
	Total	178	100,0	100,0	
Free offer of refreshment		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	175	98,3	98,3	98,3
	Yes	3	1,7	1,7	100,0
	Total	178	100,0	100,0	
In flight entertainment		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	178	100,0	100,0	100,0
Type of aircraft		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	175	98,3	98,3	98,3
	Yes	3	1,7	1,7	100,0
	Total	178	100,0	100,0	
Is important anything else		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	172	96,6	96,6	96,6
	Yes	6	3,4	3,4	100,0
	Total	178	100,0	100,0	

Note: One respondent who indicate that is for him important anything else than possibilities in questionnaire indicated that security is important for him. The second one indicated that all of the factors

suggested in questionnaire are important for him.

The respondents ticked in questionnaire the three possibilities, which are the most important when they are choosing airlines. Price of ticket was important for 98, 3 per cent of respondents. Location of airport was important for 89, 8 per cent and as the third important factor (61 per cent of respondents) was ticked good schedule.

Table 3.8: Possibility to use self check-in in with LCA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, but I did not make use of it	54	30,3	30,3	30,3
	Yes, good upgrade of service	15	8,4	8,4	38,8
	Yes, but not interesting for me	3	1,7	1,7	40,4
	No	85	47,8	47,8	88,2
	I do not know	21	11,8	11,8	100,0
	Total	178	100,0	100,0	

40, 7 per cent of respondents (tab.3.8) have already used the possibility of using self-check in, that shows that many of LCA already use this type of check-in. Although only 25 per cent of respondents who have possibility of self check-in made a use of this facility, 83, 3 per cent from them found it as good improvement of service.

Table 3.9: Possibility to use online pre-assignment of a seat

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, but I did not make use of it	69	38,8	38,8	38,8
	Yes, good upgrade of service	18	10,1	10,1	48,9
	Yes, but not interesting for me	3	1,7	1,7	50,6
	No	72	40,4	40,4	91,0
	I do not know	16	9,0	9,0	100,0
	Total	178	100,0	100,0	

The possibility to use online pre-assignment of seating has 50, 8 per cent of respondents. Only 23, 3 per cent of customers with possibility of online pre-assignment of seat make use of it, but 85, 7 per cent found it as an interesting improvement of service.

Table 3.10: Experience with delay of flight more than 2 hours

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	15	8,4	8,4	8,4
	No	163	91,6	91,6	100,0
	Total	178	100,0	100,0	

Experience with delay of flight more than 2 hours had 8, 5 per cent of respondents (tab. 3.10).

Table 3.11: Experience with cancellation of flight

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	6,7	6,7	6,7
	No	166	93,3	93,3	100,0
	Total	178	100,0	100,0	

Experience with cancellation of flight had 6, 8 per cent of respondents (tab. 3.11).

Table 3.12: How customers of LCA approach to possibility of delay or cancellation of flights

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	70	39,3	39,3	39,3
	No	108	60,7	60,7	100,0
	Total	178	100,0	100,0	

This question stated some hypothetical probability of cancellation and delay (50%). Respondents were asked if they accepted this possibility and still use service of LCA. This high probability of delay would accept 39 per cent of them (tab.15).

Table 3.13: Experience of customers with overbooking of their flight when they could not fly

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	3,4	3,4	3,4
	No	172	96,6	96,6	100,0

Total	178	100,0	100,0
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Overbooking is very sensitive question for airlines, when they determine, how many places will be booked in comparison to seats available in airplane. 3, 4 per cent of respondents stated in questionnaire, that they could not fly because airplane was full, although they had bought ticket properly

Table 3.14: Would respondent fly again with LCA

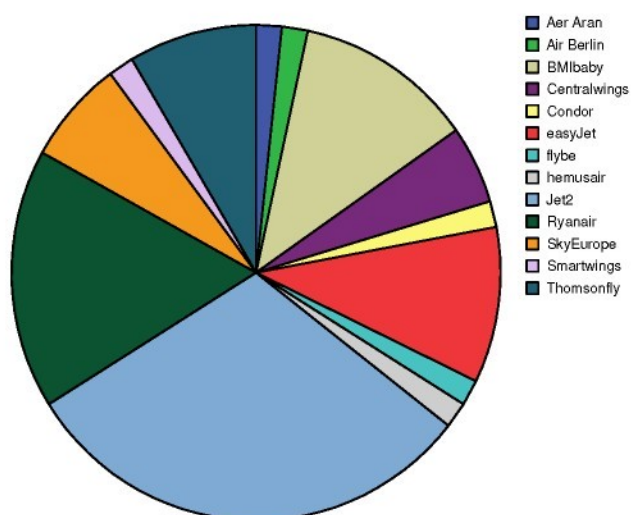
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	175	98,3	98,3	98,3
	No	3	1,7	1,7	100,0
	Total	178	100,0	100,0	

1, 7 per cent of respondents stated that they would never fly with LCA again (tab. 3.14).

Table 3.15: With which LCA flied the respondent for the last time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Aer Aran	3	1,7	1,7	1,7
	Air Berlin	3	1,7	1,7	3,4
	BMIbaby	21	11,8	11,8	15,2
	Centralwings	9	5,1	5,1	20,2
	Condor	3	1,7	1,7	21,9
	easyJet	19	10,7	10,7	32,6
	flybe	3	1,7	1,7	34,3
	hemusair	3	1,7	1,7	36,0
	Jet2	54	30,3	30,3	66,3
	Ryanair	30	16,9	16,9	83,1
	SkyEurope	12	6,7	6,7	89,9
	Smartwings	3	1,7	1,7	91,6
	Thomsonfly	15	8,4	8,4	100,0
	Total	178	100,0	100,0	

Figure 3.3: With which LCA flew the respondent for the last time



This data provide information about the LCAs used for last flight. The limitation that the respondents have covered mainly the regional LCAs was confirmed. Jet2, BMIbaby and Thomsonfly comprise together 50, 5 per cent.

Table 3.16: Satisfaction with services of LCA

Seats		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	21	11,8	11,8	11,8
	Satisfied	52	29,2	29,2	41,0
	Neutral	57	32,0	32,0	73,0
	Not much satisfied	33	18,5	18,5	91,6
	Not satisfied at all	15	8,4	8,4	100,0
	Total	178	100,0	100,0	
Ambience		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	33	18,5	18,5	18,5
	Satisfied	73	41,0	41,0	59,6
	Neutral	54	30,3	30,3	89,9
	Not much satisfied	15	8,4	8,4	98,3
	Not satisfied at all	3	1,7	1,7	100,0
	Total	178	100,0	100,0	
Food		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	Fully satisfied	21	11,8	12,7	12,7
	Satisfied	36	20,2	21,7	34,3
	Neutral	75	42,1	45,2	79,5
	Not much satisfied	22	12,4	13,3	92,8
	Not satisfied at all	12	6,7	7,2	100,0
	Total	166	93,3	100,0	
Missing	System	12	6,7		
Total		59	178	100,0	
Check-in		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	33	18,5	18,5	18,5
	Satisfied	75	42,1	42,1	60,7
	Neutral	46	25,8	25,8	86,5
	Not much satisfied	18	10,1	10,1	96,6
	Not satisfied at all	6	3,4	3,4	100,0
	Total	178	100,0	100,0	
Flight on time		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	87	48,9	48,9	48,9
	Satisfied	46	25,8	25,8	74,7
	Neutral	36	20,2	20,2	94,9
	Not much satisfied	9	5,1	5,1	100,0
	Total	178	100,0	100,0	
Weight of luggage allowed		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	30	16,9	16,9	16,9
	Satisfied	43	24,2	24,2	41,0
	Neutral	30	16,9	16,9	57,9
	Not much satisfied	48	27,0	27,0	84,8
	Not satisfied at all	27	15,2	15,2	100,0
	Total	178	100,0	100,0	
Accessibility of airport		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	61	34,3	34,3	34,3
	Satisfied	69	38,8	38,8	73,0
	Neutral	30	16,9	16,9	89,9
	Not much satisfied	15	8,4	8,4	98,3
	Not satisfied at all	3	1,7	1,7	100,0
	Total	178	100,0	100,0	

Table 3.17: Frills offered by LCA

Nothing		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	21	11,8	11,8	11,8
	Yes	157	88,2	88,2	100,0
	Total	178	100,0	100,0	
Refreshment for free		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	169	94,9	94,9	94,9
	Yes	9	5,1	5,1	100,0
	Total	178	100,0	100,0	
On board entertainment		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	172	96,6	96,6	96,6
	Yes	6	3,4	3,4	100,0
	Total	178	100,0	100,0	
Internet connection		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	178	100,0	100,0	100,0

This question shows that not many LCA offer some frills. 5, 1 per cent of LCAs offer some refreshment for free, 3, 4 per cent of LCAs offer on board entertainment. To 88, 1 of respondents was offered nothing.

The data summarized with simple frequency tables brought some interesting results which will be discussed later. To find some more relationships and results, in the following part will be tested hypothesis.

3.3. Testing of hypotheses

1st hypothesis

When customers are deciding about purchase of air ticket, the most important factor for them is low fare. Thus, costs are the most important operational efficiency for LCAs.

H0: Low fare is important for 90% of customers when they are deciding about purchase of ticket.

H1: Low fare is important for more than 90% of customer.

[n = 178; $\pi_0 = 0,9$; $\alpha = 0,05$]

p = 0,99 (177/178)

$$W \equiv \{u; u \geq u_{1-\alpha}\}$$

$$W \equiv \{u; u \geq 1,645\}$$

$$u = \frac{p - \pi_0}{\sqrt{\frac{\pi_0(1-\pi_0)}{n}}}$$

$$u = 4,00$$

$u \in W \rightarrow$ reject H0; accept H1

This test verified on significance level alpha that low fare is important for more than 90% of customers, when they are deciding about purchase of air ticket.

2nd hypothesis

There is some possibility of delay or cancellation of flight with LCAs. Thus, there will be connection between number of flights and experienced delay and cancellation.

Test 1

Table 3.18: Cross tabulation between experienced flights and delay

			Delayed		Total
			Yes	No	
Flights	1 – 5	Count	3	100	103
		% within Flights	2,9%	97,1%	100,0%
	6 – 20	Count	6	57	63
		% within Flights	9,5%	90,5%	100,0%
	21 – 40	Count	6	3	9

Total	41 - more	% within Flights	66,7%	33,3%	100,0%
		Count	1	2	3
		% within Flights	33,3%	66,7%	100,0%
		Count	16	162	178
		% within Flights	8,4%	91,6%	100,0%

Table 3.19: Chi-Square Tests - experienced flights and delay

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43,992	3	,000*
Likelihood Ratio	24,699	3	,000
Linear-by-Linear Association	17,367	1	,000
N of Valid Cases	178		

*Chi-Square test is significant at the level 0,05 (2-sided)

Chi-Square test confirms this hypothesis. The number of flights and experienced delay are dependent variables. The more flights customers experienced the higher possibility that they experience some delay is.

Test 2

Table 3.20: Cross tabulation between experienced flights and number of cancellation

			Cancellation		Total
			Yes	No	
Flights	1 – 5	Count	6	97	103
		% within Flights	5,8%	94,2%	100,0%
	6 – 20	Count	3	60	63
		% within Flights	4,8%	95,2%	100,0%
	21 – 40	Count	3	6	9
		% within Flights	33,3%	66,7%	100,0%
	41 – more	Count	0	3	3
		% within Flights	,0%	100,0%	100,0%
Total	Count	4	12	166	
	% within Flights	6,8%	6,7%	93,3%	

Table 3.21: Chi-Square Tests - experienced flights and number of cancellation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10,870	3	,012*
Likelihood Ratio	6,559	3	,087
Linear-by-Linear Association	1,690	1	,194
N of Valid Cases	178		

*Chi-Square test is significant at the level 0,05 (2-sided)

This Chi-Square test confirms that cancellation of flight and number of flights experience are also dependent variables. Thus, the more flights is experienced the higher possibility of cancellation is.

3rd hypothesis

Customers are overall satisfied with LCAs' services. However, male customers are less satisfied with seats because of small space for leg. On the other hand women are less satisfied with weight of luggage allowed.

Test 1

Table 3.22: Cross tabulation between gender and satisfaction with seats

			Seats					Total
			Fully satisfied	Satisfied	Neutral	Not much satisfied	Not satisfied at all	
Gender	Male	Count	6	19	24	15	9	73
		% within Gender	8,2%	26,0%	32,9%	20,5%	12,3%	100,0%
	Female	Count	15	33	33	18	6	105
		% within Gender	14,3%	31,4%	31,4%	17,1%	5,7%	100,0%
Total		Count	21	52	57	33	15	178
		% within Gender	11,8%	29,2%	32,0%	18,5%	8,4%	100,0%

Table 3.23: Chi-Square Tests - gender and satisfaction with seats

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,307	4	,366*
Likelihood Ratio	4,321	4	,364
Linear-by-Linear Association	3,980	1	,046

N of Valid Cases	178	
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* Chi-Square test is significant at the level 0,05 (2-sided)

This test determines that relationship between gender and satisfaction with seats is not significant. Thus, it can not be confirmed that the male customers are less satisfied with seats than female customers.

Test 2

Table 3.24: Cross tabulation between gender and satisfaction with weight of luggage allowed

			Weightlugg					Total
			Fully satisfied	Satisfied	Neutral	Not much satisfied	Not satisfied at all	
Gender	Male	Count	9	25	21	9	9	73
		% within Gender	12,3%	34,2%	28,8%	12,3%	12,3%	100,0%
	Female	Count	21	18	9	39	18	105
		% within Gender	20,0%	17,1%	8,6%	37,1%	17,1%	100,0%
Total		Count	30	43	30	48	27	178
		% within Gender	16,9%	24,2%	16,9%	27,0%	15,2%	100,0%

Table 3.25: Chi-Square Tests - gender and satisfaction with weight of luggage allowed

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27,630	4	,000*
Likelihood Ratio	28,507	4	,000
Linear-by-Linear Association	3,132	1	,077
N of Valid Cases	178		

* Chi-Square test is significant at the level 0,05 (2-sided)

Chi-Square test of relationship between gender and satisfaction with weight of luggage allowed confirms these variables are dependent.

4th hypothesis

Perceptible deterioration of LCAs' services in term of delays and cancellation of flights would discourage more then 50 per cent of customers to travel with LCA.

H0: 50 per cent of customers would be discouraged to travel with LCA.

H1: More than 50 per cent would be discouraged.

$$[n = 178; \pi_0 = 0,5; \alpha = 0,05]$$

$$p = 0,39 \text{ (70/178)}$$

$$W \equiv \{u; u \geq u_{1-\alpha}\}$$

$$W \equiv \{u; u \geq 1,645\}$$

$$u = \frac{p - \pi_0}{\sqrt{\frac{\pi_0(1-\pi_0)}{n}}}$$

$$u = -2,93$$

$$u \notin W \rightarrow \text{not reject H0; not accept H1}$$

This test does not confirm this hypothesis. It can not be supposed that the stated higher possibility of delay or cancellation would discourage more than 50 per cent of customer to travel with LCAs.

3.4.Interview

Do you offer some on board refreshment, entertainment or something else?

We offer a sandwich and one non alcoholic drink for free. The customers can buy the basic refreshment such as alcoholic and non alcoholic drinks, sweets etc. We are not thinking about anything else.

Do you sell something on board, for example cosmetics?

Yes, we have our magazine, where we offer some souvenirs, cosmetics etc. This offer is the same with Travel Service.

Do you know how this on board sale of products is profitable or how many customers buy something?

I know that it is profitable, but I do not have exact numbers now.

How often are your flights delayed? Do you have some statistics about it?

Delay of flights is our biggest problem, which we are trying to solve now. In view of the fact that our flights are still in air, potential delay is cumulating. As result, morning flights are not delayed but in later times are some delayed accumulated. But we quite successfully eliminate it of late.

Does it happen that you have to cancel some flight (not it case of bad weather etc.)?

How you announce it to customers?

In the view of the fact, that we are low cost airlines it really sometimes happens. In the case of cancellation we have to according EU law inform our clients about it 14 days before flight. We inform each client via email, which has to be filled in when reservation is made. In some cases we phone to clients.

Which services do you outsource?

Booking of hotels, car hire, insurance and lounges.

Do you plan self check in on some airports?

Yes

Do you plan online pre-assignment of seating?

Yes, we do. It will be possible in new RESA system, which we have offered from Lufthansa.

Can you describe me how the self check-in works?

It is device, where passengers alone insert their ticket or their reservation code. They get their boarding card, with which they go to the passport control.

Which possibilities of purchase ticket do you offer? Do you know how many customers use the particulars ways?

Air tickets are bought via internet in the most cases. Than is possible use our paid phone line. The payments are done with debit cards. It is also possible to buy ticket in cash in departure hall on Prague airport, where is our selling point. Customers can also buy ticket in many travel agencies.

4. DISCUSSION AND RECOMMENDATIONS

The dissertation set out to cover four main objectives, stated below, at the beginning of research. On the basis of data obtained they will be discussed in this chapter.

- Analyse low-cost airlines business model.
- Investigate services provided by European LCCs.
- Find out what is important for customers, when they are deciding for particular airlines.
- Examine customer satisfaction with LCAs' services

4.1. Discussion

Nowadays low cost airlines are well known mean of transportation for wide public. Because of their cheap fares, million travellers were encouraged to travel with LCAs during the 1990s. The results of the present study will be discussed now in three main parts: low cost airline business model, low cost airline service and customer satisfaction and operational efficiencies of LCAs.

4.1.1. Low cost airlines model

It was found and supported by testing of 1st hypothesis that when customers are deciding about purchase of air ticket the most important factor is price of fare for them. Low cost airlines developed some specifics of sale air tickets, which are typical for them. They were the first that started to sell them via Internet. It is cheaper because

there is no commission for travel agent or charges to reservation systems. Table 3.4 shows that more than 90 per cent of customers used Internet to purchase ticket. Although the representative of SmartWings stated several possibilities to buy ticket: *“via Internet, charged phone link, selling point in airports hall and travel agencies”*, the most advantageous is purchase of ticket via Internet on LCAs websites. Nearly every respondent (98, 3 %, tab.3.5) stated that the way of purchase was convenient for them. This suggests that providing of this service is not only the most cheap and advantageous for LCAs, but also customers perceive it as convenient. E-tickets mean that customers got a number or code of reservation when purchase a ticket and thus, the ticket is not paper document. This is also specific to LCAs service. The majority of respondents do not mind it. It also supported the fact that many legacy airlines also accepted this LCAs' feature.

Management is influencing income from sale of air tickets by overbooking. This way, when is sold more tickets then is seats in airplane, is not typical only for LCAs. It uses many legacy airlines as a part of yield management. Although it should be carefully calculated to avoid more customers on airports then is capacity of airplane, 3,4 per cent of respondents stated, that they could not flight because of full capacity of airplane. It is not inconsiderable number of customers and it can influence credibility of LCAs.

The second most often stated factor important when customers are deciding about LCA was stated location of airport (tab.3.7). The LCAs usually tried to use secondary airports, because they have cheaper charges and are prepared to give better conditions to airlines in comparison to main airports. Although the secondary airports are often distanced from advertised destination, there is good connection with it. It supported results from questionnaire, where 72, 9 per cent of respondents stated that they were fully satisfied or satisfied with accessibility of airports. The secondary airports are also not so crowded which enable quick and fluent check-in.

LCAs are establishing self check-in on airports. It decreases requirement of amount of airports' staff and thus can decrease airport charges and in consequence price of ticket. Another recent improvement of service is online pre-assignment of seats, when customers who have bought ticket can reserved the seat via Internet. Technical developments and Internet was one of the important factors, which help to dynamic

development of LCAs in 1990s. Nowadays it enables further improvement and widening of services.

The maximum utilisation of aircraft is one of the key components of low cost model. Although it is way how to effectively spread annual costs over more hours, it increases the possibility of delay or cancellation of flight. The Manager of Customer Department of Smart Wings is conscious of it: *"...our flights are still in air and potential delay is cumulating. As result, morning flights are not delayed but in later times the delayed are accumulated."* 2nd hypothesis tested the dependency of cancellation and number of flights. The test shows that these variables are dependent, thus it can be supposed that the more flights customer experience the higher possibility of delay has. The test was also conducted with cancellation of flight and in this case the number of flights and cancellation were also dependent. The cancellation of flight experienced 6, 7 per cent of respondents (tab.3.11). These results show that LCAs try to successfully avoid it. In the case of cancellation according the Manager of Smart Wings, the LCAs have to announce the cancellation of flight 14 days before flight. However, it is inconvenient situation, because 14 days before flight the air ticket would be more expensive then this bought before.

4.1.2. Low cost airline service and customer satisfaction

Most of the people use airline services not for flight itself but to achieve other purpose (Gilmore 2003). This purpose is to get to particular destination for many reasons such as holiday, business or visit of relatives. Gilmore (2003) stated that transport from one point to desired destination is the core service of airlines. The other services are additional, although it does not mean that they are not important.

The customer satisfaction is influenced by his expectation on service. Low fare was found the most important for customers. 4st hypothesis also show, that customers would give preference to lower fare even the high possibility of delay or cancellation. Only 39, 3 per cent of respondents would rather flight with legacy airlines for higher price (tab.3.12). It supported the fact that low fare is the important factor. It was mentioned before that important factor for customers when deciding about airlines is after price of ticket, location of airport and good schedule. Allowed weight of luggage were twice

more important for customers than reliability of LCA. Free offer of refreshment and on board entertainment were irrelevant for the majority. It is therefore likely that low-cost airline business model matches customer preferences.

The use Internet and e-tickets seems to be standard LCAs' service which customers accepted as a nature part of it. These findings support the facts that purchase of ticket on websites is the most common way (93, 3 of respondents, tab.3.4) and the majority of passengers (98, 3 per cent) consider it as convenient way (tab.3.5). Table 3.6 showed that 93, 3 per cent people do not mind that ticket is not paper based. It can therefore be assumed that nowadays the new technologies are enabling further development of services. The recent new services are self check-in and online pre-assignment of seats. 40, 4 per cent (tab.3.8) and 50,8 per cent (tab. 3.9) of respondents have possibility to use online pre-assignment of seats respective self-check in. Although only 25 per cent of respondents who have possibility of self check-in made use of this facility, 83, 3 per cent from them found it as good improvement of service. The similar situation is by online pre-assignment of seats. Only 23, 3 per cent of customers with possibility of online pre-assignment of seat make use of it, and 85, 7 per cent found it as an interesting improvement of service. It suggest that customers consider it as good improvement of service and as the service will become more common among them it can bring satisfaction with services not only in term of quick automatic self check-in and pre-assignment of seats, but also in term of cheaper flights. These facilities are enabling further savings of costs because less labour on airports is necessary. Some LCAs have already set up charges for each checked bag and thus, enabling totally automated check-in and loading turnaround times are reduced even more and (Capell, 2006).

The seven services were examined to find out customer satisfaction – seats in airplane, airplane ambience, in flight food, check in, flight on time, allowed weight of luggage and accessibility of airport.

Seats in airplane

It was supposed that male customers are less satisfied with seats in 3rd hypothesis. This assumption arises from presumption that men have bigger figure. However, this hypothesis was not confirmed and according to Chi-square test (tab.3.23) these

variables are independent. 41 per cent of respondents were fully satisfied or satisfied. Most of them were neutral and 8, 4 per cent were not satisfied at all (tab.3.16). Although the seats in LCAs' airplanes have smaller space for legs, the flights usually have duration around 2 hours. Thus, the uncomfortableness can be accepted.

Ambience in airplane

Satisfaction with ambience of airplane is considered by customers among the most satisfactory. For 59, 6 per cent of respondents were ambience in airplane considered fully satisfactory or satisfactory and only 1, 7 per cent were not satisfied at all (tab. 3.16). The reason of this result is that the most of the LCAs have new aircraft. It is value for money because the LCAs aircraft have high utilisation, which became more expensive for them when they have older fleet because of higher maintenance costs.

On board refreshment

The most of the people were neutral to the refreshment (45, 2 per cent, tab.3.6). 6, 7 per cent of respondents do not purchase it during the flight when it was not offered for free. It suggests that the refreshment is not considered important and thus customers do not expect high quality. It supported also result shown in table 3.7, where free offer of refreshment is important only for 1, 7 per cent of customers.

Check-in

Check-in was found as fully satisfactory or satisfactory by 60, 7 per cent of respondents (tab.3.16). This good result is consequence of effort of LCAs for quick check-in, which is also enabled by use of secondary airports. 40, 4 per cent of all respondents already have possibility to use self check-in and 83, 3 per cent of them who make use of it found it as good improvement of service. Although only 25 per cent of respondents who have possibility to use self check-in make use of it, the majority of them found it as good improvement of service. It supported the plans of LCAs to expand or set up this service. The manager of SmartWings also stated that they plan to establish the self-check in.

On time flight

The majority of respondents stated that they were satisfied with flight on time and nobody of them was not satisfied at all. This information is only about the last flight, thus, it is not much declarative. The 2nd hypothesis validate that some possibility of delay still exist, thus the more flights is experienced the higher possibility of delay is. However, the LCAs try to avoid this situation which confirms manager of Smart Wings: *“Delay of flights is our biggest problem, which we are trying to solve now...and we are quite successfully eliminate it of late.”* On the other hand many LCAs have reputation of high reliable in flights on time. It is supported by the fact that many of business travellers were already encouraged to travel with LCAs. The case in a point is EasyJet’s routes from London.

Allowed weight of luggage

The weight of luggage allowed differ within each LCA, however, it is usually lower then the weight which allow legacy airlines. It was analyse the connection between satisfaction with this factor and gender in the 3rd hypothesis. The dependency of these two variables was significant, thus it was confirmed that the women are less satisfied with weight of luggage. Evaluation of service is dependent on attitudes, opinion and expectations of customers. This result shows how can be the satisfaction with service different between male and female customers because of their different expectations.

Accessibility of airport

Although the LCAs were sometimes criticized because of use secondary airports and advertised them as another close destination, Girona in Spain advertised as Barcelona can be case in a point, the satisfaction with location of airport was good. The majority of respondents stated that they were fully satisfied or satisfied. (tab.3.16).

Although the satisfaction with services is not every time good, table 17 shows that only 1, 7 per cent of respondents are not going to fly with LCAs again. Price seems to be still the most important for customers even though they are not fully satisfied with service.

4.1.3. Operational management of low cost airlines

The investigation of low cost model, services and customer satisfaction enable further analysis of operational management and efficiencies of LCAs. What is important for customers should be also important for LCAs.

Although there are five basic performance objectives and all of them affects costs (Slack, 2007), some of them are more important for particular organisations than the others.

Quality

Quality of LCAs services is necessary only to some extend. Although the results from questionnaire suggested the weight of luggage allowed is important for 89, 3 per cent of respondents, the type of aircraft (and thus airplane ambience) is important only for 1, 7 per cent.

Speed

Speed is the key factor mainly inside the operation for LCAs. The business model is base on short turnaround times on airports. Many things have to be done during this time, such as cleaning of airplane, unload and load of luggage. When this does not work it affect the dependability and in consequence costs, because it can cause delay or even cancellation.

Dependability

Customers are willing to give up dependability for lower price. This result in table 15 shows that the 50 per cent possibility of 4 hours delay or cancellation of flight would accept 60, 7 per cent respondents. It was also tested in 4th hypothesis where was supposed that this situation discourage more than 50 per cent of travellers. The hypothesis was not confirmed. It suggests high willingness of customers to accept lower dependability for low price.

Flexibility

The results show that it seems to be the most important low price and demanded destination for customers. Thus, the LCAs have to be flexible in term of destinations offered according to demand of customers. The good schedule was stated important by 61, 2 per cent of respondents.

Costs

It has been already cited in Chapter 1 that this operation objective is crucial for organisations, which are competing directly on price. The respondents supported this when 99, 4 per cent of them stated that price is the most important factor when they are deciding about LCA.

It is not easy to evaluate how particular operational objectives are important for particular organisations. Apparently, the cost is the most important for LCAs. However, the service could not be received properly when other of them does not work. The results suggest that flexibility is important for LCAs as external operation objective. To attract customer demand it is necessary not only low price but also the attractive destination and it can be changing during the time. The speed is also crucial for LCAs. The results showed that customers are not too much deciding according reliability of LCA and they are also willing to accept some delays or cancellation. However, delays and cancellation bring additional costs such as compensation to passengers.

5. CONCLUSION

The overall aim of this dissertation was to analyse the services of low-cost airlines in Europe. It was done throughout three main points: analysis of low-cost airline business model, satisfaction with low-cost airlines services among customers and operational efficiencies. One of the more significant findings to emerge from this study is that low-cost airlines services match the customer needs, which mean to travel for low price to desired destination. Even the satisfaction is not full with every service the low price seems to be the most important factor. The main findings concerning customer satisfaction are summarized in following recommendations:

- Free offer of refreshment is not important or interesting for customers at all and thus it does not bring any competitive advantage. The LCA which has this offer should rather cancel it and reduce price even a little.
- The offer of higher weight of luggage allow for female customers in compensation to lower seat space for female customers and higher seat space in compensation to lower weight of luggage allowed can be good improvement of service.

As the most important factor for customers after low price was found location of airport and the schedule followed on third place. Another recommendation emerged from these findings is:

- When new route is setting up after attractiveness of destination the accessibility of airport and schedule can be big competitive advantage over the other airlines.

The research detected new trends in low-cost airline services that were found out to improve quality of them and enable to go further in decreasing costs. It is self check-in and online pre-assignment of seats. This suggested that the development of new technologies is the important turning point in widening and improving of the services. However, it seems to be important to familiarise the customer with it. Thus, the following recommendation arose:

- Some propagation of online pre-assignment of seats and self check-in is suitable to encourage the customers make use of it.

The findings from analysis of low cost airlines model and customer satisfaction brought some implications to operational efficiencies, which are enabling to operate LCAs in low costs. Although every of five basic operational objectives are somehow important for organization, the evidence from this study suggested the following:

- Operational management should be focused on cost, speed and flexibility.

In conclusion LCAs seem to be still developing and improving their services on the basis of their core characteristics: low fare, no frills and point to point service with no connection. Their expansion during the 1990s in Europe confirmed that this model is attractive for passengers, who travel for holiday as well as for business.

The study has gone towards enhancing the understanding of LCAs. However, the model differs airlines to airlines and thus, these finding could not apply to each LCA. This analysis of services was intended to be taken from several views in order to make it more complex. Consequently, it could not go deeper in the problem studied in some way and therefore some findings were limited.

Finally, a number of important limitations need to be considered. First, the participants in research were mostly the students of one university, which suggest the limitation of representativeness of research sample in term of age group and also considered LCAs, which are mostly based in this region. Furthermore, the tests of hypothesis would be more reliable, if the data content higher number of respondents. As far as interview concerned it was conducted only with one small LCA and thus it brought only one view onto LCAs service. Although the author contacted some other LCAs, it was not successful.

More research on this topic needs to be undertaken to clearly understood customer satisfaction and service quality. Further experimental investigations are needed to estimate to investigate the customer perceptions, expectations and attitudes to measure them and thus enabling better understanding to service quality and customer satisfaction. The research in the field regarding the role of LCAs in change of aviation

market during their existence would be of great help in better understanding of contemporary aviation and thus can help to better understand low-cost airlines services.

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Appendices A

QUESTIONNAIRE

My name is Katerina Hlucha and I am a student at University of Huddersfield. I would like to ask you to help me and complete this questionnaire, which is part of the primary research in my dissertation.

The aim of this questionnaire is investigate to what extent are the customers satisfied with services provided by low cost airlines (LCA) and what is for them important.

This questionnaire is intended to everyone, who travelled with low cost airlines within Europe.

Completing of the questionnaire is anonymous and the given answers will be treated confidentiality.

It should not take you more then 5 minutes of your time. Thank you.

1) Your age group:

- ☐ 15 - 35
- ☐ 36 – 55
- ☐ 56 – more

2) Gender:

- ☐ Male
- ☐ Female

3) Have you ever travelled with low cost airlines? (If you are not sure, whether it was low cost airline, in the roll box in question 13 is the list of low cost airlines in Europe)

- ☐ YES If yes, please continue with the following questions.
- ☐ NO If no, thank you for your time.

4) How many flights with low-cost airlines have you approximately experienced?

(Return flight is considered as 2 flights)

☐ 1 - 5

☐ 6 - 20

☐ 21 - 40

☐ 41 - more

5) How do you usually buy your ticket? (tick only one possibility, which is the most common for you):

☐ Via internet

☐ By phone

☐ Travel agent

☐ Other:

6) Is this way of purchase convenient for you?

☐ YES

☐ NO

7) Do you mind that you do not have paper based air ticket “in your hand”?

☐ YES

☐ NO

8) Which characteristic is important for you, when you are choosing airline for your travel? (Please choose up to three possibilities)

☐ Good schedule (time of flight)

☐ Price of ticket

☐ Airport location

☐ Weight of luggage allowed

☐ Reliability (according your experience or what you have heard about)

☐ Free offer of on board refreshment

☐ On board entertainment

☐ Type of aircraft

☐ Other, please specify:

9) Have you ever had the possibility to use self check-in with low cost airlines?

- ☐ YES, but I did not make use of it.
- ☐ YES, I used it and I find it as good upgrade of service
- ☐ YES, I used it; but I did not find it a useful or interesting service for me
- ☐ NO, I do not have
- ☐ I do not know

10) Have you had the possibility to use online pre-assignment of a seat in airplane?

- ☐ YES, but I did not make use of it.
- ☐ YES, I used it and I consider it a good upgrade of service
- ☐ YES, I used it; but I did not find it as useful or interesting service for me
- ☐ NO, I do not have
- ☐ I do not know

11) Has your flight with low-cost airlines been ever delayed more than 2hours? (not in case of bad weather or that sort of situation)

- ☐ YES
- ☐ NO

12) Have you ever experienced cancellation of flight? (not in case of bad weather or that sort of situation)

- ☐ YES
- ☐ NO

13) Imagine that there is high possibility of cancellation of flight with low-cost airlines, it means you have to wait for next day flight; or possibility of significant delay being considered more than 4 hours. High possibility for this hypothesis means it happens every second flight. In this condition, would you rather travel with a traditional airline, but for a significantly higher price (eg where the price would be 160£ instead of 40£)?

- ☐ YES, I would rather travel with traditional airlines.
- ☐ NO, I still would prefer low price of ticket and choose low-cost airlines.

14) Have you ever experienced, that although you have valid ticket, you cannot fly, because of full capacity of airplane?

- ☐ YES
☐ NO

15) Would you fly again with low cost airlines? If no, please specify what your reason is.

- ☐ YES
☐ NO
-

Please fill in the following information according to your last flight with low cost airlines:

16) With which LCA have you travelled recently? Please choose one.

--choose LCA (A-D)-- or --choose LCA (D-Z)

Other:

17) Please evaluate, how have you been satisfied with following services:

1 – Fully satisfied

5 – Not satisfied at all

	1	2	3	4	5
➔ Seats (enough space etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Plane ambience (clean, new etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Offer of refreshment (if provided or bought)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Check-in (speed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Flight on time (delay)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Weight of luggage allowed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Accessibility of airport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

18) Were there something from the following offered for free?

- ☐ Nothing
- ☐ Refreshment
- ☐ Entertainment
- ☐ Internet connection
- ☐ Other, please specify:

THANK YOU FOR YOUR TIME

DOTAZNÍK

Jmenuji se Kateřina Hluchá a jsem studentkou university v Huddersfieldu. Ráda bych Vás požádala o pomoc při mém výzkumu, který je součástí disertační práce, a to vyplněním následujícího dotazníku.

Cílem tohoto dotazníku je ohodnotit do jaké míry jsou zákazníci spokojeni se službami nízkonákladových leteckých společností, tzv. low-costů a co je pro zákazníka důležité.

Dotazník je určen každému, kdo cestoval s nízkonákladovou leteckou společností v rámci Evropy.

Vyplnění tohoto dotazníku je anonymní a získaná data budou použita pouze pro účely této práce.

Vyplnění dotazníku by Vám nemělo zabrat více než 5 minut času. Děkuji.

1) Vaše věková skupina:

- ☐ 15 - 35
- ☐ 36 – 55
- ☐ 56 – více

2) Pohlaví:

- ☐ Muž
- ☐ Žena

3) Cestoval(a) jste někdy s nízkonákladovou leteckou společností? (Pokud si nejste jist(a), které aerolinky jsou nízkonákladové, v otázce číslo 16 najdete seznam těchto aerolinek)

- ☐ ANO Pokud ano, pokračujte následujícím otázkami.
- ☐ NE Pokud ne, děkuji za váš čas.

4) Kolik letů s nízkonákladovými linkami jste přibližně absolvoval(a)? (Zpáteční cesta je považována za 2 lety)

☐ 1 - 5

☐ 5 - 20

☐ 20 - 40

☐ 40 - more

5) Který ze způsobů obvykle používáte pro nákup letenky? (označte pouze jednu možnost, která je pro váš nákup nejobvyklejší):

☐ Webové stránky

☐ Telefon

☐ Cestovní agent

☐ Jiná možnost:

6) Je tento způsob nákupu pro Vás pohodlný?

☐ ANO

☐ NE

7) Vadí vám, že letenka není v elektronické podobě, že ji nemůžete mít “v ruce”?

☐ ANO

☐ NE

8) Který z následujících faktorů je pro Vás nejdůležitější při výběru nízkonákladové společnosti? (Vyberte prosím maximálně 3 možnosti)

☐ Čas odletu (vyhovující letový řád)

☐ Cena letenky

☐ Poloha letiště

☐ Povolená váha Vašeho zavazadla

☐ Spolehlivost (podle Vaší zkušenosti, popř.co jste se doslechl(a))

☐ Nabídka občerstvení na palubě zdarma

☐ Nabídka zábavy během letu

☐ Typ letadel

☐ Jiný, prosím uveďte jaký:

9) Měl jste někdy možnost využít „self check-in“ při letu s nízkonákladovou společností?

- ☐ ANO, ale možnosti jsem nevyužil(a)
- ☐ ANO, této možnosti jsem využil(a) a považuji to za dobré zkvalitnění služeb
- ☐ ANO, této možnosti jsem využil(a); ale nepovažuji to za zlepšení služeb, není to pro mne nijak zajímavé
- ☐ NE, neměl(a) jsem možnost
- ☐ Nevím

10) Měl jste někdy možnost využít služby online rezervace místa v letadle?

- ☐ ANO, ale možnosti jsem nevyužil(a)
- ☐ ANO, této možnosti jsem využil(a) a považuji to za dobré zkvalitnění služeb
- ☐ ANO, této možnosti jsem využil(a); ale nepovažuji to za zlepšení služeb, není to pro mne nijak zajímavé
- ☐ NE, neměl(a) jsem možnost
- ☐ Nevím

11) Byl někdy Váš let s nízkonákladovou společností zpožděn o více než 2 hodiny?

(nejedná se o případy špatného počasí apod.)

- ☐ ANO
- ☐ NE

12) Byl někdy Váš let s nízkonákladovou společností zrušen? (nejedná se o případy špatného počasí apod.)

- ☐ ANO
- ☐ NE

13) Představte si situaci, že je vysoce pravděpodobné zrušení letu s nízkonákladovou společností, to znamená čekat na další let do druhého dne, anebo možnost podstatného zpoždění, tzn. více jak 4 hodiny. Vysokou pravděpodobností je v tomto případě míněno, že se to stává u každého druhého letu. Využili byste za těchto okolností raději služeb tradiční aerolinky za znatelně vyšší cenu (předpokládáme, že cena by činila místo 1600 Kč 6400 Kč)?

- ☐ ANO, raději bych letěla s tradičními aerolinkami

☐ NE, i přesto bych preferovala nízkou cenu a letěla s nízkonákladnou společností

14) Dostali jste se někdy do situace, že i přesto, že jste měli zakoupenou platnou letenku, nemohli jste kvůli plné kapacitě letadla letět daným spojem?

☐ ANO

☐ NE

15) Využili byste příště znovu služeb nízkonákladových aerolinek? Pokud ne, uveďte prosím Váš důvod.

☐ ANO

☐ NE

Následující informace prosím vyplňte podle Vaší poslední cesty s nízkonákladovou společností:

16) S kterou nízkonákladovou společností jste cestoval naposledy? Prosím, vyberte jednu z následujících možností:

--vyberte (A-D)-- or --vyberte (D-Z)

Jiná:

17) Ohodnoťte prosím, jak jste byli spokojeni s následujícím:

1 – Velmi spokojen

5 – Naprosto nespokojen

	1	2	3	4	5
→ Místo k sezení (dostatek prostoru na nohy apod.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ Prostředí v letadle (čisté, nové apod.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ Nabídka občerstvení (pokud podáváno nebo zakoupeno)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ Check-in (rychlost)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ Let na čas (žádné zpoždění)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

➔ Povolená váha zavazadel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Dostupnost letiště	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

16) Bylo něco z následujících věcí nabízeno během letu zdarma?

- ☐ Nic nabízeno nebylo
- ☐ Občerstvení
- ☐ Zábava
- ☐ Internet spojení
- ☐ Jiné, prosím specifikujte:

INTERVIEW

Nabízíte nějaké občerstvení, zábavu popř. jinou nabídku pro cestující?

Nabízíme dokonce – lehkou bagetu a jeden nealkoholický nápoj zdarma. Dále si naši zákazníci mohou zakoupit na palubě základní nabídku občerstvení (alkoholické i nealkoholické nápoje, pochutiny, sladkosti, atd) O jiné nabídce pro cestující zatím neuvažujeme.

Prodáváte na palubě letadla nějaké zboží (kosmetika apod.)?

Ano, máme přímo svůj nabídkový časopis, kde lze zakoupit různé upomínkové předměty, kosmetiku, atd. Společně opět s katalogem Travel Service.

Víš, jaké máte zisky z prodeje zboží na palubě letadla, jak je to pro vás profitabilní a máte přehled kolik cestujících (nebo kolik procent cestujících) si něco koupí?

No rozhodne na tom neproděláváme, ale přesná procenta nevím. Kdyby to bylo vyloženě důležité, musel bych se zeptat.

Jaká máte zpoždění? (Existují nějaké statistiky?)

Zpoždění letu je nás největší problém, který se snažíme co nejefektivněji řešit. Vzhledem k tomu, že naše letadla jsou pořád ve vzduchu, případné zpoždění se čím dál více kumuluje. Z toho vyplývá, že ranní lety zpožděné nejsou, ale k pozdějších časům odletu se za ten den nějaké zpoždění nashromáždí. Avšak poslední dobou se snažíme co nejvíce eliminovat tato zpoždění. A celkem se i daří.

Stává se, že z nějakého důvodu musíte zrušit let (nemyslím počasí apod.)? Jak o tom uvědomujete cestující?

Vzhledem k tomu, že jsme nízkorozpočtovka, tak se to opravdu stává. Vzhledem k nedostatku letadel, atd.. V takovém případě podle nařízení EU musíme odinformovat naše klienty min. 14 dní před odletem. Každého klienta informujeme pomocí emailu, který naši klienty musí vyplnit při dělání rezervace, popř. když se nám email vrátí, klienty obvoláváme.

Které ze služeb outsourcujete?

Knihování hotelů, hostelů, půjčování automobilu, připojištění a VIP salonky.

Plánujete na nějakém letišti self check-in.

Ano.

Nebo online rezervaci sedadel?

Ano, v novém RESA systému, který už máme objednaný od LUFTHANSY, to už bude možné.

Jaké jsou možnosti nákupu letenek? Internet, telefon? Jaká část cestujících využívá který způsob?

Letenky lze zakoupit nejčastěji přes internet, dále lze využít naší placenou linku po telefonu. To vše probíhá na základě platebních karet. Je možné platit i v hotovosti a to v odletové hale v Praze na Ruzyni, kde funguje naše info okénko. Další možnost je zakoupit letenky přes jakoukoliv cestovní kancelář, která nabízí letenky.

University of Huddersfield

Low cost airlines in Europe: an analysis of service

By

Katerina Hlucha

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ABSTRACT

Low cost airlines change dramatically aviation market during the last decade. The new business model was developed enabling to operate them below costs not conceivable before and in some elements also inspiring the legacy airlines. The secret of success is the low price for which is offered the core aspect of airline service – transportation to desired destination. The aim of this study was to analyse the low cost airline business model and low cost airlines services and also to find out customers' satisfaction with them. Then, on the basis of it determine the most important factors for success of LCAs and developed some recommendation.

The triangulation of two methods of primary research was used. As the first the interview with manager of customer service in SmartWings Lukas Klein was conducted. The results from interview were used to help design questionnaire and to support the acquired results from it as well. The questionnaires, which were given to customers of LCAs, brought the main data for study.

The study find out that services are consider quality by customers, however, the results suggested that some of them are more important and some of them not at all. The important factor for customers when deciding about LCAs, which they would use, is price and on the contrary the reliability was the less important than good schedule or weight of luggage allowed. On the basis of this result the research suggested that the free offer of refreshment is not important for LCAs at all and instead of it price in combination with attractive destination and appropriate schedule are the biggest advantage for LCAs.

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INTRODUCTION

Low-cost airlines can be considered phenomena of contemporary travelling. It changes form of the aviation during the 1990s and extend the possibilities to travel for many people. Most studies in the field of low-cost airlines have only focussed on describing this model and little attention engage in the topic from the view of customers and his preferences and satisfaction with low-cost airlines services. Low-cost model and his success captured many authors in their studies such as Mason et al. (2000) or Francis et al (2006), where they for example analysed the influence of them on airports or aviation market.

The aim of this study was, therefore, to find out customer satisfaction with low cost airlines services and on the basis of it to determine the most important factors for success of low-cost airlines and developed some recommendation. To help answering this question was analyse the low cost airline business model and low cost airlines services. The recommendations intend to find out, if there are some possibilities to improve, change or extend the service according to preferences of customers and on the base of customer satisfaction determine what is the most important for them, and thus the most important objective for low-cost airlines.

The literature states several terms for low-cost airlines. The low-cost airlines and low-cost carriers are the most common. The other term used is no frills airlines, because they abandoned frills such as offer of refreshment and classes of seats. In this dissertation the term low-cost airlines with abbreviation LCAs will be mostly used.

For primary research is chosen method of triangulation, where questionnaires intended to customers of low cost airlines will be supported by interview with Manager of the Czech low-cost airlines Smart Wings.

The overall structure of the study takes the form of five chapters. Chapter two begins by laying out the theoretical dimensions of the research, and looks at main features of low cost airlines. To help better understand to low-cost airlines issue, Southwest airlines model as first pioneer of low-cost airlines' followed by many European airlines is explained. Further it is focused on European low-cost airlines. Liberalisation of aviation market was crucial moment for development LCAs in Europe; therefore, the process of

liberalisation is described shortly. Before the low cost airlines business model is investigate the history of development LCAs in Europe is explained. Further the research has been confined to operational management and then the theory concerning the services is revised to understand service specifics in term of marketing, service quality and customer satisfaction. The second chapter is concerned with the methodology used for this study. The findings of research are presenting in Chapter 3 and the discussion of the findings and recommendations are drawn further in following Chapters 4. Finally, the conclusion gives a brief summary and critique of the findings, and includes a suggestion for further research into this area.

1. LITERATURE REVIEW

1.1.Characteristics of low-cost airlines

1.1.1. Features of low-cost airlines

Doganis (2001) thinks that there are two possibilities to make money in the airline industry. The first is through a network approach based on hub and spoke operations. It is exemplified by the development of alliances aimed at linking hubs. The second way is through a low-cost approach, which can be divided into two distinct models. The traditional low-cost model has been that of the charter or non-scheduled airlines. The second model is low-cost, no-frills scheduled airlines introduced into Europe in the late 1990s.

The general concept of low-cost, no-frills airlines is that costs are reduced compared to traditional scheduled airline operations in a number of ways. Although Francis et al (2006) make remarks that there are many variations of the model and a great difference between airlines, both authors (Doganis, 2001; Francis et al., 2006) are in agreement that the core characteristics are: high aircraft utilization, internet booking, use of secondary airports, minimum cabin crew, lower wage scales, lower rates of unionisation among employees, one class of seating, thus allowing more seats per aircraft than traditional airlines (who offer alternative seat pitches for different classes of travel), short 'on the ground' turn around times, no cargo carried to slow down turn around times, a simple fare structure and pricing strategy, e-ticketing, no seat allocation, passengers having to pay for food and drink, flexible working terms and conditions for employees relative to traditional airlines, point to point services and no connections offered (Doganis, 2001, Williams, 2001 and Mason et al., 2000). Combination of this features enable low cost airlines to offer lower prices in comparison to traditional airlines (Francis et al., 2006).

1.1.2. Dividing low-cost airlines

Francis et al. (2006) have developed a typology of low cost carriers under which it is possible to conceptually categorise five broad types of low cost carriers:

1. *Southwest copy-cats*: these airlines have an example in 'Southwest model', they minimise costs through operating mainly point to point services, a single type of aircraft and high aircraft utilisation.
2. *Subsidiaries*: these airlines include subsidiaries of long established major airlines that try to operate under the similar manners as Southwest copy-cat. They are often established as consequence of market entry copy-cat.
3. *Cost cutters*: are long established legacy airlines that are now reducing their operating costs. In many cases they do not offer frills that they did, for example in-flight food. They have also introduced low fares, one-way fares and internet booking, but they continue to operate a short and long haul network to major airports.
4. *Diversified charter carriers*: These are low cost subsidiaries established by charter airlines in order to operate low cost scheduled services. According to Doganis (2001; cited by Francis et al. 2006) a distinct feature is that their costs are low because their parent airlines have long been considered to have the lowest costs within the airline industry.
5. *State subsidised competing on price*: These airlines are not true low cost carriers as such, because they are financially supported by Government in order to offer low fare to develop tourism or to promote particular airport.

1.1.3. The Southwest model

The Southwest Airlines' successful model has been adopted by Ryanair and easyJet at the first and afterwards they were followed by most of other LCCs in Europe (OAG, 2006). In order to understand how low-cost airlines operate it is necessary to look closely at business model developed by Southwest.

The low-cost formula is not new to United States. While established in Europe in the mid- 1990s many new airlines have selected low-cost strategy in the US since the early 1970s. However, Southwest Airlines is the only one to have been consistently profitable for the last thirty-five years even during the industry's cyclical downturns. That is why many new established airlines follow its example and try to use Southwest Airline's model.

Southwest Airlines were set up to operate within Texas in 1967, but they could not start flying yet. They had to win court trial brought by its local competitors who argued that there was not enough demand to support a new entrant. In result of it was able to operate 4 years after establishing.

As home airport it has chosen Love Field, which was only 10km (6mils) from Dallas. Although, in contrast to traditional scheduled frills, they did not offer meals, pre-assigned seats or connecting flight they were successful. They developed a brand image of "flying is fun" and concentrated on a strategy of operating short sectors offering low and unrestricted fares, high-to-point frequencies and excellent on time departures. With this strategy not only they diverted passengers from other carriers, they also attracted leisure and business passenger to fly rather than drive the relatively short distance between most of the cities it served.

When US domestic deregulation came in 1978, Southwest was well placed to expand. They wanted to avoid the calamitous over-expansion of the new start up carriers of the 1980s and it is the reason why it took 12 years to grow its fleet to fifty aircraft. Traditionally, Southwest has chosen markets where no one else was operating, or which were under-served or over-priced. Southwest was dominant airline in 90 of its top 100 markets by July 1993 and it was same after 10 years. This growth over thirty-five years

has been connecting with continuing profitability in every year of operations even during three major cyclical downturns in the early 1980s, the early 1990s and again in 2001-3. In 2003, Southwest's shares of US domestic capacity was 11, 5 per cent in comparison to 14, 4 per cent for all the other low-cost carriers. By 2003 it had grown into the third largest United States airline in terms of domestic passengers or fourth largest in terms of domestic passenger-kms. This success was continuing during early 2000s, when other US major airlines made losses Southwest was profitable in each of years 2000-2004 (Doganis, 2006).

Key of Southwest's growth over thirty-five years is according Doganis (2006) based on:

- Ability to operate at costs which are consistently below its revenues
- Achievement of operation at cost levels 28-50 per cent below those of its major competitors
- Its unique service and product feature that have enabled it both to generate relatively high average yields and to operate with below-average costs
- Its key product feature is its low, unrestricted fares, enters new markets it prices not just to compete with other airlines but also against ground transport – pricing 60 per cent or more below prevailing air fares in these markets
- Low, simple and unrestricted (no complex conditions attached to them) fares combined with high frequencies and excellent punctuality
- Tries wherever possible, to use smaller, less congested airports to serve major cities

This could Southwest airlines achieve with its unique low-cost, no-frills model, which can be summarized subsequently (composed from Doganis 2006):

Crew: high motivated, more productive staff, also benefits from 10-years agreement signed with its pilot in 1994 (wage freeze for five years followed by annual increase of 3 per cent), pilots are more productive because of single aircraft type, only 3 steward on

board (minimum needed to meet safety rules), because of no catering and single class

Fleet: a single aircraft type in its fleet, the Boeing 737 make substantial savings, flying longer than most carries spread fixed annual costs over more hours, packing more seats into its aircraft which increases the seat-kilometres generated per block hour

Airports: where is possible Southwest trying to use secondary airport, airport charges and related costs for gates and so on lower; productivity of ground staff is also increase by using less congested airports and by ensuring high frequency of departures at each airport, also allow high daily utilization through scheduling 15- or 20- minute turn-rounds

Tickets: no pre-assigned seating, first US airline introduce direct online booking, direct sales (no agents commissions)

1.2.A low-cots model in Europe

The first chapter reviewed low cost airlines' core characteristics, how they can be divided and also the Southwest Airlines' model, which has been implemented by many Europeans' low cost airlines, was described. This chapter will focus on the business model adopted by low cost airlines in Europe, which brought them success and thus caused the "low cost revolution".

Although first European low cost airlines RyanAir started to operate in 1985, the low cost carries expansion really started with the creation of the single European Aviation Market. It made a possibility for low cost carries to extend their services of low fares and high frequencies. Another factor allowing further development of LCCs was the growth of Internet and finally progresses in technology such as yield and capacity management systems which enable huge cost savings for airlines to move on passengers. This brought about a boom in flight capacity (OAG, 2006).

1.2.1. Liberalisation of aviation market within EU

Situation before liberalisation

Most European countries had only one airline before deregulation of aviation market. These airlines agreed on capacity in various routes and as a result, the competition among airlines did not exist. In consequence, airline industry was characterised as low productive with high per unit costs and high fares (Sinha 2001).

Process of liberalisation

The liberalisation process in Europe was influenced by fact that there are many countries and governments with different ideas. Thus, it was difficult for them to agree on the optimal amount of deregulation.

Although the civil Aviation Memorandum Number 1 recommending liberalisation of aviation market in Europe was published in 1979 by the European Commission, the deregulatory process did not start until April 1986. The deregulation started with the ruling of the European Court of Justice in April 1986. The Court decided that the air transportation would be subject to the competitive rules as proposed in the Treaty of Rome.

The first phase of liberalisation started in December 1987 when the Council of Ministers adopted a number of measures aimed at opening market access, relaxing price controls and introducing new competition rules (Sinha 2001).

Graham (1997; cited by Sinha 2006) summarises the three phases of deregulation:

The first package came into effect from 1 January 1988:

- Allowed multiple designations, fifth-freedom rights, and automatic approval of discount fares.

The second package was implemented from 1 November 1990:

- Double disapproval rule applied to full fares.

The implementation of **the third package** started from 1st January and ended on 1st April 1997:

- No restriction on pricing on all fares, full access to all routes including cabotage
- Abandonment of distinction between charter and schedule carriers
- Protection for routes designated as public service obligations
- EC retention of right to intervene against fares, predatory pricing and seat dumping

As a result of the third package, by April 1997, all EEA carriers gained access to all routes within the EC (Sinha 2001).

The time of the main elements of deregulation was also determining factor for development of low-cost airlines in Europe (Francis et al, 2006). As can be seen in the following table (Tab.1.1), the biggest market share of market has the UK and Ireland where market deregulation took place as first.

Table 1.1: Market deregulation and beginning of low-cost operations

Region	Year low cost operations began	Year(s) in which market deregulation took place	Share of overall market (%)
UK/Ireland	1995	1993	40
EU	1999	1995	20
EU expansion	2002	2004	<1

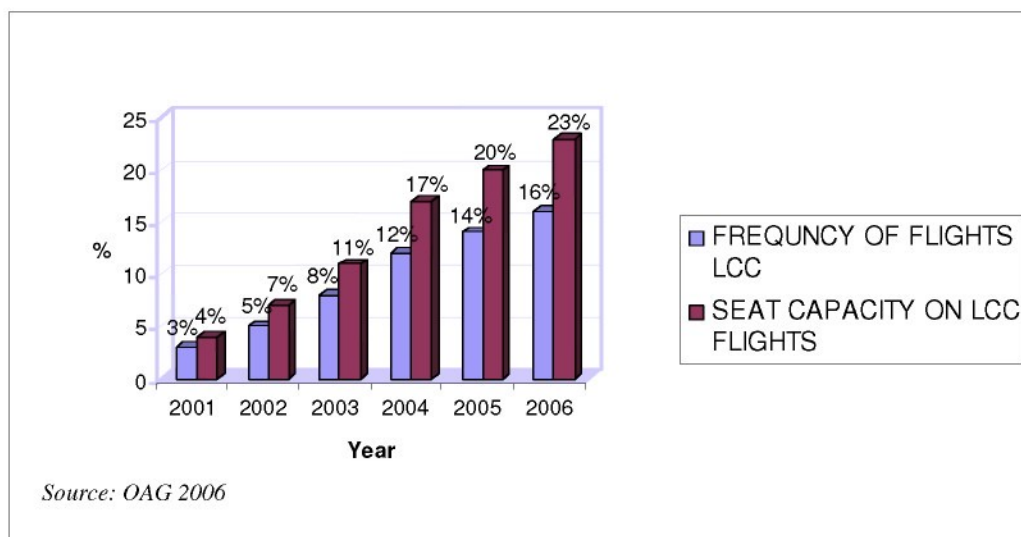
Source: Francis et al., 2006

1.2.2. Development of low-cost airlines in Europe

In only one decade, low-cost airlines have changed the European aviation scene beyond recognition. They have changed people's leisure and travel habits, opened up direct services between EU city pairs that were not available through the legacy airlines. They forced established airlines and tour operators to change their business models and also popularised regional airports “by breathing life into otherwise under utilised airports” and changed forever the image of air travel. “Perhaps though, the most significant achievement for the LCCs, especially in the EU, is that they have brought air travel within easy reach of everyone across Europe.”(OAG, 2006).

According OAG (2006), 40 low-cost airlines now operate within Europe and they are still developing. Several of them are expanding from their home countries. Also enlargement of EU in May 2004 brought new expansion of new services starting in Central and Eastern Europe as a result of the deregulation that EU membership brings.

Figure 1.1: Frequency of flights and seat capacity on LCCs : LCCs vs TOTAL ON ALL CARRIES



History of low-cost airlines

The first low-cost, no-frills European airline was Irish airline **Ryanair** launched in 1985. At the beginning Ryanair offered traditional type of service with a two-class cabin, but at lower fares than traditional airlines. These low fares caused growth of passenger traffic across the Irish Sea, however Ryanair was not profitable even its unit costs were lower than those of Aer Lingus (traditional Irish airlines). Huge losses and serious cash flow problems in 1991 led to changing of their strategy. The management decided to adopt low-cost Southwest model. As a result of this they released all frills and changed airport. This strategy was successful and one year later Ryanair achieve a small pre-tax profit that was increasing during next years.

Success of Ryanair encourages others to enter European market with low-cost, no-frills model as well as deregulation of international air services within the EU in January 1993 (see above). **EasyJet** and **Debonair** started to operate from London's fourth airport at Luton in October 1995 and in June 1996. **Virgin Express** was established an year later at Brussel (from Eurobelgian Airlines). In reaction to this progress British Airways established its own low-cost subsidiary **Go** in May 1998, operating form Stansted, followed by KLM in January 2000, which established low-cost subsidiary **Buzz**. This situation led to increasing competition and as a result of this in September 1999 Debonair stopped flying.

Apparently, most of low-cost airlines were developed in the UK. Doganis (2001) saw the reason for it: "New starts up airlines were attracted by huge London market, the light-handed regulatory environment and the entrepreneurial culture. UK costs were also lower, especially labour costs, because of substantially lower social charges than elsewhere in Europe."

By 1999 were established **AirOne** in Italy, **ColorAir** in Norway and **AirEuropa** in Spain. In addition, some charter airlines became offer scheduled service with low fares. The example can be **Air Europa** or Greek airline Cronos, which Doganis (2001) called 'hybrids'. The boom of low-cost airlines was in 2002-3, when more than twelve new airlines started to operate as low-cost. This boom is linked with increased proportion of seats offered by low-cost airlines from 8,5 per cent in 2002 to 25 per cent in 2003.

Renewed impetus has been given to European airline market in May 2004, when 10 new countries join EU. Many new low-cost airlines started to operate in Central and Eastern Europe as a result of deregulation that EU membership brings (OAG 2006).

The dominant low-cost airlines in Central and Eastern Europe are Wizz Air, with bases in Hungary and Poland and SkyEurope, operating out of Hungary, Poland and Slovakia. Also Ryanair, easyJet and many others low-cost airlines based in EU15 are making inroads to EU 10 (OAG 2006).

Although according OAG (2006), the Czech Republic declared open skies in the 1990s and thus creating a huge leisure market for Prague, the first real step to liberalisation of aviation market was made by the Czech and Slovak Governments, who both liberalised their bilateral agreements in 2002 and thus allowed low cost carriers to operate with the UK. They took advantage of the inbound tourism market for the benefit of the economy as well as they prepared for joining the single European aviation market together with eight other states in May 2004. UK low cost airlines started to operate to Prague and it gave incentive to SkyEurope to start operating first low cost airlines in Eastern Europe. By 2003, they offered flight to Amsterdam, Paris, London and Vienna.

Full membership of 10 new members has led to expansion of low cost carriers in Central and Eastern Europe supported with the relative success of SkyEurope. SkyEurope was followed by Whizz Air and Air Polonia in Poland or SmartWings in the Czech Republic (Francis et al. 2006).

According AEA (2005a) research on the development of capacity between EU15 and EU10 the growth in the number of seats on offer was 82% in two years period, between 2003 and 2005, and number of flight increase 68% in the same period in EU10. The three largest markets within new members are Poland, the Czech Republic and Hungary.

1.2.3. Low cost business model

The first European low cost airlines RyanAir and EasyJet adopted the Southwest airline's model and many other European carriers have followed them (OAG, 2006).

The key components of LCAs' model are mentioned above and the aim of this section is to explain how it is modified and developed in European environment.

Tickets

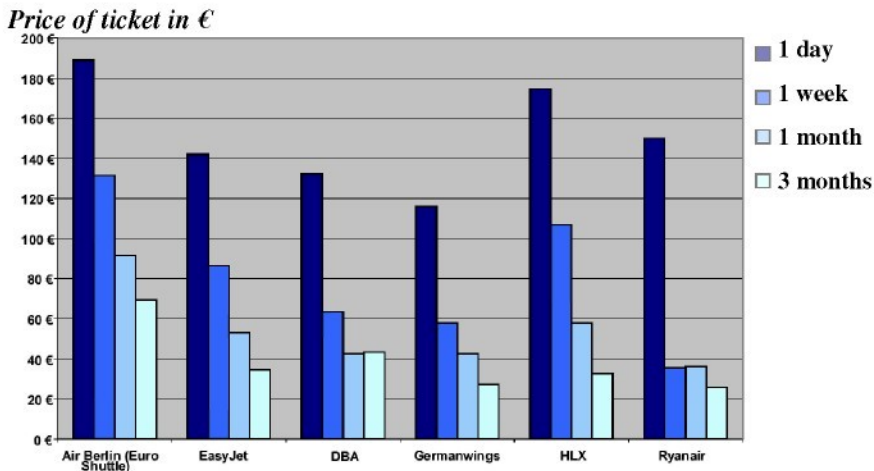
In comparison to the full service airlines offering wide range of services options at any one time, LCCs have no class differences on seats, and fares charged tend to raise as the date of a departure approaches (Button, K., 2004).

There can be recognized some typical features in LCCs' ticket policy. Only a small proportion of tickets is sold at the low price, which has been advertised. It is usually less than 20 percent (Button, K., 2004). LCCs divide their aircraft in parts, where the first set of seats are sold for the lowest price. When they are sold, the next set of seats is sold for higher price. As the date of flight is coming, seats are progressively more expensive. Typical low cost flight is differentiated up to ten price buckets. One-way fare can increase from 30£ to 210£, but the highest price is often cheaper than for the legacy airlines (Economist, 2001).

In comparison to legacy airlines there is little flexibility: to get lower price it is necessary to buy ticket up to three weeks before, ticket is not reimbursable and the change of ticket is charged, however, sometimes is not possible at all (Mirza, 2006).

Booking of tickets is made directly with the airlines – by telephone or via Internet. Customers are often encouraged to buy ticket online, where price is cheaper (Mirza, 2006).

Figure 1.2 – Low cost carriers’ average offered price depending on the time of booking before flight – example of Germany



Source: Deutsches Zentrum für Luft- und Raumfahrt (2006)

Yield management

Operations with fixed capacities need to use whole capacity of airplane to maximize revenue to full potential. Yield management is one of the possibilities and use set of methods to reach potential to make profit. Yield management is particularly useful where capacity is relatively fixed, the market can be fairly clearly segmented, the service cannot be stored, the services are sold in advance, and the marginal cost of making a sale is relatively low. These criteria fully comply with airlines. They use following methods (Slack et al, 2004):

- **Over-booking capacity**

Not everyone who bought a ticket will come and empty seat in airplane represent lost revenue. Therefore, airlines usually book more passengers in one flight than is its capacity (Slack et al, 2004).

- **Price discounting**

When demand is too low to fill in capacity, the airline will sell air tickets for lower price to agent, who will sell them at their own risk. The lower price can influence demand.

- **Varying service types**

When there is adequate demand for one type of service there is no reason to make discount. On the other hand, demand does not have to cover one type of service sufficiently and there will be a place for a price discount.

LCCs do not apply this method in combination with the price discount because they do not offer more types of services, for example business- and economy-class seat.

Airports

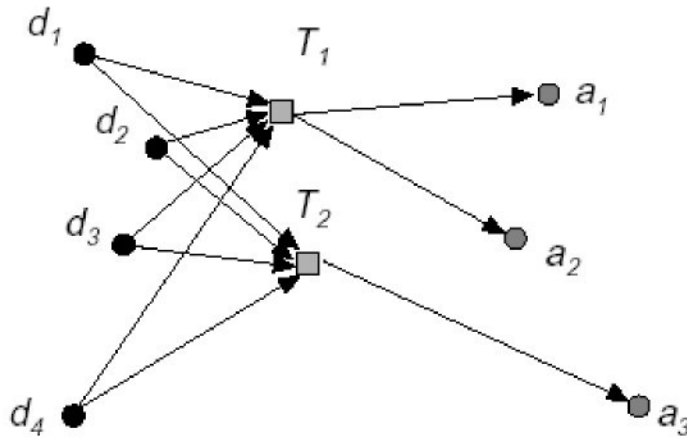
The low cost strategy involves using of secondary airports (OAG, 2006). Secondary airports often have free capacity. Air terminal costs, such as baggage and passenger handling, landing and parking charges, are lower at these airports. The example can be Geneva, where landing charges were reduced from 11 euros to 6 euros per passenger. At some airports is planned self-service baggage handling, which enables further reducing of charges. Case in the point is Marseille where the charge is reduced from 6 to 1 euro per passenger (Cole, 2005).

Secondary airports are usually close to metropolis. Typical example can be Frankfurt Hahn at 120km distance, or Stockholm Skavsta at 88km distance from the city advertised. It has aroused criticism by describing Charleroi in Belgium as "Brussels" and Gerona in Spain as "Barcelona" (OAG, 2006).

Hub-and-spoke network

It is an airline operating structure. Traffic in this network is collected from a number of spoke airports and consolidated at the hub point before redistribution traffic out of hub to connect with flights to another destination (Button, 2004). Most of airlines adopt some variation of a hub-and-spoke system. Major airlines can operate five hubs; smaller ones can have only one (Bazargan, 2004). Hub-and-spoke model is based on the need of setting up capacity utilisation by links to feeder routes at the hubs and thus is more typical for traditional airlines (Hunter, 2006).

Figure 1.3: Example of airline network with two hubs



Source: Lumsden et al., (1999)

Even LCCs are typically avoiding hub and spoke system in order to faster turnarounds, the case of EasyJet at London Gatwick is an example of exception. The price-sensitive but relatively high-yield business traffic gives the reason for it (Holloway, 2003).

Aircraft

One of the main efforts of LCCs is maximal utilisation of aircraft. The most profitable routes for them are no more than two hours' duration (OAG, 2006). LCCs' business model is in short turn around time, which is usually just 25 to 30 minutes after landing. Crucial for high-aircraft utilisation is enabled by (Capell, 2006):

- Avoiding congested hubs
- Minimal or none catering
- Quick passenger loading procedure
- No cargo
- No interlining
- Single type fleet
- Single cabin operating system

Also high floor-space utilisation is typical for LCCs' aircraft, where is higher seating density and lower seat pitches (Holloway, 2003).

There are also economies from a standardisation fleet of aircraft, especially when point-to-point structure is applied. The reduction of costs is because of identicalness of spare parts, maintenance procedures and flight crews (Button, 2004). Crews can be trained for only one type of aircraft and thus operational problems in the logistic of crew scheduling are groundless (Cole, 2005). Some airlines also use second-hand market to purchase airplanes (Button, 2004).

Labour

Labour costs are generally the second largest cost item for an airline (Bazargan, 2004). LCCs try to develop strategy that can improve their labour costs. The evidence suggests that there are some typical differences between low cost carries and traditional airlines human resources policies (Hunter 2006). According ITF Survey (2002) the human resource model in LCCs in comparison to traditional airlines can be identified in following points:

- Lower wages and poorer working conditions (estimated at between 5% and 40%).
- Monthly block hours for aircrew and for ground staff are higher (respectively 10–35% and 10–20%); Days off and vacation entitlement are reduced by 5–20%
- A majority of LCCs employ a mix of approximately equal numbers of workers on unlimited contracts and on fixed term contracts.
- In LCCs is built loyalty to the employer by propagating 'us against the others' mentality

New possibilities for cost reductions

The low cost model has kept the same in the main components for 10 years, but now some changes are being considered. It is indicated that costs can be reduced further. One of the ways is banning hold baggage and thus reducing loading and turnaround times

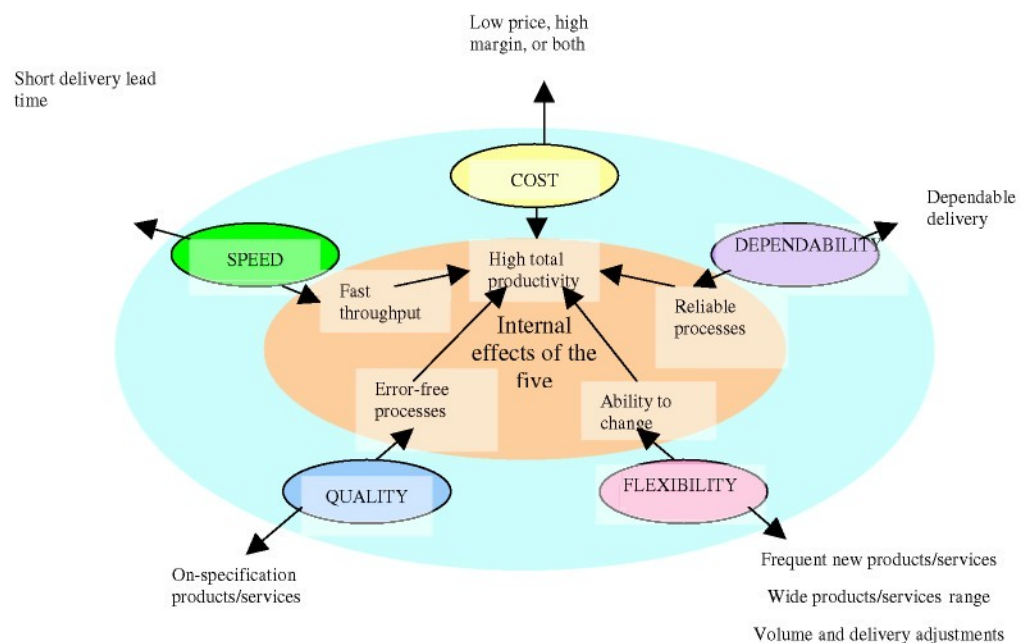
even more and enabling totally automated check-in. This system has been already introduced by Ryanair. EasyJet has also developed this model (OAG, 2006). Ryanair stated that the waiting time at the airport can decrease halve and costs can be cut by up to \$38 million by getting passenger to check in online and travel with only carry-on luggage. Thus, some airlines have already introduced charges for each bag checked in the hold (Capell, 2006).

1.3. Operations management – operational efficiency

“The low cost airline business is still outperforming the old-school carriers to turn record profits at South West, Ryanair and EasyJet.” The way how can achieve this success is according Slack et al. (2007) mainly because of operational efficiencies. According to Rhoades (2006) the low-cost no frills concept fit in well with operational efficiency that is explain in the following chapter.

Cost reduction is enabled through internal effectiveness. Operations of organisation need to define objectives that are in connection to its basic task of satisfying stakeholders. There can be found five basic performance objectives that relate to all types of operation - **quality, speed, dependability, flexibility** and **cost**. These performance objectives bring internal and external benefits. Internal benefits are various and all of them affect the cost. Thus, way to improve performance is through the improving of all operations objectives. This is shown in following figure (Fig.1.4).

Figure 1.4: External effects o the five performance objectives



Source: Slack et al, 2007

1.3.1. Quality

It is “consistent conformance to customers’ expectations”. Operations concerning quality are important because they are most visible part of operations for customers. They can easy evaluate it. In consequence quality has a big impact on customer satisfaction or dissatisfaction.

Quality can reduce cost because less mistakes mean less time will be spend on correction of mistakes (Slack et al., 2007).

1.3.2. Speed

It is “the elapsed time between customers requesting products or services and their receipt of them”. In many cases when customers can get product or service faster, he is willing to pay more for it.

Speed inside the operation is also necessary, because it helps to faster deliver of product or service to customers. Speed can also bring down inventories and reduce risks.

1.3.3. Dependability

It means ”doing things in time for customers to receive their goods or services exactly when they are needed, or at lest when they were promised”. Dependability is primarily not evident for customers, because they can evaluate it after the product has been carried out. However, it can influence the customers in further decision.

Dependability is also important inside the operation. There are several reasons for it: dependability can save time, money and gives stability.

1.3.4. Flexibility

It means ability to change the operation in term of what the operation does, how it is doing or when it is doing it. There can be found four types of requirement to operation change. The product or service flexibility is ability to introduce new of modified products and services; mix flexibility is ability to produce a wide range or mix of products or services; volume flexibility is ability to change its level of output or activity

to produce different quantities or volumes of products and services over time; and delivery flexibility is ability to change the timing of the delivery of its services or products.

Mass customization means that the organization is able to offer products and services customized for individuals and in the same time produce it in bulk, therefore to hold cost down. As a market is changing an organization should be able to respond quickly and at low cost, in other words to have agility.

As previous operational performances, the flexibility has also advantages inside the operation. Flexibility is necessary for quick respond to every situation. It can bring a time savings, because flexible organisation is able to change quickly from one task to another. Internal flexibility help to keep everything on time, even some unexpected situation emerges (Slack et al., 2007).

1.3.5. Cost

This operation objective is most important for companies, which are competing directly on price and thus important for LCCs. However, costs are important for every company even it is not competing directly on price. How can be cost influenced depend on where they are developed. Money can be spent on staff, facilities, technology, equipment or materials (Slack et al., 2007). The table 2 shows which costs savings were LCCs able to achieve as a percentage of total savings.

Table 1.2: LCCs major savings as a Percentage of total savings

Costs	Savings (%)	Sum (%)
Station costs	24%	24%
Commission	14%	37%
Airport Charges	11%	49%
Passenger services	10%	59%
Cabin/flight crew	9%	68%
Aircraft rentals	8%	75%
Sales/reservations	5%	80%
General and administration	5%	85%
Depreciation	4%	89%
Fuel	4%	93%
Maintenance	3%	96%
Handling	2%	97%
Other	1%	99%
Advertising/promotion	1%	99%
Insurance	0%	100%
En-route	0%	100%

Source: Doganis (2001) – cited in Eurocontrol (2002)

As was mentioned before each of performance objectives has internal and external effects. The internal effects are those, which affects costs. Therefore, the way how to improve cost performance is to improve performance of the other internal objectives (see Table 1.3).

Table 1.3: Summarizing of LCCs' operating model

Service design	High-frequency service
	Predominantly short-haul point-to-point service
	Use of secondary airports (in preference to major hubs)
	High-density, single class cabin configuration
	No assigned seating
	No catering or limited
	Few onboard amenities, limited airport customer service
	Simple tariff structure , one-way fares
	No frequent flyer programme
Process design	Direct sales, preferably via Internet
	E-ticketing
	No hubbing (no online connection, baggage is not transferred between flights)

	Lean administrative process
	Outsourcing of no-core processes
Productivity	Maximisation of resource utilisation (staff, aircraft)
	High cabin planning factor (targeted load factors)
Fleet structure	Single aircraft type

Source: Doganis, 2001; Lawton 2002 (cited in Holloway, 2003)

1.4.Services

1.4.1. The demand for airline service

Some characteristics of demand are typical for airline services. Most of the people use airline services not for flight itself but to achieve other purpose. Only a tiny fraction of passenger is travel for sake of flying. This is why air transportation is called intermediate good and the demand for it derived demand. As a result, when estimating demand it is necessary to consider many aspects that make destination attractive (O'Connor, 2000).

Passenger's demand varies also according to time, day of the week and season. This is called variability and it is one of the main problems of airline management in term of planning the best utilisation of aircraft, flight crews, ground personnel and so on (O'Connor, 2000).

1.4.2. Marketing mix

The service marketing mix is defined as “the set of tools and activities available to an organization to shape the nature of its offer to customers”. Product, price, promotion and place are aspects developed by Borden (1964). They are based on analysis of manufacturing industry. Thus, marketing mix for services is distinguished from this model as a result of different features of services. The core differentiate characteristics of service are intangibility, inseparability, perishability and heterogeneity.

Intangibility

Services have tangible aspects, for example airline seats, as well as intangible aspects. The intangible aspect is service performance, which leads to customers' experience. Thus, it is often difficult for customers to evaluate or compare services as a result of intangible disposition of services. In consequence price or personal information sources may be used for assessing quality.

Inseparability

The most services are influenced by customers and sellers in the same time. Thus, customers are also involved in the production of services as well as the other consumers, who can influence the provided services, when the products are consumed by more people at one time. These conditions are causing difficulty in control of the quality of services.

Perishability

The services cannot be neither inventoried nor stored because of their intangibility. Therefore it is very important to have enough opportunity to deliver service.

Heterogeneity

Heterogeneity means that standardization and quality is difficult to control. The reason is again intangible nature of services. This aspect confirms that evaluation is dependent on attitudes, opinion and expectation of customers (Gilmore, 2003).

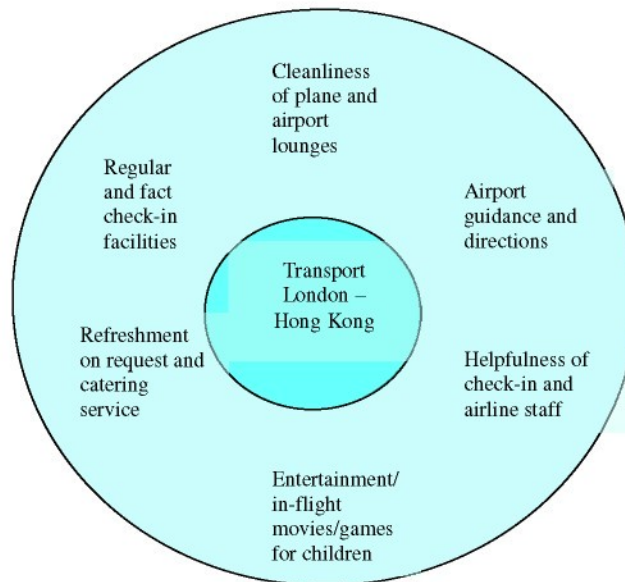
Because of these differentiate aspects marketing mix is more complex for service marketing:

The 'product' dimension

As mentioned before, the services are mainly intangible; therefore marketers need to define some tangible substitutes. These substituted may be some tools helping to get to know product (Gilmore, 2003).

Tangible substitutes enable to illustrate what is on offer, thus allow customers to understand ‘service package’. Service package has usually one core prevailing aspect and the others are auxiliary to service. They are considered as secondary. There is an example of airline industry in figure 1.5. Transport of customer from London to Hong Kong is the core aspect of service, refreshment or on board entertainment is less important, although it is also part of the service.

Figure 1.5: Core and secondary aspects of an airline service product



Source: p.19 Gilmore (2003)

Sometimes it is not easy to distinguish between core and secondary service. In competitive environment the companies have often similar core service and secondary aspects are different in order to distinction from competitors (Gilmore, 2003).

The product dimension is also depending on human influence, it means how the service is delivered (Gilmore, 2003). Rhoades (2006) states that the success of Southwest airlines was enabled because of high motivated employees. They were encouraged to be creative, innovative, nonconformist, and risk taking.

The ‘pricing’ element

Customers’ perception of value is predominantly different and it is difficult to evaluate it. Therefore costing is usually difficult and imprecise.

The ‘promotion’ dimension

The ‘promotion’ dimension is close to the product features. Service product relies heavily on promotion, which should be focus on spreading and creating demand.

The ‘place or distribution’ aspect

This aspect should be considered as little bit ‘virtual’, because there is no physical distribution system. However, services need to have some suitable environment for their performance. For example agents should be necessary where service is delivered within more than one geographical region (Gilmore, 2003).

1.4.3. Service quality and customer satisfaction

Service quality is defined as “the ability of an organization to meet or exceed customer expectations” and customer expectations are defined as “the desires or wants of consumers or what they feel a service provider should offer”.

The literature states that the measurement of the performance is essentially a measure of perceived performance. The consumers’ perception of performance is considered rather than the ‘reality’ of performance. In consequence the perceptions are reality as far as service quality concerned.

Customer has usually some expectations about particular service and on the basis of this expectation is comparing service’s performances. It is crucial to know with which expectation is comparison done. However, relationship between performance and satisfaction may change depending on the standard used and the customers can also use several standards simultaneously.

Parasuraman et al. (1985, cited by Gilmore, 2003) defined perceived service quality “as the discrepancy between what the customer feels that a service provider should offer and his or her perception of what the service firm actually offers”. If performance will be clearly perceived it will be a contributory factor in influencing overall satisfaction and intention to re-buy. There still exist some important differences between ‘perceived service quality’ and ‘satisfaction’. According to Parasuraman et al.(1985; cited in Gilmore, 2003) “perceived service quality is defined by the customer’s attitude or overall judgement of a service over time while satisfaction is considered to be connected to a specific transaction”.

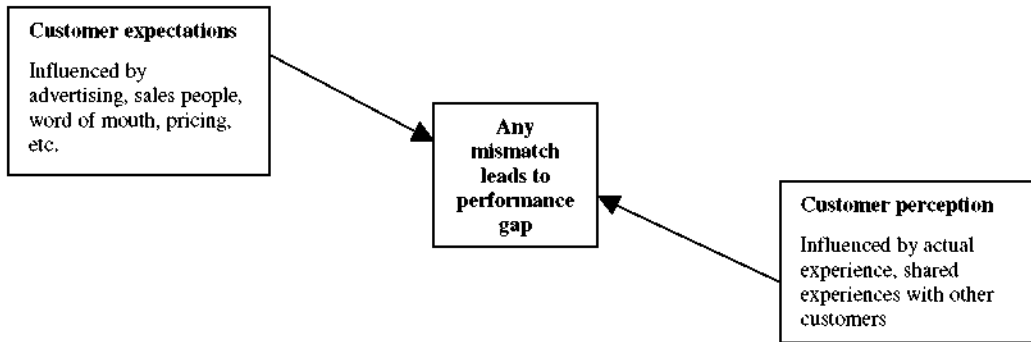
Measuring services and customer satisfaction

SERVQUAL was developed as an instrument for measuring service quality and to enable compare customer satisfaction with their expectations. Other researchers focused on development different models based on customer perceptions, expectations and attitudes. Taylor (1994, cited by Gilmore 2003) developed instrument SERVPERF, which is based on SERVQUAL and is “performance-based conceptualization of service quality. To summarize this approach, the customers do not always buy the highest quality services, but their satisfaction is influenced by convenience, price or availability of service and it does not necessarily influenced their perceptions of service quality (Gilmore, 2003).

Concept of the performance gap

Many people are involved in planning, delivering and consuming services, therefore there exist many opportunities for failure. Human errors cause performance gap when customers receive poorer service than expected. It is graphically demonstrated in the following figure (Fig.1.6).

Figure 1.6: Performance gap



Source: Gilmore (2003), p.22

Parusaman et al. (1985; cited in Gilmore, 2003) develop a gap model “focusing on the identification of the key components of service quality management and delivery based upon customer expectations and perceptions and the service delivery associated with these.” He supposed that gap exist between customer expectation and perception and the actual delivery of service.

1.5.Summary

This chapter reviewed literature concerning low cost airline with aim to explain how they operate and how they can achieve low costs. Some theory on services and operations management was set out.

Firstly was explained what the low cost airlines’ features are, and how the LCAs are divided. Explanation of the Southwest airline model was given in order to show first low cost model which many Europeans LCAs followed. At the same time this model helped to understand LCAs’ features.

Further low cost model was analysed closer. The literature proposed that LCAs model differs within each airline. The important event for developing of LCA was liberalisation of airline industry in Europe. It is described here with aim to narrow what the liberalisation brought to aviation market. Low cost model business was than expand in term of how LCAs operate to achieve low cost and be successful. There was lack of competition among airlines before liberalisation and literature support LCAs’ model success with fact, that many traditional airlines adopted some features of LCAs’

business model. Short history of development was also introduced to understand how LCAs started to operate in Europe and their path to success.

The operations management is important for LCAs to operate efficiently, thus some theory was reviewed. Theory on services was covered as well as theory on customer satisfaction which provides basis of primary research.

2. RESEARCH METHODOLOGY

2.1.Objective of study

- Analyze low-cost airlines business model.
- Investigate services provided by European LCCs.
- Find out what is important for customers, when they are deciding for particular airlines.
- Examine customer satisfaction with LCAs' services

2.2.Research Philosophy

Research philosophy and understanding to it is very useful for several reasons. It helps to clarify research design, help to differentiate between designs, which will work and which not and finally it can help to design research according consider subject or knowledge structure.

Basically, there are two main philosophies – positivism and phenomenology. Each philosophical course has own assumptions and methodological implications, however, authors usually do not ascribe all facets of philosophy's constituent element. They do not hold perpetually one position and in practical research many of them even combine methods from both philosophies.

Positivism is significant with paradigms that the world is external and objective and observer is independent of what is being observed. According Easterby-Smith et al. (1991) researcher should "focus on facts, look for causality and fundamental laws, reduce phenomena to simplest elements and formulate hypotheses and then test them."

On the contrary to positivism phenomenological paradigm assumes that the "world is socially constructed and subjective, observer is part of what observed and science is driven by human interests". In the case of this philosophy, researcher should "focus on meaning, try to understand what is happening, look at the totality of each situation and develop ideas through induction from data".

Positivism and phenomenology have also different approaches to research methods. Positivism prefers taking large samples and such a concepts, which can be measured. On the contrary phenomenological paradigm uses “multiple methods to establish different views of phenomena” and small samples (Easterby-Smith et al., 1991).

2.3. Research techniques

2.3.1. Questionnaire

Questionnaire is list of questions designed to collect information, which can be used as data for analysis. It can be distributed via mail, electronically or by asking people directly (Denscombe, 1998). If questionnaires are sent by email or mail the questions should be simple and detailed instructions should be provided because it is self administrated by respondents (Malhotra et al., 2003).

Design of questionnaire

Multiple choice questions: the question is provided with more choice of answer, respondents are asked to choose one or more alternatives. Limitation of these questions is that respondents have tendency to tick particular answer because of occupying particular position (particularly the first).

Dichotomous questions: It has only two alternatives of answer, usually yes or no (resp. agree or disagree). The answers can be supplemented by a neutral answer such as ‘don’t know’ (Malhotra et al., 2003). Proportion of neutral answer from respondents is expected small therefore as Malhotra et al.(2003) suggest neutral answer is not included in the questionnaire.

Scales: Scaling is the process, where respondents indicate an attitude to something on scale. For example on scale 1-2-3, where 1 is indicating unfavourable attitude, number 2 neutral attitude and number 3 is indicating favourable attitude (Malhotra et al., 2003).

Sampling

Sampling is the process of choosing a sample from the sampling population to get basis for estimating or predicting a fact, situation or outcome complying with fact of population from which is sample drawn (Kumar, 1999).

Sampling design process

Sampling design is conducted in following six steps (Malhotra et al., 2003):

- Define target population
- Determine the sampling frame
- Select sampling techniques
- Determine the sample size
- Execute the sampling process
- Validate the sample

Target population is collection of elements or objects that involve the information being investigated and about which can the researcher make deduction. Target population should be defined precisely to get effective research.

Sampling frame is “a representation of the elements of the target population”. It is a list of the target population or set of directions for identifying the target population (Malhotra et al., 2003).

The basic decision about **sampling technique** is, if would be used probability or non-probability sampling. Probability sampling is based on chance in comparison to non-probability sampling, which relies on the judgement of researcher (Malhotra et al., 2003).

Non-probability sampling

When probability sampling is used, each member of the research population has an equal chance of being included in the sample. On the contrary non-probability sampling has one crucial characteristic, which distinguish it from probability sampling, that the choice of people or events is not a random selection (Denscombe 1998).

Convenient sampling

This method of sampling is based on the adventitious selection of respondents. They are usually chosen because they are “in the right place on the right time.” Such a sample of convenient elements can be for example use of students or street interviews without qualifying the respondents (Malhotra et al., 2003).

Sample size is number of respondents included in the research. Researcher need to consider several quantitative and qualitative decisions to determine sample size. The qualitative considerations are for example the importance of decision, the nature of the research or the number of variables (Malhotra et al., 2003).

According to Kumar (1999) is one of the important principles of sampling, that “the greater the sample size is, the more accurate will be the estimate of the true population mean”. The aim of this research will be to get as many responds as possible within target population.

For execution of the *Sampling process* is required to specify how the sampling design decision in term of the respect to the population, sampling unit, sampling frame, sampling technique and sample size are to be implemented. Execute sampling process is necessary where there is more then one researcher involved to ensure that the process will be carried out in a consistent manner (Malhotra et al., 2003).

The objective of *sample validation* is to prevent sampling frame error by screening the respondents in the data collection phase (Malhotra et al., 2003).

2.3.2. Interview

Interview is according to Kumar (1999) “any person-to-person interaction between two or more individuals with a specific purpose in mind”. Interview can be unstructured, when the interviewer formulate questions as they come to mind, or structured, when questions are prepared before asked (Kumar 1999). Interview can be also semi-

structured. The questions are prepared before, however, the researcher is prepared to be flexible and ask more about the topics, which are considered (Denscombe 1998).

Interview can be used in many ways for many purposes. It is “an information-gathering tool”, it enables to use it together with other methods to supplement data or adding details. Interview can be helpful in preparation for a questionnaire or complement a data obtained from questionnaires (Denscombe 1998).

The combination of qualitative and quantitative method is called **methodological triangulation**. Easterby-Smith et al. (1991) are advising researcher to combine different methods from within the same paradigm whenever possible but with care.

2.4. Justify choice of research method

It was decided that the best method to adopt for this investigation was to collect data with the assistance of **questionnaires**. Denscombe (1998) identify several advantages of the questionnaires, they can cover many respondents for a low costs in short time and structured questions also enable speed of collection and analysis of data. **Non-probability sampling** was chosen because “the number of elements in a population cannot be individually identified” (Kumar 1999). Convenient method of sampling was applied because it is “least expensive and least time consuming method of all sampling techniques” (Malhotra et al., 2003). Due to lack of time and money it seems to be most appropriate method for this study.

Respondents were any customers of LCA, who travelled with LCA based in the Europe. To obtain more respondents questionnaire was translated to Czech and thus it was possible to distributed among Czech friends.

It was considered that **qualitative analysis** would usefully supplement and extend the quantitative measures and interview with representative of one Czech LCCs was conducted. Interview was also carried out with aim to analyse services on one particular LCA and to what extent follow the low cost model describe in literature review.

2.5.The limitations of primary research

The most of the questionnaires were collected among students studying in the UK, therefore there existed some possibility that their travel experience with low-cost airlines will be limited because of travelling from the same destinations. Thus, extend of number of LCCs involved can be influence as a result of dominance of some LCCs in this regions. The services provided on airport are also limited with particular airport as well as location of airports in the regions should be considered.

Limitations also emerge from method of sampling. The sample chosen according convenience sampling is not representative sample of population (Malhotra et al., 2003).

2.6.Pilot testing

Pilot study was conducted in order to find out, whether the questions included in questionnaire are clear and understandable.

The questionnaire was given to two respondents to fill it in. The aim was to find out whether are questions understandable and to check the layout and function of electronic document.

Following suggestions were consider:

The term “frills” was not understandable clearly, therefore it was not rather used to not confuse respondents.

Scales 1 - 5, 5 - 20, 20 - 40, 40 - more were used in questions, which was intended to find how many flight with LCA respondent approximately experienced, were changed to 1 - 5, 6 - 20, 21 - 40, 41 – more to be clear for respondents, which possibility they should tick.

2.7.Hypotheses

1st hypothesis

When customers are deciding about purchase of air ticket, the most important factor for them is low fare. Thus, costs are the most important operational efficiency for LCAs.

2nd hypothesis

There is some possibility of delay or cancellation of flight with LCAs. Thus, there will be connection between number of flights and experienced delay and cancellation.

3rd hypothesis

Customers are overall satisfied with LCAs' services. However, male customers are less satisfied with seats because of smaller space for leg. On the other hand women are less satisfied with weight of luggage allowed.

4th hypothesis

New established LCAs offer often some "frills" in comparison other LCAs to get some competitive advantage.

Methods used for data processing'

Data were obtained from two main sources. The first one was interview with Mr. Klein, Manager of Customer Service of Czech low cost airlines SmartWings. The interview was conducted with purpose to get information about the services of LCAs. The information helped to design questionnaire and to further analyze LCAs' services.

The second source of data for primary research was questionnaire analysing customer satisfaction and services of LCA as well. SPSS were used for quantitative analysis of this data. At the first, descriptive statistic were used to analyse questionnaire. Frequency

tables were used the most often. The hypotheses were tested to obtain some further findings from questionnaire. As the most of obtained data were categorical or nominal data, the most appropriated test was Chi-Square to determine if the relationship between variables is significant. The advantage of this test is that it is appropriate for almost any kind of data. Test of hypothesis about relative was also conducted in one case.

3. RESULTS

3.1. Personal details

Table 3.1: Age of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15 - 35	162	91,0	91,0	91,0
	36 - 55	15	8,4	8,4	99,4
	56 - more	1	,6	,6	100,0
	Total	178	100,0	100,0	

Figure 3.1: Age of respondents

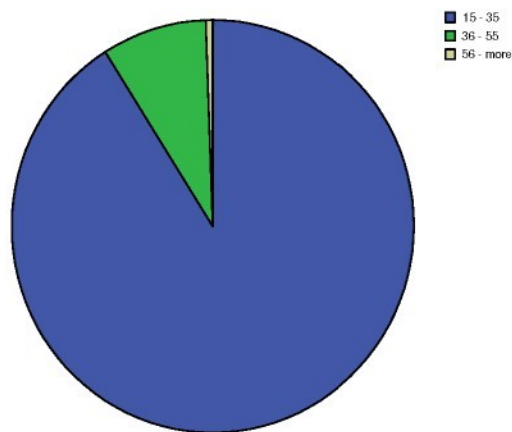
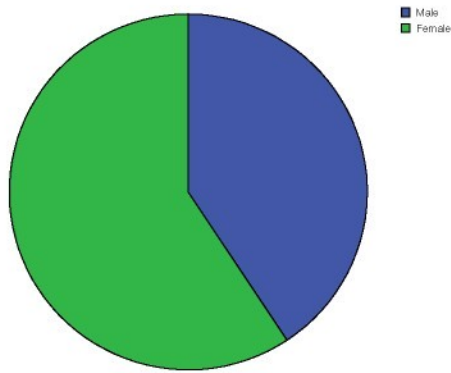


Table 3.2: Gender of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	73	41,0	41,0	41,0
	Female	105	59,0	59,0	100,0
	Total	178	100,0	100,0	

Figure 3.2: Gender of respondents



Tables 3.1 and 3.2 are showing age respective gender of respondents. It was already mentioned in methodology chapter that one of the limitation is age of respondent, which is in 91, 5 per cent between 15 and 35 years. Perception of this age group can be different to perception of another age group.

Table 3.3: Number of flights with low cost airlines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - 5	103	57,9	57,9	57,9
	6 - 20	63	35,4	35,4	93,3
	21 - 40	9	5,1	5,1	98,3
	41 - more	3	1,7	1,7	100,0
	Total	178	100,0	100,0	

This question is finding approximately number of flights with LCA. The number of flights influences for example the probability of delay or cancellation, which will be tested in one of hypotheses.

3.2.Services of LCA

Table 3.4: Which way use the respondents to buy ticket

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Internet	166	93,3	93,3	93,3
	Phone	3	1,7	1,7	94,9

Travel agent	9	5,1	5,1	100,0
Total	178	100,0	100,0	

As was supposed the most common way how to buy air ticket is via Internet (93,3 per cent of respondents, tab.7). The reason is that the LCA try to promote this way of purchase and therefore the air ticket bought on websites is often cheaper or phone link where you can buy air ticket is more expensive than usual phone call and it can take time to find appropriate flight, thus phone call is expensive. The way of purchase is tested later in one hypothesis.

Table 3.5: Convenience of way how respondents buy tickets

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	175	98,3	98,3	98,3
	No	3	1,7	1,7	100,0
	Total	178	100,0	100,0	

98, 3 per cent of respondents (tab.3.5) were satisfied with way of purchase air ticket.

Table 3.6: Do they mind that ticket is not paper based

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	6,7	6,7	6,7
	No	166	93,3	93,3	100,0
	Total	178	100,0	100,0	

Most of respondents also do not mind that ticket is only in electronic form (93, 3 per cent, tab. 3.6) .However, it is the fewer respondents than for who was the way of purchase convenient.

Table 3.7: Important characteristic for travellers when they are buying ticket

Good schedule		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	69	38,8	38,8	38,8
	Yes	109	61,2	61,2	100,0
	Total	178	100,0	100,0	

Price of ticket		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	177	99,4	99,4	99,4
	No	1	0,6	0,6	100,0
	Total	178	100,0	100,0	
Location of airport		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	10,7	10,7	10,7
	Yes	159	89,3	89,3	100,0
	Total	178	100,0	100,0	
Weight luggage allowed		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	115	64,6	64,6	64,6
	Yes	63	35,4	35,4	100,0
	Total	178	100,0	100,0	
Reliability		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	147	82,6	82,6	82,6
	Yes	31	17,4	17,4	100,0
	Total	178	100,0	100,0	
Free offer of refreshment		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	175	98,3	98,3	98,3
	Yes	3	1,7	1,7	100,0
	Total	178	100,0	100,0	
In flight entertainment		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	178	100,0	100,0	100,0
Type of aircraft		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	175	98,3	98,3	98,3
	Yes	3	1,7	1,7	100,0
	Total	178	100,0	100,0	
Is important anything else		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	172	96,6	96,6	96,6
	Yes	6	3,4	3,4	100,0
	Total	178	100,0	100,0	

Note: One respondent who indicate that is for him important anything else than possibilities in questionnaire indicated that security is important for him. The second one indicated that all of the factors

suggested in questionnaire are important for him.

The respondents ticked in questionnaire the three possibilities, which are the most important when they are choosing airlines. Price of ticket was important for 98, 3 per cent of respondents. Location of airport was important for 89, 8 per cent and as the third important factor (61 per cent of respondents) was ticked good schedule.

Table 3.8: Possibility to use self check-in in with LCA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, but I did not make use of it	54	30,3	30,3	30,3
	Yes, good upgrade of service	15	8,4	8,4	38,8
	Yes, but not interesting for me	3	1,7	1,7	40,4
	No	85	47,8	47,8	88,2
	I do not know	21	11,8	11,8	100,0
	Total	178	100,0	100,0	

40, 7 per cent of respondents (tab.3.8) have already used the possibility of using self-check in, that shows that many of LCA already use this type of check-in. Although only 25 per cent of respondents who have possibility of self check-in made a use of this facility, 83, 3 per cent from them found it as good improvement of service.

Table 3.9: Possibility to use online pre-assignment of a seat

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, but I did not make use of it	69	38,8	38,8	38,8
	Yes, good upgrade of service	18	10,1	10,1	48,9
	Yes, but not interesting for me	3	1,7	1,7	50,6
	No	72	40,4	40,4	91,0
	I do not know	16	9,0	9,0	100,0
	Total	178	100,0	100,0	

The possibility to use online pre-assignment of seating has 50, 8 per cent of respondents. Only 23, 3 per cent of customers with possibility of online pre-assignment of seat make use of it, but 85, 7 per cent found it as an interesting improvement of service.

Table 3.10: Experience with delay of flight more than 2 hours

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	15	8,4	8,4	8,4
	No	163	91,6	91,6	100,0
	Total	178	100,0	100,0	

Experience with delay of flight more than 2 hours had 8, 5 per cent of respondents (tab. 3.10).

Table 3.11: Experience with cancellation of flight

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	6,7	6,7	6,7
	No	166	93,3	93,3	100,0
	Total	178	100,0	100,0	

Experience with cancellation of flight had 6, 8 per cent of respondents (tab. 3.11).

Table 3.12: How customers of LCA approach to possibility of delay or cancellation of flights

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	70	39,3	39,3	39,3
	No	108	60,7	60,7	100,0
	Total	178	100,0	100,0	

This question stated some hypothetical probability of cancellation and delay (50%). Respondents were asked if they accepted this possibility and still use service of LCA. This high probability of delay would accept 39 per cent of them (tab.15).

Table 3.13: Experience of customers with overbooking of their flight when they could not fly

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	3,4	3,4	3,4
	No	172	96,6	96,6	100,0

Total	178	100,0	100,0
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Overbooking is very sensitive question for airlines, when they determine, how many places will be booked in comparison to seats available in airplane. 3, 4 per cent of respondents stated in questionnaire, that they could not fly because airplane was full, although they had bought ticket properly

Table 3.14: Would respondent fly again with LCA

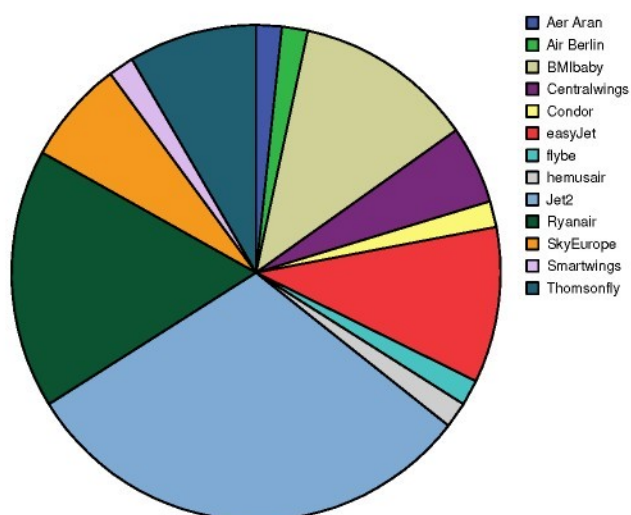
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	175	98,3	98,3	98,3
	No	3	1,7	1,7	100,0
	Total	178	100,0	100,0	

1, 7 per cent of respondents stated that they would never fly with LCA again (tab. 3.14).

Table 3.15: With which LCA flied the respondent for the last time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Aer Aran	3	1,7	1,7	1,7
	Air Berlin	3	1,7	1,7	3,4
	BMIbaby	21	11,8	11,8	15,2
	Centralwings	9	5,1	5,1	20,2
	Condor	3	1,7	1,7	21,9
	easyJet	19	10,7	10,7	32,6
	flybe	3	1,7	1,7	34,3
	hemusair	3	1,7	1,7	36,0
	Jet2	54	30,3	30,3	66,3
	Ryanair	30	16,9	16,9	83,1
	SkyEurope	12	6,7	6,7	89,9
	Smartwings	3	1,7	1,7	91,6
	Thomsonfly	15	8,4	8,4	100,0
	Total	178	100,0	100,0	

Figure 3.3: With which LCA flew the respondent for the last time



This data provide information about the LCAs used for last flight. The limitation that the respondents have covered mainly the regional LCAs was confirmed. Jet2, BMIbaby and Thomsonfly comprise together 50, 5 per cent.

Table 3.16: Satisfaction with services of LCA

Seats		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	21	11,8	11,8	11,8
	Satisfied	52	29,2	29,2	41,0
	Neutral	57	32,0	32,0	73,0
	Not much satisfied	33	18,5	18,5	91,6
	Not satisfied at all	15	8,4	8,4	100,0
	Total	178	100,0	100,0	
Ambience		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	33	18,5	18,5	18,5
	Satisfied	73	41,0	41,0	59,6
	Neutral	54	30,3	30,3	89,9
	Not much satisfied	15	8,4	8,4	98,3
	Not satisfied at all	3	1,7	1,7	100,0
	Total	178	100,0	100,0	
Food		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	Fully satisfied	21	11,8	12,7	12,7
	Satisfied	36	20,2	21,7	34,3
	Neutral	75	42,1	45,2	79,5
	Not much satisfied	22	12,4	13,3	92,8
	Not satisfied at all	12	6,7	7,2	100,0
	Total	166	93,3	100,0	
Missing	System	12	6,7		
Total		59	178	100,0	
Check-in		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	33	18,5	18,5	18,5
	Satisfied	75	42,1	42,1	60,7
	Neutral	46	25,8	25,8	86,5
	Not much satisfied	18	10,1	10,1	96,6
	Not satisfied at all	6	3,4	3,4	100,0
	Total	178	100,0	100,0	
Flight on time		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	87	48,9	48,9	48,9
	Satisfied	46	25,8	25,8	74,7
	Neutral	36	20,2	20,2	94,9
	Not much satisfied	9	5,1	5,1	100,0
	Total	178	100,0	100,0	
Weight of luggage allowed		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	30	16,9	16,9	16,9
	Satisfied	43	24,2	24,2	41,0
	Neutral	30	16,9	16,9	57,9
	Not much satisfied	48	27,0	27,0	84,8
	Not satisfied at all	27	15,2	15,2	100,0
	Total	178	100,0	100,0	
Accessibility of airport		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	61	34,3	34,3	34,3
	Satisfied	69	38,8	38,8	73,0
	Neutral	30	16,9	16,9	89,9
	Not much satisfied	15	8,4	8,4	98,3
	Not satisfied at all	3	1,7	1,7	100,0
	Total	178	100,0	100,0	

Table 3.17: Frills offered by LCA

Nothing		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	21	11,8	11,8	11,8
	Yes	157	88,2	88,2	100,0
	Total	178	100,0	100,0	
Refreshment for free		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	169	94,9	94,9	94,9
	Yes	9	5,1	5,1	100,0
	Total	178	100,0	100,0	
On board entertainment		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	172	96,6	96,6	96,6
	Yes	6	3,4	3,4	100,0
	Total	178	100,0	100,0	
Internet connection		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	178	100,0	100,0	100,0

This question shows that not many LCA offer some frills. 5, 1 per cent of LCAs offer some refreshment for free, 3, 4 per cent of LCAs offer on board entertainment. To 88, 1 of respondents was offered nothing.

The data summarized with simple frequency tables brought some interesting results which will be discussed later. To find some more relationships and results, in the following part will be tested hypothesis.

3.3. Testing of hypotheses

1st hypothesis

When customers are deciding about purchase of air ticket, the most important factor for them is low fare. Thus, costs are the most important operational efficiency for LCAs.

H0: Low fare is important for 90% of customers when they are deciding about purchase of ticket.

H1: Low fare is important for more than 90% of customer.

[n = 178; $\pi_0 = 0,9$; $\alpha = 0,05$]

p = 0,99 (177/178)

$$W \equiv \{u; u \geq u_{1-\alpha}\}$$

$$W \equiv \{u; u \geq 1,645\}$$

$$u = \frac{p - \pi_0}{\sqrt{\frac{\pi_0(1-\pi_0)}{n}}}$$

u = 4,00

$u \in W \rightarrow$ reject H0; accept H1

This test verified on significance level alpha that low fare is important for more than 90% of customers, when they are deciding about purchase of air ticket.

2nd hypothesis

There is some possibility of delay or cancellation of flight with LCAs. Thus, there will be connection between number of flights and experienced delay and cancellation.

Test 1

Table 3.18: Cross tabulation between experienced flights and delay

			Delayed		Total
			Yes	No	
Flights	1 – 5	Count	3	100	103
		% within Flights	2,9%	97,1%	100,0%
	6 – 20	Count	6	57	63
		% within Flights	9,5%	90,5%	100,0%
	21 – 40	Count	6	3	9

Total	41 - more	% within Flights	66,7%	33,3%	100,0%
		Count	1	2	3
		% within Flights	33,3%	66,7%	100,0%
		Count	16	162	178
		% within Flights	8,4%	91,6%	100,0%

Table 3.19: Chi-Square Tests - experienced flights and delay

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43,992	3	,000*
Likelihood Ratio	24,699	3	,000
Linear-by-Linear Association	17,367	1	,000
N of Valid Cases	178		

*Chi-Square test is significant at the level 0,05 (2-sided)

Chi-Square test confirms this hypothesis. The number of flights and experienced delay are dependent variables. The more flights customers experienced the higher possibility that they experience some delay is.

Test 2

Table 3.20: Cross tabulation between experienced flights and number of cancellation

			Cancellation		Total
			Yes	No	
Flights	1 – 5	Count	6	97	103
		% within Flights	5,8%	94,2%	100,0%
	6 – 20	Count	3	60	63
		% within Flights	4,8%	95,2%	100,0%
	21 – 40	Count	3	6	9
		% within Flights	33,3%	66,7%	100,0%
	41 – more	Count	0	3	3
		% within Flights	,0%	100,0%	100,0%
Total	Count	4	12	166	
	% within Flights	6,8%	6,7%	93,3%	

Table 3.21: Chi-Square Tests - experienced flights and number of cancellation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10,870	3	,012*
Likelihood Ratio	6,559	3	,087
Linear-by-Linear Association	1,690	1	,194
N of Valid Cases	178		

*Chi-Square test is significant at the level 0,05 (2-sided)

This Chi-Square test confirms that cancellation of flight and number of flights experience are also dependent variables. Thus, the more flights is experienced the higher possibility of cancellation is.

3rd hypothesis

Customers are overall satisfied with LCAs' services. However, male customers are less satisfied with seats because of small space for leg. On the other hand women are less satisfied with weight of luggage allowed.

Test 1

Table 3.22: Cross tabulation between gender and satisfaction with seats

			Seats					Total
			Fully satisfied	Satisfied	Neutral	Not much satisfied	Not satisfied at all	
Gender	Male	Count	6	19	24	15	9	73
		% within Gender	8,2%	26,0%	32,9%	20,5%	12,3%	100,0%
	Female	Count	15	33	33	18	6	105
		% within Gender	14,3%	31,4%	31,4%	17,1%	5,7%	100,0%
Total		Count	21	52	57	33	15	178
		% within Gender	11,8%	29,2%	32,0%	18,5%	8,4%	100,0%

Table 3.23: Chi-Square Tests - gender and satisfaction with seats

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,307	4	,366*
Likelihood Ratio	4,321	4	,364
Linear-by-Linear Association	3,980	1	,046

N of Valid Cases	178	
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* Chi-Square test is significant at the level 0,05 (2-sided)

This test determines that relationship between gender and satisfaction with seats is not significant. Thus, it can not be confirmed that the male customers are less satisfied with seats than female customers.

Test 2

Table 3.24: Cross tabulation between gender and satisfaction with weight of luggage allowed

		Weightlugg					Total
		Fully satisfied	Satisfied	Neutral	Not much satisfied	Not satisfied at all	
Gender	Male	Count	9	25	21	9	73
		% within Gender	12,3%	34,2%	28,8%	12,3%	100,0%
	Female	Count	21	18	9	39	105
		% within Gender	20,0%	17,1%	8,6%	37,1%	100,0%
Total		Count	30	43	30	48	178
		% within Gender	16,9%	24,2%	16,9%	27,0%	100,0%

Table 3.25: Chi-Square Tests - gender and satisfaction with weight of luggage allowed

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27,630	4	,000*
Likelihood Ratio	28,507	4	,000
Linear-by-Linear Association	3,132	1	,077
N of Valid Cases	178		

* Chi-Square test is significant at the level 0,05 (2-sided)

Chi-Square test of relationship between gender and satisfaction with weight of luggage allowed confirms these variables are dependent.

4th hypothesis

Perceptible deterioration of LCAs' services in term of delays and cancellation of flights would discourage more then 50 per cent of customers to travel with LCA.

H0: 50 per cent of customers would be discouraged to travel with LCA.

H1: More than 50 per cent would be discouraged.

$$[n = 178; \pi_0 = 0,5; \alpha = 0,05]$$

$$p = 0,39 \text{ (70/178)}$$

$$W \equiv \{u; u \geq u_{1-\alpha}\}$$

$$W \equiv \{u; u \geq 1,645\}$$

$$u = \frac{p - \pi_0}{\sqrt{\frac{\pi_0(1-\pi_0)}{n}}}$$

$$u = -2,93$$

$$u \notin W \rightarrow \text{not reject H0; not accept H1}$$

This test does not confirm this hypothesis. It can not be supposed that the stated higher possibility of delay or cancellation would discourage more than 50 per cent of customer to travel with LCAs.

3.4.Interview

Do you offer some on board refreshment, entertainment or something else?

We offer a sandwich and one non alcoholic drink for free. The customers can buy the basic refreshment such as alcoholic and non alcoholic drinks, sweets etc. We are not thinking about anything else.

Do you sell something on board, for example cosmetics?

Yes, we have our magazine, where we offer some souvenirs, cosmetics etc. This offer is the same with Travel Service.

Do you know how this on board sale of products is profitable or how many customers buy something?

I know that it is profitable, but I do not have exact numbers now.

How often are your flights delayed? Do you have some statistics about it?

Delay of flights is our biggest problem, which we are trying to solve now. In view of the fact that our flights are still in air, potential delay is cumulating. As result, morning flights are not delayed but in later times are some delayed accumulated. But we quite successfully eliminate it of late.

Does it happen that you have to cancel some flight (not it case of bad weather etc.)?

How you announce it to customers?

In the view of the fact, that we are low cost airlines it really sometimes happens. In the case of cancellation we have to according EU law inform our clients about it 14 days before flight. We inform each client via email, which has to be filled in when reservation is made. In some cases we phone to clients.

Which services do you outsource?

Booking of hotels, car hire, insurance and lounges.

Do you plan self check in on some airports?

Yes

Do you plan online pre-assignment of seating?

Yes, we do. It will be possible in new RESA system, which we have offered from Lufthansa.

Can you describe me how the self check-in works?

It is device, where passengers alone insert their ticket or their reservation code. They get their boarding card, with which they go to the passport control.

Which possibilities of purchase ticket do you offer? Do you know how many customers use the particulars ways?

Air tickets are bought via internet in the most cases. Than is possible use our paid phone line. The payments are done with debit cards. It is also possible to buy ticket in cash in departure hall on Prague airport, where is our selling point. Customers can also buy ticket in many travel agencies.

4. DISCUSSION AND RECOMMENDATIONS

The dissertation set out to cover four main objectives, stated below, at the beginning of research. On the basis of data obtained they will be discussed in this chapter.

- Analyse low-cost airlines business model.
- Investigate services provided by European LCCs.
- Find out what is important for customers, when they are deciding for particular airlines.
- Examine customer satisfaction with LCAs' services

4.1. Discussion

Nowadays low cost airlines are well known mean of transportation for wide public. Because of their cheap fares, million travellers were encouraged to travel with LCAs during the 1990s. The results of the present study will be discussed now in three main parts: low cost airline business model, low cost airline service and customer satisfaction and operational efficiencies of LCAs.

4.1.1. Low cost airlines model

It was found and supported by testing of 1st hypothesis that when customers are deciding about purchase of air ticket the most important factor is price of fare for them. Low cost airlines developed some specifics of sale air tickets, which are typical for them. They were the first that started to sell them via Internet. It is cheaper because

there is no commission for travel agent or charges to reservation systems. Table 3.4 shows that more than 90 per cent of customers used Internet to purchase ticket. Although the representative of SmartWings stated several possibilities to buy ticket: *“via Internet, charged phone link, selling point in airports hall and travel agencies”*, the most advantageous is purchase of ticket via Internet on LCAs websites. Nearly every respondent (98, 3 %, tab.3.5) stated that the way of purchase was convenient for them. This suggests that providing of this service is not only the most cheap and advantageous for LCAs, but also customers perceive it as convenient. E-tickets mean that customers got a number or code of reservation when purchase a ticket and thus, the ticket is not paper document. This is also specific to LCAs service. The majority of respondents do not mind it. It also supported the fact that many legacy airlines also accepted this LCAs' feature.

Management is influencing income from sale of air tickets by overbooking. This way, when is sold more tickets then is seats in airplane, is not typical only for LCAs. It uses many legacy airlines as a part of yield management. Although it should be carefully calculated to avoid more customers on airports then is capacity of airplane, 3,4 per cent of respondents stated, that they could not flight because of full capacity of airplane. It is not inconsiderable number of customers and it can influence credibility of LCAs.

The second most often stated factor important when customers are deciding about LCA was stated location of airport (tab.3.7). The LCAs usually tried to use secondary airports, because they have cheaper charges and are prepared to give better conditions to airlines in comparison to main airports. Although the secondary airports are often distanced from advertised destination, there is good connection with it. It supported results from questionnaire, where 72, 9 per cent of respondents stated that they were fully satisfied or satisfied with accessibility of airports. The secondary airports are also not so crowded which enable quick and fluent check-in.

LCAs are establishing self check-in on airports. It decreases requirement of amount of airports' staff and thus can decrease airport charges and in consequence price of ticket. Another recent improvement of service is online pre-assignment of seats, when customers who have bought ticket can reserved the seat via Internet. Technical developments and Internet was one of the important factors, which help to dynamic

development of LCAs in 1990s. Nowadays it enables further improvement and widening of services.

The maximum utilisation of aircraft is one of the key components of low cost model. Although it is way how to effectively spread annual costs over more hours, it increases the possibility of delay or cancellation of flight. The Manager of Customer Department of Smart Wings is conscious of it: *"...our flights are still in air and potential delay is cumulating. As result, morning flights are not delayed but in later times the delayed are accumulated."* 2nd hypothesis tested the dependency of cancellation and number of flights. The test shows that these variables are dependent, thus it can be supposed that the more flights customer experience the higher possibility of delay has. The test was also conducted with cancellation of flight and in this case the number of flights and cancellation were also dependent. The cancellation of flight experienced 6, 7 per cent of respondents (tab.3.11). These results show that LCAs try to successfully avoid it. In the case of cancellation according the Manager of Smart Wings, the LCAs have to announce the cancellation of flight 14 days before flight. However, it is inconvenient situation, because 14 days before flight the air ticket would be more expensive then this bought before.

4.1.2. Low cost airline service and customer satisfaction

Most of the people use airline services not for flight itself but to achieve other purpose (Gilmore 2003). This purpose is to get to particular destination for many reasons such as holiday, business or visit of relatives. Gilmore (2003) stated that transport from one point to desired destination is the core service of airlines. The other services are additional, although it does not mean that they are not important.

The customer satisfaction is influenced by his expectation on service. Low fare was found the most important for customers. 4st hypothesis also show, that customers would give preference to lower fare even the high possibility of delay or cancellation. Only 39, 3 per cent of respondents would rather flight with legacy airlines for higher price (tab.3.12). It supported the fact that low fare is the important factor. It was mentioned before that important factor for customers when deciding about airlines is after price of ticket, location of airport and good schedule. Allowed weight of luggage were twice

more important for customers than reliability of LCA. Free offer of refreshment and on board entertainment were irrelevant for the majority. It is therefore likely that low-cost airline business model matches customer preferences.

The use Internet and e-tickets seems to be standard LCAs' service which customers accepted as a nature part of it. These findings support the facts that purchase of ticket on websites is the most common way (93, 3 of respondents, tab.3.4) and the majority of passengers (98, 3 per cent) consider it as convenient way (tab.3.5). Table 3.6 showed that 93, 3 per cent people do not mind that ticket is not paper based. It can therefore be assumed that nowadays the new technologies are enabling further development of services. The recent new services are self check-in and online pre-assignment of seats. 40, 4 per cent (tab.3.8) and 50,8 per cent (tab. 3.9) of respondents have possibility to use online pre-assignment of seats respective self-check in. Although only 25 per cent of respondents who have possibility of self check-in made use of this facility, 83, 3 per cent from them found it as good improvement of service. The similar situation is by online pre-assignment of seats. Only 23, 3 per cent of customers with possibility of online pre-assignment of seat make use of it, and 85, 7 per cent found it as an interesting improvement of service. It suggest that customers consider it as good improvement of service and as the service will become more common among them it can bring satisfaction with services not only in term of quick automatic self check-in and pre-assignment of seats, but also in term of cheaper flights. These facilities are enabling further savings of costs because less labour on airports is necessary. Some LCAs have already set up charges for each checked bag and thus, enabling totally automated check-in and loading turnaround times are reduced even more and (Capell, 2006).

The seven services were examined to find out customer satisfaction – seats in airplane, airplane ambience, in flight food, check in, flight on time, allowed weight of luggage and accessibility of airport.

Seats in airplane

It was supposed that male customers are less satisfied with seats in 3rd hypothesis. This assumption arises from presumption that men have bigger figure. However, this hypothesis was not confirmed and according to Chi-square test (tab.3.23) these

variables are independent. 41 per cent of respondents were fully satisfied or satisfied. Most of them were neutral and 8, 4 per cent were not satisfied at all (tab.3.16). Although the seats in LCAs' airplanes have smaller space for legs, the flights usually have duration around 2 hours. Thus, the uncomfortableness can be accepted.

Ambience in airplane

Satisfaction with ambience of airplane is considered by customers among the most satisfactory. For 59, 6 per cent of respondents were ambience in airplane considered fully satisfactory or satisfactory and only 1, 7 per cent were not satisfied at all (tab. 3.16). The reason of this result is that the most of the LCAs have new aircraft. It is value for money because the LCAs aircraft have high utilisation, which became more expensive for them when they have older fleet because of higher maintenance costs.

On board refreshment

The most of the people were neutral to the refreshment (45, 2 per cent, tab.3.6). 6, 7 per cent of respondents do not purchase it during the flight when it was not offered for free. It suggests that the refreshment is not considered important and thus customers do not expect high quality. It supported also result shown in table 3.7, where free offer of refreshment is important only for 1, 7 per cent of customers.

Check-in

Check-in was found as fully satisfactory or satisfactory by 60, 7 per cent of respondents (tab.3.16). This good result is consequence of effort of LCAs for quick check-in, which is also enabled by use of secondary airports. 40, 4 per cent of all respondents already have possibility to use self check-in and 83, 3 per cent of them who make use of it found it as good improvement of service. Although only 25 per cent of respondents who have possibility to use self check-in make use of it, the majority of them found it as good improvement of service. It supported the plans of LCAs to expand or set up this service. The manager of SmartWings also stated that they plan to establish the self-check in.

On time flight

The majority of respondents stated that they were satisfied with flight on time and nobody of them was not satisfied at all. This information is only about the last flight, thus, it is not much declarative. The 2nd hypothesis validate that some possibility of delay still exist, thus the more flights is experienced the higher possibility of delay is. However, the LCAs try to avoid this situation which confirms manager of Smart Wings: *"Delay of flights is our biggest problem, which we are trying to solve now...and we are quite successfully eliminate it of late."* On the other hand many LCAs have reputation of high reliable in flights on time. It is supported by the fact that many of business travellers were already encouraged to travel with LCAs. The case in a point is EasyJet's routes from London.

Allowed weight of luggage

The weight of luggage allowed differ within each LCA, however, it is usually lower then the weight which allow legacy airlines. It was analyse the connection between satisfaction with this factor and gender in the 3rd hypothesis. The dependency of these two variables was significant, thus it was confirmed that the women are less satisfied with weight of luggage. Evaluation of service is dependent on attitudes, opinion and expectations of customers. This result shows how can be the satisfaction with service different between male and female customers because of their different expectations.

Accessibility of airport

Although the LCAs were sometimes criticized because of use secondary airports and advertised them as another close destination, Girona in Spain advertised as Barcelona can be case in a point, the satisfaction with location of airport was good. The majority of respondents stated that they were fully satisfied or satisfied. (tab.3.16).

Although the satisfaction with services is not every time good, table 17 shows that only 1, 7 per cent of respondents are not going to fly with LCAs again. Price seems to be still the most important for customers even though they are not fully satisfied with service.

4.1.3. Operational management of low cost airlines

The investigation of low cost model, services and customer satisfaction enable further analysis of operational management and efficiencies of LCAs. What is important for customers should be also important for LCAs.

Although there are five basic performance objectives and all of them affects costs (Slack, 2007), some of them are more important for particular organisations than the others.

Quality

Quality of LCAs services is necessary only to some extend. Although the results from questionnaire suggested the weight of luggage allowed is important for 89, 3 per cent of respondents, the type of aircraft (and thus airplane ambience) is important only for 1, 7 per cent.

Speed

Speed is the key factor mainly inside the operation for LCAs. The business model is base on short turnaround times on airports. Many things have to be done during this time, such as cleaning of airplane, unload and load of luggage. When this does not work it affect the dependability and in consequence costs, because it can cause delay or even cancellation.

Dependability

Customers are willing to give up dependability for lower price. This result in table 15 shows that the 50 per cent possibility of 4 hours delay or cancellation of flight would accept 60, 7 per cent respondents. It was also tested in 4th hypothesis where was supposed that this situation discourage more than 50 per cent of travellers. The hypothesis was not confirmed. It suggests high willingness of customers to accept lower dependability for low price.

Flexibility

The results show that it seems to be the most important low price and demanded destination for customers. Thus, the LCAs have to be flexible in term of destinations offered according to demand of customers. The good schedule was stated important by 61, 2 per cent of respondents.

Costs

It has been already cited in Chapter 1 that this operation objective is crucial for organisations, which are competing directly on price. The respondents supported this when 99, 4 per cent of them stated that price is the most important factor when they are deciding about LCA.

It is not easy to evaluate how particular operational objectives are important for particular organisations. Apparently, the cost is the most important for LCAs. However, the service could not be received properly when other of them does not work. The results suggest that flexibility is important for LCAs as external operation objective. To attract customer demand it is necessary not only low price but also the attractive destination and it can be changing during the time. The speed is also crucial for LCAs. The results showed that customers are not too much deciding according reliability of LCA and they are also willing to accept some delays or cancellation. However, delays and cancellation bring additional costs such as compensation to passengers.

5. CONCLUSION

The overall aim of this dissertation was to analyse the services of low-cost airlines in Europe. It was done throughout three main points: analysis of low-cost airline business model, satisfaction with low-cost airlines services among customers and operational efficiencies. One of the more significant findings to emerge from this study is that low-cost airlines services match the customer needs, which mean to travel for low price to desired destination. Even the satisfaction is not full with every service the low price seems to be the most important factor. The main findings concerning customer satisfaction are summarized in following recommendations:

- Free offer of refreshment is not important or interesting for customers at all and thus it does not bring any competitive advantage. The LCA which has this offer should rather cancel it and reduce price even a little.
- The offer of higher weight of luggage allow for female customers in compensation to lower seat space for female customers and higher seat space in compensation to lower weight of luggage allowed can be good improvement of service.

As the most important factor for customers after low price was found location of airport and the schedule followed on third place. Another recommendation emerged from these findings is:

- When new route is setting up after attractiveness of destination the accessibility of airport and schedule can be big competitive advantage over the other airlines.

The research detected new trends in low-cost airline services that were found out to improve quality of them and enable to go further in decreasing costs. It is self check-in and online pre-assignment of seats. This suggested that the development of new technologies is the important turning point in widening and improving of the services. However, it seems to be important to familiarise the customer with it. Thus, the following recommendation arose:

- Some propagation of online pre-assignment of seats and self check-in is suitable to encourage the customers make use of it.

The findings from analysis of low cost airlines model and customer satisfaction brought some implications to operational efficiencies, which are enabling to operate LCAs in low costs. Although every of five basic operational objectives are somehow important for organization, the evidence from this study suggested the following:

- Operational management should be focused on cost, speed and flexibility.

In conclusion LCAs seem to be still developing and improving their services on the basis of their core characteristics: low fare, no frills and point to point service with no connection. Their expansion during the 1990s in Europe confirmed that this model is attractive for passengers, who travel for holiday as well as for business.

The study has gone towards enhancing the understanding of LCAs. However, the model differs airlines to airlines and thus, these finding could not apply to each LCA. This analysis of services was intended to be taken from several views in order to make it more complex. Consequently, it could not go deeper in the problem studied in some way and therefore some findings were limited.

Finally, a number of important limitations need to be considered. First, the participants in research were mostly the students of one university, which suggest the limitation of representativeness of research sample in term of age group and also considered LCAs, which are mostly based in this region. Furthermore, the tests of hypothesis would be more reliable, if the data content higher number of respondents. As far as interview concerned it was conducted only with one small LCA and thus it brought only one view onto LCAs service. Although the author contacted some other LCAs, it was not successful.

More research on this topic needs to be undertaken to clearly understood customer satisfaction and service quality. Further experimental investigations are needed to estimate to investigate the customer perceptions, expectations and attitudes to measure them and thus enabling better understanding to service quality and customer satisfaction. The research in the field regarding the role of LCAs in change of aviation

market during their existence would be of great help in better understanding of contemporary aviation and thus can help to better understand to low-cost airlines services.

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QUESTIONNAIRE

My name is Katerina Hlucha and I am a student at University of Huddersfield. I would like to ask you to help me and complete this questionnaire, which is part of the primary research in my dissertation.

The aim of this questionnaire is investigate to what extent are the customers satisfied with services provided by low cost airlines (LCA) and what is for them important.

This questionnaire is intended to everyone, who travelled with low cost airlines within Europe.

Completing of the questionnaire is anonymous and the given answers will be treated confidentiality.

It should not take you more then 5 minutes of your time. Thank you.

1) Your age group:

- ☐ 15 - 35
- ☐ 36 – 55
- ☐ 56 – more

2) Gender:

- ☐ Male
- ☐ Female

3) Have you ever travelled with low cost airlines? (If you are not sure, whether it was low cost airline, in the roll box in question 13 is the list of low cost airlines in Europe)

- ☐ YES If yes, please continue with the following questions.
- ☐ NO If no, thank you for your time.

4) How many flights with low-cost airlines have you approximately experienced?

(Return flight is considered as 2 flights)

☐ 1 - 5

☐ 6 - 20

☐ 21 - 40

☐ 41 - more

5) How do you usually buy your ticket? (tick only one possibility, which is the most common for you):

☐ Via internet

☐ By phone

☐ Travel agent

☐ Other:

6) Is this way of purchase convenient for you?

☐ YES

☐ NO

7) Do you mind that you do not have paper based air ticket “in your hand”?

☐ YES

☐ NO

8) Which characteristic is important for you, when you are choosing airline for your travel? (Please choose up to three possibilities)

☐ Good schedule (time of flight)

☐ Price of ticket

☐ Airport location

☐ Weight of luggage allowed

☐ Reliability (according your experience or what you have heard about)

☐ Free offer of on board refreshment

☐ On board entertainment

☐ Type of aircraft

☐ Other, please specify:

9) Have you ever had the possibility to use self check-in with low cost airlines?

- ☐ YES, but I did not make use of it.
- ☐ YES, I used it and I find it as good upgrade of service
- ☐ YES, I used it; but I did not find it a useful or interesting service for me
- ☐ NO, I do not have
- ☐ I do not know

10) Have you had the possibility to use online pre-assignment of a seat in airplane?

- ☐ YES, but I did not make use of it.
- ☐ YES, I used it and I consider it a good upgrade of service
- ☐ YES, I used it; but I did not find it as useful or interesting service for me
- ☐ NO, I do not have
- ☐ I do not know

11) Has your flight with low-cost airlines been ever delayed more than 2hours? (not in case of bad weather or that sort of situation)

- ☐ YES
- ☐ NO

12) Have you ever experienced cancellation of flight? (not in case of bad weather or that sort of situation)

- ☐ YES
- ☐ NO

13) Imagine that there is high possibility of cancellation of flight with low-cost airlines, it means you have to wait for next day flight; or possibility of significant delay being considered more than 4 hours. High possibility for this hypothesis means it happens every second flight. In this condition, would you rather travel with a traditional airline, but for a significantly higher price (eg where the price would be 160£ instead of 40£)?

- ☐ YES, I would rather travel with traditional airlines.
- ☐ NO, I still would prefer low price of ticket and choose low-cost airlines.

14) Have you ever experienced, that although you have valid ticket, you cannot fly, because of full capacity of airplane?

- ☐ YES
☐ NO

15) Would you fly again with low cost airlines? If no, please specify what your reason is.

- ☐ YES
☐ NO
-

Please fill in the following information according to your last flight with low cost airlines:

16) With which LCA have you travelled recently? Please choose one.

--choose LCA (A-D)-- or --choose LCA (D-Z)

Other:

17) Please evaluate, how have you been satisfied with following services:

1 – Fully satisfied

5 – Not satisfied at all

	1	2	3	4	5
➔ Seats (enough space etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Plane ambience (clean, new etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Offer of refreshment (if provided or bought)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Check-in (speed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Flight on time (delay)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Weight of luggage allowed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Accessibility of airport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

18) Were there something from the following offered for free?

- ☐ Nothing
- ☐ Refreshment
- ☐ Entertainment
- ☐ Internet connection
- ☐ Other, please specify:

THANK YOU FOR YOUR TIME

DOTAZNÍK

Jmenuji se Kateřina Hluchá a jsem studentkou university v Huddersfieldu. Ráda bych Vás požádala o pomoc při mém výzkumu, který je součástí disertační práce, a to vyplněním následujícího dotazníku.

Cílem tohoto dotazníku je ohodnotit do jaké míry jsou zákazníci spokojeni se službami nízkonákladových leteckých společností, tzv. low-costů a co je pro zákazníka důležité.

Dotazník je určen každému, kdo cestoval s nízkonákladovou leteckou společností v rámci Evropy.

Vyplnění tohoto dotazníku je anonymní a získaná data budou použita pouze pro účely této práce.

Vyplnění dotazníku by Vám nemělo zabrat více než 5 minut času. Děkuji.

1) Vaše věková skupina:

- ☐ 15 - 35
- ☐ 36 – 55
- ☐ 56 – více

2) Pohlaví:

- ☐ Muž
- ☐ Žena

3) Cestoval(a) jste někdy s nízkonákladovou leteckou společností? (Pokud si nejste jist(a), které aerolinky jsou nízkonákladové, v otázce číslo 16 najdete seznam těchto aerolinek)

- ☐ ANO Pokud ano, pokračujte následujícím otázkami.
- ☐ NE Pokud ne, děkuji za váš čas.

4) Kolik letů s nízkonákladovými linkami jste přibližně absolvoval(a)? (Zpáteční cesta je považována za 2 lety)

☐ 1 - 5

☐ 5 - 20

☐ 20 - 40

☐ 40 - more

5) Který ze způsobů obvykle používáte pro nákup letenky? (označte pouze jednu možnost, která je pro váš nákup nejobvyklejší):

☐ Webové stránky

☐ Telefon

☐ Cestovní agent

☐ Jiná možnost:

6) Je tento způsob nákupu pro Vás pohodlný?

☐ ANO

☐ NE

7) Vadí vám, že letenka není v elektronické podobě, že ji nemůžete mít “v ruce”?

☐ ANO

☐ NE

8) Který z následujících faktorů je pro Vás nejdůležitější při výběru nízkonákladové společnosti? (Vyberte prosím maximálně 3 možnosti)

☐ Čas odletu (vyhovující letový řád)

☐ Cena letenky

☐ Poloha letiště

☐ Povolená váha Vašeho zavazadla

☐ Spolehlivost (podle Vaší zkušenosti, popř.co jste se doslechl(a))

☐ Nabídka občerstvení na palubě zdarma

☐ Nabídka zábavy během letu

☐ Typ letadel

☐ Jiný, prosím uveďte jaký:

9) Měl jste někdy možnost využít „self check-in“ při letu s nízkonákladovou společností?

- ☐ ANO, ale možnosti jsem nevyužil(a)
- ☐ ANO, této možnosti jsem využil(a) a považuji to za dobré zkvalitnění služeb
- ☐ ANO, této možnosti jsem využil(a); ale nepovažuji to za zlepšení služeb, není to pro mne nijak zajímavé
- ☐ NE, neměl(a) jsem možnost
- ☐ Nevím

10) Měl jste někdy možnost využít služby online rezervace místa v letadle?

- ☐ ANO, ale možnosti jsem nevyužil(a)
- ☐ ANO, této možnosti jsem využil(a) a považuji to za dobré zkvalitnění služeb
- ☐ ANO, této možnosti jsem využil(a); ale nepovažuji to za zlepšení služeb, není to pro mne nijak zajímavé
- ☐ NE, neměl(a) jsem možnost
- ☐ Nevím

11) Byl někdy Váš let s nízkonákladovou společností zpožděn o více než 2 hodiny?

(nejedná se o případy špatného počasí apod.)

- ☐ ANO
- ☐ NE

12) Byl někdy Váš let s nízkonákladovou společností zrušen? (nejedná se o případy špatného počasí apod.)

- ☐ ANO
- ☐ NE

13) Představte si situaci, že je vysoce pravděpodobné zrušení letu s nízkonákladovou společností, to znamená čekat na další let do druhého dne, anebo možnost podstatného zpoždění, tzn. více jak 4 hodiny. Vysokou pravděpodobností je v tomto případě míněno, že se to stává u každého druhého letu. Využili byste za těchto okolností raději služeb tradiční aerolinky za znatelně vyšší cenu (předpokládejme, že cena by činila místo 1600 Kč 6400 Kč)?

- ☐ ANO, raději bych letěla s tradičními aerolinkami

☐ NE, i přesto bych preferovala nízkou cenu a letěla s nízkonákladnou společností

14) Dostali jste se někdy do situace, že i přesto, že jste měli zakoupenou platnou letenku, nemohli jste kvůli plné kapacitě letadla letět daným spojem?

☐ ANO

☐ NE

15) Využili byste příště znovu služeb nízkonákladových aerolinek? Pokud ne, uveďte prosím Váš důvod.

☐ ANO

☐ NE

Následující informace prosím vyplňte podle Vaší poslední cesty s nízkonákladovou společností:

16) S kterou nízkonákladovou společností jste cestoval naposledy? Prosím, vyberte jednu z následujících možností:

--vyberte (A-D)-- or --vyberte (D-Z)

Jiná:

17) Ohodnoťte prosím, jak jste byli spokojeni s následujícím:

1 – Velmi spokojen

5 – Naprosto nespokojen

	1	2	3	4	5
→ Místo k sezení (dostatek prostoru na nohy apod.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ Prostředí v letadle (čisté, nové apod.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ Nabídka občerstvení (pokud podáváno nebo zakoupeno)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ Check-in (rychlost)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ Let na čas (žádné zpoždění)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

➔ Povolená váha zavazadel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
➔ Dostupnost letiště	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

16) Bylo něco z následujících věcí nabízeno během letu zdarma?

- ☐ Nic nabízeno nebylo
- ☐ Občerstvení
- ☐ Zábava
- ☐ Internet spojení
- ☐ Jiné, prosím specifikujte:

INTERVIEW

Nabízíte nějaké občerstvení, zábavu popř. jinou nabídku pro cestující?

Nabízíme dokonce – lehkou bagetu a jeden nealkoholický nápoj zdarma. Dále si naši zákazníci mohou zakoupit na palubě základní nabídku občerstvení (alkoholické i nealkoholické nápoje, pochutiny, sladkosti, atd) O jiné nabídce pro cestující zatím neuvažujeme.

Prodáváte na palubě letadla nějaké zboží (kosmetika apod.)?

Ano, máme přímo svůj nabídkový časopis, kde lze zakoupit různé upomínkové předměty, kosmetiku, atd. Společně opět s katalogem Travel Service.

Víš, jaké máte zisky z prodeje zboží na palubě letadla, jak je to pro vás profitabilní a máte přehled kolik cestujících (nebo kolik procent cestujících) si něco koupí?

No rozhodne na tom neproděláváme, ale přesná procenta nevím. Kdyby to bylo vyloženě důležité, musel bych se zeptat.

Jaká máte zpoždění? (Existují nějaké statistiky?)

Zpoždění letu je nás největší problém, který se snažíme co nejefektivněji řešit. Vzhledem k tomu, že naše letadla jsou pořád ve vzduchu, případné zpoždění se čím dál více kumuluje. Z toho vyplývá, že ranní lety zpožděné nejsou, ale k pozdějších časům odletu se za ten den nějaké zpoždění nashromáždí. Avšak poslední dobou se snažíme co nejvíce eliminovat tato zpoždění. A celkem se i daří.

Stává se, že z nějakého důvodu musíte zrušit let (nemyslím počasí apod.)? Jak o tom uvědomujete cestující?

Vzhledem k tomu, že jsme nízkorozpočtovka, tak se to opravdu stává. Vzhledem k nedostatku letadel, atd.. V takovém případě podle nařízení EU musíme odinformovat naše klienty min. 14 dní před odletem. Každého klienta informujeme pomocí emailu, který naši klienty musí vyplnit při dělání rezervace, popř. když se nám email vrátí, klienty obvoláváme.

Které ze služeb outsourcujete?

Knihování hotelů, hostelů, půjčování automobilu, připojištění a VIP salonky.

Plánujete na nějakém letišti self check-in.

Ano.

Nebo online rezervaci sedadel?

Ano, v novém RESA systému, který už máme objednaný od LUFTHANSY, to už bude možné.

Jaké jsou možnosti nákupu letenek? Internet, telefon? Jaká část cestujících využívá který způsob?

Letenky lze zakoupit nejčastěji přes internet, dále lze využít naší placenou linku po telefonu. To vše probíhá na základě platebních karet. Je možné platit i v hotovosti a to v odletové hale v Praze na Ruzyni, kde funguje naše info okénko. Další možnost je zakoupit letenky přes jakoukoliv cestovní kancelář, která nabízí letenky.