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# ANALYSING THE INFLUENCE OF LOW-COST AIRLINES ON TOURISTS' PERCEPTION OF SERVICE QUALITY

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*This paper aims to explore the characteristics of low-cost airlines and evaluate their influence on tourists' perception of service quality. Several aspects related to the low-cost business model are highlighted within this paper and they are all interpreted according to their relationship with tourists' perception of airline service quality. A survey was conducted on a sample of tourists frequently flying on low-cost airlines with an aim to interpret the correlation between factors influencing respondents' perception of different airline service quality elements. The research also dealt with numerous factors affecting the marketing of low-cost airline such as: passenger's nationality, annual income, frequency of air travel, airline service level and air ticket prices. The essential research results confirmed that the price factor has a primary influence on tourists' perception of quality when compared to many other factors attributed to low-cost airline services.*

**Keywords**: *Airline economics, low-cost airlines, service quality, air ticket prices, tourism*

JEL Classification: *L83, M1, O1*

## INTRODUCTION

No doubt that air transport is considered among the leading industries that have a great economical and social impact upon different nations of the world. The industry's growth and technical achievements contributed enormously to the advance of modern societies. Aviation provided the best worldwide transport network capable of handling international trade and tourism. In the beginning of the new millennium, experts predicted that the 21st century will be the century of the service industries which encompasses numerous sectors such as transport, tourism, telecommunications, insurance and banks. Although these forecasts are

very promising for the travel sector, the early years of the new millennium brought many challenges and threats to the industry. These challenges were mainly responsible for the failure of many airlines in making the necessary balance between their supply of air services and the necessary level of passenger demand. Most of the negative factors affecting airline operations were generated from the external environment, such as the 11th of September attacks, the Iraq war, the SARS / A (H1N1) epidemics, a series of natural disasters in the US, Indonesia and Japan, in addition to a number of terrorist attacks, the world economic recession, not to forget the rise of fuel prices for a number of consecutive years due to economical and worldwide political instability. Other internal factors were due to the incapability of airline managers to cope with the fast changing business environment. This deteriorating situation was accompanied by a wave of structural changes in the industry which was shaped in the adoption of cost-cutting policies that aimed to improve productivity levels and minimize labor power. This new environment created radical changes in the strategies of legacy airlines. Although the political and economical environments of the international market were instable, a group of creative airline models succeeded in gaining a significant level of profit during the last decade. These airlines have a lot of common characteristics as they rely upon effective strategic plans, use successful management techniques and provide a satisfactory level of service quality to their customers. These types of airlines are described as: 'low-cost airlines'. They succeeded in achieving what traditional / legacy airlines failed to achieve in terms of operation efficiency and economic stability. Even though world leading traditional airlines tried to abolish these carriers out of the competition, they still managed to create strong brands in the world market. It's important to mention that these airlines are also on their way to establish a strong presence in the tourism industry during the upcoming years.

## CONCEPTUAL BACKGROUND

### Low-cost airline defined

Krishan (2005) defines the term ‘no frills airline’ as:

“A service, as an airline flight, providing only the basics, with no additional amenities.”

Najda (2003) defines this model as: “An airline that operates a point-to-point network, pays employees below the industry average wage, and offers no frills service”. Another more detailed definition demonstrates a

number of synonyms to the term: 'A low-cost airline, also known as low-cost carrier or budget airline or no frills airline or discounted carrier or low-fare airline is an airline that offers low-price tickets in exchange for eliminating a number of traditional air passenger services'

## The economics of low-cost airlines

The economical characteristics of low-cost airlines include the following:

1. No complimentary in-flight service (no frills), which lowers the operating costs by 6-7 per cent and eventually the crew staffing costs. Flexibility in staff working schedule, a lack of overnight stays for the airline staff at non-base locations and streamlined operations (e.g. on some airlines toilets on domestic flights are only emptied at cabin crew requests rather than at each turnaround to lower costs).
2. One class cabins (in most cases)
3. No pre-assigned seating (in most cases).
4. Ticket-less travel (in most cases)
5. High frequency routes to compete with other airlines on high density (popular) routes and up to three flights a day on low-density routes.
6. Short turn around, often less than half an hour, with a high level of aircraft rotations (e.g. the level of aircraft utilization is higher than other airlines) and less time charged on the airport and runway.
7. The use of secondary airports where it is feasible to operate point-to-point flights.
8. A large number of the carrier's fleet is leased, reducing the level of depreciation and standardizing costs.
9. Numerous airline operations are outsourced such as ground staff and check-in. These procedures are responsible for minimizing overheads and reducing overhead costs by 11-15 per cent.
10. Relying upon standardized aircraft types (e.g. Boeing 737s) to reduce the cost of maintenance and the range of spare parts that need to be held for repairs.
11. Limited office space at the airports (Combe, 2004).
12. Heavy emphasis on advertising, especially billboards, to offset the declining use of travel agents as the main source of bookings.
13. Heavy dependence upon the Internet and the telephone for bookings.
14. A small administrative staff with several sales-related staff on

commission to improve the level of performance (as well as pilots in some cases) (Page 2005).

**Table 1** Low-cost airlines' techniques to reduce units costs

| Cost category | Cost item | Techniques for reducing costs |
|---|---|---|
| **Aircraft ownership costs** | -Ownership structure<br>-Fleet structure<br>-Aircraft utilization | -Anti-cyclical purchasing<br>-Optimize owned/leased mix<br>-Fleet harmonization<br>-Optimize mix of older and new aircraft<br>-Reduce turn around times.<br>-Reduce maintenance down-time. |
| **Fuel costs** | -Route efficiency<br>-Purchasing costs<br>-Weight reduction | -Shorter en-route and approach times<br>-Reduce delays, use smaller airports<br>-Reduction in service fees<br>-Use of fuel hedging strategy.<br>-Calculation of 'no show' passengers<br>-Through product innovation (e.g. seats) |
| **Maintenance costs** | -Fleet<br>-service costs | -Fleet harmonization<br>-Reduce average fleet age<br>-Optimize maintenance activities<br>-joint purchasing of some work |
| **Crew costs** | -Productivity<br>-Wage-related costs<br>-Crew costs | -Improved planning of crew logistics<br>-Lower block hour restrictions<br>-Fewer and/or less senior cabin crew<br>-Reduction of extra-wage allowances<br>-Reduce the need for overnight stays.<br>-Reduce allowances for overnight stays |
| **Catering costs** | -Reduce unit costs<br>-Reduce volumes | -Simplification of meal choice<br>-reduce logistics costs for delivery<br>-Monitor passengers vs. available meals<br>-Improve waste management |
| **Distribution** | -Ticketing<br>-Sales channels<br>-Sales commissions | -Development of e-ticketing<br>-Self-service check-ins<br>-Divert customers to on-line channels<br>-Efficient customer service call centre<br>-Target driven contracts with agents<br>-Reduce commissions |

*Source: International Air Transport Association (2006)*

In the following table, the international passenger traffic volume indicates the superiority of low-cost airlines over traditional carriers

**Table 2** Scheduled passengers carried internationally by airlines 2010

| Rank | Airline | Passengers (000) |
|---|---|---|
| **1** | Ryanair * | 71.229 |
| **2** | Lufthansa | 41.660 |
| **3** | Easyjet * | 37.665 |
| **4** | Air France | 30.882 |
| **5** | Emirates | 30.848 |
| **6** | British Airways | 26.320 |
| **7** | KLM | 22.787 |
| **8** | Delta Air Lines | 21.029 |
| **9** | American Airlines | 20.356 |
| **10** | Cathay Pacific Airways | 19.723 |

*Note: *= Low-cost airline*
*Source: International air transport association (2011)*

## The service quality of low-cost airlines

There has been some criticism about the quality of low-cost airlines regarding their customer services. It's important to point out that the majority of travellers are currently satisfied by their level of services. The fares offered by low-cost airlines are always lower than scheduled airlines, which makes millions of carried passengers satisfied with their quality of service given in consideration the value for money offered to them. Not to forget that scheduled airlines do not receive high satisfactory rates by passengers comparing to low-cost operators nowadays. It is evident that the low-cost cost airline model altered the way people think about travelling (Horner and Swarbrooke, 2004). Although low-cost airlines had a negative reputation about their level of airline service quality for some time, it's now agreed upon that they are reshaping the airline industry by offering a highly satisfactory air travel experience. They are capable of competing with traditional carriers in high-density / lucrative markets. US based airlines, like Southwest Airlines and Jet blue Airways, received high service quality rankings throughout the years by

Skytrax. It is expected that low-cost airlines will continue to perform better than other traditional airlines for the following reasons:

-1- Low-cost airlines do not have high operating costs like them. Traditional airlines invest much of its costs in maintaining hubs in addition to high labour costs.

-2- The low price strategy of low-cost airlines enabled them to penetrate highly profitable markets and compete with traditional airlines.

Recently, low-cost airlines are performing very well in at least two of the three most important airline quality factors (cancellations- on-time departure / arrival- delays) (Rupp, 2008).A number of low-cost airlines emerged in recent years and proved that other models can co-exist in the industry. Low-cost airlines are having a deep effect on the efficiency, competition and shape of the industry. Bowen and Headly (2010) airline quality rating survey (AQR) indicated the high quality performance of low-cost airlines in the US comparing with many legacy airlines which confirms the evolution of the low-cost model in terms of service quality.

**Table 3** Airline quality ratings of US based airlines 2010

| Airline | Airline quality ranking |
|---|---|
| Air Tran * | 1 |
| Hawaiian | 2 |
| Jet Blue * | 3 |
| Alaska | 4 |
| Southwest * | 5 |
| US airways | 6 |
| Delta | 7 |
| Continental | 8 |
| Frontier * | 9 |
| Skywest | 10 |
| American | 11 |
| United | 12 |
| Mesa | 13 |
| Comair | 14 |
| Atlantic Southeast | 15 |
| American eagle | 16 |

*Note: * = Low-cost airline*
*Source: Bowen and Headily (2011)*

It is interesting to know that low-cost services are responsible for creating a market of their own. The U.K., for example, is considered as a very good model for this theory where Easyjet proved to be a strong market player in the presence of British Airways (Horner and Swarbrooke, 2004).

## The impact of low-cost airlines on tourism

The low-cost airline model succeeded with its point-to-point network, often involving secondary airports and very low-fare levels, to attract significant traffic volume. New forms of tourism, such as short-stay city tourism (city breaks) and residential / second home tourism have emerged given in consideration that the visiting friends and relatives segment (VFR) has fed this new type of service. Low-cost airlines were capable of replacing the charter services on many short haul origin-destination pairs in many markets. Modern tourism research analyses the interrelation of various spheres of tourism and embraces the study of important issues such as demand, supply and transport simultaneously within the same relevant environment. The following figure reveals the connections and interactions between air transport and tourism (Bieger and Wittmer, 2006).

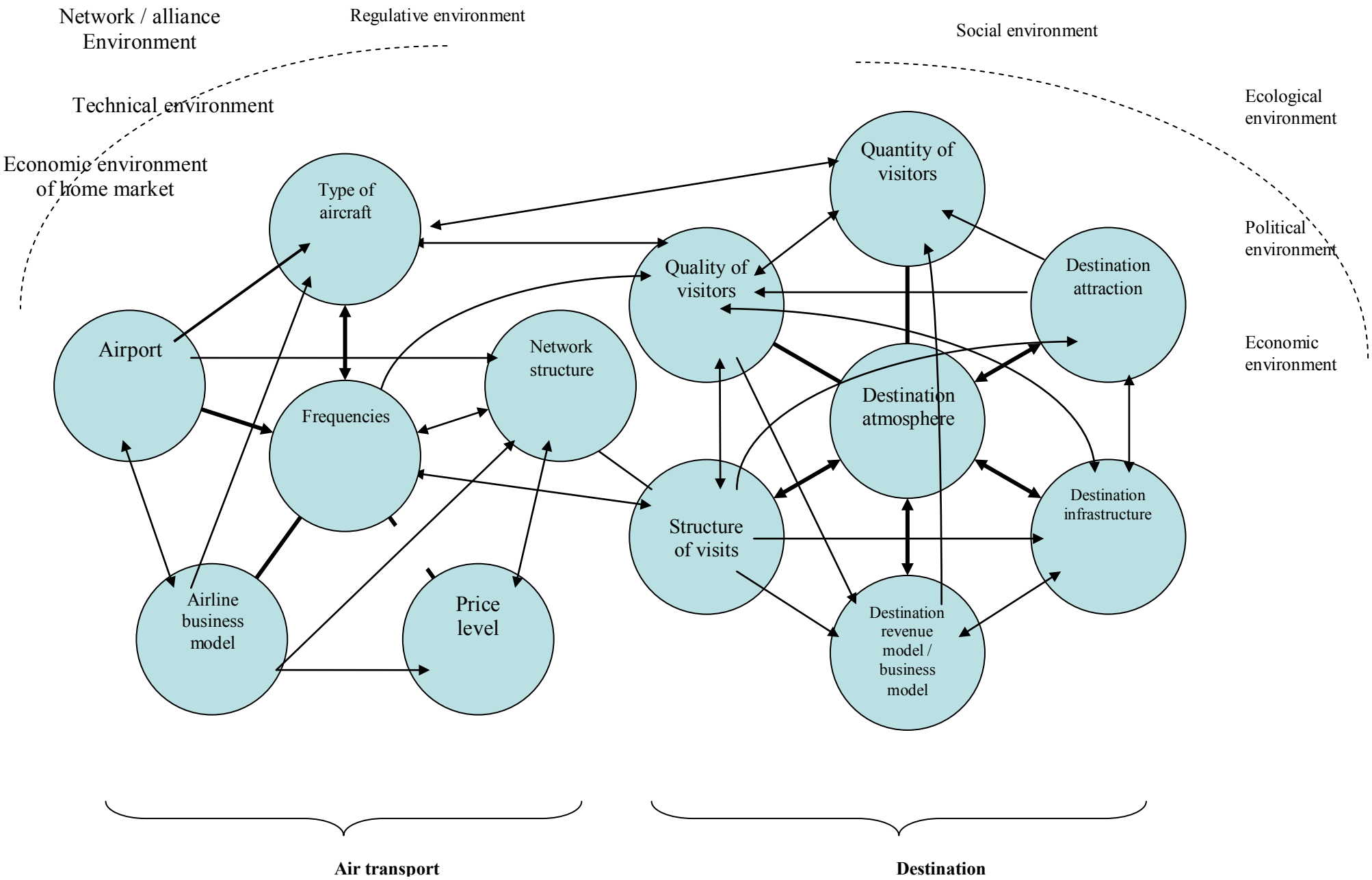




**Figure 1** System model for airlines and tourism

*Source: Bieger and Wittmer (2006)*

There is a strong correlation between tourist infrastructure and the presence of new types of air carriers, such as low-cost airlines. The presence of new airline business models will eventually increase the volume of visitors. The inter-connection between elements of the supply side is very clear in terms of improvement. In other words, an improvement of an attraction at a destination stimulates multiplier effects that attract more air services. The airport may develop into a hub for traditional airlines or a base for low-cost airlines. Consequently, as the multiplier develops, the additional tourists can generate more local revenues for further tourist infrastructure. This means that this is an inter-related and continuous cycle. This cycle can be affected negatively if any decline occurred to the quality of tourist destinations. This can be described as a downward spinal.

The term business model applies to airline companies and tourist destinations as well. It's important to note that both business models are interlinked within the broad scope of the tourism industry. It is logic to assume that not all business models of destinations and airlines can perfectly fit together. The following figure provides an overview of the most significant inter-relations. Destinations that are offering important natural or man-made attractions (e.g. historic cities) are usually served by traditional airline models that equally cater mixed traffic streams.

As for low-cost airlines, they are in synergic with destinations with are associated with large number of decentralized managed second homes, and thus a strange need for flexible air traffic connections. Traditional hotel destinations are no doubt very convenient for charter services especially that they often cater exclusive segments.

From the previous overview of the inter-relation between tourism and air transport; it is clear that each sector rely heavily on the other which can lead to both positive and negative results. This correlation is taken into consideration in adopting a certain business model. Both parties must study different models from both sides. In some cases airlines get involved in the planning process and development of tourist destinations (e.g. advertising and planning airport access facilities. The tourist destinations are often concerned about investing in local airports that can permit for larger size aircrafts to land in all-weather conditions (Bieger and Wittmer, 2006)

**Figure 2** Matching business models of airlines and tourist destinations

*Source: Bieger and Wittmer (2006)*

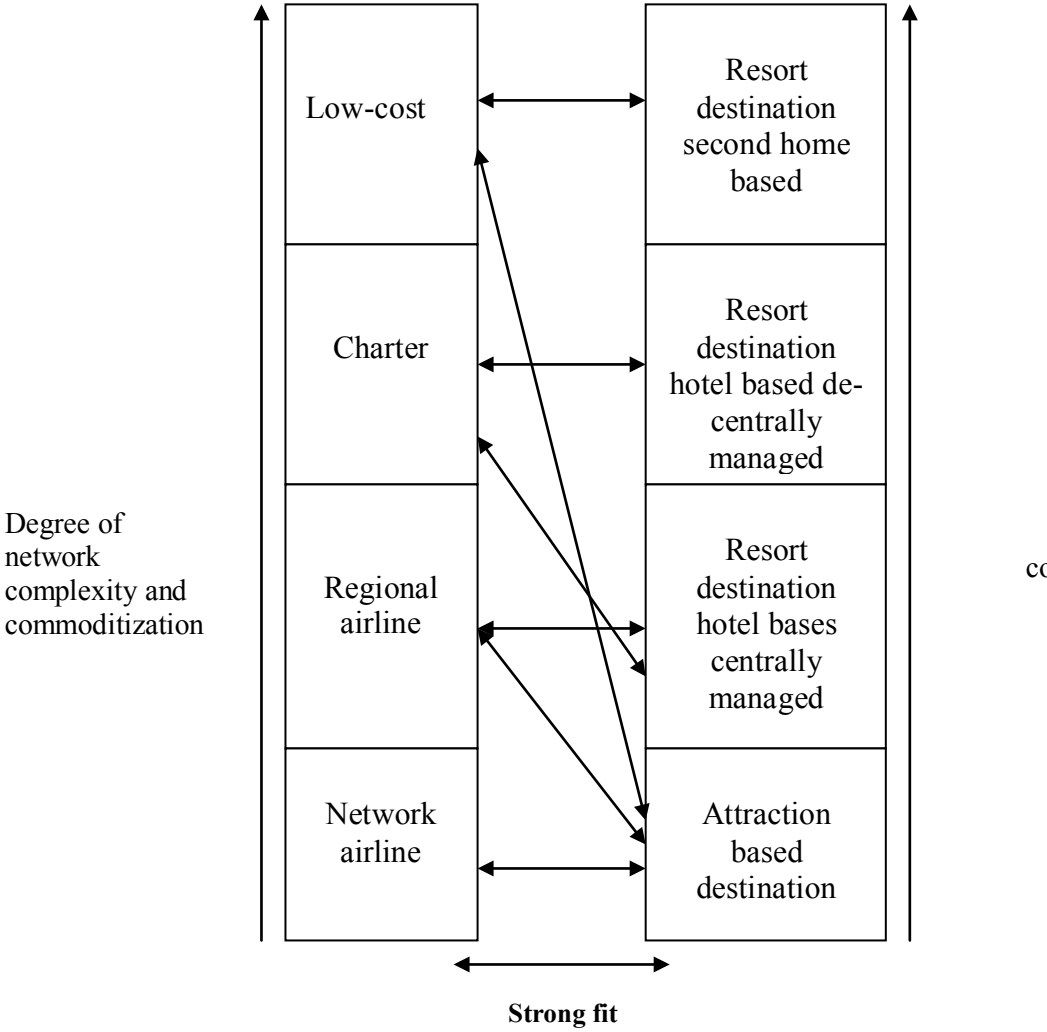

**Table 4** Business models of airlines and their impact on tourism flows

| Business model | Network / hub airlines | Regional airlines | Low-cost airlines | Charter airlines |
|---|---|---|---|---|
| **Success factors** | Extensive market coverage / market share and growth (due to network effects)<br>Alliances | Serving niches<br>Flexibility cooperation with alliances | Simple processes<br>Cost efficiency | Tour operation relation / integration<br>Cost effectiveness |
| **Driving factors of the movement** | Ability to adopt good and homogenous processes and quality search for markets and market share | Cost efficiency<br>Domination of regional markets<br>Search for niches | Strong traffic flows driven by search for routes with self-generating, strong traffic flows. | Integrated capacity management driven by tour operators interest in markets and integration of the value chain. |
| **Weight of tourism** | Tourist flows as a secondary product to get market share and size | Regional tourism flow (in the upscale segment) as important part of the business | Tourism just a part of general traffic flows, no special attendance. | Tourism flows (mass tourism) as main and often only product concentration on strong tourist destinations |
| **Perspective of business model** | Consolidation, division of markets leads to a reduction of services to peripheral destinations<br>Concentration on best paying segments<br>Better fit of capacities to well-paying segments (smaller planes, more frequency) | Concentration of business to niches closer cooperation with alliances | Own structures of airport, routes and markets | Concentration on strong tourist destinations |

*Source: Bieger and Wittmer (2006)*

## METHEDOLOGY

### Hypothesis

**H.** "The air ticket price factor has a primary influence on tourists' preferences to travel on a specific airline comparing to the service quality factor." This hypothesis presumes that the air ticket price has a primary influence upon tourists' choice to travel on a specific airline given the fact it has an overriding influence on the perception of the air travel experience comparing to the service quality level.

### Passenger survey

The questionnaire mainly aims to test the relationship between price levels and service quality elements. There are also several questions that were included in the survey with an aim to investigate the preferences of tourists regarding numerous air travel **elements**. At the end of the questionnaire form, an open-ended space was consecrated for respondents to express themselves about their travel experience with low-cost airlines.

### Sampling and data collection

In determining the sample frame of the passenger survey, the following criterion was taken into consideration:

A-The survey included tourists who were frequently flying on low-cost airlines.

B-Cairo International Airport holds the highest rank as a main point of foreign entry of air travelers

C-The survey should cover the widest range possible of responses.

Therefore, tourists arriving to Egypt via Cairo International Airport were chosen to form the population of the study (N).

Given the fact that characteristics of respondents will vary from one destination to another according to nationality, flight route, the quality of service received and also their exposure to different variables such as price levels; the random sampling technique was chosen for this survey. In order to determine the expected average size of the population an arithmetic mean was calculated on the number of tourist arrivals via Cairo International Airport during the past 5 years using the following equation $X = \Sigma X/n$ (Hendy and El-Kady, 1997) where X = no. of air passenger arrivals and n = years). The sample size was determined according to the following criteria:

1-The size of the population is very large $N > 500000$

2-The level of reliability/standard error is 5% which is commonly used in this type of research. The same standard error was used in a previous survey conducted on a similar subject (Samy, 2005).

3-A published table of sample sizes (Bazra'a, 1996) was used at a confidence level of 95% and for a reliability of 5% with a characteristic of interest in population assumed to be 50%. A 50-50 split would provide for the maximum sample size (Ritchie and Goeldner, 1994). Therefore, the sample size was determined to be 384 passengers and the size was increased to 400 to compensate for non-responses, thus n = 400. A total of 208 valid replies were received. There was an effective overall response rate of 52%.

## Field study analysis

## Data coding and processing

- The data were revised and then coded on several sheets.
- The data were analyzed using the Statistical Package for Social Science (SPSS).
- The descriptive statistics and correlations for the aggregated variables were computed to elicit results.

## Data analysis and testing

- Data were tabulated to show the frequencies and percentages of different variables (Descriptive statistics).
- The 'Kruskal-Wallis' test was used to identify significant differences between the nationality of respondents and the amount of travel via low-cost airlines – the perception of fare levels – the importance of air travel factors – the 'value for money' factor. The Chi-square test was also used to identify significant differences between the annual income of respondents and the amount of travel via low-cost airlines.
- Weighted averages were calculated to rank both respondents' preferences to spend money during their trip and the importance of different air travel factors as well.
- Non-parametric correlations (Spearman) were used to identify significant relationships between the perception of air ticket prices and the level of satisfaction with low-cost airlines, and also to identify significant relationships between the "value for

money" factor (The quality perception equals the fare paid) and the level of satisfaction with the actual service they receive.

- A content analysis was conducted to analyze the negative comments or in other words the complaints of respondents about their experiences with low-cost airlines (the analysis comprised six different categories). Content analysis is a form of observational inventorying of the properties of texts. The verbal text is scientifically analyzed by isolating particular categories of content and then quantifying it in order to elicit results from the respondents' different opinions.

## RESULTS AND DISCUSSION

### Passenger survey results

- The passenger survey included 14 different low-cost airlines: Air Berlin (Germany) – Transavia (Belarus) – Ryanair (Ireland) – Easyjet (Britain) – EgyptAir Express (Egypt) – Zoom (Canada) – BMI baby (Britain) – Corsair (France) – Westjet (Canada) – LTU airlines (Austria) – Mat airlines (Macedonia) – Monarch airlines (Britain) – Aeorsvit (Ukraine) - Condor (Germany). Low-cost airlines were categorized into 3 groups according to the responses: 1- Europeans (92.3%) 2- Arabian (4.3%) 3- North American (3.4%)
- The majority of respondents were males (69.2%) and most of them were Europeans (91.8%) and the rest of the sample was divided between the Americans (5.8%) and the Arabs (2.4%).
- Most of the passengers were under the age category 18-29 (39.4%) and the annual incomes varied between respondents, but it is clear that a relatively high category of earnings toped the ranking: 1- 70000 (36.5%) 2- Less than 25000 (26.9%) 3- 25000 (12.5%) 4- 35000 (11.1%) 5- More than 70000 (10.6%) 6- 28000 (2.4%).
- The majority of flight routes were regional (40.9%) followed by the domestic (31.7%) and the international routes (27.4%). Given the fact that this survey was conducted on a sample of tourists, 76.4% of respondents were traveling for leisure.
- More than half of respondents tend to fly for leisure purposes (61.1%) and the majority of the sample (67.3%) did not fly for business purposes during the past 12 months (2006/2007).

- Short-haul intercontinental flights earned the highest share of air traveling (65.9%). Only a minority of respondents flew less than 2 times on low-cost airlines (1.9%) while 42.3% flew more than 12 times on this type of service
- The level of satisfaction with different aspects of the low-cost airline service varied between various elements but the overall level of satisfaction was described as being 'good' (66.3%) by the majority.
- The perception of air ticket prices was in favor of low-cost airlines as the majority of respondents (43.8%) described the fare level as being 'Low' compared to traditional airlines.
- As much as the respondent rates a service element as being extremely important as much as he expects a high standard service that can be ranked as excellent. This means that any airline seeking to achieve high level of satisfaction with its customers must explore highly important services with aim to deliver them with excellence.
- Other service elements that are of a less importance like free food and beverage for instance can be cancelled or substituted by a pre-paid service.
- 66.3% of respondents agree that low-cost airlines provide 'value for money' services.
- Although the replies regarding different aspects of the low-cost airline experience varied between being positive or negative, still nearly all of them (95.2%) are willing to repeat the service.
- It is confirmed that the web is the best medium to reach passengers for low-cost airlines. The useful information sources were ranked as follows: 1- The internet (86.5%) 2- Friends and relatives (21.6%) 3- Travel agencies (17.8%) 4- Newspaper ads (17.3%) 5- TV (9.1%) 6-Guidebooks (7.2%) 7-Brochures (6.3%) 8- The carrier's web sites (4.8%).
- Low-cost airlines are distinguished from traditional carriers by a set of aspects that were assessed by respondents with an aim to categorize each one of them as an advantage or a disadvantage. The replies classified the following aspects in the advantages category:
- 1-Direct flights (97.6%) 2- Ticket-less travel (93.8%) 3- One-class cabins (82.2%) 4- Depending heavily on the telephone and the internet for flight reservation (69.7%). The disadvantages category, it comprised the following: 1-The use of secondary

airports (70.2%) 2-No free food and beverage (61.5%) 3-No-pre-assigned seats (56.3%)

- The Kruskal -Wallis test calculated in the following tables 5, 6, 7 and 8 indicate that the nationality of tourists influences numerous aspects related to air travel. These aspects include:
- The amount of travel via low-cost airlines (Chi-square = 7.311/significant).
- The perception of air ticket prices (Chi-square = 12.054/Highly significant).
- The test also indicated that the nationality also impacts respondents' evaluation of the service quality associated with the price paid (the 'value for money' factor) (Chi-square = 32.818/Highly significant)
- The correlation between the nationality and the importance of these elements:
    - 'The value for money" factor (Chi-square = 16.117/Highly significant)
    - The punctuality (Chi-square = 40.70/significant)
    - Free-food and beverage (Chi-square = 7.543/significant)

**Table 5** The relationship between the nationality and the amount of travel via low-cost airlines

| Nationality | European | American | Arab | Chi-square | Significance |
|---|---|---|---|---|---|
| **Mean Rank** | 103.12 | 98.42 | 171.90 | 7.311 DF:2 | Sig. at 0.05 |

**Table 6** The relationship between the nationality and the perception of fare levels

| Nationality | European | American | Arab | Chi-square | Significance |
|---|---|---|---|---|---|
| **Mean Rank** | 101.93 | 156.88 | 77 | 12.054 DF:2 | Sig. at 0.01 |

**Table 7** The relationship between the nationality and the" Value for money factor"

| Nationality | European | American | Arab | Chi-square | Significance |
|---|---|---|---|---|---|
| **Mean Rank** | 110.45 | 42.71 | 25.70 | 32.818 DF:2 | Sig. at 0.01 |

**Table 8** The relationship between the nationality and the importance of air travel factors

| Nationality / Travel Factors | Mean Rank(s) | | | Chi-square | Significance |
|---|---|---|---|---|---|
| | European | American | Arab | | |
| **Value for money** | 108.53 | 75.63 | 20 | 161.117 DF:2 | Sig. at 0.01 |
| **Ticket price** | 105.84 | 95.96 | 73.80 | 1.903 DF:2 | Not Sig. |
| **Punctuality** | 106.20 | 104 | 40.70 | 7.419 DF:2 | Sig. at 0.05 |
| **Free food and beverage** | 107.60 | 77.17 | 51.70 | 7.543 DF:2 | Sig. at 0.05 |
| **A direct flight** | 104.63 | 113.17 | 78.60 | 1.380 DF:2 | Not Sig. |
| **Easy Reservation** | 102.70 | 117.92 | 141.10 | 3.011 DF:2 | Not Sig. |
| **In-flight services** | 105.42 | 105.75 | 66.20 | 2.939 DF:2 | Not Sig. |
| **Free-in-flight Entertainment** | 106.48 | 70.58 | 110.10 | 4.575 DF:2 | Not Sig. |
| **Customer service** | 106.43 | 84.92 | 77.90 | 2.933 DF: 2 | Not Sig. |
| **Airport services** | 102.82 | 121 | 128.90 | 2.201 DF:2 | Not Sig. |

**Table 9** The relationship between the annual incomes and the amount of travel via low-cost airlines

| Parson Chi-square | DF | Asymp. Sig. (2-sided) | Significance |
|---|---|---|---|
| 111.569 | 10 | Sig. at 0.000 | Sig. at 0.01 |

*-Pearson Chi-square test indicated that the annual income influences the amount of travel via low-cost airlines (Chi-square = 111.569/Highly significant).*

**Table 10** Weighted averages of respondent's preferences to spend money during their trip by nationality

| Nationality / Items | European | | | American | | | Arab | | |
|---|---|---|---|---|---|---|---|---|---|
| | Mean | C.V.% | Rank | Mean | C.V.% | Rank | Mean | C.V.% | Rank |
| **Transport** | 4.03 | 46.4 | 3 | 3.50 | 71.4 | 2 | 3.99 | 47.3 | 3 |
| **Accommodation** | 2.28 | 72.8 | 1 | 4.33 | 49.4 | 5 | 2.37 | 73.4 | 1 |
| **Restaurants** | 2.96 | 38.1 | 2 | 4.66 | 22.9 | 7 | 3.04 | 38.8 | 2 |
| **Shopping** | 4.52 | 46.6 | 5 | 3.91 | 20.2 | 4 | 4.51 | 45.4 | 6 |
| **Sports activities** | 4.19 | 47.9 | 4 | 4.41 | 36.7 | 6 | 4.27 | 47 | 5 |
| **Visiting historical sites** | 5.13 | 30.9 | 7 | 3.50 | 63.7 | 1 | 5.01 | 33.1 | 7 |
| **Attending Events** | 4.85 | 36.4 | 6 | 3.66 | 80.8 | 3 | 4.20 | 39.2 | 4 |

**Table 11** Ranking of respondent's preferences to spend money during their trip by nationality

| European | American | Arab |
|---|---|---|
| 1-Accommodation | 1-Visiting historical sites | 1-Accommodation |
| 2-Restaurants | 2-Transport | 2-Restaurants |
| 3-Transport | 3-Atending events | 3-Transport |
| 4-Sport activities | 4-Shopping | 4-Attending events |
| 5-Shopping | 5-Accommodation | 5-Sports activities |
| 6-Attending events | 6-Sports activities | 6-Shopping |
| 7-Visting historical sites | 7-Restaurants | 7-Visitinghistorical sites |

- It is clear that transport is surpassed by other travel-related elements in all three categories of nationality. These results confirm that tourists are willing to save the money spent on transport for other travel related items. The weighted averages

also indicated that the degree of importance of air travel factors that are ranked by nationality as shown in table 12.

In table 12, the top air travel factors (1-5) are considered as the crucial elements that can influence respondents' choice to fly on a particular airline.

- The content analysis of the open-ended questions indicate that the negative comments (complaints) about low-cost airline services can be summarized into the following 6 categories: 1-The use of secondary airports (44.5%) 2-Punctuality (21%) 3-Seating comfort (11%) 4-Customer service (13.5%) 5-Timing of the flight (%) 6-In-flight services (4.05%)

**Table 12** Weighted averages of the importance of air travel factors by nationality

| Nationality / Items | European | | | American | | | Arab | | |
|---|---|---|---|---|---|---|---|---|---|
| | Mean | C.V (%) | Rank | Mean | C.V. (%) | Rank | Mean | C.V (%) | Rank |
| Value for money | 2.40 | 30.83 | 3 | 1.83 | 55.73 | 1 | 2.34 | 33.33 | 3 |
| Ticket price | 2.24 | 36.16 | 1 | 2.808 | 31.73 | 2 | 2.22 | 36.03 | 1 |
| Punctuality | 2.34 | 29.48 | 2 | 2.25 | 33.33 | 3 | 2.31 | 30.7 | 2 |
| Free food and beverage | 3.81 | 28.87 | 9 | 3.33 | 26.42 | 9 | 3.75 | 29.33 | 9 |
| A direct flight | 2.45 | 30.20 | 4 | 2.66 | 46.24 | 7 | 2.45 | 32.24 | 4 |
| Easy reservation | 2.53 | 33.59 | 6 | 2.66 | 28.94 | 6 | 2.56 | 33.20 | 6 |
| In-flight services | 3.17 | 21.13 | 8 | 3.16 | 12.02 | 8 | 3.16 | 21.20 | 8 |
| Free-in-flight entertainment | 3.96 | 27.02 | 10 | 3.96 | 14.24 | 10 | 3.96 | 26.90 | 10 |
| Customer service | 2.63 | 36.12 | 7 | 2.63 | 21.16 | 5 | 2.66 | 36.01 | 7 |
| Airport services | 2.50 | 32 | 5 | 2.50 | 16.36 | 4 | 2.50 | 33.07 | 5 |

*Note: Ranking: **1-5** represents the top crucial elements that influence passengers' choice to fly on a particular airline*

## HYPOTHESIS TESTING

**H.** The air ticket price factor has a primary influence on tourists' preferences to travel on a specific airline comparing to the service quality factor."

**Table 13** The relationship between the perceptions of air ticket prices and the level of satisfaction

| Item | Correlation coefficient | Significance |
|---|---|---|
| **Airline website** | -0.125 | Not sign. |
| **Reservation efficiency** | 0.107 | Not sign. |
| **The timing of the flight** | 0.172* | Sign. |
| **Punctuality** | -0.181** | Highly sign. |
| **Airport services** | -0.137* | Sign. |
| **Seating comfort** | -0.003 | Not sign. |
| **Cabin appearance/maintenance** | -0.046 | Not sign. |
| **Cabin staff service** | -0.113 | Not sign. |
| **Reading materials** | -0.015 | Not sign. |
| **Food and beverage** | 0.121 | Not sign. |
| **In-flight entertainment** | 0.197** | Highly sign. |
| **Convenient airport** | 0.086 | Sign. |
| **Baggage handling** | 0.016 | Sign. |
| **Customer service** | 0.055 | Sign. |
| **Overall level of satisfaction** | 0.133 | Sign. |

- The correlation coefficient indicate that there is a negative significant relationship between the perception of air ticket prices and the level of satisfaction with the following items of low-cost airline service :
    - Punctuality (Spearman = -0.181 / highly significant)
    - Airport services (Spearman = -0.137 / significant)
- This result implies that the air ticket price has an inverse relationship with the level of satisfaction of respondents regarding two major quality elements. Punctuality and airport services are among the crucial elements that influence passengers preferences to fly on an airline (see Table 12). This result also confirms that as much as the low-cost airline lowers

its ticket prices as much as tourists are more satisfied with the crucial elements of their air travel experience.

**Table 14** The relationship between the "value for money factor" and the level of satisfaction

| Item | Correlation coefficient | Significance |
|---|---|---|
| **Airline website** | -0.068 | Not sign. |
| **Reservation efficiency** | 0.202** | Highly sign. |
| **The timing of the flight** | -0.301** | Highly sign. |
| **Punctuality** | 0.201** | Highly sign. |
| **Airport services (check-in and boarding)** | 0.384** | Highly sign. |
| **Seating comfort** | 0.472** | Highly sign. |
| **Cabin appearance/ maintenance** | 0.198** | Highly sign. |
| **Cabin staff service** | 0.166* | Sign. |
| **Reading material** | 0.176* | Sign. |
| **Food and beverage** | -0.166* | Sign |
| **In-flight entertainment** | -0.194** | Highly sign |
| **Convenient airport** | -0.50 | Not sign. |
| **Baggage handling** | 0.93 | Not sign. |
| **Customer service** | -0.125 | Not sign. |
| **Overall level of satisfaction** | 0.042 | Not sign. |

*Note: *significant / **highly significant*

- The correlation coefficient also indicated that there is a positive significant relationship between the 'value for money' factor and the level of satisfaction with the following items:
    - Punctuality (Spearman = 0.201/Highly significant)
    - Airport services (Spearman = 0.384/Highly significant)
    - Seating comfort (Spearman = 0.472/Highly significant)
    - Cabin appearance/maintenance (Spearman = 0.198/Highly significant).
    - Cabin staff service (Spearman = 0.166/significant)

- Reading materials (Spearman = 0.176/significant)

The previously cited results indicate that as much as low-cost airlines offer a price that equals the level of service quality perceived by respondents, as much as they are satisfied with most of the elements of their flight. The results in table 14 indicate that both the ticket price and the 'value for money' factor are on top of the list of passengers importance scale regarding air travel items.

## HYPOTHESIS: ACCEPTED

- he formerly cited results (tables: 12-13-14) confirm the validity of the hypothesis as it justifies the primary effect of the price element as a fundamental factor that influences tourists' evaluation and expectations of air transport services. This fact makes the price the overriding factor that affects the perception of quality and eventually the choice of tourists regarding the airline they will fly on.
- This fact highlights the increasing importance of low-cost airline services, as a business model that relies mainly on low-fare strategies for achieving a high level of tourist satisfaction.

## CONCLUSIONS

- The materialistic factors (the air ticket price and the value for money aspect) have an overriding influence upon tourists' level of satisfaction with the quality of low-cost airline services comparing to other service quality elements.
- Aside from quality related issues, other factors influence passenger satisfaction such as scheduling (the availability of the destination in the airline's network) and the level of air fares. The latter factor became an overriding factor in choosing to fly on a particular airline. The success of low-cost airlines is strongly correlated with these two factors in addition to quality related issues. Low-cost airlines offer an air transport service with no additional free amenities and still they succeed in competing with legacy airlines through low-fares.
- It is confirmed that the price element is highly significant in influencing tourism demand comparing with many other factors attributed to the product quality, distribution or even the promotional campaigns. Low-cost airlines are highly centralized

around the price level as their core strategy which makes them capable of having a high influence on tourists' choices.

- Low-cost airlines represent the perfect solution for promoting tourism in a time where numerous countries suffer from a sharp economic downturn. Tourism demand is continuously growing but changes are occurring in tourist preferences as numerous tourists are preferring low-budget travel. No doubt those low-cost airlines participate effectively in what is so-called the low-budget phenomenon.
- Tourists today are more concerned with the basic elements of transport such as schedule and punctuality, and less concerned with supplementary services. Consumers today are more rational than ever before and highly price sensitive too. This means that they are favouring no frills services all the way. Only a small proportion of travellers are still seeking to consume luxury tourism services. The shrinking of the business classes is a living proof of this fact.
- Tourists are willing to save the money spent on transport for other travel related items. This means that tourists are seeking to travel on low-cost airline with aim to allocate their expenses in other travel-related categories in the tourist destination itself.
- It is confirmed that as much as low-cost airline lower their ticket prices as much as the passengers are more satisfied with the crucial elements of their air travel experience.

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