Transport and Communications, 2015; Vol. I.

DOI: 10.26552/tac.C.2015.1.1 ISSN: 1339-5130

# **Low-Cost Carriers – Business Model Development**

Antonín Kazda<sup>1</sup>, Mária Mrázová<sup>2</sup>

<sup>1</sup>Air Transport Department, University of Žilina, Žilina, 010 26, Slovakia <sup>2</sup>Air Transport Department, University of Žilina, Žilina, 010 26, Slovakia

**Abstract** This paper deals with low-cost airline business model that has overwhelmingly been the favoured mode of the airline. Fast-changing aviation industry forces low-cost carriers to transform their initial business model and therefore, author stresses further opportunities for the expansion of these models to another direction with more concentration on customer's needs as well as company's operational and financial benefits. One of the most important partial results is analysis of existing low-cost carrier's business models, describe their historical evolution and propose future modifications to stay competitive and profitable.

**Keywords** Low-cost carriers, business model, unit costs, unit revenues.

JEL L93

### 1. Introduction

Since the introduction of Southwest Airlines' low-cost model in the USA in 1971 and the deregulation process of American airline industry in 1978lead towards the entrance of new business model – low-cost carriers – that has changed patterns, thinking and position of legacy carriers on aviation market. Deregulation process caused that airlines had adopted new strategies and consumers had been experiencing a new market and it helped to financial benefits to the air travellers could not pay high flight ticket prices due to the legacy carrier's monopoly position on airline market.

Despite, unpredictable and unstable airline industry is still forcing airlines to restructure and create new, more flexible strategies that will be able to adapt in constantly changing environment. Since 1990, when low-cost carriers appeared in Europe following Southwest business model we can see their success further. According to Amadeus database low-cost carriers represent about 19% percent of the total air traffic in Asia, 38% in Europe and more than 30% in North America.

Moreover, measured by revenue, the industry has doubled over the past decade, from 370 billion euros in 2004 to 747 billion euros in 2014 according to IATA. Also, most of that growth has been driven by low-cost carriers which at the moment have a control of 25% of the worldwide market and they also have been expanding rapidly in emerging markets.

In spite of that fact, for instance European market is still highly saturated in order to small opportunities for further expansion across new routes, mainly in Western Europe [1].

In addition, many airlines have acknowledged the need to restructure with the ultimate goal of staying alive due to the unstable industry that forces them to think ahead. Though, they suddenly skip one significant factor that plays important role in business plan of any air transport carrier flexibility – is the key element that ensures the success.

Also, we cannot forget at the carrier's mission that should reflect three basic features: who you are what do you do and for whom and what are your uniqueness? If the company is able to answer those questions, after that it can help them to communicate with passengers. It is also the tool for leadership because it gives the airline a clear position to take when working wills allies and promoting the airline with the public.

Therefore, the author also highlights the fact another important thing that is necessary to take a look - more advanced customer analytics that will provide the overview of the services that are needed, required and inevitable to satisfy customer's needs and which will lead towards positive image of the airline that cares about their people. Mentioned features are supported by a questionnaire that the author created in order to cover this specifications and in way to achieve ancillary revenues, and mainly loyal customers on other side because airlines must not cut costs in areas such as safety, reputation, and branding or customer value.

# 2. The Purpose of the Paper

The purpose of this paper is based on the illustration of historical low-cost business model development through its evolution since 1978 until present. According to the case studies that were analysed, author found out that all low-cost contemporary models are mostly based on the Southwest

airlines business model. Therefore, author feels the need to create new concept of business model that will be different as Southwest one and which will cover basic things that are necessary to be successful – it should cover customer and company values together. Rapidly changing environment has caused that low-cost carriers cannot sustain and new features are needed to keep airlines competitive and profitable. This problem is related to the saturation of the market and as a result of this many airlines have no possibility for further expansion, such as Ryanair that was the most profitable low-cost carrier in 2014 but also they suffer from limited possibilities for further growth.

An achievement of the mentioned goal is possible just in the case when analysis of existed business models will be provided. All research is linked with the finding of the concept that will be able as nearest as possible to combine features that will lead towards getting ability to stay competitive and profitable on one side, and also attract new customers and also will raise the segment of the customers.

The research is executed through following methods, such as typological analysis, historical and statistical research method. One of the essential ways of doing research is based on gathering information in order to gain theoretical perspective of the problem that will be supported by practical suggestions of the possible ways where to direct the LCC's business model. Firstly, for the purpose of the achieving goal related to the development of low-cost airline business models, author uses historical method to get all information from the entire enter of low-cost airlines on aviation market. It is followed by their subsequent development until today's position on worldwide market.

The creation of new concept of business model is linked with its economic and operational point of view. In order to work with a big amount of statistic's data it is necessary to use methods that will make them more understandable. Therefore, author uses two-dimensional symbolic data presentation by different types of diagrams. Also, the statistical procedures are interpreted by the Product and Organisational Architecture Tool that are helpful for the classification and relation of the key elements that are typical for the airline business models.

Author also uses typological analysis in order to divide the features that are typical for researched low-cost models and later they will be located in business model structure in way that allows making comparisons and estimating whether the data are consistent with appropriate theories.

#### 3. Current Status of the Problem

Until 1978 when deregulation process started, air transport was available just for rich class due to high flight ticket prices. After that the monopoly of airline industry had to face another different competition based on the airline that offer cheaper flights and made the boom in airline industry. It

begun with Southwest airlines that introduced new business model called low-cost airline business model

As can be seen in Figure 1 below, in 2004-2009 time period it is noticeable that many low-cost carriers failed – red line (19 airlines) while in the most successful year (2003) we could observe an entrance of 13 new low-cost carriers on European market (blue line). Moreover, in 2008-2009 we can observe lower low-cost carriers traffic operations in order to financial crisis that influenced all industries [2].

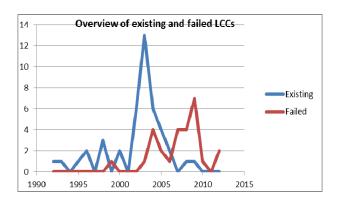


Figure 1. Illustration of existing and failed low-cost carriers [authors]

In addition, we can describe content of 4 categories that are related to low-cost carrier's airline business model, as can be seen in Figure 2 below.

Following mentioned Figure 2 in spite the fact that market conditions was tough for entrance of new carriers and mainly influenced by strong position of monopoly legacy carriers, many low-cost carriers operations started to show their position in more industrialised and economically prosperous countries of northwest Europe before their spread to south and east to the Central and Eastern Europe in 2000s. European aviation market showed strong position in 2013 despite economic crisis in many countries or due to the slow recovery from this situation. The results of the Association of European Airlines report that in 2013 they carried about 0.2% more passengers in comparison with previous year. In addition, members of the ELFAA reported a 6.7% passenger's increase in the same time period (2013). Also, European airlines have remarked growth of 5.8% in international Revenue per Kilometres (RPK), as can be seen in Figure 3 [4].

Establishment of Southwest Airlines – 1971 – inspiration for European airlines			
Classifi- cation	Year	N o	Founded Airlines
Pioneer	1992-1998	8	Ryanair, Norwegian, EasyJet, Deboanair, Virgin Express, Air Berlin, Color Air, GoFly
Early adopted	1999-2002	8	Basiq Air, Buzz, Bmibaby,  Germanwings, Goodjet,  HLX, MyTravLite,  SkyEurope
Main- stream LCCs	2003-2006	2 5	Air Polonia, Air Scotland, dba, EU Jet, FlyGlobespan, Flying Finn, Germania Express, Get Jet, Iceland Express, Jet2, Snowflake, V Bird, WindJet, FlyMe, FlyNordic, MyAir, Thomson-Fly.com, Vueling, WizzAir, Air Turquoise, CentralWings, Sterling, Transavia.com, Click Air, Zoom UK
Late adopters	2007-2012	2	Volare Web, Star1

Figure 2. Chronolgy of low-cost carriers pioneers [3]

Moreover, according to the Amadeus database, we can see significant impact related to the changing LCC's passenger demand. Low-cost carriers represents just 19% of total air traffic in Asia, 38% in Europe and over 30% in North America (related to 2013 time period). In addition, market share of low-cost carriers in Asian continent grew by 2% (from 16.5% to 18.5%) during 2011-2012 time periods and it was also the highest value in comparison with other regions worldwide.

Nowadays, in Europe we can still observe the highest concentration of low-cost airline carriers and during 2012 time period it increased about 1.5% while in Asia, Middle East and South West Pacific we can see just small increase (about 1%).

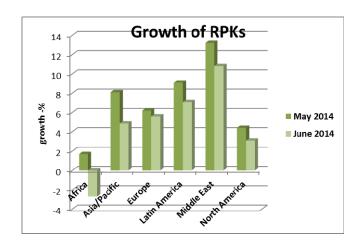


Figure 3. Comparison of PAX's growth in RPKs [4]

Current status of low-cost carrier's market share (2013 time period) is illustrated in Figure 4 below.

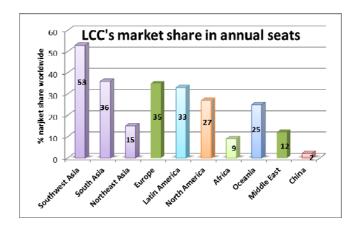


Figure 4. Illustration of LCC's market share in 2013 time period [4]

Moreover, departing flights in the first half of 2013 to the same period in 2012 has shown that in Asia low-cost carriers seats grew by 6.8% worldwide across the same period. In the Middle East it grew at a fast rate of 17.7%. In comparison with European and American continent, capacity grew as well, but at a more modest rate: just 0.8% for Europe and 1.5% for North America [4].

Briefly, although low-cost carriers have found a position of dominance and have a robust growth, it should be known that airports are also facing increasing competition and therefore it is necessary to be able to analyse multiple data to ensure that opportunities will be identified and also ensure avoiding all possible risks.

## 4. The Results and Discussion

Firstly, author created an overview of the case studies that were related to the low-cost airline business.

Consequently, according to the available materials, author divided case studies following groups such as:

1. Case studies related to low-cost airlines business model development

(They were related to the factors that encouraged the spatial and temporal spread of low-cost carriers and they also offer an overview of the business model strategies).

2. Hybridisation process related to the low-cost carriers

(These case studies were based on hybridisation process on European and American continent).

3. Entrance of the LCCs on European market

(These case studies illustrated the entrance of low-cost carriers on European market and it also explained differences between legacy and low-cost carriers).

4. Last group is related to the network structure and their spreading through European continent

(These case studies represented differences between type of services between legacy and low-cost carriers and it also covered different conditions for low-cost carriers operations on European, American and Asian continent).

Secondly, author created compendious overview of airline business models in general with the sequent concentration on low-cost airline business model. According to the available classifications of the business model, one classification was missing, therefore author created new typology related to the level of offered services by concrete low-cost airlines.

Thirdly, analysis of the current low-cost carriers' position was done. Author compared the conditions on the market during last years and nowadays. All this facts leads towards the conclusion, that many carriers still face an extremely hard macroeconomic environment.

Lately, author created questionnaire that represents customer's preferences related to the customer's profile. This will be evaluated and consequently it will offer the requirements of the customers that should be part of the services of low-cost carrier's business model. It is based on the findings which factors are crucial to influence customer's decision to fly by low-cost airlines, such as price, seat comfort, flight's punctuality, etc. Also, author highlights services that could be important for current or future customer, such as flight entertainment, interline services, Wi-Fi on-board, etc. Moreover, last section of questionnaire is related to the customer's willingness to suggest the price that they are available to pay (it is limited that the value has to be higher than 5 euros for each service).

The results of this questionnaire will be the base for the confrontation of an expert's opinion to suggested services in future concept of low-cost airline business model. Later, author will assess the possible opportunities and will make inevitable calculations related to economic and operations model development.

#### 5. Future Work

According to available data we will make financial calculations that will emerge from average values of selected economic indicators related to low-cost carriers on European continent and consequently it will cover combination of values related to the legacy carriers. After achievement of this data we will combine the most convenient values to ensure customer willingness for paying related fees and also it will cover all economic and operational values, indeed. Also, new concept of business model will include Frequent Flyer Programme - FFP (despite this way of customer's loyalty is more typical for legacy carriers). The reason why the author decides to suggest this programme into the concept of new business model is based on the fact that flyer programme focuses on ancillary revenues on one side and also this programme will be simple and understandable for customers.

As was mentioned in previous chapters, concept of new business model will be based on features that are illustrated in Figure 3 below.

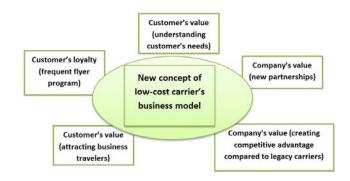


Figure 5. Features related to the concept of new business model [authors]

In addition, the author also highlights the fact that it is necessary to identify key indicators related to product and organisational architecture. Therefore we have to define the product architecture – that should be oriented on customer's needs and organisational architecture – how to manage the airline to ensure financial profits and airline's position on the low-cost carriers market where the product architecture is supported by Questionnaire on customer opinion on low-cost airline product that will suggest the services that are needed from the customer's point of view. The Organisational architecture will be supported by indicators related to the calculations of revenue, cost, profitability, comfort and convenience indexes. Combination of the Product and Organisational architecture will help to define business plan of new concept of low-cost carrier's model.

# 6. Conclusions

This paper offers an overview of current situation related to the low-cost airline business model development that is supported by its historical review since 1978 when Southwest airlines had started its business, through description of the selected research methods and their application on the researched problem. Moreover, this paper introduces new typology of the low-cost carriers business model that was never used before – typology based on the quality level of the services – that is important mainly from the customer's need to respect their requirements and expectations.

Another practical contributed is based on the illustration of possible ways through enhancements in organisational structure that will lead towards another cost reduction that is the main goal of the LCC's model and also, the author stresses the fact related to the customers – it is necessary get to know your customers better in each way, e.g. through loyalty programs. Another problem related to the low-cost carriers is that many carriers try to reduce expenses in way that is not really effective. Due to this inappropriate tactic the author helps to find the right balance between making investments to improve the experience which they offer and also maintaining their cost advantage. This was supported by questionnaire that reflects customer's willingness to pay for

extra services on-board and also it offers an overview of the services that are missing or that are insufficient.

According to the economic results that will emerged from mentioned questionnaire, author will create concept of possible low-cost carrier business model that will be given to the airline experts and which will cover the ability or non-ability to reach customer's expectations in way that will satisfy customers and their expected level of services on one side, and also economic and operations' business plan on another side.

## REFERENCES

- [1] Perovic, J. Air Passenger Market Analysis. 2015. Online Available at: <a href="https://www.iata.org/whatwedo/Documents/economics/passenger-analysis-mar-2015.pdf">https://www.iata.org/whatwedo/Documents/economics/passenger-analysis-mar-2015.pdf</a>
- [2] Button, K. The Impact of US-EU Open Skies Agreement on Airline Market Structures and Airline Networks. *Journal of Air Transport Management 15*, pp. 128-130, 2009.
- [3] Gudmundsson, P. New Entrant Airlines Life-cycle Analysis: Growth, Decline and Collapse. *Journal of Air Transport Management 4*, pp 217-228, 1998.
- [4] IATA Statistics. Airline Financial Monitor. Online Available at: https://www.iata.org/whatwedo/Documents/economics/Airlines-Financial-Monitor-Apr-15.pdf