

Economics and management
Ekonomika ir vadyba

PECULIARITIES OF COMPETITIVENESS ASSESSMENT OF AIRLINES

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Received 23 January 2022; accepted 20 October 2022

Abstract. The current state of the aviation market is characterized by intense competition and rapid change, brought about by deregulation, rapid technological development, industrial consolidation, and innovation. One of the key players in the aviation sector is airlines. In such a competitive environment, airlines that can adapt and change in the market gain a competitive advantage over other airlines, which is key to success. This article is aimed at understanding the concept behind competitive advantage, identifying the main business models in the commercial airline industry as well as finding the optimal competitiveness evaluation method and using it to assess the airline competitiveness.

Keywords: aviation, airlines, airline business models, competitive advantage, competitiveness assessment methods, airline competitiveness assessment.

Introduction

Aviation is one of the most global industries: connecting people, cultures, and businesses around the world (Addepalli et al., 2018; Directorate for Financial and Enterprise Affairs Competition Committee, 2014; Gittens et al., 2019; Ružica et al., 2017). Although the sector is highly dependent on a variety of challenges and factors, it has established itself as the most advanced and profitable industry (Addepalli et al., 2018). The current state of the aviation market is characterized by intense competition and rapid change brought about by deregulation, rapid technological development, industrial consolidation, and innovation. One of the key players in the aviation sector is airlines. In such a competitive environment, airlines that can quickly and efficiently adapt and change in the marketplace take advantage, which is key to victory in a highly competitive arena (Ružica et al., 2017). However, most airlines have so far focused on how to price basic tickets. This approach ignores the latest, fundamental changes in the industry: more and more revenue comes from additional items such as checked baggage, food onboard, the choice of higher-end seats, and more legroom. Given the growing importance of additional sales, besides the flight tickets, airlines cannot continue to simply change existing revenue management models in the hope of optimizing overall revenue

(Boin et al., 2017). It is important for airlines to develop competitive strategies or review inefficient ones. The competitiveness strategy is about being different. This means consciously choosing another set of activities to ensure a unique product.

Research problem – Airlines need to understand in which areas they need to be competitive.

The object of research – Airline competitiveness.

The aim of the study – Examine the peculiarities of airline competitiveness, choose a method to evaluate their competitiveness, and perform an analysis on that matter.

Tasks to achieve the goal:

1. Briefly introduce airlines and competitiveness as the essence.
2. Describe the competitiveness evaluation methods and compare them.
3. Present the evaluation performed according to a certain method, describe the results of the study.

Research methods – The analysis of the scientific literature, the analysis of statistical documents, the logical analysis, the systematic analysis, and the comparative analysis were used to determine the peculiarities of the organization of the implementation of the airline competitiveness strategy.

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1. Competitiveness and airlines

To start analyzing airline competitiveness, it is important to first understand competitiveness as a whole. Why is it so important to stay competitive and how to maintain one's competitiveness. It is also important to get acquainted with the existing business models in the commercial passenger airline industry.

1.1. What is competitiveness?

We each understand competitiveness differently. There is no one right answer, but it is important to understand this concept and delve into the various aspects of competitiveness. Professors Alexander Zuniga, Marysol Castillo-Palacio, and Lina Marcela Padilla-Delgado have examined the conceptualization and evolution of organizational competitiveness (OC) in their scientific article "Organizational Competitiveness: The Conceptualization and Its Evolution". Below is Table 1 with an understanding of the concept of OC in different decades.

Based on the above, organizational competitiveness is a complex construct that still denotes a lack of consensus theoretically and empirically, especially when competitiveness wants to be measured. Several scholars comprehend the construct as a one-dimensional construct that is composed of different items, while others argued that is a mul-

tidimensional construct integrated by factors of analysis. In addition, literature found qualitative and quantitative methods for building a scale of measurement. This situation implies that competitiveness, as a complex construct still requires a major analysis for reaching a conceptual consensus by the scientific community in terms of factors that influence competitiveness and its measurement.

1.2. Introduction of airlines

Forms of business models in the commercial airline industry are presented based on how the carrier earns revenue, its product offering, value-added services, revenue sources, and target customers. New competitive business interactions always lead to a certain adaptation of the business model to the competitor. There are currently three main airline business models (One Education, n.d.):

- Full-service carriers (FSC).
- Low-cost carriers (LCC).
- Charter carriers.

Full-service carriers. These airlines usually have a fairly large and diverse fleet of aircraft as they operate a variety of routes ranging from regional to long haul flights. These airlines generally have a good reputation for doing good business with government and business customers. A wide range of connecting flights, allowing long-haul

Table 1. Understanding the concept of OC in different decades (compiled by the authors based on Zuniga et al., 2019)

Proposal	Author	Decade
OC means having an advantage over market trends by better managing the supply chain by the trend over other competitors	Ansoff (1965)	1960
OC is an opportunity to operate strategically in the market based on competitive pressure in the industry	Porter (1980)	1980
OC is the ability to design, manufacture and deliver products to international markets in competition with international firms	Alic (1987)	1980
OC is the result of better performance through organizational capabilities and knowledge management	Cohen and Levinthal (1990)	1990
OC depends on the ability to gain long-term competitive advantage through a variety of sources such as opportunities, knowledge, processes, and more	Barney (1991)	1990
OC is a strong ability to compete successfully in global markets	Kogut (1993)	1990
OC is the result of 5 factors: reliability, cost, flexibility, quality, and speed. Achieve better results than competitors in the market	Slack, Chambers, and Johnston (1997)	1990
OC is a construct that determines the competitive position in terms of the ratio of resources that a firm may have	Eisenhardt and Martin (2000)	2000
OC is a set of factors that affect its operation. Decisive factors: prices, costs, quality, technological and organizational improvements, efficiency, the relationship between companies, the public sector and academia, human capital	Berumen (2006)	2000
OC is about having better results and opportunities compared to competitors	Orozco, Serpell, Molenaar and Forzael (2014)	2010
OC means the ability to adapt to environmental factors and successfully develop the company's business	Sauka (2014)	2010
OC is the ability of a company to maintain or improve its competitive position and returns	Camison and Fores (2015)	2010
OC is the ability to gain organizational value over time	Zhu and Cheung (2017)	2010
OC is the company's ability to compete with similar products offered by other companies that meet the needs of price, quality, and variety	Comanescu (2018)	2010

flights from small airports with a single ticket with one or more airlines from the same alliance. Greater comfort – on-board catering, luggage included in ticket prices, as well as business and first-class lounges. Convenient loyalty programs that offer reasonable rewards for traveling with a particular airline (or more commonly with a particular airline alliance) (AirlineRatings, n.d.-a).

In stark contrast to the FSC, the low-cost carrier (LCC) network is made up of one or more airports, called “bases”, from which the carrier routes to selected (usually secondary) airports. The LCC fleet usually consists of one type of aircraft (the most popular are the B737 and A320 family), which usually accommodate between 120 and 180 passengers. Planes fly short to medium point-to-point routes and are operated as much as possible because “an airplane doesn’t make money sitting on the ground”. Companies seek to minimize internal costs and sell tickets directly to the traveler rather than through ticket resellers (Swoboda, 2013).

Charter airlines usually focus on vacationing travelers who already have airfare included in their travel packages. These companies do not sell individual tickets, on the contrary, they sign contracts with travel agents for a certain number of passengers. These airlines don’t need to invest in marketing and reservation systems or plan how to fill a plane with passengers, all this is done by ticket resellers (or most often – travel agencies). However, there is also a fundamental problem with the importance of concluding proper contracts with tour operators. Supply, quite often, exceeds demand in this market, although it varies from country to country and depends very much on the travel characteristics of a particular country (Avjobs, n.d.).

Cargo airlines are not taken into consideration in this study, for the obvious reason, that their main transported goods are not passengers but cargo. The business model of cargo airlines is self-evident. They make a living from transporting the cargo of other companies. They usually operate at night when airports are less busy and landing fees are lower. There are no costs and “headaches” with transporting people. However, these companies are heavily dependent on concluding appropriate contracts with partners, who generally require a very high level of service and reliability (salood, n.d.).

While a healthy level of competition is important to keep the best services at the lowest possible prices, competition does not always guarantee the stability of the industry. Airlines have high fixed costs, which include the purchase/lease and maintenance of aircraft. Conversely, variable costs vary depending on the level of output. For airlines, these costs include fuel and salaries. Variable costs are usually relatively small, although they can be volatile (e.g. fuel prices, maintenance costs). Companies that combine high fixed with relatively low variable costs often try to spread their expenditure across multiple products (e.g. airline tickets). For airlines, this combination creates economic incentives to grow. Economists interpret this combination of factors as economies of scale, so the industry is often dominated by a few very large players (Wolla & Backus, 2018).

Competition drives future market development. However, airlines need to find the optimal way to defend themselves from and be able to attack competitors. Concerning airline competition, it should be borne in mind that forms of competition in a multi-layered market include:

- Airlines of the same alliance that share partners (are competitors at the same time).
- Airlines of other alliances.
- Other FSC.
- Other LCC.
- Other charter carriers.
- Other modes of transport (buses, trains, own transport).

All these forms of competition are parallel, encouraging continuous progress, increasing the importance of quality business adjustment (Ružica et al., 2017)

2. Competitiveness evaluation methods

There are multiple evaluation methods, concerning competitiveness assessment. Competitiveness, as can be seen above, is a complex structure, that consists of different categories, layers. There is no concrete method of evaluating competitiveness, since different aspects come into consideration, especially, when it comes to airline competitiveness. To define a method, it is wise to analyze the existing studies of evaluating airline competitiveness. See which criteria were taken into consideration and how they were executed in the analysis.

Fageda et al. in their article “Assessing airlines: Quality as a competitive variable”, published in 2014, have chosen to focus on airline service quality and the analyses undertaken to date in this sector. They examined the factors that explain evaluations of airlines quality. More specifically, they analyzed the relationship between quality perception of an airline company and variables of operator size, the number of airports from which a company operates, the business model adopted (network, low-cost, regional), and the financial conditions of the airline. They’ve constructed a database comprising information for several airlines in the two years available (2006 and 2009). They drew on various sources to gather data about the factors that might influence passenger assessments. Passenger assessments of airlines were obtained from a survey conducted among 8,638 passengers on 110 airlines (regional, national, and international companies). The airlines included in the survey operate at airports around the world. A cumulative analysis shows that ninety percent of the companies operate from at least 30 different airports. European airlines constitute 61 percent of the sample. In their study the authors concluded that larger airlines have higher perceived quality, with the existence of density economies, this gives a competitive advantage. The dispersion of an airline’s traffic among different airports is not a significant variable and may hurt perceived quality. European regional carriers are not rated highly in terms of quality, for their pick of turboprop aircraft for regional routes, unlike jets, these aircraft are louder, lack in comfort and speed. The

author’s examination of financial characteristics revealed interesting findings: namely, that the financial conditions of an airline affect users’ perception of quality. Moreover, it seems that the economic crisis has served to undermine passenger assessments of quality further as airlines seek to adjust the quality of service offered to passengers as a cost-cutting measure.

Poberezhna in her article “Comprehensive assessment of the airlines’ competitiveness”, published in 2018, is focusing on the financial aspect assessment of selected airlines. She took the following indicators to assess the competitiveness of airlines:

- Property status of the airline and its profitability;
- Liquidity, capacity to pay, and credibility;
- Financial sustainability and health;
- Cost-effectiveness;
- Business activity.

Poberezhna used prospective analysis of financial resources element in the competition on the air services market to evaluate future competitiveness of specific airline. Furthermore, she proposed several measures to improve the competitiveness of the airlines. The author has created a forecast of the upcoming three years, in case of a successful implementation of the proposed improvement measures by the airline. In this forecast, it can be observed that the airline attains the growth of both net income and profit.

Zhao and Chen in their article “An intelligent evaluation method to analyze the competitiveness of airlines”, published in 2020, have utilized a self-organizing mapping (SOM) neural network to self-organize and self-learn the samples in the state of no supervision and prior knowledge. The training steps of high convergence speed and high clustering accuracy are determined based on the

multistep setting. The typical airline’s index data were utilized to verify the effect of the self-organizing mapping neural network on the airline competitiveness analysis. The simulation results show that the self-organizing mapping neural network can accurately and effectively classify and evaluate the competitiveness of airlines, and the results have important reference values for the allocation of traffic rights resources.

By comparing the three articles, it can be stated that the best method for evaluating the competitiveness of airlines is by multicriteria approach since there are no clear criteria for evaluating competitiveness. In the third part of this article, criteria will be specified and an analysis performed.

3. Airline competitiveness evaluation

Based on the second part of this article, a multicriteria method approach was selected for airline competitiveness evaluation. The focus of this study is aimed at airline product quality, how it is perceived by passengers and experts.

A list of 26 airlines, operating in Europe, with the highest number of passengers transported in the year 2020 was created (see Table 2).

For expert evaluation, data has been taken from the “Skytrax” website (<https://skytraxratings.com>). “Skytrax” has a leading international rating system that classifies airlines and airports by the quality of product and staff service standards. When it comes to airline rating, the ratings are based on the evaluation of product and service standards for both the onboard and airport environments, using a unified and consistent rating system (Skytrax, n.d.). The criteria for evaluating airline product quality are listed in Tables 3, 4 and 5. “Skytrax” evaluates each criterion by a best of 5 system.

Table 2. List of airlines, based on the number of passengers transported in the year 2020 (The information was taken from the official company websites and/or annual reports for the year 2020)

Airline	FSC LCC Charter	Country	Number of passengers in 2020 (millions)	Alliance
Aegean Airlines	FSC	Greece Cyprus	5.17	Star Alliance
Aeroflot Group	FSC	Russia	30.16	Sky Team
Air Europa	FSC	Spain	3.13	Sky Team
Air France- KLM	FSC	France Netherlands	34.1	Sky Team
airBaltic	LCC	Latvia	1.36	
Easyjet	LCC	United Kingdom Austria Switzerland	16.09	
Finnair	FSC	Finland	3.48	oneworld
Aer Lingus (IAG)	FSC	Ireland United Kingdom Spain	31.3	oneworld
British Airways (IAG)	FSC			
Iberia (IAG)	FSC			
Vueling (IAG)	LCC			

End of Table 2

Airline	FSC LCC Charter	Country	Number of passengers in 2020 (millions)	Alliance
Jet2.com	Charter	United Kingdom	2.85	
LOT Polish Airlines	FSC	Poland Hungary	3.59	Star Alliance
Lufthansa Group	FSC	Germany Austria Belgium Switzerland	36.35	Star Alliance
Norwegian Air Shuttle ASA	LCC	Norway Sweden	6.87	
Pegasus Airlines	LCC	Turkey	14.71	
Ryanair	LCC	Ireland Malta Poland United Kingdom	52.01	
S7 Airlines	FSC	Russia	12.35	oneworld
SAS Group	FSC	Sweden Norway Denmark Ireland	8.81	Star Alliance
TAP Air Portugal	FSC	Portugal	4.66	Star Alliance
TUI Airways	Charter	United Kingdom	2.02	
Turkish Airlines	FSC	Turkey	27.95	Star Alliance
Ural Airlines	FSC	Russia	5.6	
Volotea	LCC	Spain	3.8	
Wizz Air	LCC	Hungary United Kingdom	16.67	

Table 3. “Skytrax” airline airport services quality ranking subcategories (The information was taken from the Skytrax, n.d.)

Category	Airport Services				
Subcategory	Check-in facilities	Check-in staff service	Boarding efficiency	Staff assistance on arrival	Baggage delivery times

Table 4. “Skytrax” airline onboard product quality ranking subcategories (The information was taken from the Skytrax, n.d.)

Category	Onboard Product					
Subcategory	Seat comfort	Cabin safety information	Cabin and set cleanliness	Washroom cleanliness	Selection of food and beverage (complimentary and/or with charge)	Food and beverage prices

Table 5. “Skytrax” airline cabin staff service quality ranking subcategories (The information was taken from the Skytrax, n.d.)

Category	Cabin Staff Service								
Subcategory	Attention to cabin safety	Service skills and proficiency	Speed and timing of services	Enthusiasm and friendliness	Service hospitality	Interaction with customers	Language skills	Responding to customer requests	Quality consistency among staff

After the ratings for each airline have been collected, a data ranking approach was required, in order to evaluate which airlines are more competitive in a specific category. TOPSIS (Technique for Order of Preference by Similarity to Ideal Solution) ranking method was selected. TOPSIS is a multi-criteria decision analysis method. It compares a set of alternatives based on a pre-specified criterion. The method is used in the business across various industries, every time it is required to make an analytical decision based on collected data (Soczewica, 2020). The formulas used in the calculation are listed below:

$$n_{ij} = \frac{x_{ij}}{\sqrt{\sum_{i=1}^n x_{ij}^2}} \cdot w_j, \quad (1)$$

where: n_{ij} – normalized metric in between 0 and 1; x_{ij} – value of a specific criteria; w_j – assigned weight for each criteria.

In order to calculate the normalized metric, weights for each criterion were assigned, based on their importance for the specific category (see Tables 6, 7 and 8)

After calculation of the normalized metrics, it is required to determine the best alternative

$$V^+ = (v_1^+, v_2^+, \dots, v_n^+) = \max_i n_{ij}, \quad (2)$$

and worst alternative for each criterion:

$$V^- = (v_1^-, v_2^-, \dots, v_n^-) = \min_i n_{ij}. \quad (3)$$

The next step is to calculate the Euclidean distance between the target alternative and the best alternative:

$$s_i^+ = \sqrt{\sum_{j=1}^n (n_{ij} - v_i^+)^2}, \quad (4)$$

and worst alternative:

$$s_i^- = \sqrt{\sum_{j=1}^n (n_{ij} - v_i^-)^2}. \quad (5)$$

For each alternative a similarity to the worst alternative is calculated with a formula:

$$P_i = \frac{s_i^-}{(s_i^- + s_i^+)}. \quad (6)$$

After performing the calculation, airline rankings were achieved and shown in Table 9.

As can be seen from the results, the highest quality product can be found in airlines, such as “Lufthansa”, “KLM”, and “Aer Lingus”. Whereas the lowest quality product is found in airlines, such as “Wizz Air”, “S7 Airlines”, and “Ural Airlines”. However, it is not wise to determine a quality of a product based solely on expert opinion. The end consumers are the passengers, who not only fly more frequently, but in general, their numbers are much higher than of experts on a particular flight. Thus a comparison between expert and passenger evaluation of airlines is required, to achieve a more clear picture.

For this study, general ratings of each airline were collected both from “Skytrax” and “AirlineRatings” websites: <https://www.airlineratings.com/airline-passenger-reviews/>. “AirlineRatings” was developed to provide everyone in the

Table 6. “Skytrax” airline airport services quality ranking subcategory weights (performed by the authors)

Category	Airport Services				
Subcategory	Check-in facilities	Check-in staff service	Boarding efficiency	Staff assistance on arrival	Baggage delivery times
Weight w_j	0.2	0.2	0.2	0.2	0.2

Table 7. “Skytrax” airline onboard product quality ranking subcategory weights (performed by the authors)

Category	Onboard Product					
Subcategory	Seat comfort	Cabin safety information	Cabin and set cleanliness	Washroom cleanliness	Selection of food and beverage (complimentary and/or with charge)	Food and beverage prices
Weight w_j	0.3	0.1	0.15	0.15	0.1	0.2

Table 8. “Skytrax” airline cabin staff service quality ranking subcategory weights (performed by the authors)

Category	Cabin Staff Service								
Subcategory	Attention to cabin safety	Service skills and proficiency	Speed and timing of services	Enthusiasm and friendliness	Service hospitality	Interaction with customers	Language skills	Responding to customer requests	Quality consistency among staff
Weight w_j	0.05	0.1	0.2	0.1	0.1	0.05	0.15	0.15	0.1

Table 9. Airline rankings according to the calculations based on the expert evaluation (performed by the authors)

Airline	Airport Services	Onboard Product	Cabin Staff Service
Lufthansa Group	1	1	1
KLM (Air France-KLM)	4	4	3
Aer Lingus (IAG)	3	10	2
Aeroflot Group	11	2	6
Norwegian Air Shuttle ASA	2	7	10
Finnair	9	3	8
Easyjet	7	9	7
Iberia (IAG)	5	14	5
Aegean Airlines	8	5	12
Air France (Air France-KLM)	15	8	4
British Airways (IAG)	6	6	18
Air Europa	12	12	9
SAS Group	10	13	13
Vueling (IAG)	13	17	11
TUI Airways	14	11	19
Ryanair	19	16	14
Turkish Airlines	18	15	16
Jet2.com	16	18	17
TAP Air Portugal	22	21	15
LOT Polish Airlines	21	20	20
Pegasus Airlines	17	22	23
airBaltic	23	19	21
Volotea	25	23	22
Ural Airlines	20	26	25
S7 Airlines	24	24	26
Wizz Air	26	25	24

world a one-stop-shop for everything related to airlines, formed by a team of aviation editors, who have forensically researched nearly every airline in the world (Airline-Ratings, n.d.-b). On this website, passengers can leave their opinion of an airline based on their experience on one or more flights, based on specific criteria. The only downside is that there is no general overview, on what is the average rating for an airline, based on specific criteria. Only a general average rating for an airline can be found, based on all passenger reviews. Thus a basic comparison of airline general ratings was performed by the authors and can be seen in Figure 1.

As it can be observed, experts are ranking most airlines higher than the passengers, the only exceptions are “Jet2.com” airline, which received a similar score from both the passengers and experts, and “S7 Airlines”, which received a higher rating from the passengers, than from experts. The biggest difference can be observed with “Iberia”, “Lufthansa”, and “Vueling”. These airlines received much higher ratings from experts than from the passengers.

For the final comparison, all of the data was combined in order to see whether the passenger and expert ratings

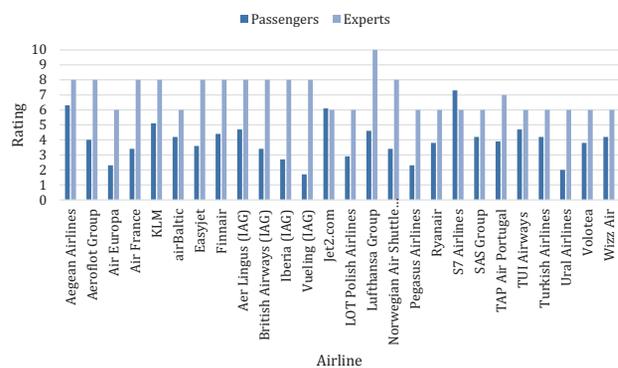


Figure 1. General airline ratings of passengers and experts (compiled by the authors from Skytrax, n.d. and AirlineRatings, n.d.-b)

reflect the reality, which is the number of passengers carried in the year 2020. In addition, the authors want to analyze whether the airline business model and being part of an alliance have an effect both on the ratings and passenger numbers. See the compiled results in Table 10.

Table 10. Airline ratings (from best to worst) based on both average passenger and expert ratings combined (performed by the authors)

Airline	FSC LCC Charter	Alliance	Number of passengers in 2020 (millions)	Average passenger rating	Average expert rating	Average passenger and expert rating
Lufthansa Group	FSC	Star Alliance	36.35	4.6	10	7.3
Aegean Airlines	FSC	Star Alliance	5.17	6.3	8	7.15
S7 Airlines	FSC	oneworld	12.35	7.3	6	6.65
KLM (Air France-KLM)	FSC	Sky Team	34.1	5.1	8	6.55
Aer Lingus (IAG)	FSC	oneworld	31.3	4.7	8	6.35
Finnair	FSC	oneworld	3.48	4.4	8	6.2
Jet2.com	Charter		2.85	6.1	6	6.05
Aeroflot Group	FSC	Sky Team	30.16	4	8	6
Easyjet	LCC		16.09	3.6	8	5.8
Air France (Air France-KLM)	FSC	Sky Team	34.1	3.4	8	5.7
British Airways (IAG)	FSC	oneworld	31.3	3.4	8	5.7
Norwegian Air Shuttle ASA	LCC		6.87	3.4	8	5.7
TAP Air Portugal	FSC	Star Alliance	4.66	3.9	7	5.45
Iberia (IAG)	FSC	oneworld	31.3	2.7	8	5.35
TUI Airways	Charter		2.02	4.7	6	5.35
airBaltic	LCC		1.36	4.2	6	5.1
SAS Group	FSC	Star Alliance	8.81	4.2	6	5.1
Turkish Airlines	FSC	Star Alliance	27.95	4.2	6	5.1
Wizz Air	LCC		16.67	4.2	6	5.1
Ryanair	LCC		52.01	3.8	6	4.9
Volotea	LCC		3.8	3.8	6	4.9
Vueling (IAG)	LCC	oneworld	31.3	1.7	8	4.85
LOT Polish Airlines	FSC	Star Alliance	3.59	2.9	6	4.45
Air Europa	FSC	Sky Team	3.13	2.3	6	4.15
Pegasus Airlines	LCC		14.71	2.3	6	4.15
Ural Airlines	FSC		5.6	2	6	4

From the compiled results it is observed that “Lufthansa” is still ranked the best airline, based on the product quality, and its carried passenger numbers were second largest in 2020. The airlines following also had relatively high passenger number. It can be stated that being in an alliance has a positive effect on Full-Service Carriers in terms of passenger numbers and passenger/expert ratings. However, the exception is the Low-Cost Carrier “Ryanair” who had the highest number of passengers in 2020 despite not being a part of an alliance and having a mediocre product quality rating. The reason for this can be that the passengers are willing to sacrifice product quality for cheap ticket prices and the large point-to-point destination variety and frequency, which the airline has in abundance.

Conclusions

By analyzing how competitiveness is understood it was observed that it is a complex construct that still denotes a

lack of consensus theoretically and empirically, especially when it wants to be measured. There is no concrete method of evaluating competitiveness since different aspects come into consideration. However, competitiveness is widely spread amongst airlines and is one of the key factors for airlines’ success. By comparing different airline competitiveness evaluation methods, it was observed that the best way to evaluate competitiveness is by using a multicriteria approach since there are no clear criteria for evaluating competitiveness.

After collecting and analyzing the airline data and statistics, expert and passenger reviews of airlines, it was observed that Full-Service Carriers have an advantage by having greater comfort, and service quality. In addition, being a part of an alliance can bring up a variety of connecting flights, which contributes to higher passenger numbers. In general, having a higher quality product can contribute to higher passenger numbers and greater reviews both from passengers and experts alike, which in return can func-

tion as a good advertisement. While airline product quality is important for passengers, this is not always the case. Passengers are willing to sacrifice product quality over a cheaper ticket price and high frequency of flights.

Disclosure statement

The authors declare that they have no conflicts of interest.

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ORO LINIJŲ KONKURENCINGUMO VERTINIMO YPATUMAI

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Santrauka

Dabartinei aviacijos rinkos būklei būdinga intensyvi konkurencija ir greiti pokyčiai, kuriuos sukėlė reguliacijų panaikinimas, sparti technologijų plėtra, pramonės konsolidacija ir inovacijos. Vienas iš pagrindinių aviacijos sektoriaus veikėjų yra oro linijos. Tokioje konkurencinėje aplinkoje oro linijos, galinčios prisitaikyti ir keistis rinkoje, įgyja konkurencinį pranašumą prieš kitas oro linijas, o tai yra raktas į sėkmę. Šio straipsnio tikslas yra suprasti konkurencinio pranašumo sampratą, identifikuoti pagrindinius verslo modelius komercinių oro linijų pramonėje bei rasti optimalų konkurencingumo vertinimo metodą ir jį pritaikyti oro linijų konkurencingumui įvertinti.

Reikšminiai žodžiai: aviacija, oro linijos, oro linijų verslo modeliai, konkurencinis pranašumas, konkurencingumo vertinimo metodai, oro linijų konkurencingumo vertinimas.