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Empirical research on user satisfaction with the transport and the supporting services at Croatian airports

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ABSTRACT

Air traffic is a very important traffic branch, since it provides the possibility of fast travelling long distances between countries and contributes to the development of economy, trade and tourism. The number of long-distance travels has been increasing, people have started to travel more and therein, the importance of air traffic has been growing. The Republic of Croatia has to take advantage of its favourable geographical position at the crossroads of West and East Europe, which facilitates the development of air traffic. Airports have major significance for the development of air traffic, and it is of great importance that they provide high quality services, i.e. that their users are satisfied. With the aim of establishing the level of user satisfaction with transportation and the supporting services in Croatian airports, an empirical research via an online survey has been conducted, where the respondents were asked about how often they used the airports in the Republic of Croatia, their supporting services, the importance of the factors influencing the decision-making on buying the ticket for the specific airline and overall satisfaction with the services in Croatian airports. The results of the primary research suggest that the users, when deciding on buying the ticket, put the price and safety first. The users are not entirely satisfied with the price-quality ratio and are not content with the prices of the parking in airports and with the airport facilities that provide hospitality services. Furthermore, it has been established that user satisfaction with transportation and the supporting services can be perceived through three factors: 1) additional services; 2) user satisfaction with additional services; 3) satisfaction with the staff and prices of additional services. The paper also analysed user satisfaction with transportation and the supporting services considering socio-demographic characteristics of the respondents. The key limitation of the research paper is the impossibility of conducting the research on site, at Croatian airports, where the users have "contact with the service", especially the supporting services. It is highly plausible that conducting research at the airports would contribute to more representative research findings and recommendations for the management.

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1 Introduction

Year after year, the number of long-distance travels is increasing. The major role in this occupies air transport, since it enables covering long distances in a very short time. Technological advancements have provided better availability of air transport services because the prices are declining, and the competition is growing. Since the Republic of Croatia is a country relying on tourism, air transport represents an extremely important factor in passenger traffic, especially during the summer. But, air trans-

port is used more and more for everyday business travels as well. Airplane is becoming a more valuable means of transport in the developed and the under-developed countries, providing connection of the remote locations that can even be on different continents (Rocha, 2017). Air connection is the key initiator of growth, especially for tourist destinations. Air transport enables integration into the economy nationally, regionally and internationally, facilitating the development of tourism and creating the possibility for employment in tourist destinations (Dimitriou and Sartzetaki, 2018). The aim of this paper is

to show the dynamics and the importance of air transport and the development of airports in the Republic of Croatia. Additionally, the paper will present the results of the empirical research that has been conducted with the aim of analysing the satisfaction, the frequency of use and the experiences of the passengers that have used the services at the Croatian airports.

The secondary and the primary research have been conducted for the purpose of this paper. The secondary data are included in the theoretical part of the paper, and they encompass the data available in scientific and professional papers from domestic and foreign literature, the data from the scientific books, the data from the International Air Transport Association, the Statistical Yearbook and the information available on the websites and in annual reports filed by the Croatian airports. In the research part of the paper, the primary data collected with the method of a survey were used, on the sample of $n=132$ respondents. The results were analysed with the methods of descriptive and inferential statistics in the IBM SPSS 24 statistical package for data analysis. The paper is structured in five sections.

In the introductory section, the topic, the goal, the structure of the paper, the methods and sources used for the elaboration of this paper are presented. The second chapter provides an overview of the existing foreign and domestic research in the area of user satisfaction with airports. The research section gives the description of the research instrument, the findings, limitations and recommendations for further research. The last chapter, chapter four, is the conclusion of the paper.

2 Literature review

The overview of the existing research showed that the analysis of user satisfaction with airports and the supporting services at the airports is the research topic of Prentice and Kadan (2019); Farooq et al. (2018); Naletina, Petljak and Kapović (2018); Tsafarakis, Kokotas, Pantouvakis (2018); Aueanantakorn (2015); Ringle, Sarstedt, Zimmermann (2014); Hussain, Al Nasser, Hussain (2014); Arif, Gupta, Williams (2013); Baker (2013); Kong Wing Chow (2013); Kim and Lee (2011); An and Noh (2009); Clemes et al. (2008); Fodness and Murray (2007); Gilbert and Wong (2003); Oyewole (2001).

Aueanantakorn (2015) conducted a research on the factors influencing user satisfaction in two Asian airports (Levant and EAX) and compared the differences among the responses of the users of both airports. The results showed that for the passengers of both airports, there is a relationship between the quality of the on-flight service and customer satisfaction. However, only the passengers that have used EAX Airways have shown satisfaction with the price, marketing and the image and quality of the service. It suggests that the quality of the on-flight service is the factor influencing user satisfaction. Ringle, Sarstedt and Zimmermann (2014) conducted a research on user satisfaction with airports and introduced the perceived

safety as the carrier of satisfaction, the element that had until then not been considered in literature. Research results show that the perceived safety is one of the key initiators that can explain the level of the overall user satisfaction. The perceived safety has a lot more influence on the satisfaction of the users that travel as tourists than on those who travel for business reasons. That implies that airlines should put more emphasis on the safety aspects in the advertising directed towards the passengers travelling as tourist (Ringle, Sarstedt, Zimmermann, 2014).

Hussain, Nasser and Hussain (2014) investigated the relations between the quality of the service, service provider image, customer expectations, perceived value, user satisfaction and loyalty to the specific product/service brand in Dubai Airport. In the research initiative that uses a quantitative approach, the data from 253 questionnaires were used. The analysis of the data suggests that the quality of the service, perceived value and the image of the trade mark have a significant influence on customer satisfaction, which in turn can lead to loyalty towards the specific brand (Hussain, Nasser, Husain, 2014).

Kong Wing Chow (2013) analysed the relation between customer satisfaction, user complaints and the quality of the provided service at the Chinese airports. The number of complaints increases with the rising number of the lost luggage, but with a descending rate. On the other hand, timely departures and arrivals of the flights do not have a significant influence on the clients' complaints. Airlines that are not owned by the government, nor privately owned, receive considerably more complaints than those owned by the government, and the highest number of complaints is filed during the third quarter that covers the high season of summer holidays. Namukasa (2013) investigated the impact of the quality of the services airports provide on the satisfaction of their users and their loyalty. The research showed that the quality of the service before, during and after the flight has a significant influence on customer satisfaction. Moreover, customer satisfaction, as a moderating variable, also influences the loyalty of the passengers. It could also be noticed that consumer satisfaction differs from person to person, since some were more interested in the off-flight services, some in the on-flight services and some wanted the possibility of additional luggage.

Clemes et al. (2008) analysed the factors influencing user satisfaction in air transport. The analysis was conducted on the sample of 428 passengers. The dimensionality of the perceived quality of the service on international flights was analysed and seven dimensions were isolated. The dimensions include: punctuality, insurance, conformity, staff courtesy, food and safety. The findings show that these seven dimensions positively correlate with the perceived quality of the service in international air transport, and out of these seven dimensions, safety and insurance are most important. Punctuality is the least important dimension, according to the perception of the passengers. Besides that, the results show that the passenger perception of the quality of international tourist service will dif-

fer according to the age, gender, income, profession and marital status of the passengers.

Many papers analyse air transport and airports in the Republic of Croatia (Naletina, Petljak, Kapović, 2018; Bajić, Tatalović and Kučko, 2014; Drljača, Pašagić Škrinjar, Brnjac, 2012; Gašparović, Jakovčić and Vrbanc, 2012; Peović, Vince and Štimac, 2012; Gašparović, 2011; Vidović, 2010; Pavlin, 2000; Pavlin, Roguljić, Sikora, 2003), investigating air cargo transport in the Republic of Croatia, the relation between tourism and air transport, low-cost carriers, the influence of liberalization on the air transport market in Croatia and customer satisfaction with the services at the airports.

Pavlin (2006) analyses the condition of airports in the Republic of Croatia and points out that, although there are many airports, Croatia falls behind regarding the realized turnover and technological development. The emphasis was placed on the improvement and development of airports, modernization of the services and the prolongation of the season which is, especially in the south of the country, limited only to the summer months. He concludes that there is a need for developing the Strategy for Airport Development or the National Plan for Airport Development. Gašparović (2011) refers to the connection between tourism and air transport in the Republic of Croatia. The data on the number of passengers in airports and airfields were analysed and those data correlate with the number of the overnight stays. The interdependence of the number of the transported passengers with the number of the passengers at the airports and the airfields was established. The conclusion indicates that there is high seasonality - most passengers travel in the summer months. Peović, Vince and Štimac (2012) analyse the impact of globalization on the development of strategies and the economy of the countries and their influence on the development of air transport. The special relevance is given to the accession of the Republic of Croatia to the European Union, since this has opened the doors for European funds that are primarily intended for great infrastructural projects. Further development of Croatian airports will largely depend on the knowledge and capability of domestic experts (Peović, Vince, Štimac, 2012).

Bajić, Tatalović and Kučko (2014) investigate the impact of liberalization on Croatian air transport market and point out that it has significantly influenced the rise of demand for international regular passenger flights. They hold how air transport in Croatia is becoming more demanding and dynamic, analyse the competition and point to the fact that domestic airline companies have to continue with the initiated processes of restructuring and improve efficiency of their business models. Gašparović, Jakovčić and Vrbanc (2012) highlight the importance of low cost carriers for the Republic of Croatia. They investigate the seasonality of air passenger transport and come to the conclusion that in the summer months, when most passengers are transported, there are many low cost flights depending on the tourists. Zagreb Airport is the only one that has mostly business motivated travels in its business structure (Gašparović, Jakovčić, Vrbanc, 2012).

Regarding the research of airport quality and the satisfaction of the passengers with the air transport services/airports in the Republic of Croatia, there are not many papers dealing with the subject, which justifies the necessity for conducting the primary research.

3 Research on user satisfaction with the transport and the supporting services at the airports

In this chapter research instrument will be explained, followed by socio-demographic characteristics of the respondents, research results analysis and limitations and recommendations for further research.

3.1 Research instrument

The respondents filled out the questionnaire regarding user satisfaction with the transport and the supporting services at Croatian airports. The questionnaire consists of three parts. The first part of it relates to 9 closed-ended questions and one rating scale. While in the second part, there are 24 statements where the respondents expressed their level of agreement with the statements regarding their satisfaction with Croatian airports on the Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree). In the third part, the respondents gave the account of their socio-demographic characteristics (age, gender, work status, personal monthly income, the level of education and region there live in).

The primary research had the aim of establishing user satisfaction with the airport services in the Republic of Croatia. The instrument of this research was a highly structured questionnaire that consisted of 17 questions. The respondents were asked to answer the questions relating to:

- Ad 1) the use of Croatian airport services;
- Ad 2) the busiest airports;
- Ad 3) the purpose of the travels;
- Ad 4) travel frequency;
- Ad 5) destinations;
- Ad 6) airline services providers;
- Ad 7) services used at the travels;
- Ad 8) the means of transport to the airport;
- Ad 9) the evaluation of the factors influencing the decision-making on purchasing the ticket of the specific airline;
- Ad 10) ranking the elements that Croatian airports could improve upon on the scale from 1 to 9, 1 being the highest, and 9 the lowest grade;
- Ad 11) the level of agreement with the statements relating to their satisfaction with the Croatian airports on the Likert scale from 1 to 5, where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree;
- Ad 12) the age of the respondents;
- Ad 13) the gender of the respondents;

Table 1 Socio-demographic characteristics of the respondents

| Variable | Category | N | % |
|-------------------------|--|----|-------|
| Gender | male | 58 | 43.90 |
| | female | 74 | 56.10 |
| Age structure | 18 to 25 | 39 | 29.50 |
| | 26 to 35 | 64 | 48.50 |
| | 36 to 45 | 23 | 17.40 |
| | 46 to 55 | 4 | 3.00 |
| | over 56 | 2 | 1.50 |
| Level of education | no qualifications/no elementary education | 0 | 0.00 |
| | elementary education | 0 | 0.80 |
| | qualified (a 3-year vocational school) | 2 | 1.50 |
| | highly qualified (a 4-year vocational school or a gymnasium) | 20 | 15.20 |
| | student | 31 | 23.50 |
| | higher or highest level of education | 67 | 50.80 |
| | master's/doctorate | 12 | 9.10 |
| Work status | permanent employment | 74 | 56.10 |
| | employed – definite contract | 18 | 13.60 |
| | part-time | 2 | 1.50 |
| | student service contract | 27 | 20.50 |
| | self-employed | 3 | 2.30 |
| | unemployed | 8 | 6.10 |
| Personal monthly income | less than 1,200 HRK | 8 | 6.10 |
| | 1,201 to 2,000 HRK | 10 | 7.60 |
| | 2,001 to 3,500 HRK | 11 | 8.30 |
| | 3,501 to 5,500 HRK | 15 | 11.40 |
| | 5,501 to 7,000 HRK | 26 | 19.70 |
| | 7,001 to 9,000 HRK | 20 | 15.20 |
| | over 9,000 HRK | 33 | 25.00 |
| | no personal monthly income | 9 | 6.80 |

Source: empirical research

Ad 14) the work status of the respondents;

Ad 15) personal monthly income;

Ad 16) the level of education and

Ad 17) the region they live in.

The questionnaire was designed based on the previous research listed in the overview of the domestic and foreign literature. The research was conducted with a combination of the methods (secondary and primary data analysis) usually used in researches, with the aim of gaining more answers; with personal interviews and with sharing the link leading to the questionnaire designed at the SurveyMonkey and disseminated via social networks.

3.2 Socio-demographic characteristics of the respondents

The total number of n=136 respondents participated in the research, but, considering that four respondents said they had never used Croatian airport services, the analysis was conducted on 132 respondents that have answered affirmatively to this question and carried on with the survey.

Most respondents (Table 1) were female, 56.10%, i.e. there were 43.9% of male respondents. Regarding the age structure, most of the respondents were in the age group between 26 and 35 (48.50%) and in the group from 18 to 25 years of age (29.50%). More than half of the respondents have high education, i.e. they have attended a university. 56.10% respondents are employed and have permanent work status. Regarding the personal income, most respondents listed the personal monthly income of over 9,000 HRK (25.00%).

3.3 Research result

3.3.1 The behaviour of the respondents when using airport services

Most respondents, 80%, have most often travelled from Zagreb Airport. That fact that most respondents were from Zagreb implies the limitation of the conduct primary research, The rest of them listed other Croatian airport almost evenly (Split (3.8%), Dubrovnik (3.0%), Zadar (2.3%), Rijeka (1.5%), Pula (2.3%) and Osijek (0.8%)). Most respondents (57.6%) said that the main



Figure 1 The use of airline services providers
Source: empirical research.

purpose of their travels was travelling to a tourist destination. A little less than 30% mostly travel for business purposes and 12.1% respondents mostly travel to visit their families. The greatest number of the respondents travels once a year (44.7%) and 2 to 5 times a year (40.2%), 12 of them stated they travelled 6 to 10 times a year, and 8 of them more than 11 times a year. Most respondents have travelled to the countries of the European Union (66.7% respondents), and the rest of Europe (10.6%). Other destinations are equally represented, and the fewest respondents have travelled to Australia, only 2.

Then, the respondents were asked to list the airline companies they use. More than half of them (53.8% re-

spondents) have most often used the services of Croatia Airlines, then the services of Ryanair (8.3%), Lufthansa (6.1%) and Qatar Airlines (4.5%), while the services of other airlines are not used very often (see Figure 1). On Figure 1 it can be seen that some respondents gave multiple answers for the usage of airline service providers (for example: Ryanair and Eurowings).

As seen from Figure 2, the respondents were asked to list the services they use before the very flight, and the services most often used are the standard ticket, the standard ticket and additional luggage or the standard ticket, additional luggage and insurance, while other services are used less and are mentioned individually. The

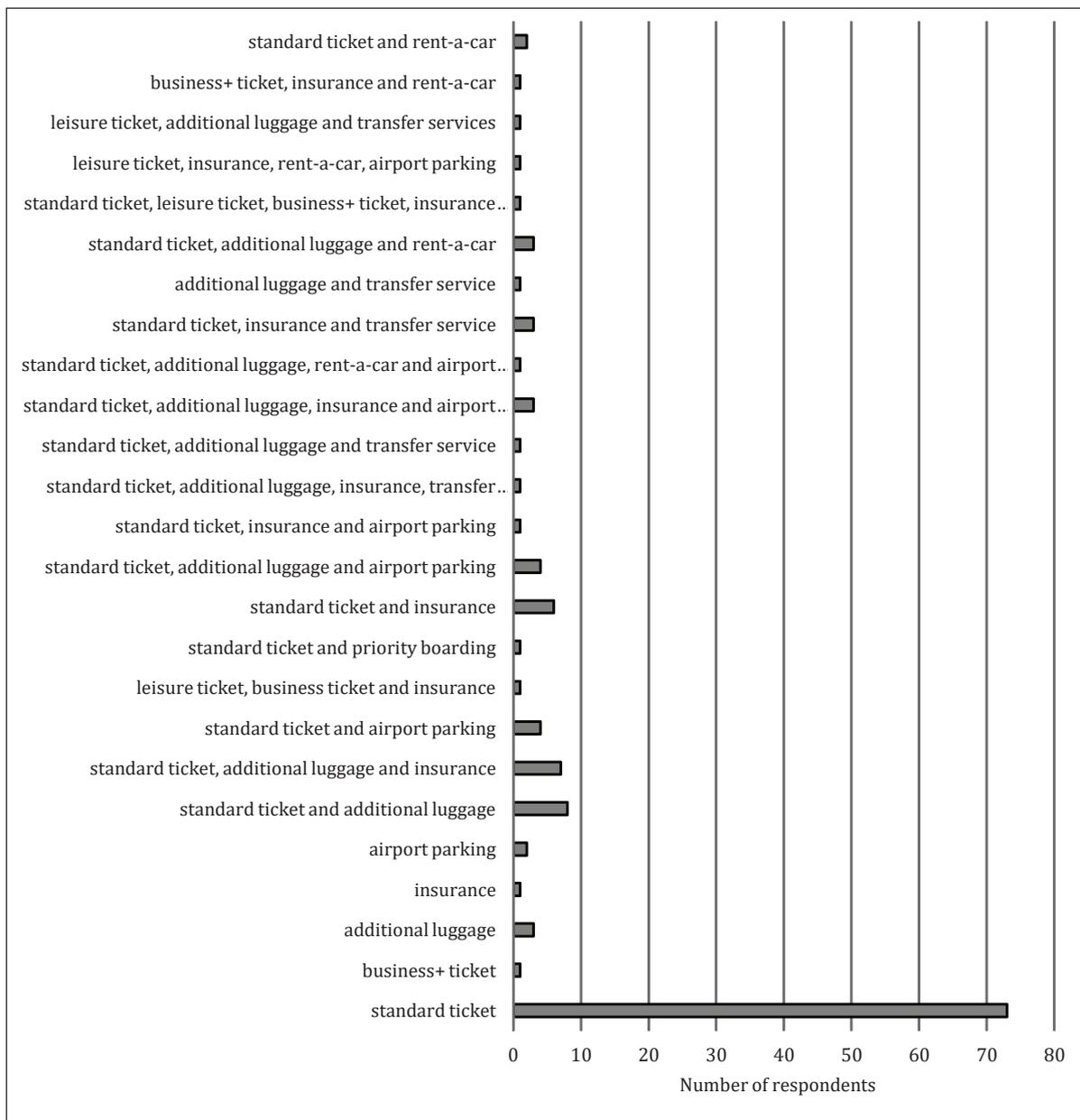


Figure 2 Use of pre-flight services
Source: empirical research.

standard ticket was the most frequent answer due to the fact that customers are often not ready to pay for any additional services. While those services for which consumers has to pay the highest price are those with the lowest frequency such as business ticket, additional luggage, transfer service, etc.

3.3.2 Ranking the factors that influence the process of decision-making on the purchase of the ticket of the specific airline company

In addition, the respondents were asked to rank the following elements: the mode of payment, ticket price, food and beverages, how simple is the online booking,

conformity, staff courtesy, organization of transport to the airport and punctuality, and their influence on deciding which airline company to choose. They were also asked to mark from 1 to 9 which of the elements Croatian airports should build on, where 1 was the highest and 9 the lowest grade. The respondents ranked the price as the most important element, and then there is safety and punctuality, while the possibility of additional services and how the airport is arranged were least important factors (Table 2).

Table 2 Ranking of the factors influencing the decision on which airline to choose

| | 1 | 2 | 3 | 4 | 5 | Rank |
|------------------------------|--------------|--------------|--------------|--------------|--------------|-------------|
| | n (%) | |
| Ticket price | 1 (0.80) | 2 (1.50) | 11 (8.30) | 31 (23.50) | 87 (65.90) | 1 |
| Safety | 5 (3.80) | 6 (4.50) | 12 (9.10) | 31 (23.50) | 78 (59.10) | 2 |
| Conformity of the seats | 16 (12.10) | 25 (18.90) | 41 (31.10) | 34 (25.80) | 16 (12.10) | 7 |
| Airport arrangement | 25 (18.90) | 33 (25.00) | 51 (38.60) | 17 (12.90) | 6 (4.50) | 9 |
| Staff courtesy | 14 (10.60) | 18 (13.60) | 47 (35.60) | 34 (25.80) | 19 (14.40) | 6 |
| Payment mode | 11 (8.30) | 3 (2.30) | 41 (31.10) | 45 (34.10) | 32 (24.20) | 5 |
| Reputation of the airline | 4 (3.00) | 9 (6.80) | 26 (19.70) | 56 (42.40) | 37 (28.00) | 4 |
| Offer of additional services | 24 (18.20) | 28 (21.20) | 42 (31.80) | 26 (19.70) | 12 (9.10) | 8 |
| Adhering timetable | 5 (3.80) | 2 (1.50) | 19 (14.40) | 48 (36.40) | 58 (43.90) | 3 |

Source: empirical research

3.3.3 User satisfaction with transporting and the supporting services at Croatian airports

Table 3 shows descriptive statistics of the statements relating to user satisfaction with transporting and the supporting services at Croatian airports.

In order to analyse their statements in more detail, a factorial analysis with the method of the Guttman-Kaiser criterion and varimax rotation were used. The data analy-

sis has extracted three factors with the characteristic root larger than one (Guttman-Kaiser criterion) that together account for 48.057% of the variance. It is important to note that the lowest and the highest results of all the particles ranged from 1 to 5.

The matrix of the factorial structure of user satisfaction with the transporting and the supporting services is displayed in Table 4.

Table 3 Descriptive statistics of the statements relating to user satisfaction with the transport and the supporting services

| Statements | x | SD |
|---|----------|------------|
| Cleanliness in the waiting lobbies is at high standards. | 3.53 | 1.044 |
| I am satisfied with the courtesy of the staff providing additional services. | 3.42 | 1.027 |
| The staff at Croatian airports is well-informed on the offer of additional services. | 3.33 | 1.000 |
| I am satisfied with the offer of the modes of payment of additional services. | 3.33 | 1.015 |
| The availability of taxi service at the airports is satisfactory. | 3.30 | 1.047 |
| I am satisfied with the speed of additional service providing. | 3.20 | .953 |
| The offer of parking spaces at Croatian airports is satisfactory. | 3.19 | 1.192 |
| Free use of the Internet at Croatian airports is easily accessible. | 3.17 | 1.099 |
| I am satisfied with the service quality considering the price of the ticket. | 3.16 | 1.158 |
| The staff at hospitality facilities is extremely courteous. | 3.15 | 1.023 |
| Free use of the Internet at Croatian airports is of acceptable speed. | 3.14 | 1.039 |
| The service of additional luggage insurance is of satisfactory quality. | 3.13 | .842 |
| The services of shuttle buses at the airport are at high standards. | 2.99 | .904 |
| The information on additional services is easily noticeable. | 2.95 | .873 |
| Currency exchange fees are acceptable. | 2.93 | .926 |
| The waiting lobbies are very well equipped. | 2.92 | 1.082 |
| The price of the additional luggage insurance is acceptable. | 2.92 | .900 |
| I am satisfied with the offer of additional services at Croatian airports. | 2.89 | 1.121 |
| The assortment in duty free shops at Croatian airports is sufficiently large. | 2.82 | 1.184 |
| The services at the hospitality facilities are of very high quality. | 2.70 | .980 |
| I am satisfied with the price-quality ratio in duty free shops. | 2.59 | 1.119 |
| The fees charged for additional services are acceptable. | 2.48 | 1.115 |
| The offer of additional services at Croatian airports is poor compared to those abroad. | 2.30 | 1.165 |
| Parking prices at Croatian airports are extremely high. | 2.03 | 1.152 |
| TOTAL | | 132 |

Source: empirical research.

Table 4 Factorial structure matrix of user satisfaction with the transport and the supporting services

| Factors and particles | Saturation on the factors | | |
|---|---------------------------|-------|------|
| | 1 | 2 | 3 |
| 1. OFFER OF ADDITIONAL SERVICES | | | |
| The service of additional luggage insurance is of a satisfactory quality. | .651 | | .334 |
| Currency exchange fees are acceptable. | .643 | | |
| The offer of parking spaces at Croatian airports is satisfactory. | .621 | | |
| The services of shuttle buses at the airport are at high standards. | .560 | | |
| Cleanliness in the waiting lobbies is at high standards. | .536 | .352 | |
| The information on additional services is easily noticeable. | .530 | | |
| The waiting lobbies are very well equipped. | .482 | .330 | .428 |
| The availability of taxi service at the airports is satisfactory. | .479 | | |
| 2. USER SATISFACTION WITH ADDITIONAL SERVICES | | | |
| I am satisfied with the offer of the modes of payment of additional services. | | .699 | |
| I am satisfied with the speed of additional service providing. | | .686 | |
| I am satisfied with the courtesy of the staff providing additional services. | | -.649 | |
| Free use of the Internet at Croatian airports is of acceptable speed. | .529 | .609 | |
| Free use of the Internet at Croatian airports is easily accessible. | .516 | .579 | |
| I am satisfied with the service quality considering the price of the ticket. | | .484 | .446 |
| The fees charged for additional services are acceptable. | | .481 | .418 |
| I am satisfied with the offer of additional services at Croatian airports. | .338 | .383 | .545 |
| The offer of additional services at Croatian airports is poor compared to those abroad. | | .377 | |
| 3. SATISFACTION WITH THE STAFF AND THE PRICES OF ADDITIONAL SERVICES | | | |
| The assortment in duty free shops at Croatian airports is sufficiently large. | | | .810 |
| I am satisfied with the price-quality ratio in duty free shops. | | | .725 |
| The services at the hospitality facilities are of very high quality. | .546 | | .565 |
| The staff at hospitality facilities is extremely courteous. | .581 | | .450 |
| The price of the additional luggage insurance is acceptable. | .585 | | .359 |
| The staff at Croatian airports is well-informed on the offer of additional services. | | .683 | .353 |
| Parking prices at Croatian airports are extremely high. | | | .320 |

Source: empirical research.

As evident in Table 4, the acquired factors could best be described as the offer of additional services, user satisfaction with the transport and the supporting services and the satisfaction with the staff and the prices of the additional services. The reliability of the acquired subscales examined with the Cronbach alpha-coefficient is satisfactory. For the particles relating to the 1st factor - reliability, it is .834. The particles that belong to the 2nd factor have the reliability of .743 and the reliability of the particles of the 3rd factor .786.

3.3.4 The analysis of user satisfaction with the transport and the supporting services at Croatian airports regarding the socio-demographic characteristics

One of the goals of this research was to investigate if there exist a statistically significant difference in the respondents' attitudes on the satisfaction with the services at Croatian airports considering their socio-demographic features – age, gender, work status, personal monthly income, education and the region they live in.

Differences in the respondents attitudes considering their age

In order to establish the existence of a statistically significant difference in the respondents' attitudes on the satisfaction with the transport and the supporting services at Croatian airports regarding their age, ANOVA (ANALYSIS OF VARIANCE) was conducted. No statistically significant difference in the attitudes of the respondents of different age was established regarding the offer of the additional services ($F = 1.711, p > 0.05$), the user satisfaction with the additional services ($F = 1.164, p > 0.05$) or the satisfaction with the staff and the prices of additional services ($F = 1.249, p > 0.05$).

Differences in the respondents assessments regarding the gender

For the purpose of establishing if there is a statistically significant difference in user attitudes on their satisfaction with the transport and the supporting services in Croatian

airports regarding their gender, a t-test was administered and it showed that there is no statistically relevant difference in the attitudes of the male respondents as compared to the female respondents regarding the offer of additional services ($t = -.774$, $df = 130$, $p > 0.05$), the user satisfaction with the additional services ($t = -.547$, $df = 130$, $p > 0.05$) or the satisfaction with the staff and the prices of additional services ($t = .021$, $df = 130$, $p > 0.05$).

Differences in the respondents attitudes regarding their work status

For establishing whether there is a statistically relevant difference in respondents attitudes on the services provided at Croatian airports regarding their work status, ANOVA was conducted, showing there is no statistically relevant difference in the respondents attitudes on the offer of additional services ($F = 1.239$, $p > 0.05$), the user satisfaction with the additional services ($F = .462$, $p > 0.05$) or the satisfaction with the staff and the prices of additional services ($F = 1.378$, $p > 0.05$) regarding their work status.

Differences in the respondents attitudes regarding their personal monthly income

In order to establish the existence of the statistically significant difference in the respondents' attitudes on the satisfaction with the transport and the supporting services in Croatian airports regarding their personal monthly income, ANOVA was conducted. It was established that there is no statistically relevant difference in the respondents attitudes on the offer of additional services ($F = .592$, $p > 0.05$), the user satisfaction with the additional services ($F = 1.216$, $p > 0.05$) and the satisfaction with the staff and the prices of additional services ($F = 1.403$, $p > 0.05$) regarding their personal monthly income.

Differences in the respondents attitudes regarding their level of education

The existence of a statistically significant difference in the respondents attitudes on the satisfaction with the transporting and the supporting services in Croatian airports regarding their level of education was examined by ANOVA, and it was established that there is no statistically relevant difference in the respondents attitudes on the offer of additional services ($F = 1.140$, $p > 0.05$), the user satisfaction with the additional services ($F = .789$, $p > 0.05$) and the satisfaction with the staff and the prices of additional services ($F = 1.560$, $p > 0.05$) regarding the level of their education.

Differences in the respondents attitudes regarding the region they live in

In order to establish the existence of a statistically significant difference in the respondents' attitudes on the satisfaction with the transporting and the supporting services in Croatian airports regarding the region they live in, ANOVA was conducted. No statistically significant dif-

ference in the attitudes of the respondents of different age was established regarding the offer of the additional services ($F = 3.224$, $df = 4$, $p < 0.05$) and the satisfaction with the staff and the price of additional services ($F = 3.147$, $df = 4$, $p < 0.05$). The Pos-hoc analysis (Dunnett C) showed that the respondents from Slavonia ($M = 3.37$, $sd = .524$) assess user satisfaction with the additional services statistically more positively than those who live in Istria, Primorje and Gorski Kotar ($M = 2.54$, $sd = .530$), and moreover, the respondents who live in Slavonia ($M = 3.38$, $sd = .592$) assess the satisfaction with the staff and the offer of the additional services statistically more positively than those who live in Zagreb and the surrounding area ($M = 2.77$, $sd = .667$).

3.4 Limitations and recommendation for further research

The findings of the conducted research cannot be generalized considering the small research sample. Another limitation is the fact that most respondents were from Zagreb and the surrounding area, and that they have mostly used the services of Zagreb Airport. The recommendation for further research is to include more respondents outside the capital city and its surrounding region. Since air transport service in the Republic of Croatia is exceptionally seasonal, it would be of great benefit to conduct a research separately in the summer months and during the winter months, i.e. during the summer season and in the off-season.

4 Conclusion

With the rise of demand for a faster mode of transport and a quicker way to cross long distances, air transport has been gaining importance and becoming a more significant model of transport. This has resulted in the rising number of passengers who choose air transport for their travels, be they for tourist, private or business purposes. Year after year, the airports in Croatia break the records in passenger traffic, although the most passenger traffic is realized in three largest airports: "Franjo Tuđman" Airport (Zagreb Airport), Split Airport and Dubrovnik Airport, but the smaller ones also chive considerable results, owing this first and foremost to the low cost carriers. Liberalization of the air market, the environment for airports is becoming more dynamic and demanding. More and more new companies appear on the market, bringing new destinations, new possibilities and prices and thereby advocating the creation of a positive image of Croatia on the international market.

Since Croatia is a tourist country, most passengers travel mainly over the summer months and Croatian market is characterized with high seasonality. Great seasonal deviations point to the fact that a change in tourist concept is needed, aiming at prolonging the season. Regarding the longer development of air transport, special attention should be paid to safety and the goal is to develop highest standards of air transport safety in order to diminish threats in air transport. More attention is given to rais-

ing awareness on user satisfaction and quality monitoring, since it is these two elements that lead to the higher number of passengers.

The research on user satisfaction was conducted for the purpose of this paper on the people who live in the Republic of Croatia. It has shown that users mostly take into account the price when choosing an airline and that they are not entirely satisfied with the price-quality ratio. They are additionally not pleased with the prices of parking and the prices of the facilities at the airports. Regarding the hospitality facilities, they are dissatisfied with the quality of the service. Additional services that are not highly ranked as important when buying the ticket also do not satisfy the users and they think that the offer in Croatian airports is not up to standards compared to those abroad. The same opinion is held by the users regarding duty free shops in Croatian airports and they think that the assortment is not rich enough. The research findings lead to the conclusion that there is room for improvement in terms of reducing the price of parking on airports, improving the quality of service in hospitality facilities of the services provided at the Croatian airports.

References

- [1] An, M., Noh, Y.: Airline customer satisfaction and loyalty: impact of in-flight service quality, *Service Business*, Vol. 3, No. 3, 2009, pp. 293-307.
- [2] Arif, M., Gupta, A., Williams, A.: Customer service in the aviation industry—An exploratory analysis of UAE airports, *Journal of Air Transport Management*, Vol. 32, 2013, pp. 1-7.
- [3] Aueanantakorn, K.: Customer satisfaction with air transport, *Journal of Supply Chain Management Research and Practice*, Vol. 9, No. 1, 2015, pp. 36-49.
- [4] Baker, D. Mc A.: Service quality and customer satisfaction in the airline industry: A comparison between legacy airlines and low-cost airlines, *American Journal of Tourism Research*, Vol. 2, No. 1, 2013, pp. 67-77.
- [5] Bajić, J., Tatalović, M., Kučko, K.: **Analiza zrakoplovne konkurencije u Hrvatskoj**, *Suvremeni promet*, Vol. 34, No. 1-2, 2014, pp. 178-186.
- [6] Clemes, M., Gan, C., Kao, T., Choong, M.: An empirical analysis of customer satisfaction in international air travel, *Innovative Marketing*, Vol. 4, No. 2, 2008, pp. 49-62.
- [7] Dimitriou, D. J., Sartzetaki, M. F.: Air transport connectivity development in tourist regions. Working Papers SIET 2018 (No. 18_1), 2018, http://www.sietitalia.org/wpsiet/WP_SIET_2018_1_SARTZETAKI.pdf (last visited: 16 October 2018).
- [8] Drljača, M., Pašagić Škrinjar, J., Brnjac, N.: Analiza prometa tereta u zračnom prometu Republike Hrvatske i smjernice budućeg poslovanja., *Znanstveno vijeće za promet*, Zagreb, 2012, pp. 23-30.
- [9] Farooq, M. S., Salam, M., Fayolle, A., Jaafar, N., Ayupp, K.: Impact of service quality on customer satisfaction in Malaysia airlines: A PLS-SEM approach, *Journal of Air Transport Management*, Vol. 67, 2018, pp. 169-180.
- [10] Fodness, D., Murray, B.: Passengers' expectations of airport service quality. *Journal of Services Marketing*, Vol. 21, No. 7, 2007, pp. 492-506.
- [11] Gašparović, S.: Zračni promet i turizam primorske Hrvatske, *Geoadria*, Vol. 16, No. 2, 2011, pp. 155-187.
- [12] Gašparović, S., Jakovčić, M., Vrbanc, M.: Hrvatske zračne luke u mreži europskih niskotarifnih kompanija, *Geoadria*, Vol. 17, No. 1, 2012, pp. 93-109.
- [13] Gilbert, D. Wong, R. K.: Passenger expectations and airline services: a Hong Kong based study, *Tourism Management*, Vol. 24, No. 5, 2003, pp. 519-532.
- [14] Hussain, R., Al Nasser, A. Hussain Yomna, K.: Service quality and customer satisfaction of a UAE-based airline: An empirical investigation, *Journal of Air Transport Management*, Vol. 42, 2014, pp. 167-175.
- [15] Kim, Y. K., Lee, H. R.: Customer satisfaction using low cost carriers, *Tourism Management*, Vol. 32, No. 2, 2011, pp. 235-243.
- [16] Kong Wing Chow, C.: Customer satisfaction and service quality in the Chinese airline industry, *Journal of Air Transport Management*, Vol. 35, 2013, pp. 102-107.
- [17] Naletina, D., Petljak, K., Kapović, A.: Influence of liberalization on air transport market: research into consumers' satisfaction with low-cost airlines services in the Republic of Croatia In Dujak, D. (Ed.) *Proceedings of the 18th International Scientific Conference Business Logistics in Modern Management*, Osijek: Faculty of Economics in Osijek, 2018, pp. 21-40.
- [18] Namukasa, J.: The influence of airline service quality on passenger satisfaction and loyalty: The case of Uganda airline industry, *The TQM Journal*, Vol. 25, 2013, pp. 520-532.
- [19] Oyewole, P.: Consumer's socio-demographic characteristics and satisfaction with services in the airline industry, *Services Marketing Quarterly*, Vol. 23, No. 2, 2001, pp. 61-80.
- [20] Pavlin, S.: **Mogući razvitak zračnog prometa za potrebe razvoja turizma u Primorsko-goranskoj županiji**, *Acta Turistica*, Vol. 12, No. 2, 2000, pp.139-172.
- [21] Pavlin, S.: *Aerodromi I*. Zagreb: Faculty of Transport and Traffic Sciences, 2006.
- [22] Pavlin, S., Roguljić, S., Sikora, I. (2003). **Analiza stanja i perspektive razvitka hrvatskih aerodroma**. In I. Legac (Ed.), *Treći hrvatski kongres o cestama: zbornik radova*, Zagreb: Hrvatsko društvo za ceste, 2003, pp. 495-498.
- [23] Peović, T., Vince, D., Štimac, I.: Adaptation Level of Croatian Air Transport to European Air Transport Trends and Business Surroundings. In Steiner, S., Božičević, J., Bukljaš Skočibušić, M. (Eds.) *Zbornik radova Znanstvenog skupa Ocjena dosadašnjeg prometnog razvitka Hrvatske i osnovne smjernice daljnjeg razvoja*, Zagreb: Hrvatska akademija znanosti i umjetnosti i Znanstveno vijeće za promet, Zagreb, 2012, pp. 31-42.
- [24] Prentice, C., Kadan, M.: The role of airport service quality in airport and destination choice, *Journal of Retailing and Consumer Services*, Vol. 47, 2019, pp. 40-48.
- [25] Ringle, C., Sarstedt, M. and Zimmermann, L.: Customer Satisfaction with Commercial Airlines: The Role of Perceived Safety and Purpose of Travel., *Journal of Marketing Theory and Practice*, Vol. 19, No. 4, 2014, pp. 459-472.
- [26] Rocha, L. E.: Dynamics of air transport networks: A review from a complex systems perspective, *Chinese Journal of Aeronautics*, Vol. 30, No. 2, 2017, pp. 469-478.
- [27] Tsafarakis, S., Kokotas, T., Pantouvakis, A.: A multiple criteria approach for airline passenger satisfaction measurement and service quality improvement, *Journal of Air Transport Management*, Vol. 68, 2018, pp. 61-75.
- [28] Vidović, A.: *Model niskotarifne zrakoplovne operative u Hrvatskoj*, doctoral thesis, 2010, Zagreb: Fakultet prometnih znanosti.