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HOTEL AND TOURISM MANAGEMENT

УНИВЕРЗИТЕТ У КРАГУЈЕВЦУ

UNIVERSITY OF KRAGUJEVAC

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FACULTY OF HOTEL MANAGEMENT AND TOURISM IN VRNJAČKA BANJA

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Editorial

Менаџмент у хотелијерству и туризму – Hotel and Tourism Management is an open access peer-reviewed journal which discusses major trends and developments in a variety of topics related to the hospitality and tourism industry. The Journal publishes both theoretical and applied research papers, giving full support to collaborative research efforts taken jointly by academia and industry. According to its editorial policy goal, *Менаџмент у хотелијерству и туризму – Hotel and Tourism Management* has constantly been striving to increase its quality by promoting the popularisation of science and providing significant scientific and professional contribution to the development of hospitality and tourism industry, both in Serbia and on the global scale. The Journal is published by the Faculty of Hotel Management and Tourism in Vrnjačka Banja, University of Kragujevac. Since launching the Journal in 2013, fifteen issues have been published so far.

Менаџмент у хотелијерству и туризму – Hotel and Tourism Management includes the following sections: Original Scientific Paper, Review Article, Short or Preliminary Announcement and Scientific Critique. It is published biannually. The Journal offers an open access of its contents, which makes research results more visible to a wider international academic community. All articles are published in English and undergo a double-blind peer-review process.

The main aspects taken into consideration in paper evaluation are the originality of the study, contribution to the theory and practice and the use of grammar and style (either American or British English are accepted). The expected turn-around period is one to two months following the date of receipt. The crucial requirements for the submission of a manuscript are that the manuscript has not been published before, nor is it under consideration for publication elsewhere. The manuscript will be initially checked to ensure that it meets the scope of the Journal and its formal requirements. Submitted content will be checked for plagiarism. The provided names and email addresses will be used exclusively for the purposes stated by the Journal and will not be made available for any other purpose or to any other party.

The Journal has a reputable international editorial board comprising experts from the United States, the United Kingdom, the Russian Federation, Spain, Italy, Mexico, Japan, Kuwait, India, Poland, Slovakia, Romania, Finland, Lithuania, Moldova, Greece, Slovenia, Bulgaria, Serbia, Croatia, Montenegro, North Macedonia, Bosnia and Herzegovina.

I am glad to announce that *Менаџмент у хотелијерству и туризму – Hotel and Tourism Management* is indexed in ERIHPLUS (European Reference Index for the Humanities and the Social Sciences), CEEOL (Central and Eastern European Online Library), DOAJ (Directory of Open Access Journals), EBSCO (EBSCO Information Services), Ulrich’s Web (Ulrich’s Periodicals Directory), SCIndeks (Serbian Citation Index), CNKI (China National Knowledge Infrastructure), CyberLeninka, WorldCat and Google Scholar databases.

I would like to use this opportunity to express my deep gratitude to the authors, reviewers, and members of the Editorial and Publishing Boards for their devoted time and efforts that have contributed to the development of our Journal. At the end, I am pleased to invite you to look into the latest research in the fields of hospitality and tourism presented in the current issue.

Editor in Chief
prof. Drago Cvijanović, Ph.D.

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Overview of price discrepancies among hotels positioned in the same category

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Abstract: Hotels have a variety of pricing methods at their disposal when defining adequate pricing strategy. Nevertheless, irrespective of the complexity and the manner in which room prices are calculated all methods are based on certain factors which have an influence on the final room rate. Accordingly, the perception regarding the impact of each factor along with the expected value provided to the customer will cause for hotels to charge different prices. The prices offered on Booking.com for hotels falling in different categories allow examination of the potential price differences among five, four, three and two stars hotels in multiple cities in Europe. The findings suggest that even though two hotels may belong to the same category, their prices may differ few hundreds of per cents which implies that the level of value offered to guests can vary significantly.

Keywords: hotel room rate, room price, price strategy, hotel category, Booking.com
JEL classification: L83, Z33

Pregled razlike cena među hotelima pozicioniranim u istoj kategoriji

Sažetak: Hoteli imaju na raspolaganju razne metode određivanja cena prilikom definisanja adekvatne strategije cena. Ipak, bez obzira na složenost i način na koji se izračunavaju cene soba, sve metode se zasnivaju na određenim faktorima koji utiču na konačnu cenu sobe. Shodno tome, percepcija uticaja svakog faktora zajedno sa očekivanom vrednošću koja se pruža kupcu dovešće do toga da hoteli naplaćuju različite cene. Cene koje se nude na Booking.com-u za hotele koji spadaju u različite kategorije omogućavaju ispitivanje potencijalnih razlika u cenama između hotela sa pet, četiri, tri i dve zvezdice u više gradova Evrope. Nalazi sugerišu da, iako dva hotela mogu pripadati istoj kategoriji, njihove cene se mogu razlikovati nekoliko stotina procenata, što znači da nivo vrednosti koji se nudi gostima može značajno da varira.

Ključne reči: cena hotelske sobe, cena sobe, strategija cena, kategorija hotela, Booking.com
JEL klasifikacija: L83, Z33

1. Introduction

Pricing decision may be one of the most demanding activities for hotel managers and the marketing department since wrong prices may have an adverse effect on hotel profitability or

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its customer base. Unjustifiably high price could decrease the number of customers, while a lower price will adversely affect the bottom line. Consequently, managers need to pay attention to the evolution of factors that could potentially affect their pricing decisions and accordingly adapt their pricing strategies.

In their efforts to achieve the objective of setting up an optimal price hotel have plenty of pricing methods available and these methods may be customized to the specific needs or environment. However, due to the increased access to finance and the increase in competition (Jovanović, 2019) hotels should be especially cautious when defining their room rates as inadequate pricing strategy may lead toward overpricing or underpricing of the services provided. Consequently, using different pricing methods may lead to different prices even among hotels falling in the same category or operating the same city.

The purpose of this research is to identify the existence of discrepancies in prices as well as the potential size of these discrepancies, which may appear among hotels in the same category and hotels which operate in the same environment. Hence, a comparison of room price was performed among hotels offering their activities in cities in Europe. Also, the research shows the degree of potential difference in the value offered to customers. The findings suggest that there are price discrepancies in room rates set by hotels in the same category and the differences may be as high as a few thousand per cents.

2. Literature review

Evaluating the price differences in the hotel industry may be better understood by looking at the importance of the price and some of the basic pricing strategies used by hotels.

2.1. Importance of setting the right prices – Implications for correct pricing of hotel services

In today's economy, customers have more readily available data than ever before which means that they can easily compare products and services offered by different companies. Consequently, companies need to be especially cautious when pricing their products because the inadequate price can mean lost customers or lost revenue. The aforementioned is especially true for companies that offer comparable products as it is the case with the hotel industry.

The hotel industry offers products with a high degree of similarity where those little differences make a significant impact on the pricing decisions and customers' willingness to pay the price. Hence, hotels can gain a competitive advantage when they provide adequate value for money to its customers.

The notion behind "adequate value" deals with the question of whether the price at which the room is sold corresponds to the level of service offered to guests. Noteworthy mentioning is that the possibility for manipulation of room rates is highly limited in today's environment because customers have the opportunity to find prices charged by other hotels at a single website or platform such as Booking.com, TripAdvisor, etc. Hence, the task to set up the optimal prices is even more challenging as there is a direct competition on these platforms.

Furthermore, the pricing decision becomes additionally complicated as guests have the opportunity to evaluate their stay in the specific hotel based on a couple of attributes offered by the online booking platform (Zhang et al., 2011). Consequently, too many negative reviews will limit the maximum price that could be charged by the hotel. On the other hand, an excellent review score may offer the possibility for setting up higher prices (Castro & Ferreira, 2018).

2.2. Determinants of hotel room rates

Defining a room price is not as easy as it may look at first glance because hoteliers need to consider a plethora of factors which may have a positive or negative impact on the final price. A vast number of factors have been identified and the literature suggests that these factors could be grouped or classified in different manners. For instance, it is suggested that the determinants of hotel room rates can be placed into three broad categories such as costs and expenses, factors associated with the hospitality industry and hotel specific factors (El-Nemr et al., 2017).

Also, factors that should be considered may be further classified based on the features, attributes and variables associated with the specific room. Accordingly, they may fall in any of the three types of variables, the tangible variables, reputational variables and contextual variables (Abrate & Viglia, 2016). Tangible variables are composed of the physical characteristics of hotel products and services and reputational variables account for the ratings and reviews provided by guests on relevant websites and platforms. The contextual variables serve the purpose to include the effect coming from the attributes such as location and the degree of competition.

Traditional and modern factors which arise due to the technological advances and the utilization of technology in the hotel industry is yet another way in which price relevant factors could be grouped. For example, Zhang et al. (2011) argue that aside from the well-known traditional factors, hotels should also pay attention to the electronic-word-of-mouth as a factor because guests can easily share their experience on online booking platforms or different types of review websites. Other factors which can be placed in the category of modern factors are hotel availability on booking platforms, means of payment (e.g. PayPal or other payment providers), professional and an easy to use website, online presence on different social apps (Facebook, Instagram, WhatsApp), and the level of utilization of modern communication channels (Viber, Twitter, WhatsApp) (Ilić & Nikolić, 2018).

It can be noted that while supply and demand of hotel services along with the operational costs were the primary factors in the past, today they are representing only the starting point for estimation of optimal room prices. This is in a way that relying solely on the logic of higher supply equals lower prices and higher demand equals higher prices may not be adequate (valid) in today’s environment. Alternatively, it is suggested that pricing decisions should be based on as much relevant information as possible if managers want to achieve optimal room rate, which will offer optimal revenue while maintaining high customer satisfaction. El-Nemr et al. (2017) also argue that although consumer behaviour has been neglected, it is an important factor that should be incorporated in the pricing strategies since hotel guests have increased access to information. Noteworthy mentioning is that different hotel and room attributes or characteristics don’t have equal influence on the final room rate (Thrane, 2006). Hence, hotels need to be able to evaluate the value assigned by guests for each attribute and emphasize the attributes which affect the price in a positive manner while removing or reducing the non-value adding attributes.

Aside from the aforementioned, customer’s perception regarding the value for money received is another factor which may affect the room rate in the hospitality industry (Santos & Flores, 2017). Stated differently, the room price can be seen as a combination of different features which create certain value and affect the customer’s willingness to pay the defined price (Zhang et al., 2011).

Although there are tens or even hundreds of factors which may potentially affect the price charged by hotels, every factor doesn’t have equal weight in the pricing decision. Moreover, while there are some universal factors which are applicable to a large number of hotels, there are also factors which are characteristics for the specific city, region or country (Du Plessis & Saayman, 2011). Hence, instead of full replication of pricing strategy from other hotels, each hotel needs to define a pricing strategy which is customized to the specific hotel characteristics, circumstances and surrounding.

2.3. Overview of pricing strategies in the hospitality industry

At a very basic level, the price can be perceived as the process of assigning a monetary value to a specific product or service. However, the role of the price may also be considered from the marketing side or from the customer's point of view. Accordingly, the price may be used as a marketing tool to attract customers as long as they accept to pay the specific price, while from the customer's point of view the price shows the level of quality they could expect when they purchase a product (Kim et al., 2004).

The decision on the most appropriate pricing strategy depends on a number of factors surrounding the specific hotel as well as the hotel industry. At a fundamental level, companies may choose to use static or dynamic pricing approaches to define the adequate selling price. The static approach is based around the notion that the price doesn't experience any drastic changes throughout the specified period or throughout the year. Thus, hotels using some of the static pricing strategies will retain the same room rate irrespective of the room occupancy rate, demand and supply or changes in the environment. On the other hand, dynamic pricing strategies are strategies where hotels will adjust their room rates in accordance with the changes in a variety of factors (Beck et al., 2018). For example, changes in the supply and demand levels will increase or decrease the room rates. When applying dynamic pricing, hotels are able to easily adapt to changes in the market and enjoy an adequate level of occupancy rate even in periods of low demand.

The importance of setting an optimal price stimulated the development of various pricing methods which differ in terms of the factors which are included in the pricing decision and the price calculation process. Cost-plus pricing may be one of the simplest pricing methods for hotel industry due to the way in which room rates are determined. Namely, the price is formed with the associated direct and/or indirect costs and the addition of a prespecified markup. Under the cost-plus method, managers can decide to use some of the basic strategies to derive the respective room rate. Accordingly, the available strategies may include full cost-plus pricing and direct cost-plus pricing. The full cost-plus pricing considers all costs plus a percentage markup that represents the profit. On the other hand, direct cost-plus strategy relies primarily on the direct cost associated with the service offered and the plus markup is composed of indirect expenses and the planned net profit.

Although the cost-plus pricing method may have its advantages, some argue that this method may be obsolete in an industry which is characterized by a higher level of competition. Accordingly, hotels may resort towards competitive pricing approaches if they operate in an environment with increased competition (Kim et al., 2004). The competition-based approach is a rather simple method to define hotel prices as it is based on the prices charged by competitors. Hotels will determine their prices in accordance with the prices charged by other hotels (Sammut-Bonnici & Channon, 2014). Nevertheless, this type of pricing strategy may lead toward overpricing or underpricing of rooms and eliminate the possibility for setting an optimal room price.

Market based pricing approach is also a move away from the cost-based pricing, where higher weight is given to the supply and demand for the specific services in the market. Accordingly, the economic logic is followed when setting the prices, which means that prices will rise when the demand exceeds the supply while there will be a price decrease when the supply exceeds the demand.

Value-based pricing strategy is also used by hotels in their efforts to define an adequate room rate. This approach is centered on the value perceived by the customers, which make this value the starting point when defining room prices (Beck et al., 2018). Hotels may be able to charge higher prices by offering additional attributes or perks for basic packages which will differentiate them from the competition and give the impression of providing higher value.

Pricing method used in the hotel industry is also the hedonic pricing model which is centered on the idea that the room price is calculated by summing unobserved or implicate prices related to a set of room attributes (Castro & Ferreira, 2018). In other words, this model is based on the assumption that although each of the individual attributes and characteristics cannot be sold separately, their values can be added to form a room price. Hotels then have the opportunity to define their room rate based on the existence or lack of the attributes which may influence the overall hotel quality and the desire of guests to choose the specific hotel.

Hotels have the option to apply advanced methods such as forecasting models to forecast the hotel room rates (Zheng et al., 2020). Moreover, the room rate may be forecasted on a daily basis by predicting the potential demand and the inclusion of other crucial factors.

Aside from the above stated pricing strategy, there are also other pricing strategies which may be utilized by decision makers to define adequate room rates. Discount pricing represents an approach which may be applied by hotels where seasonality has a major impact on their room occupancy rate. Accordingly, this approach considers the option for hotels to charge lower prices (at a discount) during low seasons in an attempt to maintain a certain level of occupancy and generate additional revenue through other services. Some hotels may also apply the strategy to define prices based on the length of stay by imposing a minimum number of days that should be reserved. This strategy may be suitable during the periods of high demand or in locations where demand exceeds the supply. Hotels may also define different packages for specific types or groups of customers if they follow the price per segment approach. For instance, they could offer a newlyweds rate, happy couple rates and so on. Furthermore, some hotels, especially the ones that are part of a well-established hotel chain, may follow a so-called positional pricing strategy. In this approach, the brand and reputation strength will have a major influence on the prices (Brzaković et al., 2019) and highly reputable hotels may even charge a premium due to their brand even when they offer the same attributes as their competitors.

It is obvious that there is an overwhelming number of pricing strategies suggested by the literature as well as strategies used by hotels. The common aspects of these strategies are that the factors affecting the pricing decisions are modified or broadened to account for the appearance of new factors coming from a variety of developments and increased access to information.

3. Materials and methods

Hotels set their room rates using different pricing strategies which incorporate the influence of a variety of factors as well as the value added by different attributes. Consequently, the aim of this research is to examine the size of the existing discrepancy among hotels operating in the same city and belong to the same category in terms of the number of stars as stated by Booking.com.

The data used for the analysis is manually gathered from the online booking platform Booking.com. The lowest and the highest prices demanded by hotels for a one-night stay for two people during a prespecified date were collected for each city individually for each star category separately. A total of 34 capital cities in Europe were included in the analysis, while the categories where only two hotels were available for the selected date were excluded from the analysis.

For the purpose of the analysis, primarily the monetary difference in euro was calculated between the highest and the lowest price. Afterwards, the percentage difference is estimated where the lowest value is set as the base value and the starting point that customers will receive the basic services when paying the lowest price in the category. By doing so, there is an opportunity to see the value that is added on top of the basic price when customers want to enjoy a higher level of amenities along with the value coming from different factors.

The research is faced with couple of limitations when it comes to the data used in the analysis. First, the hotels included in the analysis are hotels which had available room for the selected date, which means that all hotels operating in the specific city were not included in the analysis. Second, while some hotels may conduct their business activities during specific seasons, the effects coming from seasonality were not included in the analysis. Lastly, this research doesn’t consider the factors which cause the potential price discrepancy as suggested by the literature.

4. Results and discussion

The results obtained through the analysis of data gathered from Booking.com are observed for each category of hotels separately. Structuring the analysis in this manner enables easier observance of the potential results and reaching the relevant findings. The findings provide a practical overview of the influence of relevant factors on the final room price, as suggested by the literature. Starting with hotels belonging in the highest star category, the results for each category are presented in the following tables.

Table 1: Price discrepancies among five stars hotels in selected cities

Country	**City**	**Stars**	**Lowest price per night €**	**Highest price per nigh €**	**Difference €**	**Difference %**
UK	**London**	5	98	2,873	2,775	2,832%
Czech	**Prague**	5	42	899	857	2,040%
Greece	**Athens**	5	96	886	790	823%
Netherlands	**Amsterdam**	5	129	900	771	598%
Italy	**Rome**	5	133	913	780	586%
Spain	**Madrid**	5	50	340	290	580%
Austria	**Vienna**	5	109	676	567	520%
Latvia	**Riga**	5	60	350	290	483%
Hungary	**Budapest**	5	95	525	430	453%
Portugal	**Lisbon**	5	117	590	473	404%
Denmark	**Copenhagen**	5	177	792	615	347%
Sweden	**Stockholm**	5	123	480	357	290%
Poland	**Warsaw**	5	60	224	164	273%

Belgium	**Brussels**	5	94	279	185	197%
Lithuania	**Vilnius**	5	107	300	193	180%
Germany	**Berlin**	5	109	297	188	172%
Serbia	**Belgrade**	5	90	239	149	166%
Norway	**Oslo**	5	149	374	225	151%
Moldova	**Chișinău**	5	63	144	81	129%
Finland	**Helsinki**	5	112	256	144	129%
Ireland	**Dublin**	5	179	332	153	85%
Bulgaria	**Sofia**	5	63	115	52	83%
Belarus	**Minsk**	5	91	157	66	73%
Romania	**Bucharest**	5	74	127	53	72%
Estonia	**Tallin**	5	117	197	80	68%
Croatia	**Zagreb**	5	94	148	54	57%
Ukraine	**Kyiv**	5	94	126	32	34%
Andora	**Andorra la Vella**	5	95	122	27	28%
Slovakia	**Bratislava**	5	124	144	20	16%

Source: Author's research

The findings for five stars category indicate that there may be a price difference of more than 2,000% between the lowest and the highest price charged by hotels in London and Prague. At the same time, the third highest discrepancy of more than 800% is identified between hotels in Athens. Such a substantial price discrepancy implies that guests will experience a sizable difference in room attributes and service quality in the aforementioned cities. On the other hand, the lowest difference in price and consequently, the difference in value received is detected in Bratislava with a price difference of only 16%.

Table 2: Price discrepancies among four stars hotels in selected cities

Country	**City**	**Stars**	**Lowest price per night €**	**Highest price per nigh €**	**Difference €**	**Difference %**
Italy	**Rome**	4	39	375	336	862%
Czech	**Prague**	4	34	300	266	782%
Slovenia	**Ljubljana**	4	62	500	438	706%
Poland	**Warsaw**	4	35	269	234	669%
Spain	**Madrid**	4	59	384	325	551%
Greece	**Athens**	4	44	279	235	534%
UK	**London**	4	50	299	249	498%
Croatia	**Zagreb**	4	45	260	215	478%
Germany	**Berlin**	4	58	296	238	410%
Ukraine	**Kyiv**	4	31	158	127	410%
Netherlands	**Amsterdam**	4	65	320	255	392%
Denmark	**Copenhagen**	4	107	524	417	390%

Austria	**Vienna**	4	54	240	186	344%
Portugal	**Lisbon**	4	55	230	175	318%
Serbia	**Belgrade**	4	33	137	104	315%
Hungary	**Budapest**	4	44	175	131	298%
Bulgaria	**Sofia**	4	42	155	113	269%
Lithuania	**Vilnius**	4	38	139	101	266%
Romania	**Bucharest**	4	32	109	77	241%
Norway	**Oslo**	4	74	238	164	222%
Slovakia	**Bratislava**	4	48	154	106	221%
Ireland	**Dublin**	4	71	225	154	217%
Latvia	**Riga**	4	37	117	80	216%
Sweden	**Stockholm**	4	69	209	140	203%
Estonia	**Tallin**	4	49	145	96	196%
Moldova	**Chișinău**	4	41	120	79	193%
Belgium	**Brussels**	4	59	152	93	158%
Andora	**Andorra la Vella**	4	45	95	50	111%
Finland	**Helsinki**	4	87	178	91	105%
Liechtenstein	**Vaduz**	4	151	307	156	103%
Switzerland	**Bern**	4	122	196	74	61%
Malta	**Valletta**	4	126	162	36	29%
Belarus	**Minsk**	4	67	83	16	24%

Source: Author's research

The finding for the category of four stars hotels signals that there is a much lower price discrepancy among hotels in this category compared to the discrepancy in the previous category. Accordingly, the highest price difference is evident in Rome with 862%, Prague with 782% and Ljubljana with 706%. Nevertheless, the lowest percentage difference of 24% appears among hotels in Minsk.

Table 3: Price discrepancies among three stars hotels in selected cities

Country	**City**	**Stars**	**Lowest price per night €**	**Highest price per nigh €**	**Difference €**	**Difference %**
Italy	**Rome**	3	31	957	926	2,987%
Sweden	**Stockholm**	3	44	970	926	2,105%
Hungary	**Budapest**	3	23	456	433	1,883%
UK	**London**	3	33	507	474	1,436%
Greece	**Athens**	3	30	300	270	900%
Czech	**Prague**	3	24	150	126	525%
Ukraine	**Kyiv**	3	15	89	74	493%
Ireland	**Dublin**	3	62	340	278	448%

Austria	**Vienna**	3	34	173	139	409%
Germany	**Berlin**	3	42	209	167	398%
Netherlands	**Amsterdam**	3	45	219	174	387%
Bulgaria	**Sofia**	3	15	69	54	360%
Romania	**Bucharest**	3	25	109	84	336%
Portugal	**Lisbon**	3	42	176	134	319%
Latvia	**Riga**	3	20	77	57	285%
Spain	**Madrid**	3	36	132	96	267%
Slovenia	**Ljubljana**	3	40	143	103	258%
Poland	**Warsaw**	3	24	83	59	246%
Slovakia	**Bratislava**	3	28	89	61	218%
Andora	**Andorra la Vella**	3	35	110	75	214%
Estonia	**Tallin**	3	38	117	79	208%
Serbia	**Belgrade**	3	28	80	52	186%
Belarus	**Minsk**	3	26	71	45	173%
Belgium	**Brussels**	3	48	129	81	169%
Lithuania	**Vilnius**	3	35	85	50	143%
Croatia	**Zagreb**	3	45	98	53	118%
Norway	**Oslo**	3	65	129	64	98%
Denmark	**Copenhagen**	3	80	154	74	93%
Switzerland	**Bern**	3	112	214	102	91%
Cyprus	**Nicosia**	3	60	109	49	82%
Moldova	**Chișinău**	3	23	36	13	57%
Finland	**Helsinki**	3	84	103	19	23%

Source: Author's research

The results regarding the difference between the three stars hotels are quite interesting as the three highest price discrepancies in this category are also higher than the discrepancies found in the hotels with five stars and four stars. Accordingly, the highest price difference is found between hotels in Rome, Stockholm and Budapest with a difference of 2,987%, 2,105% and 1,883% respectively.

While three stars category has the highest identified discrepancy across hotels from all categories, the lowest price difference in this category is identified among hotels in Helsinki with a difference of 23% which is similar to the smallest discrepancies in five and four stars categories.

Table 4: Price discrepancies among two stars hotels in selected cities

Country	City	Stars	Lowest price per night €	Highest price per nigh €	Difference €	Difference %
UK	**London**	2	34	421	387	1,138%
Italy	**Rome**	2	18	144	126	700%
Germany	**Berlin**	2	23	110	87	378%
Belarus	**Minsk**	2	15	56	41	273%
Greece	**Athens**	2	30	110	80	267%
Bulgaria	**Sofia**	2	16	51	35	219%
Sweden	**Stockholm**	2	48	149	101	210%
Netherlands	**Amsterdam**	2	53	159	106	200%
Denmark	**Copenhagen**	2	54	140	86	159%
Spain	**Madrid**	2	50	129	79	158%
Finland	**Helsinki**	2	40	103	63	158%
Belgium	**Brussels**	2	46	115	69	150%
Portugal	**Lisbon**	2	34	80	46	135%
Poland	**Warsaw**	2	31	71	40	129%
Moldova	**Chișinău**	2	21	41	20	95%
Cyprus	**Nicosia**	2	55	106	51	93%
Romania	**Bucharest**	2	23	43	20	87%
Ireland	**Dublin**	2	73	129	56	77%
Ukraine	**Kyiv**	2	21	37	16	76%
Czech	**Prague**	2	27	47	20	74%
Austria	**Vienna**	2	50	85	35	70%
Croatia	**Zagreb**	2	38	58	20	53%
Estonia	**Tallin**	2	33	50	17	52%
Malta	**Valletta**	2	60	90	30	50%
Andora	**Andorra la Vella**	2	30	43	13	43%
Slovakia	**Bratislava**	2	40	56	16	40%
Switzerland	**Bern**	2	109	139	30	28%
Latvia	**Riga**	2	35	41	6	17%

Source: Author's research

Hotels in London, Rome and Berlin have the highest price discrepancies among two stars hotels with their respective differences in the price of 1,138%, 700% and 378%. Alternatively, the smallest price discrepancy exists between hotels conducting their activities in Riga with a difference of 17%.

Table 5: Cities with highest differences in hotel room rates

Cities with highest price differences	**Five stars**		**Four stars**		**Three stars**		**Two stars**	
	London	2,832%	Rome	862%	Rome	2,987%	London	1,138%
	Prague	2,040%	Prague	782%	Stockholm	2,105%	Rome	700%
	Athens	823%	Ljubljana	706%	Budapest	1,883%	Berlin	378%

Source: Author's research

The results also show that hotels operating in London and Rome have the highest price discrepancies in two categories. In other words, hotels in London hold the position for highest price difference among five stars and two stars hotels while guests of four stars and three stars hotels will experience the highest difference in room rates in Rome. Also, Rome is found once more in the top three positions among hotels with the highest price difference. It can be noted that all cities found among the top three positions in respect to the price discrepancy are also well-known and highly desirable tourist destinations in Europe.

It can be said that although hotels may belong to the same category, guests may enjoy large variations in the quality and the amenities of the hotels and the rooms. Accordingly, the same star category is not a guarantee for the same level of services and room quality and based on the room rates guests may choose the level of comfort they want to enjoy.

5. Conclusion

Price is a crucial factor when it comes to the process of attracting customers and maintaining a base of loyal guests. Hence, hotels pay special attention to define a price, which will fully reflect the level of quality of their rooms and provide value for money demanded by guests. Hotels define room prices through the application of a pricing method which is most appropriate based on the hotel characteristics and its surroundings. The process of calculating the optimal room prices means that hotels need to include a variety of factors which affect the final price. Therefore, there are certain price differences even among hotels that belong to the same category.

The findings of this research are in line with the literature which stipulates that hotels in the same category may set different room rates based on the weight of relevant factors and whether the hotels employ a hedonic, dynamic or some of the other pricing strategies (Sanchez-Pérez et al., 2019; Soler & Gémar, 2016; Yalcin & Mert, 2018). Accordingly, a substantial difference of more than two thousand per cents in prices has been identified between hotels with the same number of stars. This implies that customers can expect a consistency only at the basic level of services whereas the quality of additional services, as well as the overall value, will largely depend on the price they are willing to pay.

Analysis performed in this research has identified the price discrepancies among hotels only at certain fundamental level. Nevertheless, the analysis and findings set the ground for future research which should be aimed at better understanding of the reasons and factors that lead toward sizable discrepancies among hotels in the same categories. Future analysis may be conducted with the aim of identifying factors which are common to a large number of hotels and factors relevant to specific hotels and cities.

The analysis may also be performed to see whether the price differences for hotels in the same star category are justified based on the value and quality of additional services offered by hotels with higher prices. Also, examining the effect coming from the brand and hotel reputation on hotel room rates may be of special interest. This is in a sense to see whether well-known hotels or hotel chains are able to charge a premium above the price of their competitors for the same level of services.

Examining the effect coming from the level of economic development and living standards on hotel price may also be of interest for future analysis. Namely, the research may show whether hotels operating in economies with lower economic development or lower living standards will lead to lower prices even when the quality of services is the same as in hotels in developed countries.

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Customer experience in the tourism industry – Determinants influencing complaint behaviour

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Abstract: The customer service experience with a specific travel agency is a kind of moment of truth. Customer satisfaction is the outcome they have experienced when service performance met expectations. Contrary to satisfaction, consumers may experience dissatisfaction with the provided service. One of the responses to dissatisfaction is a consumer complaint. Apart from feeling satisfaction or dissatisfaction with the provided service, consumers may also be satisfied or unsatisfied with the complaint process. The aim of this paper is to identify differences in the determinants of complaint behavior (tendency to file a complaint, justice of interaction, perception of fairness, satisfaction with the complaint handling process and loyalty) between female and male respondents. Field research was conducted meaning that the primary data were collected through a survey. The paper presents the respondents' assessments of the set statements regarding experiences during the complaint process. To meet the research objectives, the Mann-Whitney U test was applied, which is used to examine the differences between the two independent groups as a nonparametric alternative to the t-test of independent samples.

Keywords: travel agencies, consumers, services, experience, complaint behavior
JEL classification: L83, Z32

Iskustvo korisnika u turističkoj industriji – Determinante žalbenog ponašanja

Sažetak: Uslužno iskustvo korisnika sa konkretnom turističkom agencijom je svojevrsni trenutak istine. Zadovoljstvo korisnika je ishod koji su oni doživeli kada su performanse usluge ispunile očekivanja. Suprotno zadovoljstvu korisnici mogu ostvariti nezadovoljstvo pruženom uslugom. Jedan od odgovora na nezadovljstvo je žalba korisnika. Kao što korisnici mogu osetiti zadovoljstvo ili nezadovoljstvo pruženom uslugom, tako mogu osetiti i zadovoljstvo ili nezadovoljstvo žalbenim procesom. Cilj rada je identifikacija razlika u determinantama žalbenog ponašanja (sklonost ka podnošenju žalbe, pravda interakcije, percepcija pravičnosti, zadovoljstvo procesom rukovanja žalbom i lojalnost) između ispitanika ženskog i muškog pola. Sprovedeno je terensko istraživanje tako da su primarni podaci prikupljeni metodom ankete. U radu su prikazane ocene ispitanika na postavljene tvrdnje koje se odnose na iskustva tokom žalbenog postupka. Da bi se ispunili ciljevi istraživanja primenjen je Mann-Whitney U test kao neparametarska alternativa t-testa nezavisnih uzoraka, koji se upotrebljava za ispitivanje razlika između dve nezavisne grupe.

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Ključne reči: turističke agencije, korisnici, usluge, iskustvo, žalbeno ponašanje
JEL klasifikacija: L83, Z32

1. Introduction

The interest in this research topic stems from the fact that the user's complaint - as a consequence of unsatisfactory experience, represents an important resource for the application of the so-called recovery paradox. This means that service companies have great resources but are not able to utilize them properly and efficiently. This arises the question such as in which ways organizations can best use their resources in order to achieve maximum results. The customer filing complaint is one of the tools that would comply with such a purpose. Dissatisfied customers who make a complaint provide feedback to a service company. This information is the starting point for changes in the service process, for the specific service. Therefore, employees on the first line of service should behave adequately towards customers from the very first moment. The importance of the research is reflected in the identification of differences in the determinants of complaint behavior depending on the gender of the respondents. Respondents' assessments to the offered statements arose as a result of experience in complaint processes.

Travel agencies treat their customers as direct partners. According to Topalović and Marinković (2020), "the main goal of conducting all marketing activities in tourism is to provide the expected value to consumers and make long-term profits. By creating appropriate value for their customers, travel agencies create satisfied and loyal consumers, who reporesent one of the results of a successful marketing application" (p. 50).

Consumers gain different experiences after using specific tourist services. Each individual has different socio-demographic and psychographic characteristics, which determine his/her choices. Therefore, every person reacts differently to the same service. This defines the very aspect of the experience. In addition to personal, there are environmental factors affecting the experience. Co-creation of services occurs as a result of the simultaneous development of production and consumption. In the process of co-creation, on the one hand, there are participants who provide the service (employees from the first line of service) and other possible participants outside the service (e.g. other users), and on the other hand, there are service users. The result of a service encounter is a user experience formed in the present or past based on the interaction of all participants (Jaakkola et al., 2015).

The so-called moment of truth is the first contact that is realized between the employees from the first line of service and the users. It participates in creating a subjective experience of the service from the particular user (McColl-Kennedy et al., 2015).

The experiences of one user could influence the perception of another one. With this being said, it can be concluded that the tourist experience is an impact factor, affecting personal experiences of other users, as well (Rihova et al., 2015).

The consumer experience is multidimensional and focuses on customer cognitive, emotional, behavioral, sensory, and social responses to the company's offer during the travel period (Lemon & Verhoef, 2016). Experience-based spending largely focuses on hedonistic value for the consumer, time, and effort on such trips (before, during, and after). For all these reasons, consumers are not only passive agents who react to stimuli, but also producers of their own experiences. Planning, considering options and choosing leisure travel can be seen as a positive activity in itself, increasing the overall value of the tourist travel experience (Gill et al., 2005).

2. Service experiences as a subjective category

If the research of users can be observed through certain phases, then their behavior during the purchase can be stated as the first phase. Once the needs are identified, it is time to find a way to meet them. The result is services tailored to meet those needs (Bowen & McCain, 2015). According to Bharwani and Jauhari (2013), "service users do not buy services, but they buy experiences; they do not buy quality of service than memories" (p. 825). In order to successfully identify customer ratings after the service has been provided, catering companies must maintain their perspective. Products are interchangeable and tangible while services are intangible, but what is common is that experiences are memorable. To achieve a competitive advantage, employees from the first line of service can be used as a key "resource" in creating a customer experience. Hence, there is the need for special competencies of employees on the first line of service (Bharwani & Jauhari, 2013).

Although the "memorable experience is influenced by many other aspects" (Bharwani & Jauhari, 2013, p. 833), the competence of first-line staff plays a key role in the interactions between employees and users. As Chen and Chen (2010) stated "service experience points out as a personal reaction and feeling of service users, and therefore it has a significant impact on their satisfaction" (p. 29).

Users have their own expectations of how their needs and desires should be met. Based on the provided service, users shape impressions compared to their expectations. Customer loyalty is the goal of every organization, regardless of whether it provides them with a service or a product. In order to achieve customer loyalty, it is necessary to achieve satisfaction beforehand. Satisfaction arises as a positive difference between anticipated expectations and realized service experience. Users' expectations arise as a result of believing that the service will be provided to them in a desired way. They are influenced by many factors.

Satisfaction with the service is the result of previously formed expectations about the service and perception of the same. Based on the user's assessments, a perception is created before the service is provided. Service is a process that results in the simultaneous action of production and consumer assessment (William et al., 2016). Customer satisfaction is the outcome they experienced when service performance met expectations. As opposed to satisfaction, there is dissatisfaction. As a reflection of dissatisfaction, a user complaint may occur.

If users' expectations were to be seen as favorable, adjusted, or initial, experience should be taken as a key criterion for distinguishing them. After having the experience with a certain service, adjusted expectations arise. This type of expectation is characterized by continuous changes, but they also lead to repurchases. If there are favorable expectations, they increase over time. Initial favorable expectations are used as a standard in assessing customer satisfaction. The perception of performance arises after the service experience (Lin & Lekhawipat, 2016).

According to Payne et al. (2008), "within client processes, there are three elements of the relationship of experience that can be recognized: cognition, emotion, and behavior" (p. 87). The traditional flow of consumer information refers to the research of cognition, influence, and behavior. When considering experience related to a relationship, these elements should be taken in a broad context. Emotions and feelings expand beyond the influence that emphasizes attitudes and desires. We use emotions as an expression for "feelings of mood and personality traits based on influence" (Payne et al., 2008, p. 87). Satisfaction is a positive emotion as opposed to an unsatisfactory experience that creates negative emotions.

3. Creating a tourist experience as a starting point for loyalty

One of the factors influencing the user experience is the performance of each organization. It is this on which how well the service company satisfies its sophisticated customers depends. Richard and Zhang (2012) emphasize that "customer satisfaction can be seen as a response to the perception evaluation of a discrepancy between previous expectations and the actual performance of services perceived after its consumption" (p. 573). Loyal customers continue to buy services. As a result, William et al. (2016) consider that there has been a change in the focus of quality of the original manufacturers' point of view under different names such as *quality-based services*, *objective and subjective quality* and *operational management*.

Subjective quality has received a lot of attention and benefits, especially in the free market economy, to gain customers. The quality of service affects the intention to buy existing and potential customers. The logical consequence of not meeting the expectations of the service results in the departure of the user. The reduction of the base of users of the company's services affects the reduction of profits, and thus the overall business performance of the company. William et al. (2016) point out that "during the consumption of experiences, different types of consumer emotions express important information about how the user will finally evaluate the service and later the overall quality of the relationship" (p. 2).

Tronvoll (2007) states that an individual's purchasing decision depends on the set of emotions being dominated. Liefeld et al. (1975) were among the first to investigate the influence of sociodemographic characteristics on the tendency to complain as a consequence of unsatisfactory experiences. Reynolds and Harris (2006) claimed that the users who complain are most often younger, highly educated, earning above average income. Homburg et al. (2010) show that men and women differ in their purchasing behavior, and consequently in the complaint procedure. The review of papers in this area did not provide an equal view on the issue of differences in the determinants of complaint behavior among users of tourist services. Therefore, there is the call to present the results of research conducted on a sample from the Republic of Serbia.

4. Methodology and results of empirical research

Empirical research was conducted using a survey. The sample included a total of 158 respondents from the Republic of Serbia. The findings of the pilot research (Tomić et al., 2018) served as the basis to which the results obtained after the research in the period from January to April 2018 are added. The questionnaire contains statements which refer to the process of filing a complaint in the business of a travel agency whose services have been used in the last three years. Respondents gave answers using a rating scale, i.e. Likert's scale from 1 to 5. The statements relate to five determinants of complaint behavior: tendency to complain, fairness of interaction, perception of fairness of interaction in handling complaints, satisfaction, and loyalty of complainant. In order to identify a statistically significant difference in the determinants of objection handling, the Mann - Whitney U test was used as a nonparametric alternative to the t-test. The importance of the research is reflected in the identification of differences in the determinants of complaint behavior depending on the gender of the respondents. Respondents' assessments to the offered statements arose as a result of experience in complaint processes. The statements in the questionnaire were adapted to the relevant studies Homburg et al. (2010), Karatepe (2006) and Mattila (2001). The analysis of the gathered data was conducted through the statistical software SPSS 21.

In the structure of respondents, 37.3% are male while 62.7% are female. Most respondents are of the age span 18 to 27, 55.7%. 41.1% of respondents have completed college or university and are the most represented in the sample. In the sample structure, most respondents travel 2-3 times a year, meaning 29.7%, followed by 29.7% of respondents who travel once a year, while 11.4% of respondents travel 4 or more times a year. The least number of respondents do not travel every year, representing 17.7%. The results of the research showed that 67.1% of respondents spend on average over 200 euros per trip.

The task of this research is to examine whether there is a statistically significant difference in the determinants of complaint behavior between users of tourist services of different gender. The hypotheses set in the pilot study (Tomić et al., 2018) were also applied in this paper. The difference in relation to the pilot research is in a larger number of respondents. The main hypothesis Ho is defined: "There is a statistically significant difference in the determinants of complaint behavior between users of tourist services of different gender. Afterwards, the main hypothesis Ho needs to be broken down into the following five hypotheses related to the determinants of complaint behavior. H1: There is a statistically significant difference between the users of tourist services of different gender in the trend to make a complaint. H2: There is a statistically significant difference in the equality of interaction between users of tourist services of different gender. H3: There is a statistically significant difference in the perception of fairness between users of tourist services of different gender. H4: There is a statistically significant difference in consumer satisfaction of complaint procedure between users of the tourist service of different genders. H5: There is a statistically significant difference in loyalty between users of tourist services of different gender" (Tomić et al., 2018, p. 19).

The results of the Kolmogorov-Smirnov and Shapiro-Vilko tests showed that the assumption about the normality of the distribution was not confirmed. The determination of a statistically significant difference in the propensity to file a complaint in relation to the gender of the subjects was investigated using the Mann-Whitney U test, as a nonparametric alternative to the t-test of independent samples (Table 1). In order for the result to be considered statistically significant, the result of the Z approximation should be less than the required limit value of 0.05.

Table 1: Test statistics for H_1

	Tendency to file a complaint
Mann-Whitney U	2,640.5
Wilcoxon W	7,590.5
Z	-1.041
Asymp. Sig. (2-tailed)	0.298

Source: Author's research

The Mann-Whitney U test was used to confirm the differences between the two independent groups (male and female). The obtained values were converted into ranks. Afterwards, it was determined if they are different.

Table 1a: Mean value of rank and median

	Gender	N	Mean Rank	Median
Tendency to file a complaint	Male	59	84.25	2.0
	Female	99	76.67	2.0
	Total	158		

Source: Author's research

Mann-Whitney U test did not reveal a statistically significant difference in the tendency to file complaints of men (Md = 2.0, n = 59) and women (Md = 2.0, n = 99) in Serbia, U = 2,640.5, Z = -1.041, p = 0.298, r = 0.08 (small effect). Men and women in Serbia are equally inclined to file complaints.

The Mann-Whitney U test was used as a nonparametric alternative since the normality of the distribution was not confirmed (Table 2).

Table 2: Test statistics for H_2

	Justice of interaction
Mann-Whitney U	2,919.0
Wilcoxon W	4,689.0
Z	-0.006
Asymp. Sig. (2-tailed)	0.996

Source: Author's research

Table 2a: Mean value of rank and median

	Gender	N	Mean Rank	Median
Justice of interaction	Male	59	79.47	4.0
	Female	99	79.52	4.0
	Total	158		

Source: Author's research

Mann-Whitney U test did not find a statistically significant difference in the fairness of the interaction of men (Md = 4.0, n = 59) and women (Md = 4.0, n = 99) in Serbia, U = 2,919.0, Z = - 0.006, p = 0.996, r = 0.0005 (small effect). Men and women in Serbia equally perceive the justice of interaction during the complaint process.

Not only with the fairness of the interaction, but also with the perception of the fairness of the interaction in the complaint handling process, the Mann - Whitney U test was used (Table 3).

Table 3: Test statistics for H_3

	Perception of fairness
Mann-Whitney U	2,848.0
Wilcoxon W	7,798.0
Z	-0.262
Asymp. Sig. (2-tailed)	0.793

Source: Author's research

Table 3a: Mean value of rank and median

	Gender	N	Mean Rank	Median
Perception of fairness	Male	59	80.73	3.5
	Female	99	78.77	3.5
	Total	158		

Source: Author's research

Mann-Whitney U test did not identify a statistically significant difference in the perception of fairness of men (Md = 3.50, n = 59) and women (Md = 3.5, n = 99) in Serbia, U = 2,848.0, Z = -0.262, p = 0.793, r = 0.03 (small effect). Men and women in Serbia equally perceive the fairness of interaction in handling complaints.

Nevertheless, the Mann - Whitney U test was also used to determine a statistically significant difference in satisfaction with handling complaints (Table 4).

Table 4: Test statistics for H_4

	Satisfaction of the complainant
Mann-Whitney U	2,681.5
Wilcoxon W	7,631.5
Z	-0.869
Asymp. Sig. (2-tailed)	0.385

Source: Author's research

Table 4a: Mean value of rank and median

	Gender	N	Mean Rank	Median
Satisfaction of the complainant	Male	59	83.55	3.67
	Female	99	77.09	3.33
	Total	158		

Source: Author's research

Mann-Whitney U test did not reveal a statistically significant difference in satisfaction with the complaint handling process of men (Md = 3.67, n = 59) and women (Md = 3.33, n = 99) in Serbia, U = 2,681.5, Z = -0.896, p = 0.385, r = 0.07 (small effect). Men and women in Serbia are equally satisfied with the travel agency's approach to the complaint process.

Finally, the fifth auxiliary hypothesis was tested using the Mann-Whitney U test, as a nonparametric alternative to the t-test of independent samples (Table 5).

Table 5: Test statistics for H_5

	Loyalty of the complainant
Mann-Whitney U	2,827.0
Wilcoxon W	7,777.0
Z	-0.340
Asymp. Sig. (2-tailed)	0.734

Source: Author's research

Table 5a: Mean value of rank and median

	Gender	N	Mean Rank	Median
Loyalty of the complainant	Male	59	81.08	4.0
	Female	99	78.56	3.6
	Total	158		

Source: Author's research

Mann-Whitney U test did not reveal a statistically significant difference in loyalty between men (Md = 4.0, n = 59) and women (Md = 3.6, n = 99) in Serbia, U = 2,827.0, Z = -0.340, p = 0.734, r = 0.03 (small effect). Men and women in Serbia are equally loyal to travel agencies.

5. Discussion and conclusion

The key resource in the service sector are people. The process of production and consumption itself takes place simultaneously. Thus, service providers and users create experiences at the same time. User experiences depend on a large number of factors. The focus of this paper was to look into the differences in the determinants of complaint behavior of users of travel agency services.

The subject of this research is to assess and explore unsatisfactory experiences of tourist services users employing the determinants of complaint behavior. In total, five determinants of complaint behavior were given to the respondents for evaluation. Each determinant included certain claims which importance was measured based on previous user's experience with a particular travel agency. At the beginning of the research, the main hypothesis Ho was defined, which was broken down into five auxiliary hypothetis refering to the five determinants of complaint behavior. The applied Mann-Whitney U test did not reveal a statistically significant difference in the trend of making compalint, fairness of interaction, perception of interaction, consumer satisfaction with the compaint procedure, and loyalty of men and women in Serbia. To conclude, there is little effect of gender on the five determinants of complaint behaviour. The men and women in Serbia are equally inclined to make complaints. Based on the presented results, it is concluded that the main hypothesis was rejected. There is no statistically significant difference in the determinants of complaint behavior between users of tourism services among different gender.

There are some limitations to this study mostly due to the time constraints. As a result of the short time response, the sample was too small. The selection field was limited to only one choosen socio-demographic characteristic.

Further research could look into the extension of this study in two ways: include more socio-demographic characteristics and increase the number of time intervals in which the research is conducted. Moreover, a larger sample could be taken into account. Another suggestion would also concern the analysis of psychographic characteristics of users of tourist services.

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Valorization of territorial capital in function of rural tourism development – A case study of Kneževo municipality

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Abstract: The main goal of the research presented in the paper is to analyse the current state and level of development of rural area, in Kneževo municipality, as well as to define the possibilities of development of certain forms of rural tourism based on the territorial capital. In other words, the capital of space consists of natural and created capital. For the purposes of the valorisation of tourist potentials, the qualitative-quantitative methodology of the World Tourism Organization was used, which includes conducting a survey using standard forms of a questionnaire. Based on this survey, resource scoring was performed according to all external and internal factors, i.e. criteria. According to the results of the research, the indicator of tourist value for Kneževo municipality is estimated with 98.74 points out of a possible 400 points, or 25% of its potential tourist value.

Keywords: territorial capital, rural development, rural tourism, valorisation
JEL classification: Z, Z3, Z32

Valorizacija teritorijalnog kapitala u funkciji razvoja ruralnog turizma – Studija slučaja opštine Kneževo

Sažetak: Osnovni cilj rada je analiza postojećeg stanja i nivoa razvijenosti ruralnog područja opštine Kneževo, kao i definisanje mogućnosti razvoja određenih oblika ruralnog turizma na osnovu teritorijalnog kapitala. Teritorijalni kapital se sastoji od prirodnog i stvorenog kapitala. Za potrebe valorizacije turističkih potencijala korištena je kvalitativno-kvantitativna metodologija Svjetske turističke organizacije koja podrazumijeva provođenje ankete pomoću tipskih anketnih upitnika. Na osnovu tog istraživanja izvršeno je bodovanje resursa i to po svim eksternim i internim faktorima, odnosno kriterijumima. Prema rezultatima istraživanja pokazatelj turističke vrijednosti za opštinu Kneževo iznosi 98,74 od mogućih 400 bodova, odnosno 25% od potencijalne turističke vrijednosti.

Ključne reči: teritorijalni kapital, ruralni razvoj, ruralni turizam, valorizacija
JEL klasifikacija: Z, Z3, Z32

1. Introduction

The connection between the structure and wealth of territorial capital and the structure of supply and development of tourism has been the subject of research by numerous authors. In

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their research, the territory is usually characterized by its various functions, its structure of rural economy, as well as their socio-cultural identity (Bogdanov & Janković, 2013). Territorial capital refers to the complex of economic, cultural, social and environmental resources that ensures the development potential of a particular area. Territorial capital (spatial capital) is represented by a set of factors: from a geostrategic position, climate, size, human resources, transport and other infrastructure, all the way to cultural heritage. In other words, the territorial capital consists of natural and created capital. Natural capital is defined as the total capacity of the region and the total amount of natural resources including arable land, areas under forests, air, water, fisheries, protected areas, biodiversity and non-renewable resources (oil, natural gas, coal, and forest). The capital created includes the capital of human resources and the capital created by human activity. The evaluation of economic, cultural, social and environmental resources in the form of qualitative and quantitative indicators, represents the valorisation of resources of a particular area so that it can be put in the function of the development. Tourist valorisation of rural areas is a precondition for the development of rural tourism. The main goal of the paper is to analyse the current state and level of development of the rural area on the case study of Kneževo municipality as well as to define the possibilities of developing certain forms of rural tourism based on the territorial capital that this municipality has.

In the introductory part, the theoretical setting of the problem of valorisation of territorial capital is explained and a link is given to the territorial capital of the municipality of Kneževo, and its tourist potentials. The results of the applied methodology for assessing the tourist value of internal and external factors, as well as the total tourist value of the destination are presented and discussed in the context of the case study of Kneževo municipality. In conclusion, the results of the research are summarized and recommendations are given for improving the tourist value of the destination.

2. Background

There are generally two groups of territorial capital dimensions in the literature: “hard” and “soft”. The “hard” dimension or so-called “objective factors” can include: a geostrategic position, a size of the territory, agro climatic resources, economic structure and infrastructure, structure of labour force, degree of technological development, cultural heritage, human capital, as well as the quality of life and environment (Storper, 1997). The “soft” dimension, also called the “subjective”, includes: the ability to understand processes, information, as well as the ability to implement joint development programs and plans, possession of capacity for innovation, social capital, the level of development of communication skills and connections between different actors, and subjective factors related to folk customs and traditions, local mentality, etc. (Storper, 1997). According to Bigaran et al. (2013), the components of territorial capital have three combined characteristics: real estate (not transferable), specificity (they have specific qualities and characteristics that are difficult to find elsewhere) and heritage property (they arise on the territory in a long period and it is not possible to create them in a short time).

Rural areas are no longer viewed only from the aspect of agricultural development, but as an area with potential for the development of new activities that often include tourism, recreational activities, production of indigenous products, as well as activities in the field of e-commerce (Saxena et al., 2007). In recent years, rural tourism has become the exit strategy of rural areas for the promotion of local resources, as well as the integration of local actors in development activities that ultimately lead not only to improving the competitiveness of the area, but also to income growth (Riveros & Blanco, 2003). Although there are different definitions of the concept of rural tourism, some institutions have tried to define all the elements that this special type of tourism includes, whereby rural tourism is considered to include all tourist activities in rural areas, such as: hunting, fishing, winter, eco, health and cultural tourism (Baćac, 2011). The importance of rural tourism in rural areas is measurable by a number of indicators, as is its contribution to reducing depopulation and unemployment. Given the many industrial activities that have failed, tourism is emerging as an outstanding alternative strategy for rural development and as a complement to the agricultural activities of the local population. Likewise, rural tourism contributes to the renewal of the village, the protection of the environment and traditional architecture, and the protection of natural and cultural heritage.

The most significant contribution of tourism is reflected in the fact that only through the development of this activity certain properties of certain natural elements, phenomena and spaces can be valorised, and thus can be put in the function of meeting the appropriate needs. After the inventory of tourist resources, the tourist valorisation of space can be approached, which aims to evaluate, i.e. qualitative and quantitative assessment of tourist potential (space and facilities and phenomena in it), certain destinations from the aspect of assessing opportunities for tourist business. Two basic important categories in tourist valorisation are: attractiveness (usefulness and rarity) and value. Tourist value is a relative size, which depends on many factors related to demand in a given time and space, but also to subjective assessment of the tourist itself. The subjectivity of valorisation can lead to inadequate valorisation of tourism in the area being valued. Among the most important criteria of tourist value authors include: a geographical position of the area, the attractiveness of tourist product, traffic connections, the degree of development of tourist capacities, equipment of tourist canters, richness of cultural and historical heritage, etc. (Mojić, 2016).

This type of tourism in Republic of Srpska has begun to develop in recent times and has been given less attention compared to other types of tourism, which can be confirmed based on accommodation capacity, built tourist infrastructure, tourist attractions, development of tourist products and the number of entrepreneurs in rural areas. According to the Export Strategy for the Tourism Sector, the WTTC (World Travel & Tourism Council) notes that "tourism demand in Southeast Europe (SEE) is on a steady pace and exports of tourism services in Bosnia and Herzegovina amounted to 1,136.6 million in 2011" (Rokvić et al., 2017, p. 159). The same organization further envisages "a nominal increase in the export of tourism services in Bosnia and Herzegovina of 8.3% per year, thus the total value of tourism services exports in 2021 would amount to BAM 2,025.4 million" (Rokvić et al., 2017, p. 159). According to the Ministry of trade and tourism of Republic of Srpska in the last twenty years, the growth rate of tourism has been twice the growth rate of gross domestic product (Ministry of Trade and Tourism of Republic of Srpska, 2011). The research of Berjan et al. (2014) points out that main difficulties in the development of rural tourism in Republic of Srpska including the lack of financial resources, high VAT and other taxes, a low occupation rate, as well as the "lack of qualified staff, lack of support from local authorities, complicated legal system and legislation, and outdated infrastructure and equipment" (p. 1808).

Republic of Srpska has a complex and in many ways specific geographical position, as well as a pronounced diversification of its tourism product. This confirms the fact that Republic of Srpska belongs to great natural regions: pannonia, mountain-valley and adriatic. Kneževo municipality is sitated in the central part of Republic of Srpska: area between pannonia region in north and adriatic region in south, belongs to mountain-valley area. Natural tourist values of this region are high and medium high mountains and deep river valleys, nature parks and reserves, specific flora and fauna, endemic and relict species, different forms of water, etc. which form the basis of various types of tourism (adventure, health, eco, excursion, hunting, fishing ...). The essence of the tourist product concerns valorization of a space such as mountains: Vlašić, Gole Planine, Ranče, Čemernica, Tisovac, Osmače, and canyons of rivers: Cvrcke, Duboke, Ugra, Ilomska, as a space of integral tourist offers (Ministry of Trade and Tourism of Republic of Srpska, 2011). Currently, the residential tourism is the most represented type of tourism in Kneževo. This type of tourism usually includes visits of city population on weekends, holidays, vacations in their own or rented facilities (cottages).

3. Materials and methods

For the purposes of valorisation of tourist potentials, the qualitative-quantitative methodology of the World Tourism Organization was used (UNWTO, 2011), which includes conducting a survey using standard forms of questionnaire that can be useful to researchers during inventory and assessment. Based on these forms, scoring of resources (in the field) was performed according to all external and internal factors, i.e. criteria. In order to obtain the total value of the examined resource, first, all internal factors are added, then all external factors are added and finally the sum of internal multipliers with the sum of external factors (Mojić, 2016; Stanković, 2016).

All criteria, are classified into two large groups, internal and external valorization factors. Internal factors include specific qualities and values that each tourist resource has. There are, depending on their nature, two types of internal factors: those related to the degree of utilization of tourist resources (urbanization, infrastructure, equipment and tourist services) and those that refer to the inherent characteristics of a tourist resource and which essentially coincide with the characteristics of the resource itself that form the basis of its tourist value.

Internal factors, according to the methodology of the World Tourism Organization are represented with the following formula:

$$(A + B + C + D) = X \tag{1}$$

where: X = sum of partial estimates of internal resource factors, A = urbanization assessment, B = infrastructure assessment, C = assessment of equipment and services, D = assessment of inherent resource characteristics.

External factors are those that significantly affect or may significantly affect resource-oriented tourist flows and that determine their position in relation to the market and demand: possibility of access (accessibility), specificity of resources, proximity of emitting centres and importance of resources. According to the same methodology, external factors are calculated with the following formula:

$$(E + F + G + H) = Y \tag{2}$$

where: Y = sum of partial estimates of external resource factors, E = accessibility assessment, F = resource specification assessment, G = estimate of the proximity of emitting centres and H = assessment of resource significance.

After calculating the total value of internal and external factors, the total value of the tourist zone is obtained according to the formula:

$$VZ = (\Sigma FI \times \Sigma FE) \tag{3}$$

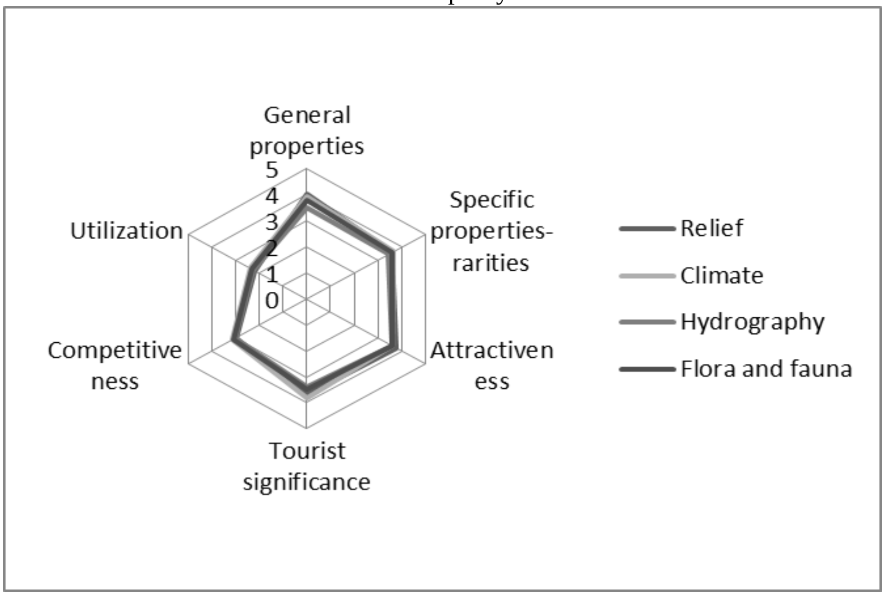
where: VZ = tourist value of the zone (region), FI = value of internal factors of the zone, as the sum of values of all internal factors of each resource (A, B, C, D) and FE = value of external factor (zone) regions.

The value of external factors acts as an element of weighting of internal factors, so their mutual multiplication leads to the total value of the zone or region.

4. Results and discussion

Territorial capital - natural characteristics (relief, climate, hydrography, flora and fauna) available to Kneževo municipality, which represents the basic potential for the development of rural areas, was evaluated according to the following criteria: General properties; Specific properties - rarities; Attractiveness; Tourist significance; Competitiveness; Utilization. The results show that, although the municipality is rich in the natural territorial capital, which by its general and specific properties and attractiveness represents a great potential for tourism development, this potential is poorly or not used at all. The average competitiveness score was rated at 3 out of possible 5, and the average utilization was rated at 2.28 points out of possible 5 (Figure 1).

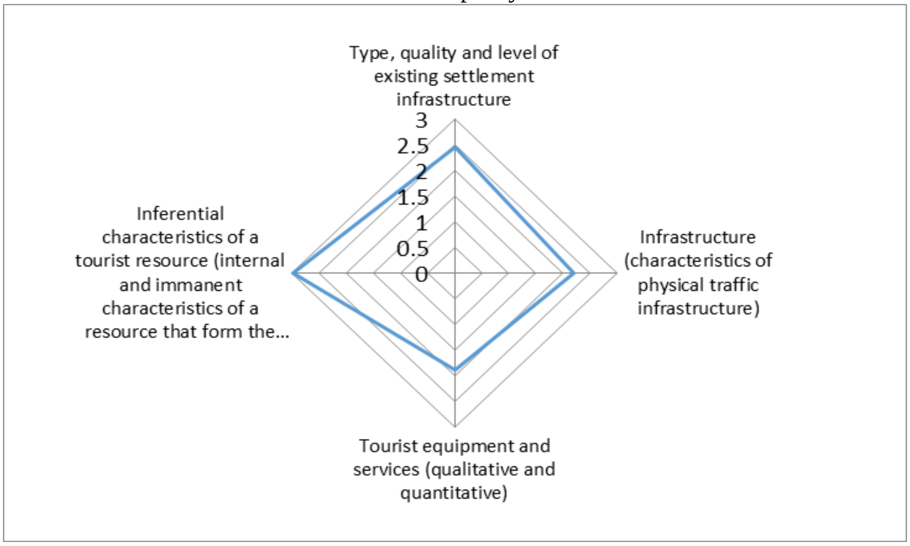
Figure 1: The impact of territorial capital on the development of rural tourism in Kneževo municipality



Source: Author's research

Among the internal factors of Kneževo municipality as a tourist destination, the highest average score was given to the inherent characteristics of the tourist resource (internal and immanent characteristics of the resource that form the basis of its tourist value), such as rural events, local customs and traditions, relief and climate, flora and fauna, hydrography, rural households, rural products, rural population. The lowest-rated factors are directly related to tourism as an activity, namely: tourist equipment and services, i.e. existing accommodation facilities, hotel and non-hotel accommodation, accommodation in rural households, restaurants, cafeterias, crafts, sports, travel agencies, as well as tourist services related to information for tourists, commercialization of tourist resources and activities, traffic connection with tourist attractions, etc. (Figure 2).

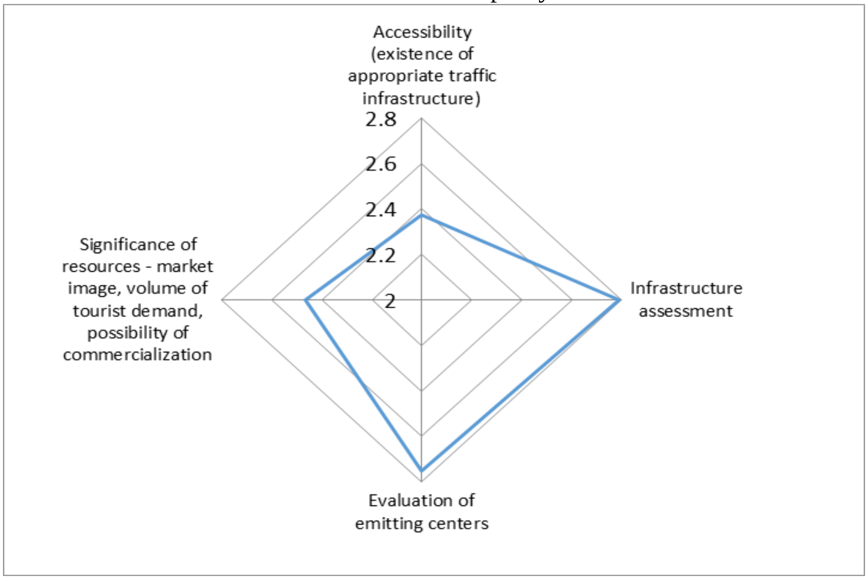
Figure 2: Influence of internal factors on the valorisation of territorial capital in Kneževo municipality



Source: Author’s research

Among external factors, the highest rating was given to the assessment of infrastructure, in terms of the proximity of certain emitting centres for the demand for tourist services in Kneževo municipality, while the lowest rating was the factor of accessibility of tourist resources in municipality (Figure 3).

Figure 3: The influence of external factors on the valorisation of territorial capital in Kneževo municipality



Source: Author’s research

The results of the research show that there is a significant difference in the value of internal and external factors of territorial capital on the development of rural tourism in Kneževo municipality. According to respondents, Kneževo municipality realizes only about 50% of internal values (9.5 out of possible 20 points), as well as 50% of the value of external factors (average value of external factors 10.37 out of a possible 20 points), i.e. 25% of the value in relation to the maximum value of the tourist destination (98.74 out of a possible 400 points).

5. Conclusion

By analysing the territorial capital of Kneževo municipality, it can be concluded that the research area is rich in natural resources - conserved territorial capital, which is an excellent basis for the development of rural tourism. The results of the research show that there is a significant difference in the value of internal and external factors of territorial capital on the development of rural tourism in the municipality of Kneževo, where, according to respondents, Kneževo municipality realizes only about 50% of internal and external factors value. The lowest-rated factors are directly related to tourism as an activity, namely: tourist equipment and services, i.e. existing accommodation facilities: hotel and non-hotel accommodation, accommodation in rural households, restaurants, cafeterias, crafts, sports, travel agencies, as well as tourist services related to information for tourists, commercialization of tourist resources and activities, traffic connection with tourist attractions, etc. In order to use the territorial capital of Kneževo municipality, in the function of sustainable development of rural tourism, as the most efficient way to valorise the territorial capital of municipality, it is necessary to develop activities targeted in the direction of:

- establishment of a tourist organisation at a municipal level as well as partnership of local stakeholders with the purpose of strategic planning of tourism development, capacity building of service providers and tourism product development;
- development of tourist signalization in order to improve the accessibility of tourist attractions, and inclusion of potential tourist destinations on the map of roads of regional or international level (e.g. via Dinarica, bicycle routes, speleological tours, ski resorts, etc.);
- support for the development of rural tourism services on family farms, and support for the development of activities within rural tourism in municipality (organization of events, geographic identification and promotion of rural tourism products, gastronomic events, etc.);
- education of residents for the provision of services in rural tourism, e.g. accommodation, food, recreational and educational activities in the village, on the farm, etc.;
- better traffic connection of the village with the communities and the centre of the municipality;
- strengthening functional links between populated areas.

By improving the living conditions through the implementation of certain measures in rural areas, additional conditions would be created that would complete the entire territorial capital in the function of the development of rural tourism in Kneževo municipality.

At the end, it is worth noting that this research may contribute to the creation of analytical material in the field of rural tourism, as a basis for further valorization and activation of rural resources, primarily from the aspect of qualitative assessment. In the statistical records, rural tourism is classified in the group of “other types of tourism”, so there are no quantitative data on the scope and level of development of this form of tourism in Republic of Srpska. The recommendation for future researchers is to develop a methodology for quantitative assessment of rural tourism contribution to overall tourism and rural development.

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The importance of intangible elements in the assessment of service quality in hotels in Kolubara District

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Abstract: One of the hotel companies' key strategies in terms of increasing domestic and international competition is that the hotel service offer reflects a high quality level. Aim of this paper is to measure the guests' satisfaction level by the intangible components of offer in the Kolubara District hotels, i.e. to show the significance of this dimension in the total process of providing hotel services. Satisfied guests show a higher loyalty level, which represents a precondition for visiting the same hotel by the same guests and recommend it to their friends. The research was conducted in four hotels, where 100 respondents, the guests of the hotel, were surveyed. The research results showed that the intangible dimension of hotel offer can predetermine and increase the value of services to a large degree, and guests' satisfaction as the users of services as well.

Keywords: hotel industry, intangibility of services, quality of services, satisfaction
JEL classification: M21, Z30

Značaj neopipljivih elemenata u oceni kvaliteta usluge u hotelima u Kolubarskom okrugu

Sažetak: Jedna od ključnih strategija hotelskih preduzeća u uslovima sve jače domaće i međunarodne konkurencije jeste da uslužna ponuda hotela odražava visok nivo kvaliteta. Cilj ovog rada jeste merenje nivoa zadovoljstva gostiju neopipljivim komponentama ponude u hotelima Kolubarskog okruga, odnosno da prikaže značaj ove dimenzije u ukupnom procesu pružanja hotelskih usluga. Zadovoljni gosti ispoljavaju veći stepen lojalnosti, što je preduslov da će gosti ponovo posetiti isti hotel i preporučiti ga svojim prijateljima. Istraživanje je sprovedeno u četiri hotela, pri čemu je anketirano 100 ispitanika koji su bili gosti hotela. Rezultati istraživanja su pokazali da neopipljiva dimenzija hotelske ponude u velikoj meri može predodrediti i povećati vrednost, a samim tim i zadovoljstvo gostiju kao korisnika usluga.

Ključne reči: hotelijerstvo, neopipljivost usluga, kvalitet usluga, satisfakcija
JEL klasifikacija: M21, 330

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1. Introduction

The tangible and intangible elements of hotel service are very important in the hotel industry and tourism, because they play an important role in assessing the guests' satisfaction and the tourist's final decision in choosing a certain hotel or destination. Many satisfied users of the hotel services stay loyal, which means they will come back to a certain hotel or destination. Therefore, loyalty occurs as a consequence of the high quality of hotel service, in which the intangible component of service plays a key role (Vujić et al., 2018).

The intangible elements of hotel service refer to the totality of relations in the process of providing and using the hotel service program. Basically, this process is a way in which the hotel guest experiences and uses the service. The service process takes significantly more time than in other activities. At first, a potential guest gets various information on a hotel, communicates with the hotel, books accommodation and other services, comes to the hotel, stays at the hotel for a certain time, uses numerous services and then leaves the hotel. In this process of the service provision, human factor plays the dominant role in the guests' satisfaction level. According to Kotler and Bloom (1984) intangibility was defined as everything that cannot be seen, tasted, heard or smelled.

Employees are the most significant resource of a hotel company, and the quality of delivered services as well as the business success depends on their knowledge, skills, abilities and competencies (Perić et al., 2018). The hotel service provides in interaction between the employees and the service users. Guests, as well as the hotel service users and the hotel employees, realize a high communication and interaction level, which affects the quality of a hotel service product. In the hotel industry, the employees who make a direct contact with the guests are of the greatest importance for the quality of services, since they represent the key factor in satisfying guests and achieving their loyalty (Sekulić, 2017).

Satisfaction of the guests is based on the tangible (technical) and intangible (functional) dimensions of quality that are interdependent, but including differences as the result of experience and tradition in the service provision, expectations of the guests, the relation among hotel and guests, and the staff reliability. Technical quality refers to the guests' basic benefit obtained by the service (using room, food, and pool), and it is important in the evaluation of the service quality, while the functional quality refers to the process of creating and providing services and is related to the way in which the guest obtains, experiences and uses the service. At the same time, ensuring a consistent level of quality of the intangible service component represents the biggest problem in the hotel industry. These difficulties come out from a large number of interactions between the employees and guests. New situations, that both the guests and the employees experience subjectively, always emerge (conversation atmosphere, readiness to provide a service, kindness etc.). For example, one guest can prefer a bartender who speaks little, but is efficient and skilful, while some other guest may expect the same bartender to be a partner in conversation and get a lot of information from him (Barjaktarević, 2013).

The following hypotheses will be tested by this research.

H1: There is no statistically important difference in the respondents' attitudes regarding average grades of the hotel service components' intangible elements depending on the respondent's gender.

H2: There is a strong correlation between the intangible components of hotel service and the total satisfaction of guests during their stay in the hotel.

2. Intangible elements of the hotel service

In modern business conditions, the hotel companies have to take care of the service quality, in order to be competitive on the market (Stanković, 2018; Šušić & Đorđević, 2019). The significance of intangible dimension lies in the fact that it increases the service value and also the consumers' satisfaction. If the intangible service dimension is not in line with the service users' expectations, then a high level of material components cannot compensate dissatisfaction of users with the total hotel service.

The intangible dimension in the hotel industry is an unavoidable element in defining numerous terms, such as a hotel product, a service etc. British theorist Medlik (1980) pointed out five key components while explaining the hotel product. Those were: location, terms and the material character suit conveniences, services – style and manner of the service provision, price and image. Of everything above mentioned, the *service* is especially important for us, as the intangible component of the hotel product, whose content has been determined by terms and conveniences of material character, i.e. the material component that has determined potential for providing services, their scope, range and content. However, human factor, i.e. personnel employed in the hotel industry is the main characteristic of the style and way of providing services.

Dutch authors impose the so called PBE concept of the hotel product, and their approach distinguishes three groups of elements (P – product, B – behaviour, and E – environment), which make the essence of the hotel product, if harmonically correlated. The group B, i.e. behaviour of the personnel means the intangible dimension in the hotel industry. This process implies direct communication between the personnel and guests, therefore these group elements refer to the quality of the service recipient – service provider relationship (Reuland et al., 1985).

If it is about the hotel service definition and its quality, they often comprise the tangible and intangible components. Thus, Kosar (2005) defined the hotel product quality as a market category that covers the occurrence of its tangible and intangible components by connecting them in an integral entirety. The hotel product quality was also defined as the realization of all related services ensuring that the processes comply with the requirements of hotel service. Čačić (2010) defined the hotel service as a set of tangible and intangible features provided to a guest, with an interpersonal relationship established with him/her, as well as his/her needs and expectations met, based on these features.

Numerous foreign authors describe the intangible elements of the hotel service through different assertions that can be classified in two groups. The first group consists of employees, i.e. their knowledge, skills, experience, understanding guests, friendly attitude toward guests, respect for guests, care, politeness, personal attention, tidiness etc. The second group represents the service process, which also affects: accuracy and efficiency in making a reservation, check-in speed, availability of a reserved room, accuracy in serving food in accordance with food ordered by a guest, correctness of all items in the bill, speed in the service provision, providing the service as promised, availability of information on the hotel services and their prices, solving problems, understanding guests' complaints (Akan, 1995; Akbaba, 2006; Dortyol et al., 2014; Juwaher, 2004; Oh, 1999).

The hotel industry today represents the global industry, which consists of the global consumers that use the hotel services worldwide (Čelić, 2019). The use of hotel contents, such as a room, a restaurant, a bar, a fitness centre and a pool, is not considered luxurious any more. For many users of hotel services, these contents are a component of their style (Sekulić & Mandarić, 2013). Socio-psychological dimension of a working process in the hotel industry is based on staff, i.e. the employed personnel. The personnel ensure a special physiognomy and personality in functioning of the hotel industry. Individual work methods in hotels are present regardless of the achieved level of mechanization and automation of part of working process, and have a decisive effect on user's satisfaction by the hotel service. The personal character of hotel industry services implies the presence of users and direct communication with the employed personnel. Making contacts between employees and hotel guests makes an integral component of working process in the domain of basic and additional services (Kosar, 2008). Hotel employees represent the most important resource of every hotel, and the quality of delivered services depends on their competences. It is the employees who are the first link, someone guests meet first upon arrival at the hotel, and their performance affects the guest's perception of service quality. The hotel staff, as the intangible dimension in the hotel industry, has a key influence on the hotel service quality, which results in satisfied and loyal guests. Consumers' or hotel service userssatisfaction is the key for keeping and attracting new users (Urošević et al., 2018). The hotel's main goal, as any other company's, is satisfaction and value creation, which is especially significant for taking part on the market (Maričić, 2011).

3. Research methodology

The research was conducted in four hotels, where 100 respondents, the guests of the hotel, were surveyed. A survey questionnaire was created for collecting the primary data, and it was aimed at questioning the attitudes of the hotel guests. The questionnaire was distributed to respondents in printed form. Totally, one hundred questionnaires were filled out. The research was carried out in the period from September to November 2019, in the hotels located in the most important destinations of the Kolubara District, such as: Hotel Divčibare and Hotel Maljen in the mountain tourist destination Divčibare on Mount Maljen, Hotel Vrujci in Vrujci Spa, and Hotel Grand in Valjevo. The questionnaire consisted of three parts:

- The first part refers to the ascertainments, which reflect the guests' satisfaction with the quality of services during their stay at the hotel (26 questions);
- The second part covers questions, which refer to an overall opinion about staying at the hotel (4 questions);
- The third part of the questionnaire refers to the general type questions, which aimed to determine the demographic characterstics of the hotel guests.

The respondents expressed their attitudes on a seven-point Likert scale. The stated ascertainments were evaluated on a scale from 1 to 7 by the respondents, whereby 1 signified "the absolute dissatisfaction", while 7 signified "the absolute satisfaction". The data analysis was conducted by applying the statistical program IBM SPSS (*Statistical Package for the Social Sciences* ***SPSS 20***). Within ***descriptive statistical analysis***, there were calculated an arithmetic mean and a standard deviation for every ascertainment, in order to determine the ascertainments the respondents expressed the highest/the lowest degree of agreement with, as well as based on which ascertainments the respondents' attitudes were the most homogeneous/heterogeneous. ***Reliability analysis*** was used to determine a Cronbach's alpha coefficient for every variable in a model, which showed if the ascertainments, used for measuring the variables, were internally consistent. Statistically significant differences in the assessment of different socio-demografic characteristics respondents were determined by ***applying a t test***. ***The correlation analysis*** was conducted in order to determine a degree of linear dependence between the observed variables.

4. Research results

The descriptive statistical analysis results are shown in Table 1. There were measured an arithmetic mean and a standard deviation for every individual ascertainment. More favourable attitudes of the respondents are present in those ascertainments with a higher value of arithmetic mean, while more homogenous atiitudes were present in the ascertainments with a lower value of standard deviation.

Table 1: The descriptive statistical analysis results – Kolubara District

Variable	Ascertainment	M	SD
During your stay at the hotel, how satisfied were you?			
Hotel	Location of the hotel	5.8750	1.20120
Hotel	Visual appearance of the hotel (building, lobby, reception desk)	5.8208	1.21434
Staff	**Tidiness of employees**	**6.1099**	**0.95682**
Staff	**Kindness of employees**	**6.1521**	**0.95891**
Staff	**Courtesy of employees**	**6.1506**	**0.96151**
Reception desk	**Check-in and check-out speed**	**6.0602**	**0.95888**
Reception desk	**Booking accuracy**	**6.1401**	**0.95918**
Reception desk	**Availability of a reserved/allocated room**	**6.0316**	**1.01448**
Room	Cleanliness of a room while entering	6.1476	0.97598
Room	Appearance and design of a room	5.8720	1.10948
Room	Quality of furniture and equipment in a room	5.8614	1.10617
Room	Bedcomfort (pillow, mattress, bed sheets, …)	5.8825	1.10725
Room	Room comfort	5.8991	1.06942
Room	Room equipment (mini bar,phone, TV, internet, coffee and tea maker)	5.8840	1.15344
Hotel	The internet speed	5.7545	1.19891
Room	Bathroom cleanliness	6.0572	1.07895
Room	Bathroom equipment (soap, shampoo, bath, hairdryer)	6.0090	1.03916
Room	Appliances working properly (light, TV, air conditioning)	6.0633	0.98659
Hotel	Cleanliness of the hotel during the stay	6.1310	0.92363
Restaurant and bar	Visual appearance of the restaurant and bar	5.9488	1.07225
Restaurant and bar	Cleanliness of the restaurant and bar	6.0904	0.95808
Restaurant and bar	Selection of food and beverages	5.9910	1.05071
Restaurant and bar	Food and drink quality (appearance, taste and freshness)	6.0000	1.06075
Hotel contents	Equipment and appearance of the conference and congress hall	5.7590	1.26530
Hotel contents	Spa centres contents (pool, sauna, etc.)	5.2519	1.85865
Hotel contents	Other hotel contents (1. Parking, 2. Stores, 3. Children playground, 4. Recreational program)	5.3614	1.66195
Your overall opinion about your stay at the hotel			
Satisfaction	In total, how satisfied are you with the quality of service at this hotel in relation to the expected service?	5.8343	1.05489
Satisfaction	I have a positive opinion about the hotel	5.7395	1.13754

Satisfaction	I am ready to visit this hotel again in the future	5.5753	1.24776
Satisfaction	How satisfied are you with the total supply and your expectation ratio?	5.8298	1.07331

M – Arithmetic Mean, SD – Standard Deviation
Source: Author’s research

The ascertainments that refer to kindness, courtesy and tidiness of staff are classified in the variable ***Personnel***. All ascertainments regarding check-in/check-out of guests (accuracy of reservation, avaliability of rooms, check-in/check-out speed) make the variable ***Reception Desk***. Namely, the above mentioned ascertainments and variables represent the intangible component of the hotel service, by which we shall furthermore perceive the research results.

The descriptive statistical analysis results in table 1 show an average rating of the stated ascertianments given by the guests. The most favourable attitudes of the respondents were present regarding the ascertainments “During your stay in the hotel, how satsisfied were you with the kindness of the employees” and “……the helpfulness of the employees”, where the arithmetic mean was the highest (6.15), then with “the accuracy of reservation” (6.14). All stated ascertainments belong exactly to the intangible elements of the hotel service. Besides the above mentioned, the other ascertainments that belong to this group have high average ratings. The most unfavourable attitudes of the respondents were regarding the ascertainment “During your stay in the hotel, how satsisfied were you with the SPA centre contents (pool, sauna etc.)”, where the arithmetic mean had a lowest value of 5.25.

4.1. Reliability analysis

In such situation, when a particular variable is measured across several ascertainments, it is important to measure if that variable is reliable, i.e. if the ascertainments, by which the variable is measured, are consistent (Vujić et al., 2019). For the need of this analysis, a value of the Cronbach’s alpha coefficient was calculated, ranging in the interval from 0 to 1. The ascertainments were internally consistent, i.e. a variable was reliable if this coefficient value amounted to 0.7 and more. The reliabilty analysis results were shown in the Table 2, as well as the descriptive analysis results for formed variables.

Table 2: Reliability and desriptive analysis results for the formed variables – Kolubara District

Variables	Cronbach’s alpha	Arithmetic mean	Standard deviation
Hotel	0.793	5.9048	0.89544
Staff	**0.946**	**6.1229**	**0.92934**
Reception desk	**0.895**	**6.0966**	**0.89671**
Room	0.957	5.9914	0.92604
Restaurant and bar	0.924	5.9985	0.96291
Hotel contents	0.838	5.3715	1.49897
Satisfaction	0.895	5.8612	1.01666

Source: Author’s research

As it can be noticed in the Table 2, ***there is a high degree of internal consistency between the variables in a model.***

According to the descriptive analysis results, it can be concluded that the hotel guests were mostly satisfied with the Personnel (arithmetic mean is the highest, 6.12), the Reception Desk activities (6.09), and the Restaurant and Bar work (5.99). On the other hand, the guests were the least satisfied with the available hotel Contents (playgrounds, parking, spa, etc.) – the lowest arithmetic mean of 5.37.

Results in the Table 1 show that the ascertainments related to the intangible elements mostly have higher grades in regard to others. Furthermore, the descriptive analysis was determined that the variables Personnel and Reception Desk had better results of the arithmetic mean in regard to others. Those ascertainments and variables that were formed based on them, were belonging to a group of the most homogeneous attitudes.

4.2. T test with two independent specimens

The t test was applied aimed to analyse the guests' attitudes depending on their gender. The t test, with two independent samples, is used for comparison of two subsamples' attitudes (in this case, among male and female respondents). Statistically significant differences existed only if a level of test significance is lower than 0.05 (sig<0.05). In Table 3, the arithmetic mean and standard deviations for all formed variables are represented, differentiated by whether the hotel guests were male or female.

Table 3: Results of t test with two independent specimens: men and women

Ordinal	Ascertainment	Men		Women		t	sig.
		M	SD	M	SD		
1	Hotel	5.8921	0.91074	5.9258	0.87565	-0.535	0.593
2	Staff	6.1157	0.95183	6.1337	0.90011	0.276	0.783
3	Reception desk	6.0578	0.89761	6.1462	0.89484	-1.400	0.162
4	Room	5.9744	0.90679	6.0258	0.92921	-0.797	0.426
5	Restaurant and bar	5.9806	0.94888	6.0221	0.98106	-0.611	0.541
6	Satisfaction	5.8162	1.02370	5.9184	1.00503	-1.430	0.153

Source: Author's research

As it can be noticed in the table, the female respondents were assessing every variable with a higher average grade than the respondents of male gender, except regarding the hotel personnel. It showed also a *t* value that was negative for every variable. However, the statistically significant differences in the respondents' assessments on the basis of formed variables are present only if a *sig* value from the last column is lower than 0.05. According to this adopted limit, it can be concluded that the statistically significant differences in the assessments of male and female respondents do not actually exist, therefore the hypothesis H1 is proven (*There is no statistically significant difference in the respondents' attitudes related to the average grades of the intangible elements of hotel service components depending on the respondents' gender).*

4.3. Correlation analysis

The correlation analysis shows a degree of dependence between two variables. In survey field researches a Pearson's coefficient value of the linear correlation is usually calculated, which shows a degree of linear dependence, i.e. a degree of quantitative match between the two variables. This coefficient value ranges from -1 to 1. However, if the questionnaire contains positively scaled ascertainment (as is regarding our questionnaire, which contains the seven-point scales), this coefficient's value is positive and ranges from 0 to 1. Thereby, the values from 0 to 0.4 point out to a weak linear correlation, from 0.4 to 0.6 to a moderate linear correlation, and from 0.6 to 1 to a strong linear correlation. Of course, it is important for the Pearson's coefficient value to be statistically significant at the level of 0.05. Otherwise, the obtained value will not be statistically important and would not be considered. The correlation analysis results are presented in Table 4.

Table 4: The correlation analysis results

	Hotel	Staff	Reception desk	Room	Restaurant	Hotel contents	Satisfaction
Hotel	/	0.736*	0.731*	0.819*	0.793*	0.585*	0.748*
Staff	0.736*	/	0.767*	0.655*	0.719*	0.505*	0.752*
Reception desk	0.731*	0.767*	/	0.697*	0.690*	0.499*	0.694*
Room	0.819*	0.655*	0.697*	/	0.770*	0.492*	0.719*
Restaurant	0.793*	0.719*	0.690*	0.770*	/	0.630*	0.780*
Hotel contents	0.585*	0.505*	0.499*	0.492*	0.630*	/	0.609*
Satisfaction	0.748*	0.752*	0.694*	0.719*	0.780*	0.609*	/

* - the value is statistically significant at the level of 0.001
Source: Author's research

As it can be noticed in the previous table, the linear correlation coefficients are statistically significant at the level of 0.01. The highest degree of the linear correlation is present between hotel and room, with the Pearson's coefficient amounting 0.819, and it is about the strong linear correlation.

In the matrix, the moderate linear correlations can also be seen (for example Hotel Contents and Reception Desk), while there are no weak correlations between the tested variables. One of the highest degrees of the linear correlation is present in Personnel – Reception Desk, with the Pearson's coefficient 0.767.

The correlation analysis determined the strong correlation between the intangible components of hotel services (Personnel and Reception Desk) and the total satisfaction of guests during their stay at the hotel. The Pearson's coefficient of linear correlation between the personnel and satisfaction amounts to 0.752, while it amounts to 0.694 between the reception desk and satisfaction. In both cases there is a strong correlation, therefore the hypothesis H2 is confirmed (*There is a strong correlation between the intangible components of hotel services and the total satisfaction of guests during their stay in the hotel*).

5. Conclusion

Tertiary character defines the hotel industry as a labour-intensive activity, which implies a large share of the so-called current labour. Although numerous innovations of technical-technological character, especially computerization of business, are increasingly used in hotels, they do not diminish the significance of staff and their influence on shaping the final working form of the entire process in the hotel industry. Subjective assessment of service users, as an important factor of service quality in hotels, is predetermined to a large degree by the personnel operations, which represent the intangible elements of hotel service. Dual significance of the intangible elements in the hotel service quality assessment can be perceived. First, these elements increase an overall service value, and secondly, if these elements are not adjusted to the guests' expectations, a high level of tangible service elements cannot compensate dissatisfaction of guests by an overall hotel service either.

With the previous analyses support, we can conclude that the significance of intangible elements in satisfying the service users, while assessing an overall hotel service, was proven. The empirical research results showed that the guests gave the highest grades to the intangible dimension in the hotel industry, which were presented here by the variables Personnel and Reception Desk. The female respondents evaluated all ascertainments with the highest average grades in comparison to the male respondents, except regarding the hotel staff. However, these differences are not statistically important. Finally, the impact of intangible elements on the total satisfaction of guests was tested by the correlation analysis. The correlation analysis results have confirmed the existence of a strong correlation between the service provided by the employees and the satisfaction of guests, as well as the reception desk activities and satisfaction. Further researches related to the intangible dimension improvement in the hotel industry are primarily a task of the hotel management, which should ensure the employees with greater job satisfaction through activities, such as: education and professional development, motivation and opportunity to progress, increase of life standard, improving interpersonal relationships, etc.

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Sociodemographic characteristics and stress: The case of housekeeping and front office employees

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Abstract: Stress at the workplace has an influence on job performance, employees' health, their job satisfaction and turnover intention. Due to frequent and intensive contact with customers, as well as characteristics of working in the hotel industry, stress can occur as a consequence. Therefore, the main aim of this study is to determine whether there is a difference in the perceived sources of stress among front office and housekeeping employees according to their sociodemographic characteristics (gender, age, education level and marital status). The research included 167 employees from the front office and housekeeping departments. The results show that sociodemographic characteristics of employees do not have an impact on their perceptions of sources of stress at the workplace. In addition, the impact of the working department on the perception is not significant. Due to the size of the sample, the generalization is not possible, but the results obtained in this study can be a guideline for the identification and reduction of the sources of stress in observed hotel departments.

Keywords: stress, housekeeping, front office, employees, sociodemographic characteristics
JEL classification: L83, L89, Z30, Z39

Sociodemografske karakteristike i stres: Slučaj zaposlenih u hotelskom domaćinstvu i na recepciji

Sažetak: Stres na radnom mestu ima uticaja kako na radni učinak zaposlenih, njihovo zdravlje, zadovoljstvo poslom, tako i na namere napuštanja organizacije. Zbog čestog i intenzivnog kontakta sa korisnicima usluga, kao i zbog karakteristika rada u hotelijerstvu, stres se može pojaviti kao posledica. Na osnovu ovoga, glavni cilj ovog istraživanja je bio da se utvrdi da li postoji razlika u percepiranju izvora stresa među zaposlenima u domaćinstvu i na recepciji u zavisnosti od njihovih sociodemografskih karakteristika. Istraživanje je obuhvatilo 167 zaposlenih na recepciji i u domaćinstvu. Rezultati istraživanja su pokazali da sociodemografske karakteristike zaposlenih ne utiču na percepciju izvora stresa na radnom mestu. Pored toga, uticaj radnog sektora na percepciju izvora stresa nije značajan. Zbog veličine uzorka, generalizacija nije moguća, ali dobijeni rezultati mogu biti smernica za identifikaciju i smanjenje izvora stresa u posmatranim hotelskim odeljenjima.

Ključne reči: stres, domaćinstvo, recepcija, zaposleni, sociodemografske karakteristike
JEL klasifikacija: L83, L89, Z30, Z39

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1. Introduction

Stress can be considered as part of everyone's life and its importance in working life is growing. There is a range of stressors at work and in personal life to which individuals are exposed. Not every stressor affects all individuals the same. According to Erkutlu and Chafra (2006), workplace can be considered to be a potentially important source of stress because of the time spent in the workplace. The hospitality industry is widely acknowledged for the prevalence of stress (Kim et al., 2007; Papadopoulou-Bayliss et al., 2001; Wildes, 2007). Work in the hospitality industry is characterized by long working hours, lack of work control and conflicting work demands, which are, according to several authors, frequently cited as stressors (Bitner et al., 1994; Faulkner & Patiar, 1997; Karatepe & Uludag, 2007; Papadopoulou-Bayliss et al., 2001; Zohar, 1994). The hospitality industry gains benefits from continuous growth due to a growing number of travellers (Ernst & Young, 2015). Considering the fact that hospitality industry is characterised by requirements for close cooperation between departments and personnel, time pressures, labour-intensive functions and intensive interpersonal relations (Birdir & Tepeci, 2003; Kuruüzüm et al., 2008), the consequence can be the occurrence of workplace stress. Employees in customer-oriented fields often face conflicting demands of the company, supervisors and customers which creates dissonance for employees (Ruyter et al., 2001). On the other hand, organizations can gain benefits from happy employees, which can result in better job performances (Harter et al., 2003; Wright & Cropanzano, 2000) and higher engagement at work (Huhtala & Parzefall, 2007). The employees who are less stressed are likely to provide better service to customer compared to employees who are more stressed (Varca, 1999). As a result, the intense stress experienced by an employee can lead to a decision to leave an organization, which can cause a loss of well-trained personnel. This can result in a heavy cost for a hospitality organization (Lambert & Hogan, 2009). In the accommodation industry, the high level of experienced stress can be a consequence of the lack of supportive environment for helping families, the lack of promotion opportunities as well as neglecting the ideas of the individual in the decision-making process (Karatepe & Baddar, 2006).

The aim of the present study is to determine whether there are differences in the perceptions of sources of stress according to the sociodemographic characteristics of employees (gender, age, education level and marital status) and working department (housekeeping and front office).

2. Theoretical background

Since the hotel sector is a labour-intensive service industry, work stress is one of the most essential problems managers are facing. Ross (1995) found that it has an influence on the performance of all levels of employees, both hourly employees and managers. On the other hand, Gilboa et al. (2008) points to a higher level of negative correlation between stress and job performances among managers compared to non-managers. Also, exhaustion and cynicism can occur as a consequence of work stress in the hospitality industry (Kim, 2008), which can negatively affect the delivery of services. Siegrist and Theorell (2006) found that people who are overcommitted at work are more likely to experience stress and problems related to stress. According to Lo and Lamn (2005), poor working conditions and low wages are the main factors for causing stress in the hospitality industry. Besides this, the study conducted by O'Neill and Davis (2011) has found that the two most common stressors in the hotel industry are overloads and interpersonal tensions at work.

A lot of research has focused on the impact of gender on the perception of workplace stress (Almeida & Kessler, 1998; O'Neill & Davis, 2011). The results obtained in Almeida and

Kessler’s (1998) study indicate that women are generally more likely to experience daily stress than men. In addition to this, Michael et al. (2009) found that greater occupational stress is more prevalent among females compared to males. Furthermore, the authors found that age, educational level and marital status act as mediators in a relationship between gender and occupational stress. Sağbaş and Sürücü (2020) confirmed the results of previous research by finding women perceive stress more than men. In several studies, it was indicated that men experience higher level of stress than women (Cooper et al., 1989; Rossen et al., 1999). On the other hand, O`Neill and Davis (2011) have not found a significant impact of gender and marital status on the perception of stress. Besides gender, several authors pointed out that sociodemographic characteristics such as age (Rook et al., 1991), the level of education (Gallo & Matthews, 2003) and marital status (Warr & Parry, 1982) are related to stress. According to Jones and Brigght (2001), age can be considered as an individual differential factor that could be involved in the perception of work-related stress. In the study conducted by Acker (2004), it was found that the level of experienced stress among hotel employees vary depending on their age, that is, the older employees experience less stress than the younger ones. On the other hand, Sağbaş and Sürücü (2020) found no significant differences in the perception of job stress according to the age of employees. Considering the impact of educational level on the perception of stress, the negative relationship between educational level and experienced stress level was confirmed (Finkelstein et al., 2007; Gallo & Matthews, 2003). There is a suggestion that people who are more educated are likely to deal better with the stressful situation than lower educated people (Finkelstein et al., 2007). Several studies pointed to the association of marital status with stress (Luecken et al., 1997; Throits, 2006). Research related to these issues have found that married employed women and women with children experience a higher level of stress than single women and men (Davidson & Fielden, 1999; Luecken et al., 1997). The reason can be attributed to multiple roles which married women with children have to perform. Sağbaş and Sürücü (2020) confirmed the results of previous studies, that is, married women perceive higher level of stress than single women.

3. Materials and methods

Measures

For the purpose of this study, employees from hotel housekeeping and front office were selected. The questionnaire used in this research consisted of two parts. The first part of the questionnaire was related to the sociodemographic characteristics of employees (gender, age, education level, marital status and working department). The second part of the questionnaire contained the items related to the source of workplace stress. These items were completely adopted from Faulkner and Patiar’s (1997) study which used a module for the source of stress from the Occupational Stress Indicator (OSI) developed by Cooper et al. (1988). In the original study, the 55 items which are considered to be the sources of stress were classified into six factors. The first factor, Factor Intrinsic to the Job consisted of eight items related to attitudes of employees towards their job (e.g. “*Too much work*”, “*Effects of minor tasks*”). The second factor, The Role of Management (RM) is made up of nine items (e.g. “*Implication of mistakes*”, “*Ambiguity of job*”, “*Being visible/available*”). The Relationship with Other People (“*Personality clash*”, “*Managing work of others*”, “*Attending meetings*”) is the third factor and it consists of nine items referred to interpersonal relationships between employees who are working together. Within the fourth factor, Career and Achievement (“*Chance of own development*”, “*Change jobs, advance career*”, “*Threat of redundancy*”) there are eight items which are related to the possibility of promotion which can be regarded as stressors. The fifth factor, Organization Structure and Climate (OSC) consisted of eleven items related to the problems with administration, lack of staff and it can be considered a quick picture of the association of organization and its employees (e.g. "*Staff Shortages*", "*Organization Structure and Design*", "*Mundane Administration*"). The last factor, Home and Work Interfere (HIW) consists of ten items referred to a negative process of interaction between home and work domains due to imbalance of roles (e.g. "*Not been able to switch off*", "*Spouse attitude to my work*", "*Absence of emotional support*"). For the evaluation of sources of stress was used 5-point Likert scale (1 – definitely not source of stress, 5 – definitely a source of stress).

The research questions of this study are: 1) Are there significant differences in the perception of sources of stress according to the sociodemographic characteristics of employees such as gender, age, education and marital status? and 2) are there significant differences in the perception of sources of stress according to department in which they work?

Data collection

The data were collected during the spring and summer of 2019 in hotels in Serbia. The focus was on employees in two departments in a hotel: housekeeping and front office. The total of 170 employees was included in the research, but due to incomplete questionnaires, 3 were discarded from further analyses. The research was performed using a face-to-face survey.

4. Results and discussion

The first part of the questionnaire included information about the sociodemographic characteristics of employees. What can be noticed is a dominance of females in the sample (68.9%, HK - 77%, FO - 60%) compared to males (31.1%, HK - 23%, FO - 40%). In the housekeeping department, most of the employees are in the age group "36-45" (35.6%), followed by age group "46-55" (32.2%). On the other hand, among front office employees, the most are from age group "26-35" (52.5%), followed by employees from age group "Up to 25" (23.8%). Among housekeepers, 73.6% have completed only high school, while most of the front office employees have university degree (72.5%). When it comes to marital status, most of the housekeeping employees are married (52.9%), while in the front office department, employees are mainly in a relationship (38.8%). Frequencies and percents for both departments are represented in Table 1.

Table 1: Sociodemographic characteristics of employees

Socio-demographic characteristics	**Frequency**	**Percent**	**Frequency**	**Percent**
	Housekeeping		**Front Office**	
Gender				
Male	20	23.0	32	40.0
Female	67	77.0	48	60.0
Age				
Up to 25	8	9.2	19	23.8
26 – 35	20	23.0	42	52.5
36 - 45	31	35.6	13	16.3
46 – 55	28	32.2	6	7.5
Education				
High school	64	73.6	15	18.8
Graduate	22	25.3	58	72.5
Master	1	1.1	7	8.8
Marital Status				
Single	10	11.5	24	30.0

In a relationship	15	17.2	31	38.8
Married	46	52.9	22	27.5
Divorced	16	18.4	3	3.8

Source: Author's research

Table 2 presents the results of a descriptive statistical (arithmetic mean and standard deviation of factors) and reliability analysis. The value of Cronbach`α of all factors is higher than 0.7, which exceeds the recommended value (Kaiser, 1974) and indicates that all factors are in a domain of high reliability.

Employees in both departments agreed when it comes to the greatest source of stress, and that is *The Management Role* (HK – 4.000, FO – 3.932). The situation is similar when it comes to the least source of stress – employees from both departments evaluated items within the factor *Home and Work Interfere* as the least sources of stress. In both cases, factor *Factor Intrinsic to the Job* has the smallest value of the standard deviation (HK - 0.59924, FO - 0.70917). There is a slightly larger deviation in the answers obtained from the front office employees. The same can be noticed for the factor *Home and Work Interfere,* which has the highest value of standard deviation in responses obtained from employees from both sectors (HK – 1.07410, FO – 1.09138).

Table 2: Results of descriptive statistical analysis

FACTORS	**HOUSEKEEPING**		**FRONT OFFICE**	
	Mean	Std. deviation	Mean	Std. deviation
Factors intrinsic to the job (α=0.919)	3.897	0.59924	3.713	0.70917
The management role (α=0.905)	**4.000**	0.65581	**3.932**	0.72430
Relationship with other people (α=0.908)	3.816	0.73582	3.599	0.89196
Career and achievement (α=0.907)	3.727	0.95169	3.720	0.94074
Organization structure and climate (α=0.872)	3.953	0.77906	3.919	0.86436
Home and work interfere (α=0.901)	**3.481**	1.07410	**3.355**	1.09138

Source: Author's research

Table 3 represents the results of t-test according to the gender of employees. For the purpose of obtaining more objective results and distinction of sources of stress among departments, the t-test according to gender was applied separately for both departments. In both cases, it has been found that there are no significant differences in responses obtained by housekeeping and front office employees according to their gender.

Table 3: T-test according to the gender of employees

Factors	**Housekeeping**		**t**	**p**	**Front Office**		**t**	**p**
	Male (N=20)	Female (N=67)			Male (N=32)	Female (N=48)		
FITJ	3.844	3.912	-0.447	0.656	3.813	3.646	-0.447	0.656
MR	4.028	3.992	0.215	0.831	3.969	3.907	0.215	0.831
ROP	3.750	3.836	-0.456	0.650	3.719	3.519	-0.456	0.650
CA	3.644	3.752	0.488	0.658	3.859	3.628	-0.444	0.658
OSC	3.775	4.006	-1.166	0.247	4.006	3.860	-1.166	0.247
HIW	3.525	3.467	0.210	0.834	3.600	3.192	0.210	0.834

Source: Author's research

ANOVA test was performed separately for both observed departments. Six factors (Factors intrinsic to the job, The Management tole, Relationship with other people, Career and achievement, Organization structure and climate, Home and Work Interfere) were used as dependent variables, while sociodemographic characteristics of employees (age, education level and marital status) were used as an independent. Table 4 shows the results of the ANOVA test according to age among housekeeping and front office employees. It can be seen that there are no statistically significant differences in the perception of sources of stress according to their age. Due to this, the LSD post-hoc test was not performed.

Table 4: ANOVA according to age

Factors	Housekeeping Department				F value	t	LSD post-hoc test
	Age						
	Up to 25 (N=8)	26 – 35 (N=20)	36 – 45 (N=31)	46 - 55 (N=28)			
FITJ	3.469	3.856	3.936	4.005	1.783	0.157	-
MR	3.958	3.900	3.986	4.099	0.376	0.771	-
ROP	3.292	3.717	3.828	4.024	2.325	0.081	-
CA	3.313	3.581	3.798	3.871	0.930	0.430	-
OSC	3.538	3.795	4.026	4.104	1.497	0.221	-
HWI	2.863	3.750	3.494	3.450	1.326	0.271	-
	Front Office Department						
FITJ	3.567	3.667	4.019	3.833	1.208	0.313	-
MR	3.743	3.881	4.154	4.407	1.826	0.150	-
ROP	3.550	3.468	3.957	3.889	1.242	0.301	-
CA	3.638	3.607	3.933	4.313	1.278	0.288	-
OSC	3.795	3.871	4.185	4.067	0.632	0.597	-
HWI	3.047	3.298	3.769	3.833	1.585	0.200	-

Source: Author's research

Table 5 shows the results of ANOVA according to a level of education of employees. In the case of both observed departments, there are no statistically significant differences in the perception of sources of stress according to their education level. Thus, the LSD post hoc test was not performed.

Table 5: ANOVA according to education level

Factors	Housekeeping Department			F value	t	LSD post-hoc test
	Education					
	High School (N=64)	Graduated (N=22)	Master (N=1)			
FITJ	3.914	3.875	3.250	0.618	0.541	-
MR	3.977	4.081	3.667	0.329	0.721	-
ROP	3.912	3.571	3.111	2.286	0.108	-
CA	3.801	3.506	3.875	0.796	0.455	-
OSC	4.041	3.696	4.000	1.632	0.202	-
HWI	3.556	3.227	4.200	0.995	0.374	-
	Front Office Department					
FITJ	3.833	3.662	3.875	0.544	0.582	-
MR	4.111	3.879	3.984	0.624	0.538	-

ROP	3.785	3.546	3.635	0.429	0.653	-
CA	3.725	3.666	4.161	0.861	0.427	-
OSC	4.207	3.829	4.043	1.222	0.300	-
HWI	3.600	3.274	3.500	0.593	0.555	-

Source: Author's research

Table 6 presents the results of variance ANOVA according to the marital status of employees. As can be noticed from the table, there are no statistically significant differences in perception of sources of stress among employees in both departments according to their marital status. Thus, the LSD post hoc test was not performed.

Table 6: ANOVA according to marital status

Factors	**Housekeeping Department**				**F value**	**t**	**LSD post hoc**
	Marital Status						
	Single (N=10)	In a relationship (N=15)	Married (N=46)	Divorced (N=16)			
FITJ	3.900	3.883	3.807	4.164	1.428	0.240	-
MR	4.033	4.044	3.978	4.000	0.047	0.986	-
ROP	3.567	3.830	3.802	4.000	0.716	0.545	-
CA	3.050	4.008	3.679	4.023	2.853	0.052	-
OSC	3.480	4.020	4.007	4.031	1.412	0.245	-
HWI	3.480	4.020	4.007	4.031	1.792	0.155	-
	Front Office Department						
FITJ	3.546	3.690	3.903	3.875	1.032	0.383	-
MR	3.699	3.857	4.279	4.037	2.813	0.055	-
ROP	3.255	3.656	3.823	4.111	2.113	0.105	-
CA	3.495	3.665	3.972	4.250	1.353	0.264	-
OSC	3.613	3.994	4.082	4.400	1.696	0.175	-
HWI	3.246	3.239	3.532	4.133	0.895	0.448	-

Source: Author's research

5. Conclusion

Workplace stress has been widely examined for many years. Based on fact that work in hospitality industry is very stressful, it is necessary to examine and reduce sources of stress, because satisfied and empowered employees are the key in providing superb quality service (Malhotra & Ackfeldt, 2016). Also, the hospitality employees are faced with uncertain situations (Jogaratnam & Buchanan, 2004) which are increasing and together with an intensive relationship with customers, are an important source of stress in this industry. That is the reason why it is important to identify factors responsible for the occurrence of stress, which can result in benefits for the organization and employees. Also, the strategic use of the intervention tools for reducing stress is an important component of employee commitment to the organization. These tools can help managers to deal with the stress in a service-oriented work environment and produce a satisfied employee who will provide quality service to a customer.

The aim of the study was to determine if there are differences in the perception of sources of stress according to the sociodemographic characteristics of employees and working departments. Based on the results of the descriptive statistical analysis, the greatest source of stress for both departments is related to the role of management in the organization. It was noticed that organization structure and climate has very close values to management role, and this is especially expressed among front office employees, who almost equally valued management role (3.932) and organization structure and climate (3.919). The influence of managers on the well-being of employees can be negative, which can result in an increase of stress levels, cause depression (Sparks et al., 2001) and burnout (Huhtala & Parzefall, 2007). Hence, managers need to be aware of the problems in the organization to find a solution as soon as possible. This can include creating a working environment which is minimally stressful for employees. Such a working environment can be created by implementing different strategies for managing workplace-related stress. Housekeeping employees, as well as front office employees, have the same perceptions regarding the least sources of stress at work. Employees in both departments agreed on the interference of home and work life and its small influence on work stress. This is contrary to the results obtained in the study by Rabenu et al. (2017) who found a strong association between job stress and work-family conflict. Based on the results of existing research (Almeida & Kessler, 1998; Michael et al., 2009; Sağbaş & Sürücü, 2020), it was assumed that females experience higher levels of stress than males. By applying t-test, it was tested whether there are statistically significant differences in the perception of sources of stress according to the gender of employees depending on the working department. It was found that the perception of sources of stress is not different among males and females employed both in housekeeping and front office departments. These results are in line with previous work (O`Neill & Davis, 2011). In his study, Acker (2004) found that older employees experience less stress than younger. Based on this, it was assumed that the influence of age on the perception of sources of stress will be found. By applying the ANOVA analysis, it has been found that the perception of sources of stress does not differ depending on the age of employees in both departments. These results are in accordance with results obtained in Sağbaş and Sürücü's (2020) study. Starting from the suggestion that more educated employees deal better with a stressful situation (Finkelstein et al., 2007; Gallo & Matthews, 2003), it was assumed that the results will show the influence of education level on the perception of sources of stress. The results of this study showed that there are no significant differences in the perception of sources of stress according to the education level of employees for both departments. The previous research in this field indicated the differences in the perception of stress among married and unmarried employees (Davidson & Fielden, 1999; Luecken et al., 1997; Sağbaş & Sürücü, 2020; Throits, 2006). Although previous research identified the impact of marital status on the perception of work stress, in this study was found no differences in perception of sources of stress among employees in both observed departments according to their marital status. The possible reason for these results can be an uneven representation of married/unmarried in the sample.

In order to respond to defined research questions, the study has revealed that the sociodemographic characteristics of employees (gender, age, level of education and marital status) do not influence the perceptions of sources of stress. In addition, the impact of the working department (housekeeping and front office) is not significant.

The nature of working in the hospitality industry is such that employees experience a higher level of stress than the average employee in other industries. The higher level of stress experienced by an employee can cause a drop in productivity, lower financial results, and can also affect the satisfaction of customers and their loyalty. The possible solution can be found in implementing stress-reducing techniques, which will have a positive influence on hospitality employees. Also, according to Arasli et al. (2017), good service climate can have a positive effect on employees` perceptions and attitudes towards work and have moderating effects on consequences caused by stress. This means that a good working environment will help employees to deal with and fulfil their tasks and satisfy and delight the customers.

The main limitation of this study can be the survey method used for collecting data. In the future research in-depth interview could be used for collecting in-depth data related to stress and sources of stress. Besides, the factors such as a number of children and their age were not included in this research. These factors can significantly affect the stress level of employees due to a conflict of roles. Hence, the recommendation for future research is to include these factors to obtain more precise results. Also, another recommendation for future research is to extend the current study on all departments in a hotel with the aim to identify main and potential sources of stress within different hotel departments. Also, the extension of this research should include the influence of stressors on job satisfaction and life satisfaction, as well as on burnout and turnover intentions.

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Employer brand and workforce performance in hotel companies

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Abstract: Employer brand represents an intangible asset which is the result of successful implementation of employer branding strategy that promotes the company as exceptional employer, provides the candidates with realistic expectations and fulfills the promises made to all employees. The main aim of the research is to prove that hotel companies should be strongly encouraged to develop employer brand, since this is one of the best ways to increase workforce performance. In terms of business operations, employer brand is monitored by means of appropriate dimensions (training and development, employer reputation, work/life balance, corporate social responsibility, business culture). Testing of research hypotheses was performed using regression analysis and ANOVA test. Results indicate statistically significant impact of employer brand on workforce performance and statistically significant difference in the level of accomplished average workforce performance among different category hotels.

Keywords: employer brand, workforce performance, hotel
JEL classification: J24, J32, L25

Brend poslodavca i performanse radne snage u hotelskim preduzećima

Sažetak: Brend poslodavca predstavlja neopipljivu, nematerijalnu imovinu nastalu kao rezultat uspešne implementacije strategije brendiranja poslodavca koja promoviše kompaniju kao odličnog poslodavca, pruža realna očekivanja kandidatima sa tržišta rada i ispunjava data obećanja zaposlenima. Cilj istraživanja jeste da se dokaže da hotelska preduzeća moraju razvijati imovinu brenda poslodavca, jer je to jedan od načina da uvećaju performanse radne snage. Brend poslodavca u radu prati se putem odgovarajućih dimenzija (obuka i razvoj, reputacija poslodavca, balans između života i posla, korporativna društvena odgovornost, poslovna kultura). Testiranje istraživačkih hipoteza vrši se primenom regresione analize i uz pomoć ANOVA testa. Rezultati ukazuju na statistički značajan uticaj brenda poslodavca na performanse radne snage. Takođe, dokazana je statistički značajna razlika u nivou ostvarenih prosečnih performansi radne snage između hotela različitih kategorija.

Ključne reči: brend poslodavca, performanse radne snage, hotel
JEL klasifikacija: J24, J32, L25

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1. Introduction

Human resources are considered to be the most critical asset of a company (Aleksić Glišović et al., 2019; Rai, 2020; Tanwar & Prasad, 2017) and the crucial factor of company's sustainable efficiency (Razak et al., 2012). During the 1990s, the companies started to grasp the relevance of human resources for achieving competitive advantage over their rivals (Sharma & Prasad, 2018). Maurya and Agarwal (2018) saw talented human resources as crucial competitive driving force of organizational performance. Having in mind the importance of human resources for company's operation, there was a need for defining the concept which would satisfy the need of the company to attract and keep valuable employees. By developing the employer brand, the companies could position themselves on competitive labor market (Schlager et al., 2011) and achieve top business performance through improved work efficiency. The concept of employer brand is essential in knowledge-intensive contexts, hospitality industry services included (Schlager et al., 2011). As human resources are of vital importance for hospitality industry and its business activities, employer brand is to be developed as HRM tool which aims at: attracting talented individuals from labor market (1), increasing workforce performance, satisfaction and motivation of employees (2), and keeping valuable employees in hotels (3).

Research has proved that "human capital has crucial and positive associations with organizational productivity, performance and long-term competitive advantage" (Zhu et al., 2014, p. 934). Employer branding is a process which aims at efficient utilization of human capital and creation of satisfied employees. Such employees achieve top results, which is the final outcome of employer branding process. However, research effort that analyzes the correlation between employer brand and workforce performance, and the impact that the employer brand has on these performances is rather modest. Relevant studies have proved the impact of employer brand on employee engagement (Chawla, 2020; Davies et al., 2018), employee satisfaction (Ognjanović & Slavković, 2019; Tanwar & Prasad, 2016), employee loylity (Benraiss-Noailles & Viot, 2020), but no study has focused on the impact of employer brand on workforce performance. This study aims at overcoming the stated research gap. Additionally, the scale which has been used for assessing employees is now used for assessing employer brand. Previously used scales (EmpAt) have been efficient for the employer brand analysis from the perspective of potentially employed, but are probably not the best solution for the analysis from the perspective of current employees (Tanwar & Prasad, 2016).

The main aim of the research is to prove that hotel companies should be strongly encouraged to develop employer brand, since this is one of the best ways to increase workforce performance. In terms of business operations, employer brand is monitored by means of appropriate dimensions (training and development, employer reputation, work/life balance, corporate social responsibility, business culture). Workforce performances measure employees' work results expressed in quantitative units. As employer brand implies specific benefits that employers offer to employees, it is expected that employees shall aim at achieving better results if they are provided with such benefits. Therefore, it is necessary to do additional research and offer adequate answers to the following questions: which dimensions of employer brand are developed in hotels, can the development of employer brand have positive impact on employees' performance, and are there any differences in the level of average workforce performance between hotels of different categories?

2. Literature review

2.1. Employer brand concept

Lack of human capital has resulted in the increased demand for management and expertise skills at the relevant labor market (Arasanmi & Krishna, 2019). In order to overcome this problem, majority of companies have realized that developing an outstanding employer branding strategy is crucial for making companies competitive and attractive for valuable candidates at the labor market (Tanwar & Prasad, 2016). The primary objective of employer branding is to differentiate a specific company from competition at the labor market (Tanwar & Prasad, 2016). Sharma and Prasad (2018) state that employer branding implies applying branding efforts to human resource management, i.e. creating the image of a company as "good place of work" for potential and current employees. Consequently, the company establishes a distinctive image of attractive employer for both currently employed and potential new employees (Zhu et al., 2014). Employer brand represents an intangible asset which is the result of successful implementation of employer branding strategy that promotes the company as exceptional employer, provides the candidates with realistic expectations and fulfills the promises made to all employees.

Branding, which has traditionally been focused on products, is now applied by employers for human resources (Tanwar & Prasad, 2016). Employer branding utilizes the principles of branding for the activities of human resource functions and the ways that an organization should be shown to current and potential employees (Rai, 2020). The concept of employer brand has derived from "corporate branding theory, largely as a result of the application of ideas on influencing customers to human resource management (HRM) and to its influence over potential and existing employees" (Davies et al., 2018, p. 64). Employer branding process is focused on two target groups: insiders (employees) and outsiders (potential employees) (Saini & Jawahar, 2019). Tanwar and Prasad (2016) consider that employer branding can make expected results only if the employer is seen as attractive by current employees (insiders). Therefore, enhancement of employer brand can be done with the help of valuable and efficient employees. The primary goal of the company is to keep efficient employees and increase their productivity, which is often accomplished by developing specific dimensions of employer brand that potential employees prefer. Additionally, the objective of development of employer brand is to attract new and talented individuals who are present at the labor market (outsiders), thus strengthening human capital. The stated objectives can be successfully accomplished by building specific employer brand dimensions (benefits) that make employer different from the competition and that are promised to potential employees. Employer brand dimensions are boosted by the company's employees who are the initiators of employer branding process. Having in mind the importance of employees in employer branding process, the employer brand analysis has been from the perspective of current employees.

Practitioners and researchers state that development of efficient employer branding strategies can offer strategic advantage to companies through the improvement of engaged employees who are loyal and committed to the company, and whose engagement aims at accomplishing superior goals of the company (Chawla, 2020). Employer branding is recognized as key factor for achieving business success which encourages cognitive and organizational connection among employees, as well as positive engagement of other company members (Maurya & Agarwal, 2018). The entire process is dedicated to securing appropriate level of identification of employees with the company (Schlager et al., 2011), which encourages engaged employees. Arasanmi and Krishna (2019) consider that meeting expectations and aspirations of employees by developing adequate employer brand dimensions can have a positive impact on employee support, affection and assistance, which is also reflected on company's organizational performances. As the employees create employer brand, "the company should make sure that employees "live" the brand, in order to develop confidence and generate positive attitude by delivering brand promises through employer brand attributes" (Tanwar & Prasad, 2016, p. 857). Therefore, employer brand enhancement should aim at providing appropriate employee engagement and commitment in order to accomplish the planned results and targets of business operations.

Employer brand dimensions represent benefits (functional, psychological and economic) that the employer provides to the employees. Employee dedication and engagement largely depend on preferences and level of development of employer brand dimensions. The pioneers of research in this area, Ambler and Barrow (1996), have defined the benefits that employees acquire working for the employer (psychological, functional and economic). The initial definition has been expanded by Berthon et al. (2005) who adds interest, social, development, application and economic value. Numerous authors have based their research on all of the above stated dimensions. This paper shall analyze the following dimensions of employer brand: training and development, employer reputation, life/work balance, corporate social responsibility and business culture (Tanwar & Prasad, 2016).

Training and development represent "the extent to which an individual is attracted to an employer who provides recognition, generates a feeling of self-worth, and provides a career-enhancing experience and a springboard to future employment" (Zhu et al., 2014, p. 935). Research points to the correlation between employee training and development, and workforce productivity (Chhetri et al., 2018), as well as its correlation with organizational performance (Otoo et al., 2019; Rana & Malik, 2017). *Employer reputation* is defined as the way the company is seen by the individuals seeking employment (Schlager et al., 2011). Moroko and Uncles (2008) regard reputation as one of the integral elements of employer branding process. Maurya and Agarwal (2018) consider that employer brand and organization reputation are the key to success of every business operation. Relationship between employer brand and reputation is thoroughly analyzed in research that concludes that individuals prefer to work in a company with positive reputation, even if it means working for lower salary (Benraiss-Noailles & Viot, 2020). *Work/life balance* refers to keeping balance between employee's personal and professional life. The companies that have developed this dimension of employer brand are becoming more and more attractive on labor market (Sharma & Prasad, 2018). Tanwar and Prasad (2016) emphasize that the companies will not be able to develop employer brand if they do not invest in work/life balance. *Corporate social responsibility* (CSR) measures the impact that companies have on society in general. In return, socially responsible companies are able to engage new employees and attract new buyers. CSR is increasingly present as a topic in research where the relationship between CSR and employee's behavior is especially emphasized (Grubor et al., 2020). Authors Sharma and Prasad (2018) emphasize that numerous studies have confirmed that CSR has a positive impact on both current and future employees. *Business culture* represents the set of values and beliefs that the company's employees create, implement and respect. Literature supports business culture as an important factor of employer branding (Arasanmi & Krishna, 2019).

The stated dimensions reflect specific benefits which shall be the base for analyzing the employer brand in hotel companies. By developing employer brand dimensions, hotels have created a positive and satisfactory work environment and thus improved employees' professional results which are monitored by means of workforce performance.

2.2. Workforce performance

Along with other relevant organizational variables, qualified workforce makes a significant contribution to business success and efficiency in highly competitive business environment (Musah et al., 2016). Employees' professional results and contribution to the implementation of business targets are monitored by means of specific performances. Workforce performance refers to the activities and tasks that employees carry out in an efficient and effective manner (Ahmad et al., 2015). In the search of the answer to the question- how to develop a system which will have the potential to improve employee productivity and workforce performance, McAfee and Champagne (1993) state that performance management could represent a good solution. Measuring and monitoring of workforce performance result in the enhancement of total efficiency and productivity of overall organization process (Ahmad et al., 2015). Bitmiş and Ergeneli (2013) and Khan et al. (2019) have discussed the importance of workforce performance for achieving satisfactory business performances of organizations.

Valuable workforce generates efficiency and high productivity within a company (Musah et al., 2016). Authors Schlager et al. (2011) have made a connection between employer branding and employee outcomes, bearing in mind that the company monitors the needs and desires of employees by means of employer brand dimensions. Employer branding is focused on understanding the attitudes and feelings of workforce, as this is crucial for achieving efficient performances and outstanding work results (Musah et al., 2016). Additionally, employer brand offers specific benefits and rewards which have a positive impact on employee performances (Itam et al., 2020). Employees' work results depend on their engagement, which Chawla (2020) connects with employer branding strategy. "Employee engagement can thus be defined as positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Chawla, 2020, p. 2). The initial assumption is that development of employer brand has a positive impact on employee behavior, engagement and commitment, which again affects workforce performance and consequently employees' work results.

The research that has analyzed the correlation between employer brand and employee behavior concludes that companies with strongly organized and committed workforce can improve organizational performances, and increase company productivity and competitiveness (Arasanmi & Krishna, 2019). Davies et al. (2018) have pointed out that "satisfaction partially mediates the influence of employer brand image on engagement of employee" (p. 64). Author Chawla (2020) emphasizes that employer branding has a positive correlation with employee engagement. Benraiss-Noailles and Viot (2020) underline the impact of employer brand on positive employee well-being, which in turn, influences loyalty of employees. Schlager et al. (2011) have proved the impact of two dimensions of employer brand- social value and reputation value, on current employee identification. Tanwar and Prasad (2016) have demonstrated the impact of all observed dimensions of employer brand on job satisfaction. Ognjanović and Slavković (2019) have verified the impact of employer brand on satisfaction of employees working in hotel companies.

The following hypotheses have been defined based on the research objective, observed employer brand dimensions and workforce performance:

H_1: Employer brand has positive and statistically significant impact on workforce performances.

H_2: There is a statistically significant difference in the level of achieved average workforce performances for hotels with different categories.

3. Research instruments and statistical methods

The sample consisted of 34 hotels which were operational in 2017 in the Republic of Serbia within the scope of sector I - accommodation and food service, activity code 5510 - Hotels and similar accommodation (Decree on Activity Classification of RS, 2010, p. 124). Information on the number of companies and their activity code - 5510 were taken from Business Registry Agency of the Republic of Serbia (2017). Data necessary for conducting the research on employer brand dimensions and workforce performances were collected by means of questionnaires, which were sent to 418 emails of various hotels. Hotels returned the total of 34 filled out questionnaires, which meant that response rate was 8%. The research was carried out during 2017.

Hotel employees had to meet two criteria in order to be eligible for research participation. Firstly, the tested subjects had to be employed at III, IV or V category hotel. Secondly, they had to be hotel managers, as they were most competent employees who could assess workforce performance and the level of development of employer brand dimensions in hotels. The reason for excluding hotels of I and II category was the assumption that employer brand was not sufficiently developed. The questionnaire consisted of three parts: the first part implied questions which referred to employee and hotel features, the second part measured employer brand dimensions and the third part measured workforce performance. Research questionnaire contained the total of 22 statements measured based on five-level Likert scale which ranged from 1 - "strongly disagree" to 5 - "strongly agree". Employer brand was analyzed through the following dimensions: training and development, employer reputation, work/life balance, corporate social responsibility and business culture (Tanwar & Prasad, 2016). The part of the questionnaire which measured employer brand dimensions was created based on research of Tanwar and Prasad (2016) and Zhu et al. (2014), while the part which measured workforce performances was generated based on the research conducted by Baumann et al. (2016) and Musah et al. (2016).

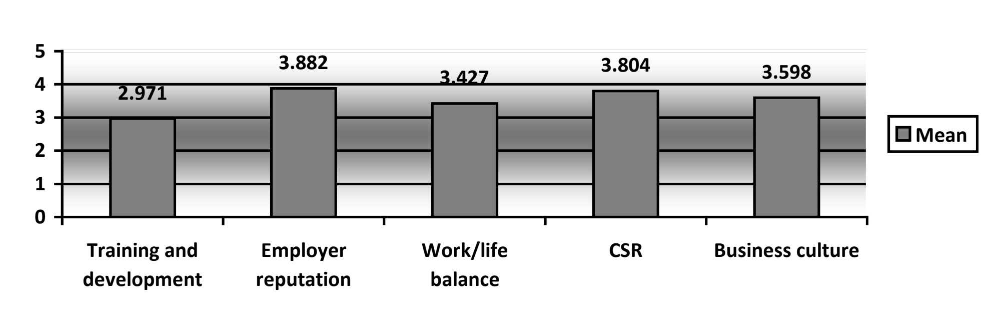
The sample was analyzed in terms of hotel category, tested subjects' education level, years of experience in hospitality industry and subjects' position at the hotel. Majority of the analyzed hotels were hotels of III (50%) and IV (47%) category. Additionally, majority of managers had a college degree (44% of the total sample), had up to 5 years of experience in hospitality industry (50%) and were employed as first-line managers, i.e. functional managers (53% of the sample).

4. Research results and discussion

4.1. Descriptive statistics

The development of employer brand dimensions at analyzed hotels was monitored by mean value. The highest mean value was recorded for employer reputation dimension (Mean = 3.882), while the lowest value was recorded for training and development dimension (Mean = 2.971) (Figure 1). The obtained results indicated that the tested subjects considered that employer reputation was closely related to employer brand, as well as that hotels permanently worked on promoting hotel reputation as exceptional employer on labor market. The mean value for dimension training and development clearly specified that hotels did not invest sufficient funds in employee training and development, which seemed as one of the crucial downsides, especially in terms of HRM practice.

Figure 1: Development of employer brand dimension for analyzed hotels



Source: Author's research

Mean value for variable workforce performances was 4.177. The highest value of standard deviation was recorded at corporate social responsibility variable (St. Dev. = 1.295). The obtained values of skewness were negative, which meant that the results were distributed in a way which was closer to higher values. Majority of obtained kurtosis results were negative, which meant that the distribution was much more flat than normal.

4.2. Reliability analysis

Reliability of the observed variables was measured based on the value of Cronbach's alpha coefficient. The value of the coefficient for the entire model was 0.877, which meant that consistency and reliability of the variables was satisfactory or even higher than the recommended minimum value 0.7 (Nunnally, 1978). Moreover, value of Cronbach's alpha coefficient for individual variables ranged from 0.827 (business culture) to 0.886 (work/life balance) (Table 1).

Table 1: Results of reliability analysis

Variable	**Cronbach's alpha coefficient**
Training and development	0.860
Employer reputation	0.832
Work/life balance	0.886
CSR	0.843
Business culture	0.827
Workforce performances	0.879

Source: Author's research

4.3. Correlation analysis

Correlation analysis results were used for monitoring the strength and direction of correlation between the variables. Correlation strength was defined based on the Pearson coefficient. Correlation coefficient between 0.10 and 0.29 indicated weak correlation between the variables, values from 0.30 to 0.49 indicated medium correlation, while values over 0.50 indicated strong correlation between the variables (Pallant, 2009). Positive/negative values of correlation coefficient pointed to the direction of the connection. If the values were positive, growth of one variable would result in the growth of another variable, and vice versa. On the other hand, if the values were negative, growth of one variable would result in the drop of another variable, and vice versa.

Table 2: Correlation matrix

	Training and development	**Employer reputation**	**Business culture**	**Work/life balance**	**CSR**	**Workforce performances**
Training and development	1					
Employer reputation	0.656**	1				
Business culture	0.704**	0.791**	1			
Work/life balance	0.318	0.479**	0.424**	1		
CSR	0.555**	0.698**	0.760**	0.574**	1	
Workforce performances	0.423*	0.625**	0.558**	0.253	0.342*	1
** Correlation is statistically significant on the level of 0.05* *** Correlation is statistically significant on the level of 0.000*						

Source: Author's research

After observing the correlation between employer brand dimensions, it could be concluded that all dimensions, except work/life balance, had strong and statistically significant correlation, especially in terms of business culture and reputation ($\rho = 0.791$; $p = 0.000$). The weakest correlation, which was not even statistically significant, was recorded between work/life balance and training and development ($\rho = 0.318$; $p = 0.066$). The analysis of correlation between workforce performance and employer brand dimensions pointed out that the correlation could be defined as medium and strong. The strongest correlation was recorded between reputation and workforce performances ($\rho = 0.625$; $p = 0.000$), while statistically insignificant correlation was recorded between work/life balance and workforce performances ($\rho = 0.253$; $p = 0.148$) (Table 2).

4.4. Regression analysis

Testing the impact of employer brand on workforce performance was carried out by applying multiple regression analysis. Such procedure implied the analysis of fulfillment of specific assumptions relevant for the application of this model. The assumptions referred to multicollinearity and autocorrelation analysis. Multicollinearity, i.e. high level of correlation between the variables was measured based on VIF coefficient, which should not be higher than 5. Autocorrelation was measured based on Durbin-Watson statistics, which should not be higher than 4. In terms of the analyzed research model, VIF coefficient was lower than 5 for all dimensions of employer brand (Table 3), while Durbin-Watson statistics for the observed model was 1.911, which confirmed that the assumptions for conducting regression analysis were fulfilled.

Table 3: Results of regression analysis

Employer brand dimensions	**Standard multiple regression**				
	β	**t**	**Sig.**	**Tolerance**	**VIF**
Training and development	-0.041	-0.201	0.842	0.478	2.093
Employer reputation	0.582	2.348	**0.026***	0.323	3.096
Business culture	0.375	1.328	0.195	0.249	4.022
Work/life balance	0.025	0.141	0.889	0.648	1.542
CSR	-0.341	-1.406	0.171	0.337	2.968

Dependent variable: Workforce performance
Significance: * $p \leq 0.05$
R^2 =0.445; F =4.492; p = 0.004
Source: Author's research

Based on the obtained results of regression analysis, one could conclude that hypothesis H_1 **was accepted** (p = 0.004), i.e. statistically significant impact of employer brand dimension on workforce performance of hotel companies was proved. Coefficient of determination R^2 was 0.445, which meant that 45% of workforce performance variability was explained by means of regression model, while the remaining part was under the influence of other factors. Having in mind that the sample was rather modest (n=34), the value of Adjusted R Square was 0.346. Value of F-statistic was 4.492. Based on the values of β, t and Sig. given in Table 3, it could be concluded that employer reputation dimension had statistically significant impact on workforce performance. The highest value of β coefficient was recorded for employer reputation dimension (β=0.582). This practically meant that, after deducting the variable which was explained by other model dimensions, employer reputation made the most significant contribution to the clarification of workforce performance. Moreover, the results indicated that employer reputation (β=0.582; t = 2.348; p = 0.026) had positive and statistically significant impact on workforce performance.

4.5. ANOVA test

Testing of hypothesis H_2 was carried out by means of one-way analysis of variance of various groups (ANOVA), which was based on comparison of average results of more than two groups (Pallant, 2009, p. 249). The application of this analysis was rather convenient for examining the difference between average values of workforce performance in hotels of different categories. The analyzed hotels were divided into three groups: hotels of III, IV and V category. The assumption for implementation of ANOVA analysis was tested based on Levene's test of homogeneity of variance which tested equality of variance in the results of each of the three analyzed groups (Pallant, 2009, p. 253). Significance value for Levene's test was p=0.144, which meant that variance homogeneity assumption was not affected and the conditions for conducting ANOVA analysis are fulfilled.

Table 4: Results of ANOVA test

	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	6.304	2	3.152	4.697	0.017
Within Groups	20.804	31	0.671		
Total	27.108	33			

Source: Author's research

The obtained results confirmed statistically significant difference at the level of $p \leq 0.05$ in terms of the results of three categories of hotels $F_{(2,31)}=4.697$; p=0.017 (Table 4). Hypothesis H_2 was **accepted,** which practically meant that there was a statistically significant difference in the level of accomplished average workforce performances among the hotels of different categories. Based on the obtained value of Eta-squared (0.233), significant difference between mean values of workforce performance could be confirmed. Additional comparison conducted based on Tukey's HSD test indicated that mean value of workforce performance of III category hotels (Mean=4.489, St. Dev.=0.547) was significantly different from the mean value of workforce performance of IV category hotels (Mean=3.667, St. Dev.=1.117).

Hotel employees assess the employer reputation dimension as the most developed. By developing a reputation in the external and internal environment, hotels are becoming more attractive to both labor market candidates and current employees. The essence of the concept of the employer brand is reflected in the fact that, on the one hand, talented and qualified graduates are looking for companies with a good reputation as an employer. On the other hand, companies are looking for motivated and talented employees who provide performance growth through work activities and generate and distribute a positive image of the company in the labor market (Brusch et al., 2018). The results of the regression analysis recommend that hotels invest and develop the employer brand because this is one way to increase workforce performances. A particularly important dimension of the employer brand whose growth can provide better workforce performance is the employer reputation. This conclusion is also indicated by the results of the correlation analysis. Reputation is a significant dimension in the recruitment process that attracts better and higher quality candidates (Arachchige & Robertson, 2011). By hiring such candidates and developing a work environment in which employees gain certain benefits (functional, psychological and economic), which also determine the employer reputation, it is possible to achieve high workforce performance in hotel. High workforce performance provides hotels certain benefits such as higher labour efficiency and productivity (Ali & Musah, 2012).

The research results also indicate that there is a significant difference in the level of accomplished average workforce performances among III and IV category hotels. Such results can be related to the development of the employer's brand. Categories III hotels get better workforce performance (Mean = 4.489) but also achieve a better assessment of the employer brand (Mean = 3.791). The average value of workforce performance of IV category hotels is Mean = 3.667, while the average assessment of the employer brand for these hotels is Mean = 3.300.

5. Conclusion

The research results provided answers to the asked research questions. Employer brand dimension- employer reputation (Mean = 3.882) and corporate social responsibility (Mean = 3.804) had the highest, while training and development dimension (Mean = 2.971) had the lowest mean value. Correlation analysis pointed to the strong and medium correlation between the employer brand dimensions and workforce performance. Hypothesis H_1 was adopted, i.e. statistically significant impact of employer brand on workforce performance at hotel companies was proved. By investing in the development of employer reputation, both externally and internally, hotels can increase employee results, which will be reflected in the overall business results of the hotel. Hypothesis H_2 was also adopted, which meant that there was a statistically significant difference in the level of accomplished average workforce performance among different category hotels. This difference in workforce performance can be interpreted in the context of the employer's brand development.

The conducted research had several *limitations*. The first limitation referred to the sample size. Subjects' response rate was 8%, which was not sufficient to make conclusions which would be valid for the entire hotel industry in the Republic of Serbia. As data were collected by means of a questionnaire, low response rate pointed to the lack of interest of hotel managers to take part in scientific research. The second limitation of the research referred to the way of perceiving workforce performance. Namely, the analyzed variable was expressed in qualitative way, but in order to make a realistic overview of employees work results, quantitative indicators (productivity, work efficiency, added value per employee, net profit per employee, etc.) should be included. The third limitation was related to the assessment of employer brand dimensions. As the questionnaires were filled out only by hotel managers, being the individuals competent for assessing workforce performance, employer brand dimensions were not assessed by employees. If other employees had been included in the assessment procedure, the results of employer brand dimensions would have probably been different.

Practical implications and proposals for future research. Research results clearly indicated that the company could have a significant impact on workforce performance by developing employer brand. This confirmed the assumption on the importance of human resources for hotel companies and the need to develop employer brand which would improve employees' efficiency. Employer reputation was a dimension which had statistically significant impact on workforce performance. This was expected, as managers who filled out the questionnaire assessed employer reputation as most developed dimension at the hotels, which was supported by the mean value (Mean=3.882). Additionally, the results of correlation analysis demonstrated that the employer reputation had the strongest correlation with workforce performance. Arasanmi and Krishna (2019), Maurya and Agarwal (2018) and Moroko and Uncles (2008) also discussed the importance of correlation between employer reputation and employer brand. As a reflection of business culture and employer's relationship with employees, the reputation was expressed in the form of company ranking at the labor market. Employer reputation was the result of all the benefits that the company had provided to its stakeholders, in this case- employees. However, hotel managers were very worried about the insufficient development of employee training and development dimension (Mean=2.971). The results pointed to low investment in professional advancement, knowledge and abilities of employees, which would have positive impact on their efficiency and productivity. Qualifications, knowledge and skills were crucial hotel resources which were relevant for guest satisfaction as well. Future research could be based on the expansion of workforce performance in terms of introducing appropriate dimensions (task performance, contextual performance, etc.) or introducing quantitative indicators of workforce. Furthermore, larger number of hotels and employees could be included in the research of employer brand dimensions in the future. In this way, researchers could make a comparative analysis of the development of employer brand from the viewpoint of employees and from the viewpoint of hotel managers.

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Covid-19 pandemic and global tourism

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Abstract: The tourism industry represents a significant part of the global economy. However, tourism demand is very sensitive to crisis events, such as economic crises, epidemics, pandemics, natural disasters and terrorist attacks. Regarding this, the primary research goal of the paper is to analyze the impact of the Covid-19 disease on global tourism. During 2020, in order to prevent further spread of this contagious disease, almost all countries in the world have introduced a ban on movement, closing of borders and other important health measures. The review of the relevant literature provided in the paper shows that the introduced measures have a negative impact on the global hospitality, travelling and tourism industry.

Keywords: SARS, Covid-19, tourism, epidemic, pandemic
JEL classification: I15, Z32

Pandemija Covid-19 i globalni turizam

Sažetak: Turistička delatnost predstavlja značajan segment svetske privrede. Međutim, turistička potražnja je veoma osetljiva na krizna dešavanja, kao što su ekonomske krize, epidemije, pandemije, prirodne nepogode i teroristički napadi. S tim u vezi, osnovni cilj rada jeste analiziranje uticaja bolesti Covid-19 na globalni turizam. Tokom 2020. godine gotovo sve zemlje sveta su, u cilju sprečavanja daljeg širenja ove zarazne bolesti, uvele zabranu kretanja, zatvaranje granica i ostale važne zdravstvene mere. Pregledom relevantne literature je utvrđeno da su preduzete mere ostvarile veoma negativan uticaj na sektore globalne ugostiteljske, putničke i turističke industrije.

Ključne reči: SARS, Covid-19, turizam, epidemija, pandemija
JEL klasifikacija: I15, Z32

1. Introduction

Tourism is considered an important industry that accounts for 10% of the global GDP, 7% of international trade and 30% of services. In this regard, 1 out of 10 jobs globally could be attributed to tourism (Chebly & Said, 2020). Until the outbreak of the Covid-19 pandemic, the tourism industry was one of the world's largest consumer markets. Significant growth of international tourism in the past decades has been the result of the influence of various factors, especially the development of new technologies, new life styles related to global prosperity, as well as the growth of low-cost airlines that made international travel available to wider audience. The enormous tourism development in past decades "can also be attributed to the emergence of the middle class in large and developing economies, such as China, Brazil and India" (RTE, 2020 as cited in Folinas & Metaxas, 2020, p. 2). The

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movement of people and tourism revenue has had a significant impact on the development of economies around the world (Grubor et al., 2019; Maksimović et al., 2019). Moreover, tourism is often the most important industry in regions that manufacture considers unattractive for investments (Počuča & Matijašević-Obradović, 2020). Tourists spend on sporting events and festivals, shopping, accommodation, restaurants, tourist attractions, while business passengers spend on conferences and other events, which stimulates the local economy and employment (Folinas & Metaxas, 2020). However, the tourism sector is very sensitive to crisis events, because when discouraging news is heard, passengers immediately decide to cancel or postpone their travels. In this regard, pandemic outbreaks are extremely pessimistic news for travelers, because in case of travel to distant destinations it can be difficult not to contract the disease. In addition, not only are passengers in danger, but also people who come in contact with them (Uğur & Akbıyık, 2020). The novel coronavirus represents just that, both an epidemic and a pandemic.

"Coronavirus is a virus of severe acute respiratory syndrome (SARS) mainly transmitted from animals to humans. The virus was most likely transmitted from birds to humans in 2002" (Uğur & Akbıyık, 2020, p. 1), when more than 8,000 people became ill between November 2002 and June 2003. The largest number of infected people was in China (almost two thirds) and Hong Kong (one fifth) (Mackyi & Liang, 2012). Also, a large number of infected and deadly cases were in Taiwan, Singapore and Canada. In late 2019, the coronavirus caused the emergence of another major virus, SARS-CoV-2. After 9,800 cases of infection and 213 deaths were recorded, the World Health Organization (WHO) classified Covid-19 as a public health threat of international importance at the end of January 2020. Five weeks later, when 118,000 cases of infection and 4,291 deaths were recorded in 114 countries, the WHO declared a pandemic on March 11 (Ghebreyesus, 2020). Thus, this severe acute respiratory syndrome spread rapidly around the world, leading to a global pandemic of the disease. Given that even ten months after the outbreak there is still no effective and proven vaccine for Covid-19, almost all countries have been forced to introduce travel bans. By July 1, 2020, the disease had caused over 500,000 reported deaths worldwide (Weed, 2020), while in early November 2020 the number was more than 1.2 million (Worldometer, 2020).

"The negative impact of Covid-19 is not limited to the loss of human lives, but also has short-term and long-term social, economic and political effects" (Farzanegan et al., 2020, p. 1). Organization for Economic Cooperation and Development (OECD) projections show that the intensive spread of Covid-19 is likely to cause a 1.5% drop in global economic growth in 2020, which is half of the projected growth rate before the outbreak (OECD, 2020). Also, "International Monetary Fund (IMF) predicts that Covid-19 will cause a global recession in 2020 that could be even worse than Global financial crisis in 2008" (Farzanegan et al., 2020, p. 1). Great restrictions on global travel and warnings to stay at home have led to the most serious collapse of the global economy since World War II. Since the ban on international travel has affected over 90% of the world's population, and intra-community movement bans were imposed, tourism industry was effectively paralyzed in March 2020 (Gössling et al., 2020). Thus, the travel and tourism sectors have shown a high vulnerability to the crisis caused by Covid-19, because this crisis has particularly affected passengers' demand. Travelling between different territories and the overall movement of people has become strictly controlled. Regarding this, hospitality industry, air transport, cruising and car rental are four industries that have experienced a large decline due to the pandemic (Sharma & Nicolau, 2020). As a result, most of the resorts and hotels remained completely empty for most of 2020.

Having in mind the above, the paper aims to clarify the impact of Covid-19 pandemic on global tourism by reviewing the relevant literature that deals with this matter. The qualitative analysis conducted in the paper should contribute to a better understanding of negative effects of this pandemic on the global tourism industry.

2. The outbreak and spreading of Covid-19

SARS is a respiratory disease that first appeared in 2003 in southern China (Guangdong province), after which it spread to North America and Europe. The official number of SARS infections worldwide was 8,096, while 774 deaths were recorded (Smith, 2006; WHO, 2004). The emergence of SARS in 2003 caused great concern at the international level due to its transmission dynamics, and simultaneously led to large economic losses in global tourism. The impact of the spread of SARS was reflected in the decrease of the number of international tourists, which fell by 42.83% during the second quarter of 2003 and 7.24% during the third quarter of the same year (Feng-Juan & Feng-Jie, 2013). Even then, it was obvious that such and similar events have a great negative impact on the tourism industry, because of its sensitivity to external shocks (Polyzos et al., 2020).

Seventeen years later, a new virus with similar characteristics appeared in China. The first cases of infection were reported in the live-animal markets in Wuhan. Further analysis determined that the pathogen that caused viral pneumonia in infected people is coronavirus. The new coronavirus has been officially named SARS-CoV-2, while the disease has been named Covid-19. Covid acronym stands for Corona Virus Disease, while the number denotes the year when the disease started to spread (Uğur & Akbıyık, 2020). Wuhan (Hubei Province) experienced an epidemic of SARS-CoV-2 virus in mid-December 2019 (Farzanegan et al., 2020; Yang et al., 2020). Regarding this development, on December 31, 2019, China sent a warning to the WHO that several cases of unusual pneumonia had occurred in Wuhan and that some of the infected people visited city markets. At the beginning of 2020, the disease spread quickly in China and later to most of the other countries. On January 31, 2020, WHO declared the outbreak of the disease Covid-19 a public health threat of international importance. At the beginning of March 2020, Covid-19 was reported for more than 1.4 million people (Folinas & Metaxas, 2020). So, in just a few weeks, the disease has spread all over the world and seriously endangered the lives of a large number of people, especially in East Asia, Europe and North America (Baum & Hai, 2020). The rapid spread of the virus forced the WHO to declare a global pandemic of Covid-19 on March 11, 2020. Also, after the spread of the disease in Italy, Spain, France, Germany and the United Kingdom, on March 13, 2020, the WHO announced that Europe had become the new pandemic epicenter. By the beginning of November 2020, over 50 million cases of Covid-19 and over 1.2 million deaths were recorded worldwide (Worldometer, 2020).

Covid-19 primarily affects lungs and respiratory tract and causes mostly respiratory symptoms. Most people who become infected with Covid-19 have mild symptoms and recover without the need for specialist treatment. However, the elderly and people with weakened immunity have an increased probability of becoming seriously ill. "This disease is transmitted from person to person through droplets from the nose or mouth that spread when the infected person coughs, sneezes or exhales" (Jones & Comfort, 2020, p. 77). Since testing is limited in many countries, due to the shortage of tests and adequate medical equipment, asymptomatic people are thought to be unconsciously transmitting the virus in large numbers (Gössling et al., 2020; Li et al., 2020). Regarding this, people without obvious symptoms spread virus even before they become aware, they need to go into self-isolation or take other actions, such as physically distancing themselves in public or covering noses and mouths to prevent the virus from spreading while talking, coughing or sneezing.

The rapid spread of Covid-19 has created significant pressures in health systems of many countries. These pressures are especially evident in the provision of a sufficient number of adequately equipped rooms in hospitals, medical equipment and devices for the treatment of gravely ill patients, sufficient number of medical staff employees and adequate facilities and testing instruments (Jones & Comfort, 2020). In order to prevent further spread of SARS-CoV-2, almost all countries in the world have defined a number of restrictions related to the movement of people and travel. However, these travel ban measures have had a major negative impact on the tourism industry and the global economy (Hoque et al., 2020). Tourism requires travelling, so any factor that is an obstacle to travel can significantly affect the tourism industry.

3. The impact of Covid-19 on tourism

The emergence of epidemics and pandemics negatively affects the development of the tourism industry. Regarding this, the fact that they occur more and more often in modern conditions is particularly troublesome. During the 20th century, only three pandemics were recorded (Gössling et al., 2020): "the so-called 'Spanish' flu or influenza of 1918-1919, 'Asian' flu (H_2N_2) of 1957 and 'Hong Kong' flu of 1968" (p. 4). However, there have been five pandemics recorded in the 21st century: SARS in 2002, bird flu in 2009, MERS in 2012, Ebola in 2013-2014 and SARS-CoV-2 in 2019. The frequent outbreak of pandemics in the 21st century can be attributed to factors of global changes. Some of these factors are: "rapid growth of the global population and its mobility, urbanization, industrialized food production in global value chains, increased food consumption (especially meat), and the development of global traffic networks" (Gössling et al., 2020, p. 3). However, in recent decades, the global tourism industry has suffered significant losses that are not related to epidemics, but are the result of a series of unfortunate climatic and geopolitical events (tsunamis, hurricanes, earthquakes, terrorism and such) (Polyzos et al., 2020). In this regard, the major events that caused the collapse of the tourism industry in the 21st century include the terrorist attack of September 11 (2001), the outbreak of the virus causing severe acute respiratory syndrome (SARS) (2003), the Global economic crisis in 2008/2009, the outbreak of the virus that causes Middle Eastern acute respiratory syndrome (MERS) (2015) and SARS-CoV-2 (2019). Until the spreading of Covid-19, it was assumed that tourism as a system was largely resistant to external shocks. However, the impact of this virus on the tourism industry is unprecedented, as the consequences of Covid-19 are far more pronounced than in the previous crises (Gössling et al., 2020).

The rapid spread of Covid-19 has significantly affected global tourism, which has suffered serious consequences (Estrada et al., 2020), especially attractive tourist destinations, such as France, Italy and Spain, but also countries where outbound tourism is extremely widespread, such as China and the United States (Farzanegan et al., 2020). The news that the virus has spread has caused great concern among tourists, potential tourists and the wider tourism industry. A global wave of cancellations and postponements of tourist and business arrangements followed. The International Air Transport Association (IATA, 2020) reported that the coronavirus would reduce global air traffic revenues by $29.3 billion in 2020. This is the first decline of its kind since the Global financial crisis of 2008, and almost 95% of the projected loss relates to carriers from the Asia-Pacific region (Folinas & Metaxas, 2020). According to a CNBC report, almost 200,000 flights from and to China were canceled in 2020. Also, "many cruise lines, such as the Norwegian Cruise Line and Royal Caribbean, have suspended sailing from and to China" (Hoque et al., 2020, p. 1).

Chinese tourism is considered one of the world's largest tourism markets when it comes to both inbound and outbound tourism. Chinese tourists make up more than 10% of the world's tourists. "China's annual revenue from the tourism industry is about CNY5.128 billion" (Hoque et al., 2020, p. 1). However, when the coronavirus spread, the Chinese tourism industry suffered a significant drop. World tourists who have booked holidays to many destinations in China, such as Beijing, Shanghai, Xi'an and Chengdu, have canceled or rerouted these reservations to other destinations, such as South Africa, the Maldives and Australia (Dezan Shira & Associates, 2020). Singapore, the United States and Australia immediately banned the entry of foreign nationals who visited China. However, the pandemic spread quickly in the United States, where, as in other countries, it caused an economic crisis. In this regard, the U.S. policy makers were forced to adopt draft plans for economic recovery. Citizens were invited to stay in their homes and received support in the form of financial assistance. Small businesses also received financial and tax incentives, while large corporations delivered requests for more financial assistance (roughly the amounts they received at the beginning of the economic crisis in 2008) (Sharma & Nicolau, 2020).

World Travel and Tourism Council (WTTC) argue that Covid-19 would have severe consequences on the global tourism industry by reducing travel by 25% in 2020 and generating a loss of 50 million jobs that would require at least ten months for this industry to recover. The effects of the pandemic are closely correlated with the degree of the implemented restrictive measures, using a U.S. administration ban on travels to Europe as an example (Folinas & Metaxas, 2020).

The first projections of the United Nations World Tourism Organization (UNWTO) for 2020 are that international travels will fall by 20-30% compared to 2019 (Chebly & Said, 2020). A 20-30% drop in tourism activities will bring down international tourism revenue by about $300-450 billion. That is "almost a third of the $1.5 trillion market" (Polyzos et al., 2020, p. 2). However, in the first half of 2020, there were as many as 65% fewer international tourist arrivals compared to the same period in 2019. It is estimated that international tourist arrivals fell by 78% and led to a loss of $1.2 billion in revenues from tourism, as well as a direct loss of 120 million jobs in tourism industry, which is seven times larger than the impact of September 11 and the biggest drop in history (UNWTO, 2020). Hence, decisive measures must be introduced to support tourism in order to save it from rapid declining. Employees in the tourism industry are not the only economic agents that are facing the negative impact on revenues, but also many related industries, so many economic sectors may suffer damage. It should also be noted that "the tourism industry is often a source of seasonal income for unskilled workers, usually originating from lower-income groups. In this sense, the adverse impact on tourism can also increase income imbalances and harm social justice" (Polyzos et al., 2020, p. 11).

Covid-19 pandemic has caused economic and social consequences for the sustainable development of countries whose GDP is substantially contributed by tourism. In most of the countries, governments have introduced measures to prevent job losses, but many travel companies are managed by self-employed persons and families who often do not qualify for state aid packages. This has happened especially in "small and less developed countries (e.g. Maldives and Seychelles) where tourism accounts for over 50% of gross domestic product" (Jones & Comfort, 2020, p. 79).

Measures taken to prevent the spread of Covid-19 (e.g., social distancing, travel and movement bans, community movement bans, self-isolation, gathering restrictions) have stopped global travel, tourism and leisure activities. As tourism is one of the most important parts of global employment and important factor contributing to GDP in several countries, the impact of Covid-19 on tourism is a topic of many international debates (Sigala, 2020).

4. Post-Covid global tourism

It can be assumed that after the Covid-19 pandemic tourism will go through certain transformations, whereby tourist strategies and tourists' behavior will most likely change. Regarding this, it will be necessary to conduct adequate analyses that will be helpful in defining future strategies on the basis of accurate data on the pandemic, mortality and its ultimate economic effects.

The most important changes that can be expected in the tourism industry after the Covid-19 pandemic can be summarized as follows:

- People will most likely avoid distant tourist destinations and, vice versa, they will prefer closer ones. The reason for choosing less distant tourist destinations is reflected in reducing the risk of infection, but also the possibility of some of the borders being closed (crossing many borders increases the risk of some of them being closed). The decisions that tourists make in favor of shorter routes can significantly contribute to the more intensive development of domestic tourism;
- The price of international flights will increase as a consequence of reduced tourism demand due to the reduced number of passengers. Also, the increase in flight prices will be additionally influenced by social distancing procedure which airlines must enforce;
- Changes in the cruise industry are expected. In accordance with the redefined tourists' requirements, the average length of cruise is most likely to decrease in the future along with the number of passengers;
- Hotels will also undergo transformations as a result of investing large sums in non-contact technologies and raising hygiene standards. In the future, crowds at receptions will be most likely avoided, reservations will be placed through applications, the use of gyms will be limited to some extent, more frequent surface disinfection will be imposed and other health and hygiene measures will be implemented more intensively. Hygiene and health conditions of tourist destinations will become important factors affecting tourists' decision making;
- The future of large gatherings (e.g. Olympics and Oktoberfest) is uncertain. Due to numerous restrictions imposed on cross-border movements, social distance, temperature control and the reduced number of international airlines, it will be difficult to organize large events that gather millions of people in the same manner as before Covid-19.

In line with the aforementioned potential changes, the tourism industry will have to regain the confidence of travelers in the future, at least when it comes to the risks to which they are exposed. Regarding this, it will be necessary to introduce updated travel insurance, refunds in case of travel cancellation and define adequate policies in case of change of travel plans. Given that travel insurance has become particularly important topic with the Covid-19 outbreak, future tourism industry recovery strategies should include offer of travel arrangements that include travel insurance packages shaped in line with the Covid-19 background.

Also, in the future, the transformation of the global tourism system oriented toward more sustainable economic development should be reconsidered. Covid-19 crisis has pointed out the importance of balance between tourism and sustainable development, reflected in the ecological changes that could be of key importance for the transition to a more sustainable future.

5. Conclusion

The world has experienced many epidemics and pandemics throughout history, but none has had as pronounced consequences for the global economy as the Covid-19 pandemic. In a short time, Covid-19 has caused great panic among people all over the planet. To prevent the further spread of Covid-19, most countries in the world immediately took important health measures, such as movement ban and closing of borders. However, the imposed restrictive measures have had a negative impact on the global economy, especially on the tourism industry. It is estimated that by the end of 2020 a large drop in international tourist arrivals will reduce global tourism industry revenue by about 70%. Thus, Covid-19 is not only a danger to human life, but also has numerous short-term and long-term negative economic, social and environmental consequences. The impact of Covid-19 on tourism in developing countries is projected to be significantly greater than in developed countries. In some smaller countries where tourism accounts for more than 50% of GDP (e.g., Maldives and Seychelles) the pandemic has pushed a large part of population to poverty since the tourism is a primary source of income in these countries.

After the end of the Covid-19 pandemic, the tourism industry will most likely experience changes as a consequence of modified attitudes and behavior of tourists and numerous proposals for its future development. Most of the proposals are aimed at providing long-term social distance during air and cruise travels and staying in hotels and restaurants.

The qualitative analysis carried out in the paper has a significant scientific contribution. The theoretical and practical contribution of the paper is reflected in a better understanding of the research subject, which is an important precondition for undertaking adequate economic measures. Although the impact of Covid-19 pandemic on the global economy and tourism is attracting the attention of many researchers, this research topic is still inadequately explored in the relevant literature. In this regard, this paper can be the basis and guideline for some future research. For example, it would be important to conduct a comparative analysis of the economic consequences of the Covid-19 pandemic and the Global financial crisis of 2008, with a special emphasis on their impact on tourism. However, certain limitations are noticed in the conducted research. The main limitations are related to the lack of officially published data regarding Covid-19 economic impact, at least when it comes to economic indicators that measure the impact of the disease on tourism industry.

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Strategic approach to the development of ecotourism in Bor District, Serbia

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Abstract: The increase in ecotourism popularity at a global level is a consequence of the increased human concern for the state of natural resources. This type of alternative tourism is increasingly present in tourist trends around the world. For developing countries, ecotourism can be an opportunity for accelerating economic development by exploiting natural resources, without changing their original state. Although it offers great opportunities, the management of tourism in protected or unprotected natural assets is a great challenge. The importance of integrating the actions of all stakeholders and the usage of strategic approach are often neglected. The aim of this paper is to generate strategies for the development of ecotourism in Bor and its surroundings. For this purpose, a combined SWOT-TOWS methodology is applied. Based on the obtained results, nine strategies are proposed, whose implementation would enable the usage of natural and cultural and historical potentials for the revival of ecotourism in this area.

Keywords: ecotourism, strategy, SWOT, TOWS, Bor District
JEL classification: Q57

Strategijski pristup razvoju ekoturizma u okolini grada Bora, Srbija

Sažetak: Porast popularnosti ekoturizma na globalnom nivou posledica je povećane zabrinutosti čoveka za stanje prirodnih resursa. Ovaj vid alternativnog turizma je sve prisutniji u turističkim kretanjima širom sveta. Za zemlje u razvoju, ekoturizam može predstavljati priliku da unaprede svoj ekonomski razvoj eksploatacijom prirodnih resursa, kojom se ne narušava njihovo izvorno stanje. Iako pruža velike mogućnosti, upravljanje turizmom u zaštićenim ili nezaštićenim prirodnim dobrima predstavlja veliki izazov. Vrlo često se zanemaruje važnost integracije svih stejkholdera i strateški pristup. Cilj istraživanja u ovom radu je generisanje strategija razvoja ekoturizma u gradu Boru i njegovoj okolini. U tu svrhu, primenjena je kombinovana SWOT-TOWS metodologija. Na osnovu dobijenih rezultata, predloženo je devet strategija čija bi implementacija omogućila iskorišćavanje prirodnih i kulturno-istorijskih potencijala u oživljavanju ekoturizma ovog kraja.

Ključne reči: ekoturizam, strategija, SWOT, TOWS, grad Bor
JEL klasifikacija: Q57

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1. Introduction

Tourism is usually seen as a service activity that contributes to increasing national GDP. A tourism development level varies from a country to country, although they all have certain resources that can attract tourists around the world. Natural potentials, without any doubt, find their place at the very top of the pyramid of a tourist demand. In that sense, a healthy or preserved environment is a prerequisite for the development of modern forms of tourism.

The end of the 20th century was characterized by the increasing awareness of people about the negative effects of their activities on nature. However, the increased presence of news about the alarming ecological situation in media was fruitful. The consumer habits of a society began to be questioned, and focus was increasingly redirected to the products whose characteristics do not hamper the environment. These changes were also reflected in tourism, i.e. the emergence of its alternative forms. One of them is ecotourism. The beginnings of ecotourism are linked to the establishment of the first national parks, more precisely to the establishment of Yellowstone National Park in the United States in 1872. It was the impetus for the opening of many other national parks throughout the USA, Canada, Australia, while they were established in Europe 30 years later.

In addition to the fact that ecotourism is considered a type of nature-based tourism, this concept is very complex, and there is no universal definition of it. One of the most accepted definitions is one formulated by the World Tourism Organization (UNWTO) which starts from the following notion of ecotourism: "Ecotourism represents all forms of tourism in which the main motivation of the tourists is the observation and appreciation of nature as well as the traditional cultures prevailing in natural areas" (UNWTO, 2001). It differs from other forms of nature-based tourism in its specifics such as education, recreation, and adventure (Laarman & Durst, 1987). Its educational dimension is emphasized parallel with minimizing the negative impacts on the natural and socio-cultural segments.

The modern age is characterized by the expansion of ecotourism. The emergence and forms of ecotourism are influenced by factors such as the population density of an area, the state of the natural environment, and numerous differences in culture. In this way, different trends in the development of ecotourism have been emerging. Statistically speaking, ecotourism trips in Europe increased by 7% in the period from 1997 to 2004, while 2004 was specific considering that 22 million ecotourism trips were recorded, representing the share of 9% in the total structure of all tourist trips. Given the overbearing pollution at the global level and the growing environmental awareness of the human population, it can be assumed that this form of tourism will be increasingly prevalent in future.

The development of ecotourism based on strategic planning is a complex multidisciplinary task developed on the principles of the sustainability concept. Clearly defined and pre-established goals can be achieved only with well-conceived environmental management in tourism. The tasks of the tourist destination ecological management are aimed at preserving the living environment of that area, which implies the application of world standards, active involvement in relevant environmental actions, and creating partnerships with other participants in the realization of established goals (Đorđević et al., 2010).

2. Ecotourism in Serbia

Ecotourism in Serbia is still in its infancy and at an unenviable level. The main reasons for this situation are considered to be insufficiently developed ecotourism destinations, as well as the lack of appropriate campaigns aimed at raising public awareness of the concept and principles of ecotourism (Beljanski, 2018). This type of tourism has only recently begun to be recognized as one of the possible ways to make a profit in both the tourism industry and the entire national economy. Natural and cultural diversity, the richness of biodiversity, areas of untouched nature, conditions for outdoor sports activities, and education of tourists are just some of the potentials that are the basis for ecotourism development. Some of the potential eco-destinations in Serbia are Stara Planina, Đerdap National Park, Krupajsko vrelo, Tara National Park, the nature reserves of Zasavica, Uvac, Stari Begej, Vlasina Lake, Golija - Studenica biosphere reserve, and many others. Currently, the most used forms of ecotourism are ecotourism in protected natural assets and ecotourism of green mountains. However, Serbia still needs to make great efforts to use its natural resources as important factors in the ecotourism offer. In that sense, it is necessary to obtain serious and comprehensive approach of the State, active participation of local government, infrastructure development, training and raising environmental awareness, an international certification of services, continuous monitoring and introduction of extensive and responsible marketing for promotion of ecotourism destinations and environmental programs (Milivojević et al., 2006).

3. Methodology

SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis is a tool that is considered the basis of strategic management. This technique aims to define all internal (Strengths, Weaknesses) and external (Opportunities, Threats) factors that affect the organization's positioning in the market (Hill & Westbrook, 1997). In order to generate strategies for achieving the desired goals, based on the results obtained by SWOT analysis, a TOWS matrix can be created. The difference between the SWOT and TOWS matrix is that the former is focused primarily on the internal environment, and the latter on the external one. The process of TOWS analysis implies the merging of external factors, i.e. opportunities and threats with the strengths and weaknesses that represent the internal factors of the project. By establishing the relationship between internal and external factors, i.e. strengths-opportunities weaknesses-opportunities, and then strengths-threats and weaknesses-threats, four types of strategies are formulated (SO, WO, ST, WT):

- "SO" strategies aim to use strengths in order to maximize and exploit potential opportunities. These strategies are also known as attack strategies.
- "WO" strategies need to minimize weaknesses in order to make room for the exploitation of opportunities. This strategy is also known as the "Min-Max" strategy.
- "ST" strategies, i.e. "Max-Min" strategy, are defined in a way that will minimize possible threats by identified strengths. Such strategies are called defensive strategies.
- "WT" strategies are aimed at minimizing weaknesses in order to avoid potential threats, and such strategies are extremely defensive. They are "Min-Min" strategies.

Besides its intensive application in business, SWOT-TOWS analysis has found its application in strategic planning within tourism. In that sense, numerous studies have applied this model to generate ecotourism development strategies as a dynamic sector growing rapidly worldwide (Akbulak & Cengiz, 2014; Asadpourian et al., 2020; Ganjali, 2014; Jozi & Rezaian, 2010; Lane, 1994).

The aim of this paper is to use the abovementioned methods to create an adequate model of strategic planning for the development of ecotourism in Bor and its surroundings.

Research area

Bor City, as the seat of Bor District, is located in the east of the Republic of Serbia. According to the 2018 census, there were 45,266 inhabitants in the city and its surrounding villages (Statistical Office of the Republic of Serbia, 2019). The city has a predominantly hilly and mountainous relief and covers an area of 856 km^2. It is known for significant deposits of copper and gold and it was considered as an industrial city for decades. However, it is less known that there are numerous natural resources in the vicinity of the city, which represent a significant basis for the development of tourism, and ecotourism as well.

Near the city, there is Brestovac banja, in which healing springs ensure medical treatment and rehabilitation to visitors. If other natural potentials are considered, the following can be taken into account: the limestone surface of Dubašnica, the mountains of Crni Vrh, Stol, Deli Jovan, Mali Krš and Veliki Krš, Bor Lake, Zlot Caves, and Lazar’s Canyon. Each of these relief areas with its characteristics creates opportunities for the development of ecotourism. In recent years, there has been a growing interest of numerous nature lovers from Serbia in the mountain massifs such as Crni Vrh and Stol. Their potentials are diverse and, therefore, they are suitable for various activities such as hiking, paragliding, skiing, relaxing in nature, and many others related to the concept of ecotourism. Bor Lake is perhaps the most famous tourist destination in the vicinity of Bor, but considering the characteristics of tourist visits to this locality and the wishes of visitors, it can be said that only mass tourism is currently developed there. The location of special importance is Zlot Caves, whose complex includes the Lazar’s Canyon, caves, and many hiking trails. In addition to natural resources, Bor has numerous potentials in the form of a rich cultural and historical heritage, which can meet requests of the educational component of ecotourism.

Within the main goal of spatial tourism development in Serbia, the following operational goals are relevant for the planning area Bor Lake - Brestovac banja: the realization of tourist projects in the existing and new destinations along with the completion of year-round offer and intensification of its exploitation; the reservation, protection, and activation of new tourist areas in accordance with the possibilities of state financing and the available amount of natural resources for tourism development; the supporting of existing and introduction of new tourism products (cruises with itineraries on natural, cultural and historical and other motives, water tourism, eco-tourism, etc.) (Official Gazette, 2010). The local government of Bor also recognized the advantages and opportunities for the development of sustainable, rural, and eco-tourism. Aiming to achieve this, a five-year strategy for tourism development in the area of the city and its surroundings has been defined. The strategy is based on operational plans, i.e. identifying key indicators for measurement of social, economic, and environmental benefits achieved in the foreseeable future. It is planned to create an action plan that will be focused on the establishment of cooperation between local government, public sector, and private sector and citizens, aiming to develop sustainable tourism.

4. Results and discussion

In order to generate the most effective and efficient strategies aimed at the ecotourism development in Bor and its surroundings, the SWOT-TOWS model was applied. The results of this analysis are presented below.

4.1. SWOT analysis results

The application of SWOT analysis in this paper is reflected in the identification of all strengths and weaknesses characterizing the research area and the identification of opportunities and threats that are relevant for the development of ecotourism. Consequently, based on a comprehensive overview of the current situation, Table 1 highlights all internal and external factors, which in the next step will be the basis for creating and prioritizing strategies for the development of ecotourism in Bor and its surroundings.

Table 1: SWOT matrix

Strengths	**Weaknesses**
S1 Areas of untouched nature and favorable conditions for growing organic products **S2** Relief potential for sports and recreational activities **S3** Numerous rural areas **S4** Specific cultural and historical heritage **S5** Local government initiative for rural development and nature conservation	**W1** Low level of ecological awareness of citizens and insufficient knowledge about the concept of ecotourism in this region **W2** Lack of synergy and nonconformity of all stakeholders **W3** Very few accommodation facilities that comply with environmental standards **W4** Poor traffic connection **W5** Insufficiently developed image of Bor District as a potential ecotourism destination
Opportunities	**Threats**
O1 Numerous EU funds and projects, as a financial incentive for the development of sustainable tourism in Serbia **O2** Trend of increasing tourist interest in ecotourism in Serbia **O3** Implementation of the Tourism Development Strategy of Bor and its surroundings for the period 2021-2025 **O4** Announcing the construction of Vožd Karađorđe Highway	**T1** Industrialization and even more intensive development of mining in this region **T2** Overexploitation of natural resources **T3** Insufficient interest of domestic and foreign investors in investing in tourism **T4** Unsuccessful implementation of adopted strategies for the development of ecotourism **T5** Redirection towards the development of more commercial forms of tourism

Source: Author's research

It can be seen from Table 1 that each factor or criterion has a different number of sub-criteria. In that case, strengths have defined five criteria (S1-S5), weaknesses have also five (W1-W5), opportunities have four (O1-O4) and threats have five sub-criteria (T1-T5). A somewhat more detailed explanation of the mentioned matrix factors follows below.

Areas of untouched nature and favorable conditions for growing organic products (S1) - The surroundings of Bor abound in wild landscapes (Crni Vrh, Stol, Veliki Krš). Due to the favorable climate and quality agricultural land, the preconditions have been created for the cultivation of organic products, for which the demand has been growing rapidly in recent years. This kind of product is one of the requirements and needs of eco-tourists. Therefore, the mentioned characteristics are the basis of rural development and recovery.

Relief potential for sports and recreational activities (S2) - Ecotourism is also characterized by the aspiration of visitors to active vacation. The specifics of the relief in this area provide favorable conditions for sports activities in nature (hiking, cycling, mountaineering, rafting, paragliding, etc.). At the same time, it is necessary to eliminate any danger of disturbing or changing the original character and appearance of the area.

Numerous rural areas (S3) - Rural areas represent a suitable ground for the development of agro-eco-tourism, which is increasingly represented in the world. This type of ecotourism is based on the stay of tourists in rural households and their participation in the agricultural activities of the hosts, as well as familiarizing with the local flora and fauna, culture, customs, and traditions.

Specific cultural and historical heritage (S4) - The cultural heritage of predominantly rural areas in the vicinity of Bor and the nearby villages is reflected in the existence of a unique Vlach community with a specific material and spiritual heritage. Historically, as the city with the most famous and oldest copper and gold mine, Bor is known for the Museum of Mining and Metallurgy, numerous monuments dedicated to the founders and mining engineers, and exhibits of mining machinery and equipment exhibited throughout the city.

Local government initiative for rural development and nature conservation (S5) - Numerous initiatives and projects implemented by local government and non-governmental organizations aimed at the development of various tourism types based on nature and environmental protection have been present in Bor during past years. These types of initiatives are increasingly involving the young people and residents of rural areas.

Other internal factors are weaknesses and their explanations follow.

Low level of ecological awareness of citizens and insufficient knowledge about the concept of ecotourism in this region (W1) - A high level of environmental awareness of the local population is a basic precondition for the establishment and long-term development of ecotourism. Following their example, residents should influence the behavior of visitors and their attitude towards the environment. Their daily activities should be in accordance with environmental rules and requirements. In this region, it is necessary to organize more frequently ecological workshops, realize ecological education, and learn the actual meaning of ecotourism.

Lack of synergy and nonconformity of all stakeholders (W2) - In order to achieve development and progress in any area, coherence and joint action of all stakeholders is a necessity. In the case of the ecotourism development in Bor and its surroundings, the situation in that regard is still not satisfactory. The cooperation between local government, urban and rural population, rural households, entrepreneurs, and investors is weak, while their activities are unrelated and inconsistent.

Very few accommodation facilities comply with environmental standards (W3) - In order to preserve a certain rural area, i.e. an area of untouched nature, during a short visitors' stay, it is necessary to build such capacities that are in line with environmental standards. Such capacities should have minimal impact on the environment. One type of such facilities is the "eco-lodges", which does not require large investments. However, in this region, as well as in the rest of Serbia, the number of eco-lodges and facilities built in harmony with nature is insignificant.

Poor traffic connection (W4) - One of the prominent shortcomings of the Region as a whole is the insufficiently frequent location and isolation of Bor. Poor traffic infrastructure and inadequate connections with other parts of Serbia make the tourists' arrival in this area much more complicated.

Insufficiently developed image of Bor District as a potential ecotourism destination (W5) - The long and widely known mining tradition of Bor certainly influenced the creation of its image of an industrial city. The reputation gained in this way undoubtedly hinders the development and promotion of Bor as an ecotourism destination.

Within the SWOT analysis, in addition to internal ones, external factors are also considered, which reflect the opportunities and threats to eco-tourism development.

Numerous EU funds and projects, as a financial incentive for the development of sustainable tourism in Serbia (O1) - The financial sources intended for the reconstruction of roads and accommodation capacities, the enhancement of consumption of renewable resources in the households, recycling, environmental protection, etc. are numerous but underutilized. They are reflected in the various EU programs that have emerged to support the development of ecotourism, rural tourism, the protection and improvement of the environment, and the preservation of cultural heritage.

The trend of increasing tourist interest in ecotourism in Serbia (O2) - In 2016, the Serbian Government adopted the Tourism Development Strategy for the period 2016-2025, which emphasizes the development of sustainability and ecotourism (Official Gazette, 2016). The strategic approach implemented at the national level significantly contributes to the provision of technical, financial, and promotional support and their integration and facilitates the establishment and operation of small and medium enterprises oriented to ecotourism in all parts of Serbia.

Implementation of the Tourism Development Strategy of Bor and its surroundings for the period 2021-2025 (O3) - One of the operational goals defined in the recently adopted Tourism Development Strategy in Bor and its surroundings for the period 2021-2024 is the development of sustainable tourism. Within this goal, measures are planned for the integration of ecotourism and active tourism in the tourist offer of the city of Bor and its surroundings.

Announcing the construction of the Vožd Karađorđe Highway **(***O4)* - Vožd Karađorđe Highway, whose construction is planned in near future, implies a fast road that will go in the epsilon branch, from Mladenovac to Aranđelovac, from Topola to Rača, Svilajnac, Despotovac, and Bor. This highway would make Bor and its tourist sites “closer” to the other parts of Serbia and make them more accessible not only to domestic but also to foreign tourists.

Finally, potential threats that could jeopardize the development of ecotourism in the observed area are analyzed.

Industrialization and intensified development of mining in this region (T1) - From the moment of the sale of the company Mining and Smelting Basin Bor to ZiJin Copper, the Chinese company, there has been recorded a rapid industrial development and exploitation of copper and gold ore, as well as the opening of new mines. In addition, the number of smaller mining companies has been increasing. These changes pose a threat in the form of endangering and destroying certain ecosystems. Furthermore, these trends significantly contribute to the creation of the image of an ecologically endangered city.

Overexploitation of natural resources (T2) - Non-compliance with environmental standards during the technological processes of production and processing of copper and gold ore in the future may contribute to significant pollution of air, water, and soil, thus eliminating any possibility of ecotourism development in the city. Even more alarming is the fact that irresponsible attitude towards natural resources and neglecting the environment capacity will significantly endanger the local population health.

The insufficient interest of domestic and foreign investors in investing in tourism (T3) - Given that ecotourism is a type of tourism that, at first glance, does not bring significant profits, very often there is no interest of investors to finance such projects. On the other hand, ecotourism development does not require significant financial resources. Most of these investments are necessary for traffic infrastructure development and the building of accommodation facilities.

Unsuccessful implementation of adopted strategies for the development of ecotourism (T4) - National and local tourism development strategies have not delivered significant results in the past. Besides, a large number of operational objectives have not been achieved yet. According to the Strategy for Tourism Development in the Republic of Serbia in the period from 2016-2025, the main reasons for this failure were the global economic crisis, the unstable political situation in the country, the lack of financial resources, and the incomprehension of the tourism sector importance for economic development. Current strategies emphasize the need for a systematic approach to tourism development, and special emphasis is placed on sustainable tourism and ecotourism. However, the latest events related to the COVID-19 virus pandemic have already started to disrupt tourism development globally. Tourism is one of the most endangered industries and the consequences will be the long-term ones. Therefore, the implementation of all strategies adopted so far is under question.

Redirection towards the development of more commercial forms of tourism (T5) - Mass tourism is still one of the tourism types that brings the highest income to the State and the local community. Traditional tourists spend larger sums of money during their stay in a certain tourist destination to satisfy their personal needs for rest and relaxation. Although ecotourism is recognized as an alternative form of tourism that strives to maintain ecological balance, the worrying fact is that competition for profit in underdeveloped countries such as Serbia will further increase the importance of mass tourism.

4.2. Generating strategies using the TOWS matrix

The next step that will enable the generation of strategies depending on the conducted SWOT analysis is the creation of the TOWS matrix.

Based on the abovementioned, the strategies for the development of ecotourism in Bor and the surrounding area are generated and shown in Table 2.

The combination of the observed internal and external factors enabled obtaining the following strategies.

The strategy of more frequent application of foreign funds and implementation of projects aimed at acceleration of eco-tourism and rural development (SO1) - In addition to the availability of natural resources, ecotourism development depends on the availability of financial resources. Coordinated and continued monitoring of open calls for ecotourism development, rural areas, and preservation of cultural and historical heritage by local governments, entrepreneurs, and farm owners would increase the chances of obtaining non-refundable financial assistance aimed at building accommodation, infrastructure development, promotion, and the like (Table 2: S1, S3, O1 and O3).

Table 2: TOWS matrix

	Strengths	**Weaknesses**
	S1 Areas of untouched nature and favorable conditions for growing organic products **S2** Relief potential for sports and recreational activities **S3** Numerous rural areas **S4** Specific cultural and historical heritage **S5** Local government	**W1** Low level of ecological awareness of citizens and insufficient knowledge about the concept of ecotourism in this region **W2** Lack of synergy and nonconformity of all stakeholders **W3** Very few

	initiative for rural development and nature conservation	accommodation facilities that comply with environmental standards **W4** Poor traffic connection **W5** Insufficiently developed image of Bor District as a potential ecotourism destination
Opportunities **O1** Numerous EU funds and projects, as a financial incentive for the development of sustainable tourism in Serbia **O2** Trend of increasing tourist interest in ecotourism in Serbia **O3** Implementation of the Tourism Development Strategy of Bor and its surroundings for the period 2021-2025 **O4** Announcing the construction of Vožd Karađorđe Highway	**SO** **SO1** Strategy of more frequent application for foreign funds and implementation of projects aimed at acceleration of eco-tourism and rural development **SO2** Strategy for creating a unique tourist product based on the integration of natural, recreational, and cultural and historical potentials	**WO** **WO1** Strategy for raising the environmental awareness of the local population and familiarization with the concept of ecotourism **WO2** Strategy for intensifying the promotion of natural and cultural and historical potentials **WO3** Strategy for enabling joint action of all stakeholders
Threats **T1** Industrialization and intensified development of mining in this region **T2** Overexploitation of natural resources **T3** Insufficient interest of domestic and foreign investors in investing in tourism **T4** Unsuccessful implementation of adopted strategies for the development of ecotourism **T5** Redirection towards the development of more commercial forms of tourism	**ST** **ST1** Strategy for environmental protection in the Region and increased control of ZiJin Company business operations by State institutions, as well as imposing more restrictive measures to prevent pollution **ST2** Strategy for stimulation of rural and agricultural development in the function of tourism	**WT** **WT1** Strategy for intensified efforts of local government towards harmonization of activities with the Tourism Development Strategy for the Republic of Serbia in the period 2016-2025 **WT2** Strategy for the establishment of ecotourism development fund by local government

Source: Author's research

Strategy for creating a unique tourist product based on the integration of natural, recreational and cultural and historical potentials (SO2) - This strategy would integrate the natural, recreational and cultural and historical values of the region, which would satisfy all the requirements of ecotourists in the form of enjoying natural wealth, active recreation and education (Table 2: S1, S3, S4, O2 and O3).

Strategy for raising the environmental awareness of the local population and familiarization with the concept of ecotourism (WO1) - The ecologically aware local population is the basic precondition for the development of ecotourism. Local government and population must be fully acquainted with the requirements of ecotourism and ecotourists, in order to create an adequate offer and set an example to visitors regarding attitudes towards the environment (Table 2: W1 and O3).

Strategy for intensifying the promotion of natural and cultural and historical potentials (WO2) - The Strategy for the Tourism Development of the City and its surroundings for the Period 2021-2025 adopted by the local government, among other things, includes the activities for the development and promotion of ecotourism. The implementation of this Strategy would overcome the weaknesses that are reflected in the underdeveloped image of Bor and its surroundings as a potential ecotourism destination.

Strategy for enabling joint action of all stakeholders (WO3) - The integration of all stakeholders aimed at ecotourism development will provide synergies necessary for coordinated and easier overcoming of problems. Their connection can be realized by establishing various associations in which all interested parties would be active (local self-government, urban and rural population, entrepreneurs, tourist organization, etc.) (Table 2: O2, O3 and W2).

Strategy for environmental protection in the Region and increased control of the ZiJin Company business operations by State institutions, as well as imposing more restrictive measures to prevent pollution (ST1) - The industrial recovery of Bor is followed by the numerous negative consequences reflected in the excessive exploitation and intensive pollution of natural resources which are the basis for the ecotourism development. Intensive control of technological processes and severe penalties in case of environmental degradation by mining companies could prevent further disturbance of the ecological balance (Table 2: S5, T1 and T2).

Strategy for stimulation of rural and agricultural development in the function of tourism (ST2) - Incentives aimed at rural and agricultural development represent a good basis for the promotion of ecotourism based on the enjoyment of ecotourists in natural and traditional values, consumption of healthy and organically grown foods, active participation in agricultural activities, learning about the habits of the local population and others (Table 2: S3, S4 and T5).

Strategy for the intensified efforts of the local government towards harmonization of activities with the Tourism Development Strategy for the Republic of Serbia in the period 2016-2025 (WT1) - The National Tourism Development Strategy for the period 2016-2025 emphasizes the development of sustainable tourism, as well as all types of tourism based on nature. The activities of the local government in line with the Strategy will also contribute to the realization of the set goals at the local level (Table 2: W2, W3, W5 and T4).

Strategy for the establishment of ecotourism development fund by the local government (WT2) - Financial support that would be provided by the local government and intended for persons and companies that want to create their own ecotourism offer, sports associations, environmental organizations, and agricultural farms will significantly facilitate the implementation of all planned activities regarding the ecotourism development (Table 2: W2 and T5).

5. Conclusion

Following the global tourism trends, the Republic of Serbia is on its way to develop sustainable tourism, i.e. tourism types based on nature and active vacation. In addition to rural tourism, which has the greatest potential for development, the concept of ecotourism can be successfully implemented by an appropriate strategic approach. Despite the wide availability of natural resources, ecotourism in Serbia is still in its infancy. However, the role of a local government in creating an ecotourism destination is considered even more important than the role of a state in most cases. Its importance is reflected in the definition and consistent implementation of the ecotourism development strategy, investments, and provision of incentives for the involvement of the overall local economy in tourism development. Regions and localities which use their own recourses insufficiently operate with loss and the revenues they generate are minimal and insufficient for stimulating the local economic development. Therefore, joint action and cooperation of all stakeholders are a necessity. Their coordinated activities can meet all the requirements of ecotourists and the main principles on which ecotourism is based. Infrastructural investments in the building of transport network and adequate accommodation capacities, intensive promotion of localities as ecotourism destinations, raising environmental awareness of citizens, and environmental protection are the key issues of crucial importance in the process of ecotourism development.

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Natural resources for the nature-based tourism development of the Vojvodina Province

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Abstract: The area of the Autonomous Province of Vojvodina has significant natural potentials for the development of nature-based tourism. The paper analyzes the data found in various articles as well as data obtained hands-on. Selected factors such as location, relief, climate, hydrography, flora and fauna and protected areas of Vojvodina were analyzed. The degree of presence of the mentioned factors for the development of nature-based tourism was determined with selected indicators. The medium and high level of the presence of factors indicates the possibility of developing ecotourism, scientific tourism, hunting, fishing, sports and recreation, bird watching, nautical, trips and other forms of tourism based on natural resources. Quantitative, comparative and data presentation methods were used in the research. The results of research can aid further research of nature-based tourism.

Keywords: nature-based tourism, AP Vojvodina, ecotourism, natural resources
JEL classification: Z32, Q56, Q57

Prirodni resursi za razvoj turizma baziranog na prirodi Vojvodine

Sažetak: Prostor Autonomne pokrajine Vojvodine poseduje značajne prirodne potencijale za razvoj turizma baziranog na prirodi. U radu su analizirani podaci različitih pisanih dokumenata, kao i podaci dobijeni na terenu. Ispitivani su odabrani faktori kao što su: položaj, reljef, klima, hidrografija, biljni i životinjski svet i zaštićena područja Vojvodine. Stepen prisutnosti navedenih faktora za razvoj turizma utemeljenog na prirodi, utvrđen je uz pomoć odabranih indikatora. Srednji i visok nivo prisutnosti faktora ukazuje na mogućnost razvoja ekoturizma, naučno-istraživačkog, lovnog, ribolovnog, sportsko-rekreativnog, turizma posmatranja ptica, nautičkog, izletničkog i drugih formi turizma utemeljenih na prirodnim resursima. To je ujedno cilj ovog rada. U istraživanju su korišćene kvantitativna, komparativna i metoda prikaza podataka. Rezultati istraživanja mogu pomoći daljem istraživanju turizma utemeljenog na prirodi.

Ključne reči: turizam prirodnih resursa, AP Vojvodina, ekoturizam, prirodni resursi
JEL klasifikacija: Z32, Q56, Q57

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1. Introduction

The paper focuses on the protected areas of Vojvodina and natural resources that are important for the development of nature-based tourism. The area of the Autonomous Province of Vojvodina is characterized by diverse natural resources for the development of various forms of tourism. The tourism form that protects and promotes natural values is nature-based tourism (Kostić et al., 2019). Nature-based tourism often refers to protected natural areas. The territory of Vojvodina covers 135 natural sites, the total area of which is 141,044.65 ha (Delić et al., 2017). This makes 6.56% of the total area of Vojvodina. The relatively small amount of protected areas can be a starting point for the development of nature-based tourism. Nature-based tourism development would also condition the growth of protected areas (Job et al., 2017).

The Autonomous Province of Vojvodina has significant potentials for all forms of nature-based tourism development. Diverse relief features, favorable climate, many hydrographic, diverse and rare flora and fauna, and protected natural areas are all different significant natural potentials for the tourism development (Maksin et al., 2018). Natural-geographical features mostly form the complete life of a certain area. These conditions decide the role of each species in the systemic symbiosis where the human role is important. All human activities are closely related to the basic characteristics of the area in which the movement of tourists is realized. Changing certain elements of the environment directly affects the behavior and characteristics of species and the complete nature (Batman & Demirel, 2016). Therefore, the geographical place of a certain area, relief and soil composition, climate, hydrography and biogeography, are the basic preconditions for the formation of the main features of Vojvodina, and can have a positive impact on the nature-based tourism development.

The area of Vojvodina has different ecosystems inhabited by many species. The protection of areas from external impact and user pressures can be realized through nature-based tourism. The development of tourism must take into account all the natural and geographical characteristics of the area in which it develops.

The goal of this paper is to research and analyze the natural resource base of protected areas of Vojvodina. That includes data found in various articles as well as data obtained hands-on such as location, relief, climate, hydrography, flora and fauna. The presence of certain natural factors will determine the selected indicators (Maksin et al., 2011).

The contribution to scientific research is reflected in the use of the results obtained in this research in the development of a strategy for nature-based tourism in Vojvodina. The paper centers on the natural factors of AP Vojvodina, which can have high importance for the development of nature-based tourism and sustainable tourism development.

The method of this paper includes the quantitative research method. The paper research method analyzes various written data about selected indicators of sustainability in protected natural areas of Vojvodina. After the analysis, with the comparative method, the most important factors that positively impact the development of tourism can be singled out.

2. Background

A feature of 21st-century tourism is the protection and improvement of nature (Bello et al., 2016). Tourists are increasingly choosing sustainable tourist destinations (Wardle et al., 2018). The reason is the wish of tourists for natural values to remain in the future. Nature-based tourism is a form of tourism that uses natural values (Eagles, 2014). Those are ecotourism, scientific-tourism, bird and animal watching, adventure tourism, sports tourism, trips, etc. (Štetić & Trišić, 2018).

Vojvodina completely belongs to the Pannonian biogeographical region and represents a secondary forest-steppe area. Forests and wooded areas cover 6.8% of the territory. Natural specifics such as favorable climate, relief, flora and fauna, the richness of water resources, and protected areas, place this region in the highly promising areas for the development of nature-based tourism (Trišić et al., 2020; Torres-Delgado & Saarinen, 2014; Valdivieso et al., 2015).

There are preserved natural and landscape areas, unique to this part of Europe, such as Deliblato Sands, Fruška Gora, and Vršac Mountains. The floodplains of the Danube, Sava, Tisa, Begej, Tamiš, Karaš, Nera, and Bosut River have been preserved on the lowest terrains, which represent a kind of oasis of flora and fauna, and most of them are in protection regimes precisely because of biological diversity (Noakes & Bouvier, 2013). There are also large steppe areas in central and northern Banat, as well as loess-soil complexes along the Tisa and Danube River. Special mention should be made of the preserved salt marshes of Banat and the unique and specific habitats of salt lakes, which have priority in protection at the international and national levels. In AP Vojvodina, there is a significant network of protected areas, i.e. important centers of autochthonous biological diversity.

Due to this richness of different habitat types, the area of Vojvodina is characterized by a rich and specific species and ecosystem diversity. The characteristic of flora and fauna are the existence of endemic and endangered species. This is a basic condition for the development of nature-based tourism. This form of tourism aims to improve the value of the area (Buclet & Lazarević, 2015).

The Autonomous Province of Vojvodina is situated in a very favorable geographical and tourism setting, which is reflected in the vicinity of neighboring countries and cities, a favorable hydrographic connection with many countries via the Danube, Sava, and Tisa as the most important rivers in Vojvodina (Lazić et al., 2008). This is another important condition for the development of nature-based tourism (Torres-Delgado & Saarinen, 2014).

The development of nature-based tourism in AP Vojvodina can provide great economic benefits, both for the tourism destination and for the economy of AP Vojvodina. Economic revenues have a significant impact on the country's financial system (Leković, 2019).

3. Materials and methods

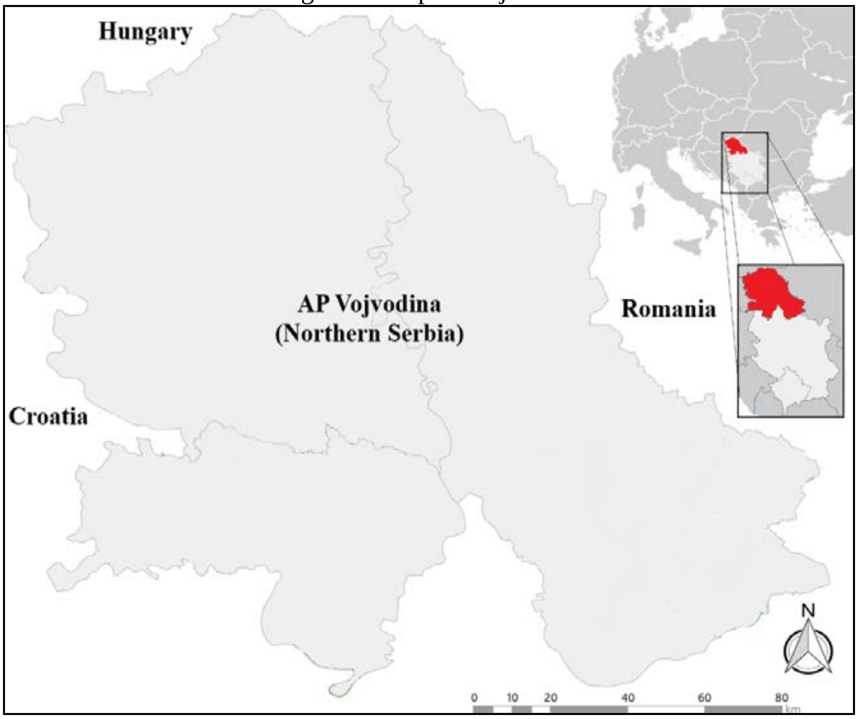
3.1. Study area

The Autonomous Province of Vojvodina is situated in the southern part of the Pannonian Plain, in Northern Serbia. It covers an area of 21,506 km^2, it is 24.3% of the total territory of the Republic of Serbia (including Kosovo). The area of the Province is located between 44^{o}38' and 46^{o}10' N, and from 18^{o}10' to 21^{o}15' E (Lazić et al., 2008).

Srem, Banat and Bačka are three geographical units of Vojvodina. The area of AP Vojvodina is a territorial and geographical unit that borders the Republic of Hungary to the north, Romania to the east, the Republic of Croatia to the west, the Republic of Bosnia and Herzegovina to the southwest (Figure 1). The southern border of Vojvodina is the administrative border with Central Serbia withal. The natural border of AP Vojvodina consists of the international navigable rivers the Danube towards the Republic of Croatia and central Serbia, and the Sava towards Bosnia and Herzegovina and central Serbia.

Vojvodina has a favorable geographical and traffic location. The proximity of Belgrade and other European cities from the region is an important feature of the tourism development of Vojvodina.

Figure 1: Map of Vojvodina



Source: Author digitalized

3.2. Natural resources data

The following main morphological units can be singled out in the relief of Vojvodina: mountains, sands, and alluvial plains. Mountain areas are Fruška Gora (539 m) and Vršac Mountain (641 m). Fruška Gora covers the southern and southwestern parts of Vojvodina, in the northern part of Srem, while the Vršac Mountains are located in the southeast of Vojvodina and Banat (Lazić et al., 2008). The area of the province consists of very rare biogeographical units, important for the formation of a unique ecosystem. Certain environmental conditions and natural processes have formed very specific terrains, many of which date from the early periods of soil formation. Most of them have special features, characteristic only for this area. Therefore, it should be considered important in the formation of this unique ecosystem. The rivers Danube, Tisa, Sava, Tamiš, Zlatica, and Begej have the largest alluvial plains in Vojvodina (Tomić et al., 2004).

The climate of Vojvodina is moderately continental with certain specifics. The average annual temperature is about 11 °C. Summer temperatures are between 21° C and 23° C and winter around -2° C. However, temperatures can be extreme to the extent that that the difference between the highest and lowest temperatures amounts to over 70° C. The average annual amount of precipitation in Vojvodina ranges from 550 to 600 mm/m^2, where extremely rainy periods at the beginning of summer (June) and periods without or with a small amount of precipitation (October and March) can be distinguished (Malinović-Milićević et al., 2018).

The river networks of AP Vojvodina consist of three large rivers: the Danube, Sava, and Tisa, with all their tributaries and canals. The Danube, which flows through Serbia with a length of 588 kilometers and through Vojvodina with a length of 358 km, is navigable along the whole length (Štetić et al., 2014). Also, important are the Danube tributaries the Tisa (168 km), the Sava (206 km) and the Begej (75 km), between which a branched network of irrigation, drainage and transport canals were dug, with a total length of 939 km, of which 673 km are navigable. All rivers are characterized by a small fall, slow and winding course, high accumulative power and a tendency to create marshes and meanders, which gives great convenience for the formation of wetlands important for the flora and fauna (Tomić et al., 2004). The hydrographic network also includes lakes, the most important of which are Palić Lake near Subotica (5,8 km^2), Ludaš Lake, and other lakes in Fruška Gora and Bačka. Wetlands are protected by special protection regimes, to preserve the unique habitats (Mitsch et al., 2015). Wetlands are highly productive ecosystems that produce wilder species and primary plants, both in number and diversity, more than any other habitat on Earth (Holden, 2016).

Flora and fauna represent a significant natural potential for the development of nature tourism. Species protection forms areas that are suitable for nature-based tourism development. There are over 2,000 species of plants and animals in the province (Stojnić et al., 2015). Biological diversity on the territory of AP Vojvodina and the number of individual species can be shown in Table 1.

Table 1: The overview of the diversity of selected species

Total species	AP Vojvodina	Republic of Serbia
Vascular plants	2,000	3,562
Fishes	75	100
Amphibians	17	23
Reptiles	14	24
Breeding birds	193	237
Mammals	75	98

Source: Author, based on Stojnić et al., 2015

Many species have the endangered status. In the category of Critically Endangered (CR), 28 species and subspecies were recorded. To this group of taxa some extremely rare species should be added that have recently been recorded only in Vojvodina, such as *Elatine hungarica, Cerastium subtetrandrum and Hierochloe repens*. In the category of Endangered (EN), 50 species were recorded, and in the category of Vulnerable (VU), 40 species were recorded. Other species (82), due to the lack of data needed to assess the exact endangered category, fall into combined categories. In App. I, strictly protected plant species, 1992 and 1999 rev., Appendix 1/Annexe 1, 16 species with four subspecies are listed. On the CITES List - Convention on International Trade in Endangered Species of Wild Fauna and Flora, Appendix 2, 46 species and subspecies are listed (Report on the implementation of the program for the natural resources protection for 2017, 2018).

The area of AP Vojvodina is inhabited by 75 species of mammals, classified in six orders: *Insectivora*, *Chiroptera*, *Rodentia*, *Lagomorpha*, *Carnivora* and *Artiodactyla* are 76.5% of the total number of mammals (98) in the Republic of Serbia (Code on the declaration and protection of strictly protected and protected wild species of plants, animals and fungi (Offical Gazette of RS, no. 5/2010, 47/2011, 32/2016 and 98/2016). It should be noted that the Wild Cat (*Felis silvestris*) is a strictly protected species only in the territory of Vojvodina, while the Wolf (*Canis lupus*) has the status of a strictly protected species in this territory, except in the hunting grounds of Deliblato Sands and Vršac Mountains, where it is protected as a protected wild species. Important representatives of endangered fauna are Eurasian Otter (*Lutra lutra*), Eurasian Beaver (*Castor fiber*) and Wild Cat (*Felis silvestris*). There are three allochthonous species: Fallow Deer (*Dama dama*), White-tailed Deer (*Odocoileus virginianus*) and Mouflon (*Ovis orientalis*), which were introduced in the middle of the last century in some fenced hunting grounds (Karađorđevo and Subotica woods) to increase game (Delić et al., 2017).

Out of the total of 307 strictly protected bird species in Serbia, 283 species have been registered in Vojvodina. Among the most endangered, globally and regionally breeding birds of Vojvodina are Great Bustard (*Otis tarda*) (BirdLife International, 2017a; Martin et al., 2000), White-tailed Eagle (*Haliaeetus albicilla*) (Korsman et al., 2012), Imperial Eagle (*Aquila heliaca*) (BirdLife International, 2017b), and Saker Falcon (*Falco cherrug*).

Out of 24 species of reptiles that live on the territory of Serbia, the area of Vojvodina is inhabited by 16 species. Of that number, 10 species are strictly protected, while two are protected (Stojnić et al., 2015).

With 21 registered amphibian species, Serbia ranks second among the Balkan countries in terms of batrachofauna, just behind Greece, which has 22 registered species. In Serbia, there are 25% of the species of the known 85 species, which inhabit the whole of Europe. Of that number, the area of Vojvodina is inhabited by 16 species, of which 13 are strictly protected, and three species have the status of protected.

About 75 species of freshwater fish from 17 families were recorded in watercourses and stagnant waters on the territory of AP Vojvodina. Out of 30 strictly protected fish species and 34 protected fish species in Serbia, 17 strictly protected and 28 protected fish species were recorded in the area of Vojvodina (Stojnić et al., 2015). European Mudminnow (*Umbra krameri*), is the most important protected fish, and the only representative specie of the Umridae family in Europe, and endemic to the Danube Basin (Freyhof, 2013). According to the IUCN Red List of Threatened Species, European Mudminnow has the status of a vulnerable species - Vulnerable A2c. At the national level, it has the status of a critically endangered species (CR) and is in imminent danger of extinction. There are other strictly protected species of fish: Sunbleak (*Leucaspius delineatus*), Tench (*Tinca tinca*), Amur Bitterling (*Rhodeus sericeus*), and Balkan Loach (Cobitis elongata). Protected species are also present in the inland waters of Vojvodina: Common Bream (*Abramis brama*), Blue Bream (*Ballerus ballerus*), Asp (*Leuciscus aspius*), Common Barbel (*Barbus barbus*), Carp (*Cyprinus carpio*), Ide (*Leuciscus idus*), Burbot (*Lota lota*), Pike (*Esox lucius*), Zander (*Sander lucioperca*), and European Perch (*Perca fluviatilis*) (Stojnić et al., 2015).

3.3. Methods

The quantitative research method included an analysis of natural resources that are important for the development of nature-based tourism. A total of 34 indicators representing natural factors important for the development of nature-based tourism were examined (EU, 2013; Konu & Kajala, 2012; Maksin et al., 2011; WTO, 2004). The indicators were confirmed by inspecting various written documents and partially confirmed in the field. The scores of the examined indicators are Low (L), Medium (M) and High (H). The obtained results can represent a significant basis for determining the possibility of developing nature-based tourism (Maksin et al., 2011; Puzović et al., 2015). After the presentation of the selected natural base, unified comparative analysis of these selected indicators will be performed. The comparative analysis will provide significant answers to the extent to which the natural base is important for the development of nature-based tourism (Torres-Delgado & Saarinen, 2014).

4. Results and discussion

Table 2 presents selected indicators that represent the existence of certain factors relevant to nature-based tourism forms (Maksin et al., 2011).

Table 2: Analysis of selected indicators for the development of nature-based tourism

Indicators		Results
1.	The favorable location of AP Vojvodina	H
2.	Favorable relief	H
3.	Favorable climate	H
4.	Hydrographic objects and wetlands	H
5.	Different species of plants and animals	H
6.	Endemic species	M
7.	Endangered species according to IUCN	L
8.	Species reintroduction	L
9.	Protected areas	M
10.	National area protection status	M
11.	International area protection status	L
12.	Sufficient number of supporting tourism facilities	M
13.	Accommodation service	L
14.	Available visitor center	M
15.	Marked walking and educational trails	M
16.	Developed ecotourism	L
17.	Developed scientific tourism	M
18.	Developed photographing birds and animals	M
19.	Developed bird and animal watching	M
20.	Hunting tourism	M
21.	Sports tourism	M
22.	The availability of mountain tourism	H
23.	Fishing	H
24.	The availability of trips	L
25.	Promotion of nature-based tourism	L
26.	The role of the local community in management protection	L
27.	The availability of ethno-villages or settlements	M
28.	Unplanned construction	H
29.	The proximity to potential environmental pollutants	M
30.	The use of natural resources	H
31.	The presence of domestic animals	H
32.	The proximity to agricultural land	H
33.	Eliminated the problem of wastewater from the settlements	M
34.	Tourism development planning	M

Source: Author, based on Maksin et al., 2011 and Puzović et al., 2015

The analysis of the assessed indicators concludes that the Autonomous Province of Vojvodina has a relief that is characteristic of lowland areas, which has a favorable impact on the climate and the formation of ecosystems in this area. Also, it is concluded that the relief greatly impacts the adoption of protection measures for various spatial units, and therefore the constitution of protected natural areas and sites of Vojvodina, important for the conservation of these valuable biogeographical units. This relief has a positive effect on the development of nature-based tourism (Lazić et al., 2008).

The climate of a certain area, together with its morphology, defines the type of vegetation that can be characteristic and endemic to a place, although people often change it over time. Proper analysis of biogeography is essential for the management of most tourism destinations, which are important for all outdoor activities, including nature-based tourism. Climate has a direct impact on the biogeographical distribution of natural vegetation in the region. The favorable climate of Vojvodina has had a significant impact on the characteristic flora and fauna in this area, in terms of the diversity of organisms, some of which are endemic. The same favorable impact was reflected in the formation of characteristic habitats such as the eolian and wetland, which again represent rare forms of geodiversity, characteristic of the province. This represents a significant basis for the development of nature-based tourism. This form of tourism in Vojvodina can be developed throughout the year.

Many protected natural areas on the territory of the Autonomous Province of Vojvodina are precisely wetlands with rare plant and animal species, which mutually form a single biogeographical diversity (Stojanović et al., 2018). There are also numerous lakes and ponds of fluvial, eolian and artificial origin. The Vojvodina marshes are a subject of interest in the UNESCO because they form a kind of oasis of the natural world. Wetlands represent significant potential for the development of science tourism, ecotourism, fishing, sports tourism, bird watching, and other forms of nature-based tourism.

In addition to the above, the scientific-educational and recreational significance of the natural base should be emphasized, because these areas are also terrains with attractive motives for tourism (Vujović et al., 2018). All this confirms the interest of various economic and social structures in the use of the space of Vojvodina. Therefore, it is necessary to harmonize all these needs and put them in correlation with the function of nature protection and the development of nature-based tourism.

The flora and fauna represent a significant resource of this area. Protection systems are established with the aim of conserving these values because these areas very often suffer different and high levels of impact from users, due to their attractive attributes. Visits to certain areas are accompanied by intensive construction and the presence of other entities that draw on the resources of the environment. Prohibited hunting and the impact of prohibited agricultural chemicals on the flora and fauna are no less present. Each of these changes in the elements of the environment affects the reduction or destruction of species and thus biodiversity. The protection of flora and fauna is the basis for the development of nature-based tourism. By spending money in these tourist destinations, one directly invests in protection. The economic factor is a factor in all activities and tourism as well (Leković, 2020).

5. Conclusion

The Autonomous Province of Vojvodina has a variety of natural resources for the development of nature-based tourism. There are various reliefs, climate, hydrography, flora and fauna and protected natural areas. Tourism of the 21st century is characterized by tourists who are increasingly enjoying nature. Tourism uses natural resources. By examining selected indicators of the development of nature-based tourism, the connection between nature and tourism can be established. Research results of this article indicate that certain natural resources are important for nature-based tourism development (Delić et al., 2017). The high significance "H" has indicators as location, relief, climate, hydrographic objects including wetlands, different species of plants and animals and availability of mountain tourism, fishing. Indicators with a medium "M" result are endemic species, natural area protection status, the sufficient number of supporting tourism facilities, available visitor center, marked walking and educational trails, developed scientific tourism, sports tourism, bird and animal watching, natural photographing and hunting tourism. These research results will be used for the nature-based tourism strategies of protected natural areas of Vojvodina (Lazić et al., 2008). These natural factors are important for tourism development. The factors that are marked as low ("L") are: endangered species according to IUCN, species reintroduction, international area protection status, accommodation service, developed ecotourism, the availability of trips, promotion of nature-based tourism and the role of the local community in management protection (Krstić et al., 2020). These natural factors need to be improved with various strategies of development (Buclet & Lazarević, 2015; Cvijanović et al., 2020).

The relief of Vojvodina enables the development of mountains, trips and sports tourism. The mountains Fruška Gora and Vršac Mountains are important for that. The climate allows the development of nature-based tourism throughout the year. Moderate temperature and precipitation do not have an impact on tourist activities. Flora and fauna represent significant tourist potential. The forms of tourism in which the main motive for travel is flora and fauna are ecotourism, adventure tourism, bird and animal watching, sports tourism, trips and other forms of nature-based tourism. The endangerment of flora and fauna affect the formation of protected natural areas. This impacts the development of scientific tourism. The analysis of the research results leads to the conclusion that the natural resources of protected areas in Vojvodina have an impact on nature-based tourism. Due to the distinct natural potentials, nature-based tourism should be developed. The realization of nature-based tourism can generate significant income. A large part of the income can be invested in the protection of areas, development of tourism infrastructure and all forms of tourism. This is the result of the research in this paper. The limitation of the research is that there are numerous settlements in the area of protected areas. The majority of the population of these settlements use resources of protected natural areas for their own needs and daily activities and it was difficult to separate them from the tourist use.

The research results will be used for future research of sustainable tourism development which is based on natural resources and the improvement of natural values.

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Review Article

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Business intelligence and open data: The possibilities for the derivation of valuable information in tourism domain

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Abstract: This paper aims to introduce the concept of data analysis which could easily be implemented by anybody involved in the subject matter with basic IT knowledge and skills. The paper is divided into two parts, the first of which presents an overview of related research from two points of view: (1) publications which refer to the analysis, or the overall use of open data from the tourism domain and (2) publications which use business intelligence tools to analyse tourism data. Results indicate that there is a significant number of publications but none of them combines the two issues in the field of tourism (open data and business intelligence). The second part refers to the possibilities of using Power BI, the business intelligence tool for analysing available open data about tourism in Serbia.

Keywords: tourism, open data, business intelligence, overview, related research
JEL classification: Z32, Y10, C55

Poslovna inteligencija i otvoreni podaci: Mogućnosti za izvođenje vrednih informacija u oblasti turizma

Sažetak: Ovaj rad ima za cilj da predstavi koncept analize podataka koji bi svi koji se bave predmetnom materijom s lakoćom mogli primenjivati, pri čemu im je potreban osnovni nivo IT znanja i veština. Rad je podeljen u dva dela pri čemu prvi predstavlja pregled srodnih istraživanja i to sa dve tačke gledišta: (1) pregled publikacija koje se odnose na analizu i generalno upotrebu otvorenih podataka iz oblasti turizma i (2) pregled publikacija u kojima se alati poslovne inteligencije koriste za analizu podataka u vezi turizma. Rezultati ukazuju da postoji značajan broj publikacija, ali nijedna od njih ne obrađuje istovremeno upotrebu otvorenih podataka i poslovne inteligencije u oblasti turizma. Drugi deo se odnosi na mogućnosti korišćenja Power BI alata za poslovnu inteligenciju za analizu dostupnih otvorenih podataka o turizmu u Srbiji.

Ključne reči: turizam, otvoreni podaci, poslovna inteligencija, pregled, srodna istraživanja
JEL klasifikacija: Z32, Y10, C55

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1. Introduction

As a land of rich history, Serbia is located from a cultural point of view on the border between East and West, geographically speaking, located at a place which enables its future to be built in the direction of its tourism development potential. Serbia was ranked 83rd in 2019 in the tourism competitiveness chart, which is an astonishing 12-position rise compared to 2017 (World Economic Forum, 2019).

Numerous spots in Serbia which have enormous tourism potential are yet to be open to a wider population of tourists. A need for marketing and promotion quality improvement is self-imposed. However, it is vital to appropriately target marketing, and for that, valid information obtained by analysing appropriate data is needed.

In the past couple of years, the world has been aiming towards opening up data in different areas of creativity. That trend has been followed by Serbia as well where data is usually opened up by public institutions. Consequently, they offer the possibility to their citizens to obtain, process and analyze them in the desired manner. Thus, public institutions achieve a higher level of transparency in their work, and the citizens are able to indirectly contribute to the important decision-making.

Collections of open data for Serbia are located at specialized portals such as Open data Portal (*data.gov.rs*) and are usually stored in one of the open formats such as CSV, XML, and JSON. The main characteristic of open formats is their machine-readibility, which implies that the collection of data can be automatically processed and analysed through one of the open softwares. There are many open-source business intelligence tools. In this paper, we used *Microsoft Power BI*. Although not entirely open, Power BI has enough free features for beginners.

One of the goals of this paper is to determine the possibility of implementing this tool to the analysis of available open data with regards to the tourist visits in Serbia in the last decade. The second important goal of this paper is an overview of related research from two perspectives: (1) publications which refer to the analysis, or the overall use of open data from the tourism domain and (2) publications in which business intelligence tools are used to analyse tourism data.

2. Methodology

The data on publications which deal with the subject of this paper was obtained by using the Google Scholar search engine (https://scholar.google.com/) on May 2020. The criterion for choosing the publications was the keyword in the title which directly refers to open data and business intelligence while combining terms which refer to tourist (e.g. tourism, tourist, tourists, touristic, hotel, hotels, hospitality, etc.). Dimitrovski et al. (2019) used similar methodology for conducting “A bibliometric analysis of Crossref agritourism literature”. For the realisation of the aforementioned search, the advanced search provided by Google Scholar was implemented by finding articles which include all the keywords and at least one keyword in the title. A title suitability check for the theme analysed was subsequently carried out by the authors. Papers found in journals, conference proceedings and parts of thematic collections, like books and monographs written entirely in English were used.

For the purposes of the practical part of research, the data from The Statistical Office of the Republic of Serbia were used, available at the Open Data Portal (Open Data Portal, 2020). Choosing the catering and tourism category one arrives at several collections of open data for which analysing the collection named *Tourist arrivals-monthly data* was chosen. Located in it is the data on the number of local and foreign tourists by months, years, and regions of the

Republic of Serbia (the Region of Šumadija and Western Serbia, the Belgrade Region, the Region of Southern and Eastern Serbia and the Vojvodina Region).

The data is available in the.xls format and prior to the analysis it was necessary to perform data pre-processing. After that, a *Microsoft* tool for business analytics Power BI was used to carry out the analysis. The tool allows connection of different data sources and provides powerful reports. Power BI provides a possibility of integration with Excel which is significant for the users who are used to working in Microsoft environments.

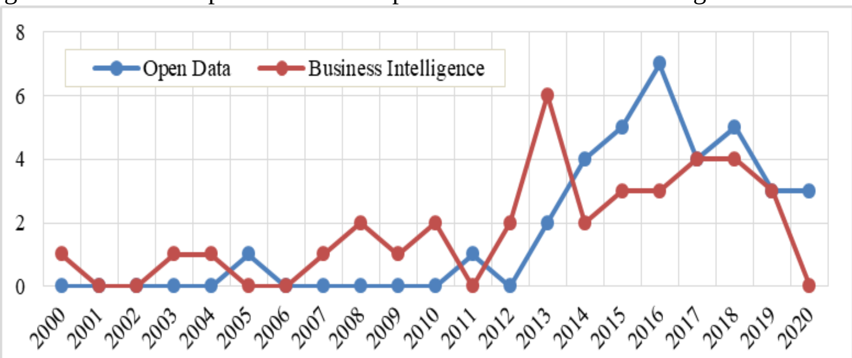
3. Results and discussion

3.1. Results of the search for topic-related papers

There is a significant number of publications which deal with issues regarding open data use in the tourism field (Miele & Mola, 2005; Cao et al., 2011; Groen et al., 2013; Cannataro et al., 2013; Longhi et al., 2014; Wu et al., 2014; McNaughton et al., 2014; Okuno, 2014; Pereira et al., 2015; Fermoso et al., 2015; Bue & Machì, 2015; Villa, 2015; McLeod & McNaughton, 2015; Keler & Mazimpaka, 2016; Pesonen & Lampi, 2016; Kršák et al., 2016; McNaughton et al., 2016; Mekhabunchakij, 2016; De Vocht et al., 2016; Li & Hsia, 2016; Pantano et al., 2017; Urata et al., 2017; Mekhabunchakij, 2017; Sidor et al., 2017; Scorza et al., 2018; Amnur & Meidelfi, 2018; Sedlak & Ivanišević, 2018; Maita, 2018; Al-Ghossein et al., 2018; Ocampo & Palaoag, 2019; Pantano et al., 2019; Duca & Marchetti, 2019; Le & Cao, 2020; Mountasser et al., 2020; Yochum et al., 2020), as well as the implementation of business intelligence tools for tourism data analyses (Minghetti et al., 2000; Carson et al., 2003; Zimmerman et al., 2004; Vrdoljak-Salamon et al., 2007; Salguero et al., 2008; McKnight, 2008; Galicic, 2009; Lozada et al., 2010; Vizjak et al., 2010; Custis, 2012; Crockett, 2012; Fuchs et al., 2013; Angelaccio et al., 2013; Bazdan, 2013; Sharma et al., 2013; Korte et al., 2013; Daryaei et al., 2013; Alzua-Sorzabal et al., 2014; Verma, 2014; Höpken et al., 2015; Fuchs et al., 2015; Martins et al., 2015; Baggio, 2016; Höpken & Fuchs, 2016; Teimouri et al., 2016; Vajirakachorn & Chongwatpol, 2017; Hyseni, 2017a; Hyseni, 2017b; Ramos et al., 2017; Mariani et al., 2018; Bilandzic & Lucic, 2018; Chen et al., 2018; Chen, 2018; Stylos & Zwiegelaar, 2019; Nyanga et al., 2019; Godnov & Redek, 2019). The interesting fact is that there are no papers combining the two issues in the area of tourism (open data and business intelligence).

The following chart (Figure 1) shows a movement in the number of publications about open data and business intelligence in tourism domain.

Figure 1: Number of publications on open data and business intelligence in tourism

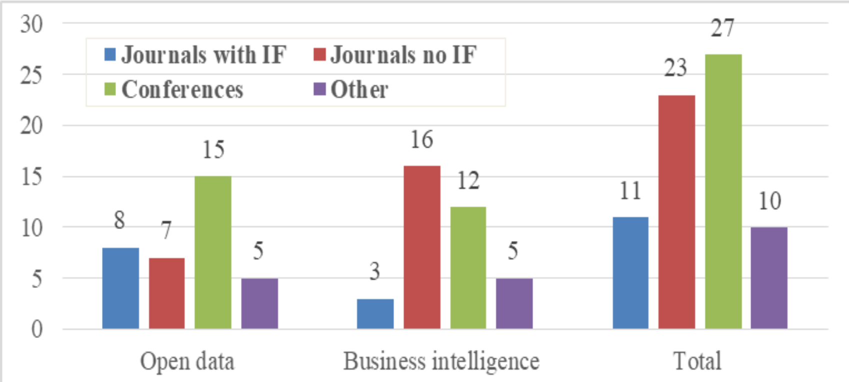


Source: Author's research

The first paper on business intelligence in tourism was published in 2000, while the first publication on open data in tourism dates back to 2005 after which follows a five-year break. Since 2011, i.e. 2012 there is a notable increase in the number of publication about the two issues.

The following chart (Figure 2) shows the number of publications by analyzed categories for open data and for business intelligence.

Figure 2: Number of papers by categories



Source: Author's research

As it can be seen from Figure 2, the largest number of papers related to open data and business intelligence (total number is 71) was published in conference proceedings (27; 38.03%), followed by papers published in journals which are not listed in Thomson Reuters Web of Knowledge and do not have an impact factor (23; 32.39%), papers in journals from Web of Science database, which are a part of Thomson Reuters Web of Knowledge (11; 15.49%), and papers in other types of publications – chapters in books, monographs, etc. (10; 15.08%).

3.2. An overview of the practical application of Power BI tools on the experimental collection of data

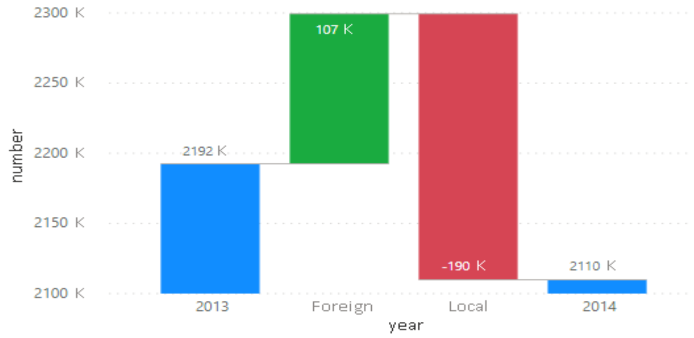
The capabilities of the Power BI tool are presented in the experimental collection of data through specific analyses shown in figures 3-8. As input parameters for the analyses shown in figures 3-6, the following basic analysis results were used:

- an overview of the type of tourists (local, foreign);
- tourist visits by Serbian regions;
- yearly tourist visits spanning from 2010-2020;
- monthly tourist visits.

The abovementioned basic analysis were carried out but were not presented in this paper because they are extremely simple – they can be carried out in any spreadsheet software with a basic skill level. Their results indicate that in the last decade, Serbia had slightly more visits by local tourists; the most visited region was the Šumadija and Western Serbia Region; the number of tourists has been growing yearly since 2010, while in 2014 there was a slight fall. The current year (2020) has been excluded from further analysis in this paper.

Figure 3 shows an analysis of the tourist visits' decrease in 2014 according to their type (local/foreign). There was a drastic decrease in local tourists' visits, while the number of foreign tourists increased.

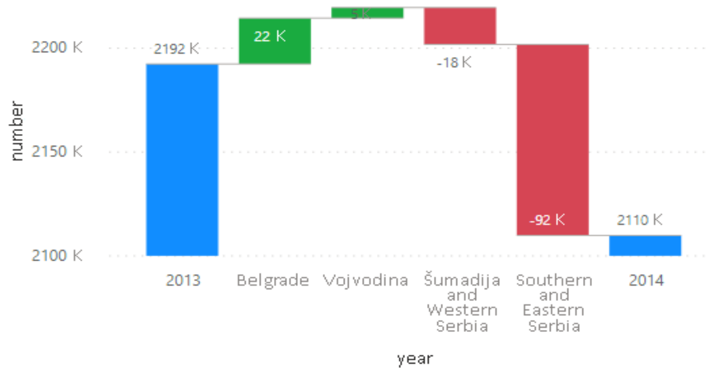
Figure 3: A decrease in the number of visits in 2014 according to the type of tourist



Source: Author's research

Analysing the decrease in the number of tourists' visits by region in 2014, the biggest plummet in visits is noticed in the Šumadija and Western Serbia region (Figure 4).

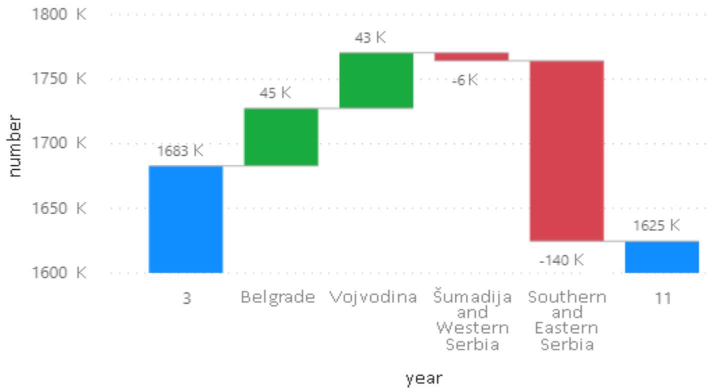
Figure 4: A decrease in tourist visits in 2014 according to region



Source: Author's research

Analysing the number of tourist visits by months in the last 10 years, it was revealed that the largest number of visits was realised during the month of August (11.6%), and the smallest during November, where the largest decrease is noticed compared to the region (Figure 5).

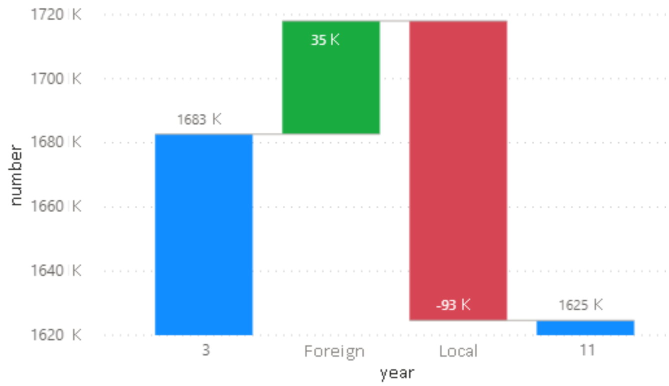
Figure 5: Analysis of the decrease in visits for November according to region



Source: Author's research

The biggest plummet at the time was noted in the Šumadija and Western Serbia region. Additionally, the decrease in the number of visits was more pronounced in local tourists as opposed to foreign ones whose number was at an average increase (Figure 6).

Figure 6: Analysis of the decrease in tourist visits in November according to type



Source: Author's research

In addition to the simple analysis application which is not simple to carry out in the spreadsheet software, Power BI provides the ability for one to intuitively pose a research question to which it provides an answer. An example of the question posed and the answers given is shown in Figure 7. The research question refers to the number of visits by regions and months but with a difference compared to the month of November

Figure 7: Question asked and a given answer

number by region by month difference compared to 11

region	number	difference compared to 11
Šumadija and Western Serbia	9382161	8913979
8	1215552	747370
5	1031336	563154
7	946803	478621
6	890170	421988
10	758585	290403
9	743224	275042
4	738736	270554
1	718026	249844
2	675117	206935
3	607784	139602
12	588646	120464
11	468182	0
Belgrade	8665720	8039498
Southern and Eastern Serbia	4167916	3944593
Vojvodina	4086171	3779328
Total	26301968	24677398

Source: Author's research

Given that the ultimate goal of the tourism sector is the increase of tourist visits, identifying the key factors which could lead to it is crucial for the decision makers in this field. Power Bi has an option which helps one indentify the mentioned key factors – the tool's answer to the question *What influences the increase of the number of tourists* is that the increase of tourist visits in the entire country highly depends on the number of visits in the Šumadija and Western Serbia region.

4. Conclusion

Considering the research goals set in this paper, and acknowledging the results obtained, conclusions are drawn from several directions:

- According to the number of similar research for both aspects of the research (35 for the use of open data in tourism and 36 for the use of business intelligence in tourism), according to the period when research data is realised, it can be said that the subject of this paper is very up-to-date and it has a grounded position in contemporary science;
- The capabilities of Power BI as a business intelligence tool are significant for analysing available open data in the tourism field. Its use is in the forefront when the information obtained after initial analysis is in need of deeper analysis. It is important to note that such analysis is impossible to be carried out in the basic skill versions of the well-known spreadsheet software.
- The literature available, data openness and free access to the business intelligence software should serve as a stimulus for the tourism sector decision makers themselves to arrive at valuable information in similar ways. As it is shown in this paper, an advanced knowledge in statistics or computer science is not necessary for data search and the use of BI software, since the tool itself has indications of artificial intelligence.

The authors' future work on this issue refers to predicting the number of Serbian tourists by year following regions and months using the data mining technique.

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TOURISM IN FUNCTION OF DEVELOPMENT OF THE REPUBLIC OF SERBIA – Tourism and Rural Development

Conclusions of the 5th International Scientific Conference held at the Faculty of Hotel Management and Tourism in Vrnjačka Banja on September 4th, 2020

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For the fifth consecutive year, the Conference "TOURISM IN THE FUNCTION OF DEVELOPMENT OF THE REPUBLIC OF SERBIA" was successfully held at the Faculty of Hotel Management and Tourism in Vrnjačka Banja on September 4th, 2020. The main conference theme - Tourism and Rural Development - was carefully selected, as in previous years, in accordance with the topic selected by the World Tourism Organization (UNWTO) for World Tourism Day 2020. Due to the adverse global conditions caused by the Covid-19 pandemic, the conference was held as a one-day event on September 4th, following epidemiological recommendations of the World Health Organization and the National Crisis Committee for the Control of Infectious Diseases. The scientific meeting was organized by the Faculty in partnership with numerous domestic and foreign institutions, with the support of the competent ministry of the Republic of Serbia. Given the gravity of the current situation, attendees participated in this one-day event strictly adhering to all epidemiological measures, including personal protective measures as well as those of physical distancing.

The meeting was officially opened by Prof. Dr. Nenad Filipović, the rector of the University of Kragujevac, after which Prof. Dr. Drago Cvijanović, the dean of the Faculty of Hotel Management and Tourism in Vrnjačka Banja, addressed the participants. In the plenary session, the attendess had an opportunity to hear three online lectures delivered by estemeed speakers. Prof. Dr. Marianna Sigala, a professor at the University of South Australia and the director of the Center for Tourism and Leisure Management, is a globally renowned researcher in the field of tourism and hospitality with particular focus on ICT application in these industries. Prof. Dr. Dimitri Ioannides, a professor of Social Geography at the University of Central Sweden, is primarily interested in the economic geography of tourism and tourism planning and sustainable development and has publications relating to both topics. Prof. Dr. Jože Podgoršek, State secretary at the Ministry of Agriculture, Forestry and Food of the Republic of Slovenia, together with his colleagues, has introduced new technological solutions to Slovenian vegetable growing farms. The video presentations of the plenary lecturers focused on "Culture in a bottle: Designining wine tourism experiences with a sustainable impact", "Tourism in periphery: Obstacles & opportunities", and "The role of agriculture in the development of tourism in Slovenia".

The main focus of the conference was related to challenges and issues relating to rural tourism. The primary goal was to reach conclusions, through the exchange of ideas and experiences of participants, about the future development of Serbian tourism, with specific

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reference to the development of tourism in rural areas. The participants of this scientific meeting had the chance to hear practical experiences of lecturers from our country, along with theoretical presentations. Although the arrival of lecturers from numerous countries was announced, including Australia, Slovenia, Sweden, Romania, Republic of North Macedonia, Bosnia and Herzegovina, Croatia, and many others, due to the specific circumstances related to the global pandemic of Covid-19, Conference was personally attended only by the participants from the Republic of Serbia.

The presentation of papers was organized into one session including: "Investigating experience of Chinese tourists with branded hotels in Serbia: A case study of *Booking.com*", "Visitor management planning as a tool for sustainable tourism in protected areas in Serbia", "Cultural tourism and folk architecture in the service of revitalization of rural space", "Tourism as an opportunity for regional economic development of the Podunavlje District", and "Perceptions of environmental impacts of tourism: A case study of Vrnjačka Banja". The results of the conference are two thematic collections with a total of 60 scientific papers (113 authors/co-authors) which are available to the wider scientific audience (ISBN 978-86-89949-46-9, ISBN978-86-89949-47-6).

With the advancement of globalization and European integration processes, the needs and problems of rural tourism in the Republic of Serbia are becoming increasingly similar to the ones in other European countries. Taking account previous valuable experience of other Europen countries in regard to rural tourism, it is likely to expect that tourism would enhance development of rural areas of Serbia in an economic, social, cultural and ecological manner. The participants of the Conference came to the specific and general conclusions concerning rural tourism in the Republic of Serbia.

Specific conclusions from the Conference are that the Republic of Serbia has very favorable opportunities for the development of rural tourism (preserved nature, clean air, unpolluted rivers and lakes, mild climate, and rich flora and fauna). Tourists visiting rural areas are taking advantage of favorable opportunities, engaging themselves in different activities, including recreational and leisure activities (walking, playing sports, horseback riding, hiking, etc.), travel activities (taking organized trips/excursions to nearby natural attractions, such as caves and waterfalls), practical activities (some tourists show interest in involvement in agricultural work), learning activities (discovering customs and everyday habits of local residents, learning about cultural and historical monuments surrounding Serbian villages, engaging in guided cultural heritage tours, etc.) and creative activities (making products of old crafts and handicrafts). An engagement in various activities coupled with special kindness of hosts, hospitality and traditional Serbian food and drinks provides excellent grounds for enhancing rural tourism in the Republic of Serbia.

In general, the exchange of experiences and good practices led to the general conclusion that rural tourism in the Republic of Serbia could play a key role in: increasing tourism activities that will generate more jobs in tourism or related industries and reduce unemployment, diversifying the rural economy; protecting and improving natural and cultural resources and revitalizing the countryside. However, the biggest challenge at the moment is the Covid-19 virus pandemic, which is transforming everything applicable in tourism so far. Taking into an account unfavorable situation at the global level, rural tourism has potential to mitigate side-effects of Covid-19 pandemic, stimulate rural development and contribute to the efficient recovery of tourism and hospitality sector in Serbia and worldwide. Namely, tourists are increasingly turning to destinations in their own countries which are close to them and do not pose a health risk. This is supported by the fact that, according to the data by the Statistical Office of the Republic of Serbia, the number of domestic tourist arrivals increased by 25.3% while the number of foreign tourist arrivals decreased by 87.1% in

August 2020, compared to August 2019. This situation should, conditionally speaking, be utilized to stimulate the development and promotion of rural tourism within the country. It can be concluded that, although the situation with the pandemic is very uncertain and that we cannot count on foreing tourists arrivals, domestic tourists interested in rural areas represent a potential that can sustain tourism in Serbian rural areas during these adverse conditions.

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A model for preparing manuscripts for submission to the journal Hotel and Tourism Management

Title of the paper in English

Name Surname[1*], Name Surname[2], Name Surname[3]

[1] Institution
[2] Institution
[3] Institution

Abstract: This document presents a model for preparing the camera-ready manuscripts to be submitted for publishing in the journal Hotel and Tourism Management. The abstract briefly summarizes the article, at the same time enabling a reader to assess its relevance. The author(s) should elaborate the **goal** of their research or state the reason for writing the paper. They are additionally required to describe the **methods** used during the research and give a brief description of the **results** and conclusions of the research. The abstract should be between **100 and 150** words long.

Keywords: 3-5 keywords
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Sažetak: Ovaj dokument predstavlja obrazac za formatiranje radova tako da izgledaju kao da su već spremni za štampu. Sažetak predstavlja kratak informativni prikaz sadržaja članka koji čitaocu treba da omogući brzu i tačnu ocenu njegove relevantnosti. Autori treba da obrazlože **cilj** istraživanja ili navedu razlog zbog koga pišu članak. Zatim, potrebno je da opišu **metode** korišćene u istraživanju i ukratko opišu **rezultate** do kojih su došli u istraživanju. Sažetak treba da sadrži od **100 do 150** reči.

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1. Introduction

Papers should be written **in English** using Microsoft Word for Windows. The minimum number of pages is **6** full pages, whereas the maximum number should not be higher than **10** full pages including the text, figures, tables, references list and appendices. The page should be formatted as **B5 (JIS)**. Allow **20mm** for the bottom and top margins and **25mm** for the left and right margins on a page. The line spacing within a paragraph is single whereas the spacing between two paragraphs is **6pt**. The text should be written using **Times New Roman** font. The maximum number of authors per paper is three.

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3. Materials and methods

Materials and Methods section should provide a reader with sufficient details and argue all the necessary aspects in order to allow other researchers to replicate the research and build the published results.

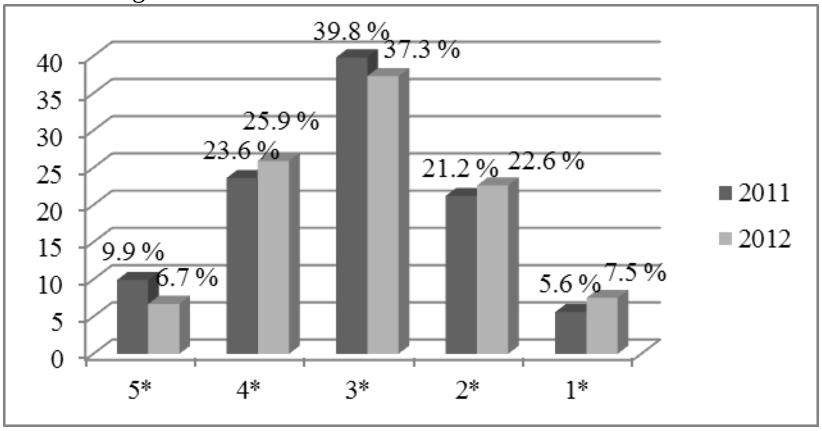
4. Results and discussion

The results obtained in the research should be described in this section. The discussion should highlight the main findings.

Figures, tables and equations

All illustrations whether diagrams, photographs or charts are referred to as Figures. The name and number of figures should be centered on the line above a figure.

Figure 1: Percentage of rooms in the structure of hotel accommodation in 2011 and 2012



Source: Ministry of Finance and Economy of the Republic of Serbia, 2013

The equations are written using Microsoft Word (MathType); they are consecutively numbered and centered.

$$PVo = \frac{FVn}{(1+i)^n} \tag{1}$$

The name and number of tables should be centered above the table.

Table 1: Percentage of rooms in the structure of hotel accommodation in 2011 and 2012

Category	2011	2012	Number of rooms (2011)	Number of rooms (2012)
5*	9.9	6.7	1,452	990
4*	23.6	25.9	3,486	3,911
3*	39.8	37.3	5,895	5,636
2*	21.2	22.6	3,102	3,420
1*	5.6	7.5	1,133	1,132
Total	100	100	15,068	15,089

Source: Ministry of Finance and Economy of the Republic of Serbia, 2013

If the study findings were presented graphically or in a table, author(s) are encouraged to state the source below the picture or table in the following form: Author's research.

The paper with all tables and figures should be sent as one data bank. Besides, all figures and tables (grayscale) should be sent as separate files in JPF or TIFF formats with the smallest resolution of 300dpi.

5. Conclusion

Conclusion summarizes the results achieved during the research.

References

The reference list should not contain sources which were not used in the paper. **All the sources mentioned in the paper should be hyperlinked to the corresponding sources in the bibliography** (e.g.: Luque-Martinez et al., 2007). Use the author's last name and year of publication as the bookmark (for example Luque_Martinez_et_al_2007).

When giving references, APA system of referencing should be used. For more information see *Publication Manual of the American Psychological Association* (6th ed.).

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If there are more authors, they are all named. Before the name of the last author '&' is used. When there are more than seven authors, the names of the first six are given and the name of the last author is preceded by '…'.
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E.g.: Đurković, M. (Ed.) (2007). *Srbija 2000-2006: država, društvo, privreda [Serbia 2000-2006: State, society, economy]*. Beograd, Srbija: Institut za evropske studije.

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One-author paper published in a journal
E.g.: Harish, R. (2008). Brand architecture and its application in strategic marketing. *The Icfai University Journal of Brand Management*, *7*(2), 39–51.

Two-author paper published in a journal
If the cited paper is given a DOI number, it should also be included.
E.g.: Tew, C., & Barbieri, C. (2012). The perceived benefits of agritourism: The provider's perspective. *Tourism Management*, *33*(6), 215–224. https://doi.org/10.1016/j.tourman.2011.02.005

A paper with more than two authors published in a journal
E.g.: Luque-Martinez, T., Castaneda-Garcia, J. A., Frias-Jamilena, D. M., Munoz-Leiva, F., & Rodriguez-Molina, M. A. (2007). Determinants of the use of the Internet as a tourist information source. *The Service Industries Journal*, *27*(7), 881–891. https://doi.org/10.1080/02642060701570586

An article with a known author
E.g.: Mišić, M. (2012, February 1). Ju-es stil smanjio gubitke [US steel has cut losses]. *Politika*, p. 11.

An article with no author given

E.g.: Straževica gotova za dva meseca [Straževica finished in two months]. (2012, February 1). *Politika*, p. 10.

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Documents or data bases taken from the Internet, a private or official Internet page with a known author

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Documents or data bases taken from the Internet, a private or official Internet page with an unknown author

E.g.: *Penn State Myths*. (2006). Retrieved December 6, 2011 from http://www.psu.edu/ur/about/myths.html

Documents or data bases taken from the Internet, a private or official Internet page with an organization or corporation as an author

E.g.: Ministarstvo finansija i privrede Republike Srbije [Ministry of Finance and Economy of the Republic of Serbia]. (2013). *Informacije o turističkom prometu u Srbiji [Information on tourist traffic in Serbia]*. Retrieved February 6, 2013 from http://www.turizam.mfp.gov.rs/index.php/sr/2010-02-11-17-24-30

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