

## **The determinants of the usefulness of online reviews in the tourist offer selection**

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**Abstract:** The dynamics of the development of tourism sector is reflected, among other things, in the fact that an increasing number of tourists choose an offer based on online reviews. Although it is true that due to the intensive development of communication via the Internet, online reviews are one of the dominant sources of information, their level of perceived usefulness may differ. The aim of the research is to examine the extent to which textual comments, photos and ratings of tourist offers determine the usefulness of online reviews. In order to analyze the results, we used exploratory factor analysis. Moreover, by using regression analysis, it was confirmed that usefulness affects the level of trust in online reviews, as well as that trust has implications for the intention to purchase a tourist offer. Finally, we came to conclusions that may have numerous implications for the decisions of marketing managers in the field of tourism.

**Keywords:** electronic interpersonal communication, online reviews, online trust, intention to purchase a tourist offer

**JEL classification:** M31, Z30

## **Determinante korisnosti onlajn recenzija prilikom izbora turističke ponude**

**Sažetak:** Dinamičnost razvoja sektora turizma ogleda se, između ostalog, i u tome da sve veći broj turista svoju odluku o izboru ponude bazira na onlajn recenzijama. Iako su usled intenzivnog razvoja komunikacije putem Interneta onlajn recenzije jedan od dominantnih izvora informisanja, njihov nivo percipirane korisnosti može se razlikovati. Cilj istraživanja je ispitivanje u kojoj meri tekstualni komentari, fotografije i rejting turističke ponude određuju korisnost onlajn recenzija. Za analizu rezultata korišćena je eksplorativna faktorska analiza. Primenom regresione analize potvrđeno je da korisnost utiče na nivo poverenja prema onlajn recenzijama, kao i da to poverenje ima implikacije na nameru o kupovini turističke ponude. Na kraju, dolazi se do zaključaka koji mogu imati brojne implikacije na odluke marketing menadžera u oblasti turizma.

**Ključne reči:** elektronska interpersonalna komunikacija, onlajn recenzije, onlajn poverenje, namera o kupovini turističke ponude

**JEL klasifikacija:** M31, Z30

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## 1. Introduction

The Internet has drastically affected the way of exchanging information regarding a tourist offer. Unlike traditional approach, where users' attitudes about a tourist offer were formed mainly under the influence of oral communication, in digitalized environment, communication is carried out through various forms, which are all based on the use of web content (Gellerstedt & Arvemo, 2019; Martins et al., 2018). Hence, reviews of other tourists are one of the most important sources of information when it comes to choosing a tourist offer (El-Said, 2020; Filieri & Mc Leay, 2013; Guo et al., 2021; Zhao et al., 2015). The fact that in the era of digitalization, a large amount of information is available to tourists additionally emphasizes the question of whether all user-generated content is equally useful (Filieri, 2015; Zhao et al., 2015). Research on the usefulness of online reviews in the field of tourism, in accordance with textual, numerical and visual indicators, is not sufficiently represented in domestic literature.

The aim of this paper is to get relevant knowledge about the extent to which the textual content, rating and visual context of online reviews influence their usefulness. Another goal is to examine whether the usefulness of online reviews has an impact on trust towards a tourist offer, as well as whether that trust implies purchase intention.

The paper is structured in the following way. The theoretical overview refers to basic concepts, such as electronic interpersonal communication and online reviews, as observed in the field of tourism. Furthermore, we analyze the importance of studying the usefulness of online reviews and trust in online environment, in order to empirically examine numerous relationships through an integrative research framework. As for the qualitative research methods, we applied the content analysis method, deductive method, as well as analysis and synthesis. In order to test the hypotheses, a quantitative methodology was used, specifically, reliability analysis, exploratory factor analysis and regression analysis. After elaborating the key results, concluding remarks were given, and within them the most significant implications, limitations and directions of future research were presented.

## 2. Literature overview

### 2.1. The importance of online reviews in tourism

Tendency towards exchanging one's experience and ideas about tourist offer is additionally pronounced in online environment (An et al., 2020; Filieri & McLeay, 2013; Guo et al., 2021; Kocić & Radaković, 2019; Rianthong et al., 2016). In that manner, instead of traditional *word of mouth* communication, an increasing number of papers in the field of tourism and marketing is based on evaluating the role of electronic interpersonal communication when making the choice of a tourist offer (El-Said, 2020; Filieri & McLeay, 2013; Kocić & Radaković, 2019; Ladhari & Michaud, 2015; Martins et al., 2018; Mauri & Minazzi, 2013; Park & Nicolau, 2015).

Although there are many similar aspects from communicative point of view in relation to traditional oral communication, one of the most significant and specific aspects of electronic interpersonal communication compared to traditional one is that positive and negative comments can be posted simultaneously, with the possibility of higher measurability and visibility (Mauri & Minazzi, 2013; Zhao et al., 2015). Electronic interpersonal communication can be done through various forums, blogs, online communities, social networks, thus it is a "more powerful" means of information compared to traditional oral communication (Borisavljević, 2021; Ladhari & Michaud, 2015). Comments on the Internet can play a very important role when choosing a tourist offer, especially having in mind the impossibility of evaluating the offer before using it (Filieri et al., 2018; Gellerstedt & Arvemo, 2019; Khare et al., 2020; Kim et al., 2021; Liu & Park, 2015; Xie et al., 2014).

Online reviews of other users are one of the fundamental forms of electronic interpersonal communication (Filieri, 2015; Filieri & McLeay, 2013; Jiménez & Mendoza, 2013; Li et al., 2019; Liu & Park, 2015; Ludwig et al., 2013; Martins et al., 2018; Mauri & Minazzi, 2013; Park & Nicolau, 2015; Racherla & Friske, 2012; Ristova, 2020; Zelenka et al., 2021). Through this form of communication, which can be in the form of positive, negative or neutral statements, recommendations or opinions (Filieri, 2016), potential or current tourists gain insight into additional information that can be significant for final decision (Filieri, 2015; Hlee et al., 2018). The users of the tourist offer very often perceive the information provided by other tourists as more honest and reliable compared to those originating from business entities (Borisavljević, 2021; Zhao et al., 2015). For this reason, it is very important to examine the various determinants of the usefulness of online reviews and their role in the process of creating tourist trust (Khare et al., 2020; Zelenka et al., 2021). As stated by Hlee et al. (2018), online reviews will reflect the potential demand for tourist products, which is one of the basic reasons for conducting this research.

Online reviews are particularly important in the field of tourism (Chan et al., 2017; Fang et al., 2016; Khare et al., 2020; Liu & Park, 2015; Park & Nicolau, 2015), having in mind that they can serve as one of the key resources for reducing risk and uncertainty (Fang et al., 2016; Gellerstedt & Arvemo, 2019; Ladhari & Michaud, 2015; Rianthong et al., 2016; Xie et al., 2014). With this form of electronic interpersonal communication, potential and current customers exchange information on the quality of a hotel offer, tourist destinations, tourist services (Zhao et al., 2015), or, for instance, on their satisfaction with a tourist offer (Filieri & McLeay, 2013; Ristova, 2020; Xie et al., 2014). As a very popular source of information (Hlee et al., 2018) and as one of the forms of electronic interpersonal communication with most impact (Jiménez & Mendoza, 2013; Mauri & Minazzi, 2013), online reviews have significantly changed the way package holidays are planned and realized (Filieri et al., 2018). This is particularly emphasized when collecting information related to destinations, accommodation facilities, restaurants, attractions, and the overall tourist offer (Hlee et al., 2018). In this paper, the importance of online reviews will be examined in relation to the tourist offer in general, without highlighting the differences in terms of its specific features.

Although there are numerous papers in the field of tourism which aim to examine online reviews (Chan et al., 2017; Rianthong et al., 2016), only few of them are based on the key question that precedes the intention to purchase a tourist offer: How useful are online reviews? The time and effort that tourism users invest in analyzing online reviews has further contributed to examine key characteristics when analyzing the content of online reviews (Jiménez & Mendoza, 2013). Although the usefulness of online reviews may depend on those who in fact leave the reviews (Chan et al., 2017; Fang et al., 2016), or, for example, - on the dimension of time (Lu et al., 2018), the most significant indicator of the usefulness of online reviews is actually their content (Fang et al., 2016).

The diversity of determinants that establish usefulness can be reduced if we observe some of the previous research that linked the question of the usefulness of online reviews to the textual, numerical or pictorial contents of the reviews (Filieri et al., 2018). When examining the influence of online reviews on the intention to book a hotel offer, Chan et al. (2017) state that the crucial components of online reviews are rating in the form of numbers and descriptive comments. One of the studies that included over two hundred thousand reviews was aimed at a comparative analysis of the relationship between textual comments and numerical ratings (Alantari et al., 2022). Equivalent to the conclusions of this study, in which we applied a method of machine learning by which the usefulness of online reviews of hotel offers was covered, it was observed that the rating is related to some of the keywords given in the form of textual or descriptive reviews. Based on the classification provided by Le et al. (2022), online reviews include textual comments, ratings in the form of numbers, i.e. stars,

and photos of other users. Bearing in mind that most websites base their offer on a combination of textual and visual content (Kim et al., 2021), examining the influence of that content in choosing a tourist offer can provide significant scientific and practical implications.

## **2.2. Textual comments within online reviews**

Textual comments can be very significant in the process of profiling certain offer, determining the rate of conversation (Ludwig et al., 2013) and determining the purchase intention (Li et al., 2019; Wu et al., 2021). When writing textual comments about a particular offer, users not only describe its features, but also express emotions and emphasize their opinions and attitudes as well (Kim et al., 2022). The qualitative content of online reviews allows a more detailed insight into the experience of other users in relation to the tourist offer and is often indicator of their quality (Ludwig et al., 2013). According to previous research, it has been determined that textual features can be key determinants of the usefulness of reviews (Wu et al., 2021). Textual comments within online reviews refer to opinion, the value of reading, comprehensiveness and quality of reviews (Le et al., 2022). Some authors go a step further, where the sentimental aspects of the reviews are analyzed more thoroughly within the textual comments (Ristova, 2020), which are brought into relation with sales (Li et al., 2019).

## **2.3. The significance of photos within online reviews**

The impressions of potential or current tourists about a certain tourist destination will be more complete if user reviews, in addition to textual and numerical data, contain photos as well. Since it is not possible to test a tourist offer prior to using it, the photos that other travelers leave have a significant impact on the perception of the level of quality (Filieri et al., 2018), as well as on purchase intention (Le et al., 2022; Zhang et al., 2022). Online reviews by other users that contain photos get more attention from tourists, facilitate objective evaluation (Filieri, 2016) and enable easier processing of detailed information (Zhang et al., 2022). Photos by users are one of the ways to market the image of a certain tourist offer (He et al., 2022), because they enable the visualization of the tourist experience (An et al., 2020). Le et al. (2022) defined visual content by those contextual photos that enable easier perception of the content and clarify doubts regarding a certain offer. The link between online reviews of a visual nature and the usefulness of such reviews has already been identified in the literature (An et al., 2020; Hlee et al., 2018). Marder et al. (2021) found an association between online reviews containing photos and intentions to purchase a travel product.

## **2.4. Rating as a form of online reviews**

Information overload in online environment often results in tourists basing their choice on the rating of a particular offer rather than on textual comments (Bigné et al., 2020). A tourist offer can be expressed numerically, in the form of certain numbers, in the form of stars or graphic representations that categorize the given offer, i.e. indicate its rating (Filieri, 2015; Jiménez & Mendoza, 2013; Li et al., 2019). Quantitative expression of users' attitudes, experiences or opinions is an integral part of online reviews (Kim et al., 2021; Li et al., 2019), which reduces the number of alternatives for tourists (Filieri & McLeay, 2013). Research has confirmed that tourists expect a high quality of service and better interaction with users from a hotel offer that is highly categorized, compared to those tourist offers that are rated low, where the priority is cleanliness, safety and security of tourists (Kim et al., 2021). Some studies have confirmed that when choosing a tourist offer, extreme rating values (one or five stars) are more useful compared to offers categorized with three stars (Liu & Park, 2015; Park & Nicolau, 2015). Rianthong et al. (2016) point out that the rating of the

hotel offer has positive influence on both the number of reservations and the profit generated on that basis. In previous research, it was found that when examining purchase intention, it is important to observe the congruence between the rating and the textual comments of the reviews (Jiménez & Mendoza, 2013), and that this type of relationship contributes to increasing the value of online reviews (Wu et al., 2021).

## **2.5. The usefulness of online reviews**

When potential tourists consider online reviews, they create certain beliefs that are actually created as a consequence of the extent to which such reviews are useful, informative and up-to-date (Sparks et al., 2013). In this sense, the usefulness of reviews is one of the crucial prerequisites for online reviews to influence behavioral intentions (Lee et al., 2017; Lu et al., 2018; Racherla & Friske, 2012; Wu et al., 2021). The heterogeneity of the tourist offer, as well as the large number of online reviews suggest that one of the main challenges for marketing managers is to see to what extent online reviews can be useful for other individuals (An et al., 2020; Filieri et al., 2018; Park & Nicolau, 2015). Although numerous studies seek to investigate the relationship between online reviews and purchase (Jiménez & Mendoza, 2013; Ladhari & Michaud, 2015; Sparks et al., 2013), the number of those papers that examine the usefulness of online reviews in the field of tourism is considerably smaller (Fang et al., 2016; Filieri et al., 2018; Park & Nicolau, 2015). Higher usefulness of online reviews is often one of the potential sources for providing additional value to consumers, especially in the area of tourism (Liu & Park, 2015). By examining the usefulness of online reviews when assessing websites for booking tourist offers, Liu and Park (2015) have analyzed quantitative and qualitative characteristics. The conclusions made in the paper written by Wu et al. (2021) imply that the interaction between content and rating of reviews implies more usefulness, i.e. it creates higher value for consumers. In accordance with the available literature, another variable whose effect on perceived usefulness will be observed is visual content. Similar to previous theoretical conclusions, we defined the following hypotheses in the paper:

H1: Textual comments within online reviews have a positive and statistically significant effect on the usefulness of those reviews related to a tourist offer.

H2: Photos within online reviews have a positive and statistically significant effect on the usefulness of those reviews related to a tourist offer.

H3: Rating within online reviews has a positive and statistically significant effect on the usefulness of those reviews related to a tourist offer.

## **2.6. Trust towards online reviews**

A large number of online reviews does not always imply that those reviews will evoke trust in potential tourists. The matter of trust in the online environment is particularly significant if considering the pronounced risk and insecurity due to the inability to have insight into the tourist offer itself (Ladhari & Michaud, 2015). In that sense, trust towards online reviews is understood as truthful, non-commercial opinion of those who have experience with a certain product or service (Filieri, 2016, p. 48). Users' trust in the area of tourism is one of the phenomena that is often studied (Filieri, 2016; Khare et al., 2020; Ladhari & Michaud, 2015; Zelenka et al., 2021), and it has already been identified that in this area online trust can suggest the purchase intention (Khare et al., 2020; Kocić & Radaković, 2019). The number of the false reviews additionally strengthens the fear of users when choosing a tourist offer. For that reason, in order to identify false reviews, we applied textual analysis, as well as numerous mathematical and statistical methods (Zelenka et al., 2021). Useful online reviews tend to result in a higher level of trust (Liu & Park, 2015). However, few studies aim to

establish interdependence between the usefulness of online reviews and trust towards those reviews. In accordance with that, we defined the following hypotheses in the paper:

H4: The usefulness of online reviews has a positive and statistically significant effect on the trust towards those reviews related to a tourist offer.

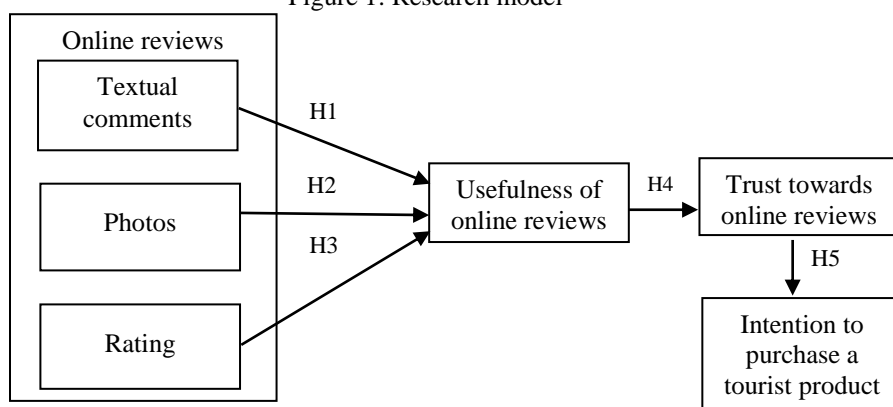
H5: Trust towards online reviews has a positive and statistically significant effect on the intention to purchase a tourist product.

### 3. Methodology

In order to conduct the empirical research, we used the survey method, and we used a questionnaire as an instrument to gather data, which we distributed electronically in the period from April to May 2022. The respondents were contacted by sending the online survey link to their social media accounts. The survey included only those respondents who were interested in reading online reviews before making the reservation of a tourist offer. The respondents expressed the degree to which they agreed with the statements in the questionnaire using a five-degree Likert scale. The variables used in the questionnaire were measured by statements that were adjusted according to the aim of the research. Statements related to textual comments within online reviews were adjusted based on the paper by [Wu et al. \(2021\)](#). Contextual photos were already examined by statements in the paper by [Le et al. \(2022\)](#). The significance of rating as a means of expressing online reviews was examined by statements in papers by [Filiari \(2015\)](#) and [Le et al. \(2022\)](#). The usefulness of online reviews was measured based on papers by [Zhao et al. \(2015\)](#). The level of online trust towards reviews was measured by statements that were adjusted based on the paper by [Su et al. \(2021\)](#), while the intention to purchase a tourist product was measured by statements based on the paper by [El-Said \(2020\)](#).

The analyses needed to make valid conclusions were made in the statistical software for social sciences SPSS, version 21. We interpreted the results of the research based on the results of the explorative factor analysis, reliability analysis and regression analysis. The research model is presented in Figure 1.

Figure 1: Research model



Source: Authors' research

The structure of the sample is such that out of 202 respondents in total, there are more women (51.5%) compared to men (48.5%). When it comes to the age criterion, most respondents belong to the age group 19 to 24 (27.7%), followed by those aged from 31 to 36 (26.2%), while fewer respondents belong to the category aged from 25 to 30 (22.8%), and above 36 (23.3%). Most respondents have university education (37.1%), while 27.7% of the respondents have undergraduate education, and 35.1% state that they have high school education. When it comes to the employment status, most respondents are employed (48%),

followed by entrepreneurs (25.7%), students (20.3%), while the number of unemployed respondents is the smallest (5.9%).

#### 4. Research results

As stated, we used explorative factor analysis to group statements into factors. In order to test whether using this analysis is justified, we showed Bartlett's Test of Sphericity and Kaiser-Meyer-Olkin – KMO measure of sampling adequacy (Table 1). The value of the KMO measure is 0.892, which is significantly higher than the recommended limit value of 0.6 (Coakes, 2013). Bartlett's Test of Sphericity has a statistically significant value (Sig=0.000), which shows that there is a statistically significant correlation between the original variables.

Table 1: Value of KMO statistics and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.892
Bartlett's Test of Sphericity	Approx. Chi-Square	1072.835
	Degrees of freedom	78
	Significance	.000

Source: Authors' research

By using Principal Component Analysis, and after the factor rotation (varimax), three factors were singled out. The first factor pertains to textual comments; the second factor pertains to online reviews expressed by photos, while the third factor pertains to the rating of a tourist offer. The given matrix is interpretable, and only those statements whose values of absolute factor weights are above 0.5 were kept.

Table 2: Rotated Component Matrix

<b>Rotated Component Matrix<sup>a</sup></b>			
	Component		
	1	2	3
text3	.777		
text1	.763		
text5	.761	.361	
text2	.752		
text4	.752		
text6	.749		
photo4		.737	
photo3		.711	
photo1		.693	
photo2		.670	
rating1			.829
rating2			.805
rating3			.678
Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization			
a. Rotation converged in 5 iterations			

Source: Authors' research

Table 3 includes the obtained factors, the values of factor weights in each factor, as well as the value of the Cronbach's alpha coefficient. The high value of the Cronbach's alpha coefficient – above 0.7 (Nunnally, 1978) indicates that the factors have good internal consistency. When deciding on a certain number of factors, it is important to point out that we kept the factors whose characteristic value was higher than 1, which was the case with the first three factors (it was 5.377 for the first factor, 1.798 for the second factor and 1.006 for the third factor). The total percentage of variability that these three factors explain is 62.93%, which is in line with recommendations given by Tabachnick and Fidell (2013).

Table 3: Results of the explorative factor analysis

<b>Factors and relevant statements</b>	<b>Factor weight</b>	<b>Cronbach's alpha</b>
<b>Textual comments</b>		<b>0.886</b>
Textual reviews about the tourist offer should be clearly understandable.	0.763	
Textual reviews about the tourist offer should express emotions.	0.752	
Textual reviews about the tourist offer should be long enough.	0.777	
Textual reviews about the tourist offer should be written in a clear writing style.	0.752	
Textual reviews about the tourist offer should be written in detail.	0.761	
Textual reviews about the tourist offer should be high quality.	0.749	
<b>Photos</b>		<b>0.758</b>
Photos within online reviews make the overview of the tourist offer easier.	0.693	
Online reviews contain photos that make the tourist offer attractive.	0.670	
Photos within online reviews enable clear visualization of the tourist offer.	0.711	
Photos within online reviews clarify my doubts about the tourist offer.	0.737	
<b>Rating</b>		<b>0.724</b>
The rating of the tourist offer within online reviews enables me to learn more about the offer.	0.829	
The rating of the tourist offer within online reviews enables me to understand the quality of the offer.	0.805	
When searching for tourist offers, I focus on those that have a high rating expressed in online reviews.	0.678	

Source: Authors' research

In order to examine the shared effect of the observed factors on the usefulness of online reviews, we applied multiple regression analysis (Table 4).



Table 4: Validity of the multiple regression model

<b>R</b>	<b>Adj. R Square</b>	<b>St. error</b>	<b>F</b>	<b>Sig</b>
0.793	0.623	0.26883	111.711	0.000

Source: Authors' research

The model is representative (Sig=0.000); the value of the Adjusted Coefficient of Determination equals 0.623, which shows that 62.3% of the variability of the usefulness of online reviews is explained by the defined factors.

The value of the growth factor variance which is lower than five for all defined factors confirms that the problem of multicollinearity does not exist in the regression model (Table 5). When observing them separately, textual reviews contribute most to the usefulness of online reviews ( $\beta=0.609$ ,  $p=0.000$ ). Consequently, it can be concluded that the effect of photos within online reviews on the usefulness of online reviews is pronounced and very strong ( $\beta=0.484$ ,  $p=0.000$ ). Rating within online reviews also has a positive and statistically significant effect on the usefulness of those reviews, but its effect has lower intensity ( $\beta=0.152$ ,  $p=0.000$ ). We thereby conclude that hypotheses H1, H2 and H3 can be confirmed.

Table 5: Results of multiple regression analysis (with the usefulness of online reviews as the dependent variable)

<b>Variable</b>	<b><math>\beta</math></b>	<b>T</b>	<b>Sig.</b>	<b>VIF</b>
Textual comments	0.609	14.071	0.000*	1.000
Photos	0.484	11.172	0.000*	1.000
Rating	0.152	3.513	0.001*	1.000

\*The value is significant at the level equaling 0.05

Source: Authors' research

By using simple regression analyses (Table 6), we examined whether the usefulness of online reviews has any implications on the level of trust towards those reviews, as well as whether the level of trust affects the intention to purchase a tourist product.

Table 6: Results of simple regression analyses

	<b>Adj. R Square</b>	<b>F</b>	<b>Sig(F)</b>	<b><math>\beta</math></b>	<b>T</b>	<b>Sig.</b>
Usefulness of online reviews→Trust	0.474	182.093	0.000*	0.690	13.494	0.000*
Trust→The intention to purchase a tourist product	0.439	158.402	0.000*	0.665	12.586	0.000*

\* The value is significant at the level equaling 0.05

Source: Authors' research

We can conclude that 47.4% of the variability of trust towards online reviews as the dependent variable is explained by the usefulness of online reviews, and that 43.9% of the variability of the intention to purchase a tourist product online as the dependent variable is explained by online trust. Therefore, based on the above, hypotheses H4 and H5 can be confirmed.

## **5. Conclusion**

The evident complexity of the tourist offer, the existence of a large number of criteria which tourists consider when making their choice, as well as the omnipresent insecurity in the online environment emphasize the significance of empirical analysis in this paper. In accordance with the conclusions of the empirical research, marketing managers should bear in mind that various forms of online reviews have certain implications on the perceived usefulness of online reviews. By adopting a proactive approach and by improving the exchange of online reviews, this form of communication can be used as an effective marketing means.

Although, this study represents a valuable resource for the tourism sector, its limitations should be explained. The limitation referring to the representativeness of the sample could be overcome by enlarging the number of respondents in future research. This study examines the intention to purchase a tourist product in general, without specifying its components. In addition, most of conclusions are based on the analysis of online reviews, and future papers could also examine the significance of expertise, competence and credibility of the tourists who post reviews. Moreover, the research examined the significance of the online reviews regardless of the platform where the reviews were posted. Some future research should develop an integrative research framework that would identify the similarity of online reviews on different platforms, whether on websites of hotels and tourist agencies, or reviews on social media websites.

One more variable that could be included is the country of origin of tourists that post comments about a tourist offer. This could help get a more complete insight into additional factors that characterize the choice of the tourist offer made by Serbian tourists. Furthermore, the details contained in online reviews, as well as the ratio of positive to negative reviews, could also be a useful marketing tool in the area of promoting and selling a tourist offer. The paper is based on the analysis of the quality of the content of online reviews in terms of their rating, photos and textual comments. The quantity of such content could be examined based on related research in order to determine whether perceived usefulness changes if there are more reviews posted by other tourists in the online environment. The paper examines the direct link between textual content, rating and photos within online reviews and their usefulness. Some future papers could also examine the effect of the moderator, for instance, in order to determine whether some extreme rating supported by photos of a tourist offer provides higher usefulness for tourists.

Although the role of online reviews is more than obvious with the development of the Internet, it would also be desirable to perform a comparison of the degree to which tourists in our country give advantage to online reviews compared to recommendations received from family and friends, i.e. by traditional word-of-mouth communication. Research has shown that a higher level of usefulness of online reviews for tourists is also a potential source of trust, which later results in the purchase intention. Accordingly, a systematic approach and constant analysis of online reviews should be the imperative in order for business entities in the area of tourism to be able to do business successfully.

## **Conflict of interest**

The authors declare no conflict of interest.

## References

1. Alantari, H. J., Currim, I. S., Deng, Y., & Singh, S. (2022). An empirical comparison of machine learning methods for text based sentiment analysis of online consumer review. *International Journal of Research in Marketing*, 39, 1–19. <https://doi.org/10.1016/j.ijresmar.2021.10.011>
2. An, Q., Ma, Y., Du, Q., Xiang, Z., & Fan, W. (2020). Role of user-generated photos in online hotel reviews: An analytical approach. *Journal of Hospitality and Tourism Management*, 45, 633–640. <https://doi.org/10.1016/j.jhtm.2020.11.002>
3. Bigné, E., William, E., & Soria-Olivas, E. (2020). Similarity and consistency in hotel online ratings across platforms. *Journal of Travel Research*, 59(4), 742–758. <https://doi.org/10.1177/0047287519859705>
4. Borisavljević, K. (2021). *Marketing odnosa u turizmu [Relationship marketing in tourism]*. Kragujevac: Ekonomski fakultet Univerziteta u Kragujevcu.
5. Chan, I. C. C., Lam, L. W., Chow, C. W. C., Fong, L. H. N., & Law, R. (2017). The effect of online reviews on hotel booking intention: The role of reader-reviewer similarity. *International Journal of Hospitality Management*, 66, 54–65. <http://dx.doi.org/10.1016/j.ijhm.2017.06.007>
6. Coakes, S. J. (2013). SPSS verzija 20.0 Windows: Analiza bez muke [SPSS version 20.0 for Windows: Analysis without anguish] [prevod Jasna Soldić-Aleksić]. Beograd: Kompjuter biblioteka.
7. El-Said, O. A. (2020). Impact of online reviews on hotel booking intention: The moderating role of brand image, star category, and price. *Tourism Management Perspectives*, 33, 100604. <https://doi.org/10.1016/j.tmp.2019.100604>
8. Fang, B., Ye, Q., Kucukusta, D., & Law, R. (2016). Analysis of the perceived value of online tourism reviews: Influence of readability and reviewer characteristics. *Tourism Management*, 52, 498–506. <https://doi.org/10.1016/j.tourman.2015.07.018>
9. Filieri, R. (2015). What makes online reviews helpful? A diagnosticity-adoption framework to explain informational and normative influences in e-WOM. *Journal of Business Research*, 68, 1261–1270. <http://dx.doi.org/10.1016/j.jbusres.2014.11.006>
10. Filieri, R. (2016). What makes an online consumer review trustworthy? *Annals of Tourism Research*, 58, 46–64. <http://dx.doi.org/10.1016/j.annals.2015.12.019>
11. Filieri, R., & McLeay, F. (2013). E-WOM and accommodation: An analysis of the factors that influence travelers' adoption of information from online reviews. *Journal of Travel Research*, 53(1), 44–57. <https://doi.org/10.1177/0047287513481274>
12. Filieri, R., Raguseo, E., & Vitari, C. (2018). When are extreme ratings more helpful? Empirical evidence on the moderating effects of review characteristics and product type. *Computers in Human Behavior*, 88, 134–142.
13. Gellerstedt, M., & Arvemo, T. (2019). The impact of word of mouth when booking a hotel: Could a good friend's opinion outweigh the online majority? *Information Technology & Tourism*, 21, 289–311. <https://doi.org/10.1007/s40558-019-00143-4>
14. Guo, X., Pesonen, J., & Komppula, R. (2021). Comparing online travel review platforms as destination image information agents. *Information Technology & Tourism*, 23, 159–187. <https://doi.org/10.1007/s40558-021-00201-w>
15. He, Z., Deng, N., Li, X, R., & Gu, H. (2022). How to “read” a destination from images? Machine learning and network methods for DMOs' image projection and photo evaluation. *Journal of Travel Research*, 61(3), 597–619. <https://doi.org/10.1177/0047287521995134>
16. Hlee, S., Lee, H., & Koo, C. (2018). Hospitality and tourism online review research: A systematic analysis and heuristic-systematic model. *Sustainability*, 10(4), 1141, <https://doi.org/10.3390/su10041141>

17. Jiménez, F. R., & Mendoza, N. A. (2013). Too popular to ignore: The influence of online reviews on purchase intentions of search and experience Products. *Journal of Interactive Marketing*, 27, 226–235. <http://dx.doi.org/10.1016/j.intmar.2013.04.004>
18. Khare, A., Dixit, S., & Sarkar, S. (2020). Antecedents to online travel purchase: Role of network benefits, pilgrimage packages, interactivity, trust and customer reviews. *Journal of Quality Assurance in Hospitality & Tourism*, 21(6), 690–715. <https://doi.org/10.1080/1528008X.2020.1740133>
19. Kim, M., Lee, S. M., Choi, S., & Kim, S. Y. (2021). Impact of visual information on online consumer review behavior: Evidence from a hotel booking website. *Journal of Retailing and Consumer Services*, 60, 102494. <https://doi.org/10.1016/j.jretconser.2021.102494>
20. Kocić, M., & Radaković, K. (2019). The implications of the electronic word-of-mouth communication in choosing a wellness offer. *Economic Horizons*, 21(1), 43–56. <https://doi.org/10.5937/ekonhor1901043K>
21. Ladhari, R., & Michaud, M. (2015). eWOM effects on hotel booking intentions, attitudes, trust, and website perceptions. *International Journal of Hospitality Management*, 46, 36–45. <http://dx.doi.org/10.1016/j.ijhm.2015.01.010>
22. Le, L. T., Ly, P. T. M., Nguyen, N. T., & Tran, L. T. T. (2022). Online reviews as a pacifying decision-making assistant. *Journal of Retailing and Consumer Services*, 64, 102805. <https://doi.org/10.1016/j.jretconser.2021.102805>
23. Lee, M., Jeong, M., & Lee, J. (2017). Roles of negative emotions in customers' perceived helpfulness of hotel reviews on a user-generated review website: A text mining approach. *International Journal of Contemporary Hospitality Management*, 29(2), 762–783, <https://doi.org/10.1108/IJCHM-10-2015-0626>
24. Li, X., Wu, C., & Mai, F. (2019). The effect of online reviews on product sales: A joint sentiment-topic analysis. *Information & Management*, 56, 172–184, <https://doi.org/10.1016/j.im.2018.04.007>
25. Liu, Z., & Park, S. (2015). What makes a useful online review? Implication for travel product Websites. *Tourism Management*, 47, 140–151. <http://dx.doi.org/10.1016/j.tourman.2014.09.020>
26. Lu, S., Wu, J., & Tseng, S.L.A. (2018). How online reviews become helpful: A dynamic perspective. *Journal of Interactive Marketing*, 44, 17–28. <https://doi.org/10.1016/j.intmar.2018.05.005>
27. Ludwig, S., Ruyter, K. D., Friedman, M., Brügger, E. C., Wetzels, M., & Pfann, G. (2013). More than words: The influence of affective content and linguistic style matches in online reviews on conversion rates. *Journal of Marketing*, 77(1), 87–103.
28. Marder, B., Erz, A., Angell, R., & Plangger, K. (2021). The role of photograph aesthetics on online review sites: Effects of management- versus traveler-generated photos on tourists' decision making. *Journal of Travel Research*, 60(1), 31–46. <https://doi.org/10.1177/00472875198951>
29. Martins, M. R., Rachão, S., & Augusto da Costa, R. (2018). Electronic word of mouth: Does it really matter to backpackers? Booking website reviews as an indicator for hostels' quality services. *Journal of Quality Assurance in Hospitality & Tourism*, 19(4), 415–441. <https://doi.org/10.1080/1528008X.2018.1429980>
30. Mauri, A. G., & Minazzi, R. (2013). Web reviews influence on expectations and purchasing intentions of hotel potential customers. *International Journal of Hospitality Management*, 34, 99–107. <http://dx.doi.org/10.1016/j.ijhm.2013.02.012>
31. Nunnally, J. (1978). *Introduction to psychological measurement*. New York, NY: McGraw–Hill.
32. Park, S., & Nicolau, J. L. (2015). Asymmetric effects of online consumer reviews. *Annals of Tourism Research*, 50, 67–83. <http://dx.doi.org/10.1016/j.annals.2014.10.007>

33. Racherla, P., & Friske, W. (2012). Perceived 'usefulness' of online consumer reviews: An exploratory investigation across three services categories. *Electronic Commerce Research and Applications*, 11, 548–559. <http://dx.doi.org/10.1016/j.elerap.2012.06.003>
34. Rianthong, N., Dumrongsiri, A., & Kohda, Y. (2016). Optimizing customer searching experience of online hotel booking by sequencing hotel choices and selecting online reviews: A mathematical model approach. *Tourism Management Perspectives*, 20, 55–65. <http://dx.doi.org/10.1016/j.tmp.2016.07.003>
35. Ristova, M. C. (2020). What do hotel guests really want? An analysis of online reviews using text mining. *Menadžment u hotelijerstvu i turizmu – Hotel and Tourism Management*, 8(1), 37–48. <https://doi.org/10.5937/menhottur2001037R>
36. Sparks, B. A., Perkins, H. E., & Buckley, R. (2013). Online travel reviews as persuasive communication: The effects of content type, source, and certification logos on consumer behavior. *Tourism Management*, 39, 1-9. <http://dx.doi.org/10.1016/j.tourman.2013.03.007>
37. Su, L., Yang, Q., Swanson, S. R., & Chen, N. C. (2021). The impact of online reviews on destination trust and travel intention: The moderating role of online review trustworthiness. *Journal of Vacation Marketing*, 1–18. <https://doi.org/10.1177/13567667211063207>
38. Tabachnick, B., & Fidell, L. (2013). *Using multivariate statistics*. Boston: Pearson/Allyn&Bacon.
39. Wu, C., Mai, F., & Li, X. (2021). The effect of content depth and deviation on online review helpfulness: Evidence from double-hurdle model. *Information & Management*, 58, 103408. <https://doi.org/10.1016/j.im.2020.103408>
40. Xie, K. L., Zhang, Z., & Zhang, Z. (2014). The business value of online consumer reviews and management response to hotel performance. *International Journal of Hospitality Management*, 43, 1–12. <https://doi.org/10.1016/j.ijhm.2014.07.007>
41. Zelenka, J., Azubuike, T., & Pásková, M. (2021). Trust model for online reviews of tourism services and evaluation of destinations. *Administrative Sciences*, 11(34), <https://doi.org/10.3390/admsci11020034>
42. Zhang, M., Zhao, H., & Chen, H. A. (2022). How much is a picture worth? Online review picture background and its impact on purchase intention. *Journal of Business Research*, 139, 134–144. <https://doi.org/10.1016/j.jbusres.2021.09.050>
43. Zhao, X. R., Wang, L., Guo, X., & Law, R. (2015). The influence of online reviews to online hotel booking intentions. *International Journal of Contemporary Hospitality Management*, 27(6), 1343–1363. <https://doi.org/10.1108/IJCHM-12-2013-0542>