Abstract
The use of eWOM has been growing ever since the spread of the internet world-wide. In the tourism sector electronic word-of-mouth became a key factor in decision-making and behavior of the Internet users, generating useful information about a certain location. In this article we will approach the word of mouth on the tourism websites and applications.

This paper’s aim, aside from a comparative analysis between four important cities from Romania, it is a research on how the eWOM affects the hotel general score from OTA websites like booking.com and tripadvisor.com.

Keywords: eTourism, Online Review, eWom

JEL classification: Z32, L83, L86

1. Introduction
In the last decade, the development of the tourism industry saw an upward way due to the advances in the ITC sector. Reflecting upon the past two decades, it is obvious that we cannot separate our understanding of the relationship between ITC and tourism from the global, societal view of technology (Xiang 2018). Therefore, technology has radically and irreversibly changed the society we live in also becoming a major factor of importance with regards to how the travel experience has been shaped (Baka 2016), it is already clear that this solid relationship between information technology and tourism has served the development of new concepts such as e-tourism, travel 2.0, online travel agency, electronic word-of-mouth etc. The rise of web

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applications allowed the empowering of the consumer (Sigala 2010), creating a two-way communication between the user and the provider and a new and more advanced concept, electronic word-of-mouth.

It is already known that consumers talk about their vacation with friends, family, colleagues etc. this type of marketing is known as word-of-mouth. Social media, Blogs, Videos, Wikis, Fora and chat rooms have empowered individuals to generate and share information and experiences online. (Tussyadiah and Fesenmaier 2009)

With various options, such as vlogs, social media and other travel websites, the consumer prefers to get information directly from there, for many reasons, one of them being the rapid access to online reviews, hotel scores and other specifications that help the consumer decide. The user generated content and has become a major factor in decision making.

The eWOM term stands for electronic word-of-mouth, which is a review written by a consumer that covers a large area on the Internet, in all industries, in the last two decades. With the recent proliferation of social media websites that facilitate the sharing of travel experiences with others, the role of online consumer reviews have be-come increasingly pertinent for the tourism and hospitality industry (Yang et al. 2018). Therefore, online reviews have become a great marketing tool and gained an unbounded value though online tourism agencies like booking.com and tripadvisor.com, satisfying both the customer and the hotel owners. Dellarocas & Narayan, (2006) study indicates that eWOM growth within online user generated content has a direct influence in the value of the brand, service value and in the customer relationship management.

The source of feedback is clearly important, but so is the nature of such information. Some of this feedback is positive in nature and some is negative. (Torres, et al., 2015) Research in the tourism area has demonstrated the influence of both positive and negative WOM upon tourism products in studies across a broad range of nations. (Litvin et al. 2008)

Whereas WOM research explores various forms of consumer communications, research on consumer-generated feedback specializes in electronic platforms for such feedback such as TripAdvisor, Yelp, and blogs among others. One of the topics of interest within consumer-generated feedback is that of its use for purchase decisions. A research conducted by (Cox et al. 2009) relates that consumers use online reviews, and other user generated content when planning a trip or booking a hotel. (Torres et al., 2015)
2. Literature review & background research

The rise of the Internet generated new forms of communication via online platforms, allowing a way to share user generated content. This phenomenon has empowered both the provider and the consumer, exchanging information from B2C and from C2C has facilitated a growth in the new digitalized industries. In this context (Litvin et al. 2008) defines what is called eWOM as electronic word-of-mouth.

The prevalence of social media websites has created an environment where people face information overload when confronted with numerous online consumer reviews. (Yang et al. 2018) As such, people tend to rely on social media platforms, online travel agencies and other travel websites to make a decision. Researchers found that electronic word-of-mouth has a big impact on customer decision.

In the literature, online reviews are viewed as public-goods, because of the free access to everyone who plans a trip or book a hotel. Having knowledge about a product or a service, before the checkout allows the customer to make the right call.

As (Litvin et al. 2008) mentions in his research, consumers imitate each other following a social or vicarious learning paradigm, but perhaps more importantly, they also talk to each other. Described as WOM communication, the process allows consumers to share information and opinions that direct buyers towards and away from specific products, brands, and services. Among the few existing publications, eWOM behavior is primarily explained from individual rational perspective with the emphasis on cost and benefit. Consumer participation in online consumer-opinion platforms depends a lot on interactions with other consumers. (Cheung and Lee 2012) Tuominen, (2011) and Ye, Law, & Gu, (2009) have found that the number of online reviews significantly increases the occupancy of a hotel, which proves us that eWOM is becoming a solid, unbiased information eWOM actually creates a new type of reality by influencing readers during their online information searches. (Litvin et al. 2008)

More importantly, the emergence of social media and eWOM in the tourism sector forced hotels to adopt a new marketing and management strategy. Despite the increasing role played by online infomediaries in reshaping the structure of the hospitality industry, it is not yet completely clear whether and how hotels can capture the economic value brought by their greater visibility on online infomediaries. (Neirotti et al. 2016)
Recent eWOM studies have been conducted in relation to goods and services (Cheung and Thadani 2012; Chevalier and Mayzlin 2006). According to Serra Cantallops & Salvi, (2014), those focusing on the hotel industry can be split into review-generating factors (previous factors that encourage consumers to write reviews) and eWOM impacts (impacts caused by online reviews) from the point of view of consumers and companies.

Research based on 50 articles about hospitality and tourism eWOM concludes that “online reviews appear to be a strategic tool that plays an important role in hospitality and tourism management, especially in promotion, online sales, and reputation management”. (Martin-Fuentes et al. 2018)

Differences between both scoring systems are clearly more significant in hotels with low scores than in those with high scores. On hotels with very high scores, the Booking system does not contribute to inflating the scores but results in lower scores than a conventional system such as Priceline. (Mellinas et al. 2016)

Understanding how online reviews influence online bookings is vital for hotels because it can be used as a marketing tool for an asynchronous way to communicate.

Differences were found between traditional word of mouth and electronic word of mouth, the last one contains additional characteristics, one of them is the online reviews, both positive and negative shown simultaneously on travel platforms.

Info mediation can add economic value in the transaction between a customer and a hotel. This value is shared among the parts involved in the transaction: the customer and the hotel, first, and then all the distributors (OTA and TripAdvisor). (Neirotti et al. 2016)

3. **Booking.com and TripAdvisor.com**

Booking.com is an online accommodation-booking website where travellers can compare prices and customer reviews. (Neirotti et al. 2016)

Many conducted studies use Booking.com and TripAdvisor because of their importance in the hospitality and tourism sector, being the most visited travel platforms in the world, with over 420 million visits per month (SimilarWeb) on booking.com and TripAdvisor with 124 million visits per month. Based on user generated content, online review analysis can be an unbiased source of information but also the ranking, prices, listing and other variables. Booking.com uses a scale from 2.5 to 10 while TripAdvisor uses a scale from 1 to 5, with rounded decimals to the midpoint. Booking.com deletes old
reviews after 14 months creating an updated view over the listed hotels. Rankings are used to create a hierarchy between the best and the lowest hotels, using a scale from 1 to 10 or from 1 to 5, therefore they are a fast way to obtain information over an accommodation.

TripAdvisor is an online platform that help travellers plan their trips by consulting the advice from other real travellers about a wide variety of opinions of different hotels, restaurants and tourist attractions. It started as a review website for accommodations and has become a meta search engine. (Torres, Adler, Behnke, Miao, & Lehto, 2015) claims TripAdvisor is a very prominent online review site for hotels. Using consumer feedback, applies a proprietary formula to assign hotels a ranking and offers as well direct links to different booking tools to the site visitors. (Balague et al. 2016)

A survey implemented by TripAdvisor in 2018 has revealed that about 86% of travellers will not book accommodation without reading reviews first and about 89% usually research on a destination’s activities and restaurants before travel. Below, in figure 1 we can observe that people usually start thinking about a trip mostly from personal recommendations followed by great deals and TripAdvisor browsing.

**Figure 1: TripAdvisor, the key prompt to make travelers start thinking about a trip**

<table>
<thead>
<tr>
<th>What prompted you to start thinking about your most recent trip?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A personal recommendation</td>
<td>15%</td>
</tr>
<tr>
<td>I saw a great deal in a sale</td>
<td>11%</td>
</tr>
<tr>
<td>Browsing on TripAdvisor inspired me to visit a destination</td>
<td>10%</td>
</tr>
<tr>
<td>Saw a newspaper/magazine article</td>
<td>4%</td>
</tr>
<tr>
<td>Saw advertising</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: TripBarometer 2017-2018
Another result obtained from the survey was the source of inspiration on destination choice when considering a trip: about 35% of the sample group responded with TripAdvisor, as an inspiration and about 9% are still believing in traditional word-of-mouth.

There are a few differences between Booking.com and TripAdvisor, one of them is the review system; booking.com allows users to write and publish a review only after they lodged for one or more nights in a hotel listed on their website. TripAdvisor allows any user with an account to write and publish reviews, but this policy has its negative aspects. Hence, because of a high-level competition, in the hotel industry, malicious specialists are hired in order to denigrate the competition.

On a different note, TripAdvisor indexes hotel rates from websites like booking.com, hotels.com, agoda.com, in order to offer the best deal for an accommodation or other services.

**Figure 2: Visits in the last 6 months on Booking.com (blue line) and TripAdvisor (orange line)**

On the second figure we can see that booking.com has approximately 300 million more views than TripAdvisor, in the last six months, concluding a higher credibility for the customer and a very aggressive marketing strategy, with over 28 million properties listed on their website. Booking.com is centred around customer satisfaction. Their business collects about 12-15% commission from a booking and restricts the owner to book at a higher price than the one listed on booking.com. The trust in a recommendation drives the
intentions of a consumer higher. By being a subclass of trust (Simons 2002), credibility and usefulness are enchanting the purchase intention. Having the literature review and findings above, the research question is the following: Is there a relationship between the number of reviews and the hotel score? Ye et al., (2011) demonstrated that there is an imperfect correlation between number of reviews and number of reservations.

4. Methodology

In order to answer the research question, a correlation was applied on a set of data gathered from the analyzed platforms. The focus of this study was on the most popular hotels found in four important cities from Romania.

To compare the hotels, both TripAdvisor and Booking.com were used as trusted source of user generated content and the selection was made subjectively by the author, classified by the highest rank and the occupancy of the hotel. The destinations include Sibiu, Brașov, Timișoara and Cluj-Napoca, selected to test the hypothesis. All the results are shown in the graphics below.

The selection of hotels from Book-ing.com and TripAdvisor, within mentioned cities was limited to first page, collected in a spreadsheet can be observed in the table below. Also, selected hotels must have at least 200 reviews, in order to allow a relevant score.

Table 1: Number of hotels and properties listed on booking.com and TripAdvisor

<table>
<thead>
<tr>
<th>City</th>
<th>booking.com</th>
<th>TripAdvisor.com</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of hotels</td>
<td>No. of properties listed</td>
</tr>
<tr>
<td>Sibiu</td>
<td>45</td>
<td>809</td>
</tr>
<tr>
<td>Brasov</td>
<td>56</td>
<td>1032</td>
</tr>
<tr>
<td>Timisoara</td>
<td>61</td>
<td>391</td>
</tr>
<tr>
<td>Cluj-Napoca</td>
<td>78</td>
<td>650</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td>2882</td>
</tr>
</tbody>
</table>

Source: Author’s own elaboration

At a first sight, at Table 1 we notice that booking.com has more properties listed than TripAdvisor, meaning a higher competitiveness for
owner’s properties. Even though Booking.com’s scores can’t be below 2.5, it was taken to consideration a scale from 1 to 10. The data samples selected were the most important hotels from the most visited cities in Romania.

From the total hotels from Sibiu, Brasov, Cluj-Napoca and Timisoara the research only analyses ten of them, those with the highest score and highest number of reviews, from every city, found on Booking.com. Although, listed by score, there are several apartments classified as hotels, and which are excluded from the research.

On booking.com the rating system is based on the rating given by the reviewer which means a subjective view on hotel services.

Even though TripAdvisor indexes Booking.com’s hotel rates, therefore, it’s properties, Table 1 shows that Booking.com has a lot more hotels. Also, it is known that most foreign tourists prefer hotels for accommodation instead of sharing an apartment on Airbnb or Couchsurfing. According to National Institute of Statistics the number of establishments is different from city to city, in Brasov, for example, there are 961 accommodations while in Timisoara there are only 175. Between Table 1 and the table below we notice a difference caused by the lack of declared accommodations.

<table>
<thead>
<tr>
<th>City</th>
<th>Number of establishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sibiu</td>
<td>303</td>
</tr>
<tr>
<td>Brasov</td>
<td>961</td>
</tr>
<tr>
<td>Timisoara</td>
<td>175</td>
</tr>
<tr>
<td>Cluj-Napoca</td>
<td>316</td>
</tr>
</tbody>
</table>

Source: http://www.insse.ro

5. Results

On a closer look at the selected hotels, there are significant variations between the rating of the hotels and the number of reviews. In fact, this allowed a correlation analysis between those two variables. Hotel score is used
to create a rank between hotels, allow the user to compare which hotel is the best option to choose. Users give a score on a hotel page from booking.com (2.5 to 10 grade) or TripAdvisor (1 to 5 stars) therefore, we are looking for a connection.

Different results were found using Spearman correlation, between the ranking of the hotel and the number of reviews as shown in the figure 4.

**Figure 3: Spearman correlation between number of reviews and hotel score**

![Spearman Correlation for hotels from Brașov](image1)
![Spearman Correlation for hotels from Sibiu](image2)
![Spearman Correlation for hotels from Cluj Napoca](image3)
![Spearman Correlation for hotels from Timișoara](image4)

Source: Author’s own elaboration

In Sibiu and Timișoara the correlation was 0.006 and -0.0734 which means there is no real correlation between the number of reviews and hotel ranking.

For Brasov the correlation was 0.650, meaning that there is a connection between the score and the number of reviews. For Cluj-Napoca,
after the spearman correlation results are negative -0.367 meaning an inverted correlation between reviews and score.

Using Pearson correlation, the results were similar, with both Sibiu and Timișoara having no link between reviews and rank while for Brasov a small correlation was found and Cluj-Napoca an inverted correlation.

**Figure 1: Pearson Correlation applied on online reviews and hotel score**

![Pearson Correlation](image)

Source: Author’s own elaboration

Between the 10th most popular hotels from every city analyzed there is a small difference on the average score, the first being Cluj-Napoca (9), Brașov (8.62), Timișoara (8.29) and Sibiu (8.17). Although Cluj-Napoca has the highest average score, it has a total of 575 reviews and Sibiu, with the lowest score has the most online reviews 1097. This study presented several limitations, since we worked with correlation only from the first page of searched hotels from Booking.com

6. **Conclusions**

This study brings a contribution to the literature by delivering an analysis between two important variables: number of reviews and hotels’ score.

The data resulted indicate that there is no real connection between number of reviews and the hotel score or is insignificant at such a low scale. Although, a small inverted correlation was found on Sibiu with the highest number of reviews and a low average score and Cluj-Napoca with a low number of reviews and a high average score on hotels.
Electronic word of mouth is an effective tool both for hotel and customer and represents an important marketing phenomenon, that will allow us to understand more of the eWOM effectiveness on the Internet. A further study can be generated by analyzing the best hotels on a worldwide scale.

7. References

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