Managing reputation on TripAdvisor – a case study of Cracow’s hotel market

Abstract. The aim of the study described in this article was to establish if there are any patterns in the way different Cracow hotels manage their online reputation by responding to online user reviews. Reputation was analysed by means of quantitative variables representing some dimensions of reputation. Characteristics of selected hotels were investigated to show how they influence the way in which hotels respond to online reviews posted by hotel guests. 1327 replies to over 4000 reviews were collected by a web scraping tool called ParseHub. The significance of differences among group means in a sample was checked by one-way ANOVA analysis of variance and HSD Tukey test. It was found that three independent variables - having a social media profile, being part of a hotel chain and the TripAdvisor user rating - were factors that significantly differentiated hotels’ response to online reviews. Some differences to findings of previous studies were also identified, primarily in terms of the effect of star ratings and the number of rooms. It was concluded that Cracow’s hotels are better at managing their online reputation than hotels operating in other local markets and that visibility was the dimension of reputation that received the most attention.

Keywords: online reputation, electronic word of mouth, TripAdvisor, reviews

JEL Codes: L83, L86

1. Introduction

The Internet revolution in the 21st century has changed multiple businesses and ways they operate in modern markets. One of the most important changes that have occurred is the growing importance of reputation in the online environment. Given the ease of sharing opinions, user reviews about all kinds of products
have become very popular. Consequently, companies need to develop proper reputation management strategies that strengthen their image and ensure their identity is not tarnished or depreciated. Lack of appropriate and timely response can have disastrous effects for the company’s operations and revenues. These issues are even more evident in the case of the hospitality industry, which year by year increasingly relies on online distribution channels. As more and more bookings are made online, reviews posted on various social medias become more important. As Zaman, Botti, & Thanh [2016] found in their study, before travelling potential guests checked at least one website containing user generated content, such as reviews, opinions or ratings. This shows how important electronic Word of Mouth (eWOM) has become to contemporary travellers.

On the other hand, studies have shown that hotel managers are not doing enough to successfully manage their reputation in the online environment and are not monitoring their social media channels or replying to the content posted by their past guests [O’Connor 2010]. However, O’Connor noted that the findings of his study should be qualitatively verified by other researchers with respect to different markets. There is also a lack of substantial research into how different types of hotels approach these issues. Xie, Kwok & Wang [2017] suggested that further studies should focus on the moderating effects of product types, such as hotel star ratings. Moreover, Xie at al. [2016] also pointed out that other variables (such as the room rate) should be analysed in terms of their influence on managerial responses. That is why this article aims to establish if there are any patterns in the way different Cracow hotels manage their online reputation through responses to the eWOM content.

2. Literature review

2.1. Corporate reputation, image and identity

Reputation, in addition to corporate image and identity, is one of the most valuable intangible assets that companies possess. However, there are multiple definitions of this concept in the literature. Dąbrowski [2010] suggests that the lack of one definition can be attributed to the multidimensional usage of reputation in social studies. Gotsi & Wilson [2001] proposed defining reputation as the perception of the quality of the company, based on the company’s way of communication and the experience of its customers. This definition of reputation can be used as a measurable variable enabling comparisons between different businesses and the choice of those with the highest reputation. Similarly, Dowling [2016] interprets the company’s reputation as a reflection of its stakeholders’ level of ad-
miration and respect in a given period. A similar idea can be found in the work of Walker [2010], who points out that reputation is a construct, which is strongly connected with the current perception of the company. Both Dowling and Walker distinguish corporate reputation from the corporate image. Dowling perceives company image as an element contributing to reputation while Walker defines it as a goal that the company is striving to achieve in the eyes of its stakeholders. The lack of a clear distinction between these two concepts is also mentioned by Dąbrowski [2010], who implies that the main difference between them is their origin. He suggests that the image is shaped by external factors, while reputation is determined by external and internal factors. This idea is further supported by Budzyński [2006], who also interprets a corporate image as a separate construct, which is defined as marketing communication aimed at external stakeholders. On the other hand, marketing communication was also analysed by Mohammed, Guillet & Law [2015], who connect it more with the idea of corporate identity rather than image or reputation. Moreover, the same authors suggested that hospitality businesses are lacking when it comes to the appropriate use of this dimension in their marketing strategies. At the same time, Love, Lim & Bednar [2017] stress that some elements can influence all three of these concepts. They give the example of the company’s manager, who can be viewed as a variable with a strong impact on the identity of the company as seen by internal stakeholders while representing its image and reputation to external stakeholders.

2.2. Dimensions of reputation

Given multiple definitions of corporate reputation, there are many frameworks for analysing the antecedents and dimensions of this construct. What is more, while some frameworks are similar across different fields of business and science, for many individual businesses sources of reputation are affected by their country of operation or stakeholders’ perspective [Ali et al., 2014]. This relationship is presented in Figure 1.

At the same time, Głuszek [2013] identifies dimensions of reputation as “universal characteristics that make the company highly regarded by the stakeholders”. Similarly, Fombrun & Van Riel [2004] identify five universal dimensions of reputation, presented in Figure 2.

The first dimension (visibility) is defined by Głuszek [2013] as a sum of evaluations of all actions and communications that the company has made and expressed in a given period. The antecedents of visibility are marketing campaigns and the company’s financial or social activities. Moreover, participation in corporate social responsibility programs can improve the company’s visibility, which in turn can contribute to reputation growth. At the same time, Pant
& Pant [2018] report that a strong presence in social media channels can also boost visibility and reputation. This effect was observed for online and traditional customers. The second dimension (transparency) is defined by Kim & Kim [2017] as the company’s readiness to share both positive and negative
information with its stakeholders. The findings of Kim & Kim [2017] suggest that without a sufficiently high level of transparency all marketing actions are impaired and have a limited effect on designated target groups. The third dimension (distinctiveness) is defined by Van den Bosch, de Jong, Elving [2005] as a sum of corporate business strategy and its corporate visual identity. The authors imply that in order to better distinguish itself, the company should have characteristic logos, slogans and a clear mission and vision statement. According to Wojnarowska [2013], the fourth dimension (authenticity) is reflected by the company’s actions aimed at implementing its mission and vision values in everyday operations. Sisson & Bowen [2017] stress that this aspect is critically important during crisis management, as the lack of authenticity in corporate actions can result in greater reputation losses. The last dimension – consistency – is believed by Dąbrowski [2010] to be the hardest one for a company to achieve. Zarębska [2006] underlines the importance of this aspect in managing communications with internal and external stakeholders in order to ensure consistent messages to all parties involved. Finally, Fombrun & Van Riel [2004] suggest that all these dimensions need to co-exist within the same period in order for the company to establish a positive reputation.

2.3. eWOM

Word-of-mouth marketing is usually considered to be one of the most powerful tools that can be used to advertise a company. Tkaczyk [2007] has shown that in the context of the Polish market this technique is 7 times more influential than traditional advertisements. However, with the emergence of the Internet, word-of-mouth marketing is frequently believed to be turning into eWOM – electronic word of mouth. Mishra & Satish [2016] define this concept as all forms of publicly available online content (both positive and negative) posted by previous, current or future customers. The authors underline that eWOM can take the form of text (e.g. reviews), numeric values (ratings in review) or nominal values (“Like” or “Dislike” buttons on social media). However, according to Huete-Alcocer [2017], it is important to recognise several differences between traditional WOM and eWOM. One of them is the different level of trustworthiness associated with each form: given that eWOM users usually have limited knowledge about the content’s author, they are less likely to treat such information as equally credible. Moreover, Tham, Croy & Mair [2013] have proven that the lack of information about the author’s expertise in the field discussed in the review makes eWOM even less trustworthy. On the other hand, Filieri [2016] states that the initially lower level of credibility can increase after users check the profile of the review’s author. For example, TripAdvisor allows users
to check the number of reviews written by a given user, the number of “thank you” badges received or even personal information if the user has decided to share it on their profile.

2.4. Managing eWOM

Given the importance of eWOM in contemporary marketing strategies, companies should include it in their daily operations. Ismagilova et al. [2017] identified three stages of effective eWOM management. The first step consists in generating eWOM content. This stage includes all actions that the company can undertake in order to persuade customers to leave an online comment. According to Ismagilova et al. [2017], there are no universal solutions in this respect, and the range of possible tools is very wide. For example, individuals that are more prone to be motivated by recognition can be promised that their review will be promoted on the company’s website, while people who respond better to economic incentives can be invited to try and experience the company’s services for free. However, the last strategy can raise concerns regarding the impartiality of reviews and should be carefully managed [Ismagilova et al. 2017]. In the context of the hospitality industry, TripAdvisor provides tools, such as Express Review, that can be used to approach more customers with a request for a review. Posters and handouts located in the reception area are other alternatives that can make guests more aware of the possibility of leaving a review. The second stage of eWOM management involves monitoring and keeping up-to-date with the content posted online, which can influence the company’s reputation. Dutko [2016] points out that monitoring should not only be limited to the company’s online channels but should also include those of its main competitors, as they can also provide valuable information. In this way, the company can compare its strengths and weaknesses in terms of different properties in the market. Barnes & Jacobsen [2014] found that one third of all American companies did not undertake any monitoring actions, ignoring all of their online presence except for their website. The last stage of effective eWOM management consists in providing an appropriate reaction to online content, usually through posting a response to a review. The effectiveness of these activities was analysed by Xie et al. [2016], who found that replying to customers over time leads to an average increase of 0.23 in the hotel’s rating. What is more, the practice of leaving responses has also resulted in more reviews being posted by guests later on. A similar finding was reported by Roozen & Raedts [2018], who observed that posting responses to reviews can result in a greater volume of eWOM content in the future. As regards the content of such responses, Ho [2018] identified eight main approaches that hotels can use in creating their reply. The most effective one when dealing with negative reviews was to acknowledge the problem and describe how it was mitigated during or after the guest’s stay.
3. Materials and methods

The aim of the following study was to establish if there are any patterns in the way different Cracow hotels manage their online reputation by replying to reviews posted on TripAdvisor. Firstly, Cracow was chosen as the location for the study because it is Poland’s most popular tourist destination, attracting both leisure and business travellers [Kościólek et al. 2018]. Similarly, the choice of TripAdvisor as a source of reviews was motivated by its status as one of the 3 most popular travel websites in the Polish Internet [Gemius 2018] and the fact it provides the most detailed information about hotel replies (such as response date and author).

The independent variables (hotel characteristics) were chosen following studies analysing similar relationships – such as effects of managerial response on consumer eWOM and hotel performance [Xie et al. 2016], monetizing managerial responses on TripAdvisor [Xie, Kwok, Wang 2017] or the framework proposed for measuring hotels’ managerial responses [Perez-Aranda, Vallespin, Molinillo 2018]. The list of the independent variables and studies where they were used are presented in Table 1.

The dependent variables for measuring the effectiveness of hotel responses were also identified in the course of the literature review and are shown in Table 2. These variables were chosen to partially represent the dimensions of reputation. Although the collected quantitative data do easily lend themselves to an

<table>
<thead>
<tr>
<th>Hotel characteristic</th>
<th>Variable type</th>
<th>Source of the data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Star category</td>
<td>Ordinal</td>
<td>Central Register of Hotel Properties (Centralny Wykaz Obiektów Hotelarskich)</td>
</tr>
<tr>
<td>Number of rooms</td>
<td>Discreet</td>
<td>TripAdvisor profile of the property</td>
</tr>
<tr>
<td>Average price for a double room in the last 6 months</td>
<td>Discreet</td>
<td>TripAdvisor profile of the property</td>
</tr>
<tr>
<td>Rating</td>
<td>Ordinal</td>
<td>TripAdvisor profile of the property</td>
</tr>
<tr>
<td>Hotel type</td>
<td>Nominal</td>
<td>TripAdvisor profile of the property</td>
</tr>
<tr>
<td>Number of reviews</td>
<td>Discreet</td>
<td>TripAdvisor profile of the property</td>
</tr>
<tr>
<td>Existence of property’s Facebook profile</td>
<td>Nominal; dichotomous</td>
<td>Google.com</td>
</tr>
<tr>
<td>Belonging to a hotel chain</td>
<td>Nominal; dichotomous</td>
<td>Google.com</td>
</tr>
</tbody>
</table>

Source: own elaboration.
in-depth analysis of reputation, their volume ensures a certain accuracy of the findings. The percentage of replies represents the share of reviews that received a response from the hotel, reflecting its online visibility, i.e. its strong presence and activity in social media channels [Pant, Pant 2018]. The time taken to post response is associated with the dimension of consistency and indicates swift and timely reactions in communications with external stakeholders [Zarębska 2006]. Finally, the response length is related to the dimension of transparency dimension, as longer reviews usually contain more information. This supports the idea of transparency as “openness of CSR information disclosure” [Kim, Kim 2017]. The dimensions of distinctiveness and authenticity are harder to measure by means of quantitative variables and would require the use of text-mining methods.

The data were collected in the first two weeks of October 2018 from the TripAdvisor website using the method known as web scraping or web parsing. A free web scraping tool called ParseHub was used to collect reviews and information regarding all 272 hotels and accommodation providers in Cracow. However, as suggested by Xu & Li [2016], only 20 reviews from each hotel were selected for analysis and establishments with fewer than 20 reviews were excluded. This procedure was applied to make sure that each hotel had equal representation in the sample of reviews. Moreover, reviews or replies in a language other than Polish were also excluded. The final dataset consisted of 201 businesses, 4002 reviews and 1327 hotel replies. The data were analysed using Excel with add-ons, such as Solver, Fuzzy Lookup, and macros created by the author. The significance of differences among group means in a sample was checked by one-way ANOVA analysis of variance and HSD Tukey test.

Table 2. Dependent variables

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Example in the literature</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of replies</td>
<td>O’Connor 2010</td>
<td>TripAdvisor profile of the property</td>
</tr>
<tr>
<td>Time needed to post the response</td>
<td>Perez-Aranda, Vallespín, Molinillo 2018; Wang, Chaudhry 2016the authors examine the effect of publicly responding to hotel guests’ reviews on subsequent reviewer ratings. The authors find that manager responses to negative reviews (MR-N</td>
<td>TripAdvisor profile of the property</td>
</tr>
<tr>
<td>Length of the response</td>
<td>Zhang &amp; Vasquez 2014</td>
<td>TripAdvisor profile of the property</td>
</tr>
</tbody>
</table>

Source: own elaboration.
4. Results & Discussion

4.1. Hotel category

As can be seen in Table 3, the mean values of the dependent variables differed significantly between hotels within each star category, especially when it comes to the percentage of replies and the time taken to reply. The above average number of replies was observed not only in 4-star and 5-star hotels but also in the uncategorized segment. The results are partially consistent with the findings of Xie, Kwok & Wang [2017] indicating the highest response rate for hotels with higher star ratings. Interestingly, Cracow hotels analysed in the study had a higher average percentage of responses compared to London hotels studied by O’Connor [2010]. However, it is likely that the two studies are not comparable owing to the time gap between them. Also, hotels with fewer stars tended to post shorter replies. What is surprising 5* properties have the second largest “time to reply” – only the Uncategorised segment had a higher mean. Moreover, the ANOVA test has shown no significant difference between the replies’ length. These results are partially consistent with the findings of Xie, Kwok & Wang [2017], who observed that low-end hotels tended to post shorter responses, but high-end hotels were quicker to reply.

Table 3. Results for “star category” variable

<table>
<thead>
<tr>
<th>Star category</th>
<th>Number of units</th>
<th>Mean percentages of replies [%]</th>
<th>Mean time taken to reply [days]</th>
<th>Mean reply length [characters]</th>
</tr>
</thead>
<tbody>
<tr>
<td>5*</td>
<td>12</td>
<td>38</td>
<td>41</td>
<td>322</td>
</tr>
<tr>
<td>4*</td>
<td>43</td>
<td>34</td>
<td>16</td>
<td>378</td>
</tr>
<tr>
<td>3*</td>
<td>74</td>
<td>29</td>
<td>38</td>
<td>349</td>
</tr>
<tr>
<td>2*</td>
<td>10</td>
<td>15</td>
<td>19</td>
<td>241</td>
</tr>
<tr>
<td>1*</td>
<td>4</td>
<td>33</td>
<td>6</td>
<td>165</td>
</tr>
<tr>
<td>Uncategorised</td>
<td>58</td>
<td>37</td>
<td>64</td>
<td>387</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>33</td>
<td>40</td>
<td>362</td>
</tr>
<tr>
<td>ANOVA test</td>
<td></td>
<td>( F = 3.036; ) ( p = 0.045 )</td>
<td>( F = 2.314; ) ( p = 0.028 )</td>
<td>( F = 0.730; ) ( p = 0.602 )</td>
</tr>
</tbody>
</table>

Note: A significance level of 0.05 for ANOVA test; bold results are significant.
Source: own elaboration based on acquired data.
4.2. Number of rooms

Table 4 presents the results depending on the number of rooms. The ANOVA test shows the differences in all three dependant variables are statistically significant when the number of rooms is taken into account. There is a significant difference between hotels with more than 75 rooms and those that have fewer than 75 rooms. Smaller hotels reply to about 28% of reviews while the indicator for larger ones exceeded 40%. A similar relationship can be seen in terms of “Time to reply” as properties possessing more than 75 rooms have a significantly shorter response time. Such results could suggest that larger properties have separate departments/designated personnel that is individually responsible for managing online reputation. These results stand in partial contradiction to the findings of Xie et al. [2016] indicating that hotel size did not affect managerial responses. However, in their study, the number of rooms was only investigated as a moderating variable, which might explain the different findings.

Table 4. Results for “number of rooms” variable

<table>
<thead>
<tr>
<th>Number of rooms</th>
<th>Number of units</th>
<th>Mean percentages of replies [%]</th>
<th>Mean time taken to reply [days]</th>
<th>Mean reply length [characters]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-25</td>
<td>65</td>
<td>28</td>
<td>65</td>
<td>370</td>
</tr>
<tr>
<td>26-50</td>
<td>63</td>
<td>28</td>
<td>40</td>
<td>367</td>
</tr>
<tr>
<td>51-75</td>
<td>26</td>
<td>27</td>
<td>30</td>
<td>382</td>
</tr>
<tr>
<td>76-100</td>
<td>8</td>
<td>44</td>
<td>11</td>
<td>385</td>
</tr>
<tr>
<td>&gt;100</td>
<td>39</td>
<td>47</td>
<td>15</td>
<td>327</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>33</td>
<td>40</td>
<td>362</td>
</tr>
</tbody>
</table>

ANOVA test: $F = 2.436; p = 0.0486$  
$F = 2.516; p = 0.038$  
$F = 2.750; p = 0.035$

Note: A significance level of 0.05 for ANOVA test; bold results are significant.

Source: own elaboration based on acquired data.

4.3. Average room price

As presented in Table 5, ANOVA test results show significant differences in all three dependent variables across the groups distinguished in terms of the average room price. HSD test showed most differences in % of replies. Smallest “% of replies” was recorded in the cheapest segment, surprisingly followed by the most expensive
segment. On average, the largest percentage of replies and the shortest time taken to post a reply were observed in the PLN 600-800 segment. Interestingly, the most expensive hotels that one would expect to be the most interested in managing their reputation, were by far the slowest in replying and had the second-lowest percentage of responses. In the literature, few studies can be used for comparison in these respects. However, Aznar et al. [2018] found that there was a correlation between a hotel’s average daily rate and its online ratings in social media, which seems to contradict the absence of a strong correlation in the Cracow study.

### 4.4. TripAdvisor rating

According to the data (Table 6), rating on TripAdvisor has a significant relationship with reputation management strategies. Properties with a score of “4” or higher have much greater “% of replies” as compared to properties with a lower score. Time taken to reply is harder to contrast as properties with a score of “3” or lower have not replied to any of the reviews. Such results can be interpreted to mean that hotels with higher ratings are more aware of the need for a timely response and are more engaged in monitoring their social media profiles. Another thing worth noting is the time taken to respond by hotels with the highest user ratings. Although it is the shortest of all the groups, it means that even the best hotels take roughly two weeks to respond to guest reviews. All of these results are consistent with previous studies in this respect. Liu, Kim & Pennington-Gray [2015], who analysed hotel response strategies in crisis times also found that hotels with higher user ratings better had the shortest response times. Similarly,

<table>
<thead>
<tr>
<th>Average price per night [PLN]</th>
<th>Number of units</th>
<th>Mean percentage of replies [%]</th>
<th>Mean time taken to reply [days]</th>
<th>Mean reply length [characters]</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 200</td>
<td>28</td>
<td>15</td>
<td>47</td>
<td>383</td>
</tr>
<tr>
<td>200-400</td>
<td>114</td>
<td>34</td>
<td>32</td>
<td>365</td>
</tr>
<tr>
<td>400-600</td>
<td>31</td>
<td>45</td>
<td>49</td>
<td>385</td>
</tr>
<tr>
<td>600-800</td>
<td>4</td>
<td>67</td>
<td>14</td>
<td>345</td>
</tr>
<tr>
<td>&gt; 800</td>
<td>24</td>
<td>22</td>
<td>73</td>
<td>290</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>33%</td>
<td>40</td>
<td>362</td>
</tr>
</tbody>
</table>

ANOVA test

\[
\begin{align*}
F &= 4.333; \\
p &= 0.002
\end{align*}
\]

\[
\begin{align*}
F &= 2.466; \\
p &= 0.003
\end{align*}
\]

\[
\begin{align*}
F &= 2.517; \\
p &= 0.019
\end{align*}
\]

Note: A significance level of 0.05 for ANOVA test; bold results are significant.

Source: own elaboration based on acquired data.
Levy, Duan & Boo [2013] reported a positive correlation between hotels’ average user ratings and the percentage of responses. Interestingly, the highest hotel response rate recorded in that study was only 15%.

### 4.5. Hotel type

ANOVA test results indicate that there are significant differences between different segments in terms of the percentage of replies and the time taken to reply (Table 7).

Table 6. Results for “TripAdvisor rating” variable

<table>
<thead>
<tr>
<th>TripAdvisor Rating</th>
<th>Number of units</th>
<th>Mean percentages of replies [%]</th>
<th>Mean time taken to reply [days]</th>
<th>Mean reply length [characters]</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>11</td>
<td>52</td>
<td>14</td>
<td>373</td>
</tr>
<tr>
<td>4.5</td>
<td>85</td>
<td>41</td>
<td>43</td>
<td>361</td>
</tr>
<tr>
<td>4</td>
<td>63</td>
<td>38</td>
<td>40</td>
<td>357</td>
</tr>
<tr>
<td>3.5</td>
<td>32</td>
<td>35</td>
<td>53</td>
<td>374</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2.5</td>
<td>1</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>33</td>
<td>40</td>
<td>362</td>
</tr>
</tbody>
</table>

ANOVA test  
\[ F = 6.319; \quad p = 4.3E-06 \]  
\[ F = 2.279; \quad p = 0.019 \]  
\[ F = 3.59; \quad p = 0.010 \]

Note: A significance level of 0.05 for ANOVA test; bold results are significant.  
Source: own elaboration based on acquired data.

Table 7. Results for “characteristic segment” variable

<table>
<thead>
<tr>
<th>Hotel type</th>
<th>Number of units</th>
<th>Mean percentages of replies [%]</th>
<th>Mean time taken to reply [days]</th>
<th>Mean reply length [characters]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family friendly</td>
<td>127</td>
<td>33</td>
<td>38</td>
<td>378</td>
</tr>
<tr>
<td>Business</td>
<td>147</td>
<td>40</td>
<td>34</td>
<td>370</td>
</tr>
<tr>
<td>Romantic</td>
<td>54</td>
<td>40</td>
<td>23</td>
<td>368</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>33</td>
<td>40</td>
<td>362</td>
</tr>
</tbody>
</table>

ANOVA test  
\[ F = 3.185; \quad p = 0.026 \]  
\[ F = 3.441; \quad p = 0.032 \]  
\[ F = 0.276; \quad p = 0.960 \]

Note: A significance level of 0.05 for ANOVA test; bold results are significant.  
Source: own elaboration based on acquired data.
Business and romantic hotels on average reply more frequently and more quickly than family-friendly hotels, but the average response time of romantic hotels is 11 and 15 days shorter than that of business and family-friendly hotels, respectively. One possible reason why hotels of this type seem to care more about their online reputation is their need to make a more favourable impression on couples, who usually pay much attention of the hotel’s image when looking for a place to stay [Bauer, McKercher 2003].

### 4.6. Number of reviews

As can be seen in Table 8, the relationship between the number of reviews on TripAdvisor and management responses is very limited. Significant differences were identified by the ANOVA test only in the case of the time taken to reply and response length. These results seem counterintuitive, given that, according to

<table>
<thead>
<tr>
<th>Number of reviews</th>
<th>Number of units</th>
<th>Mean percentages of replies [%]</th>
<th>Mean time taken to reply [days]</th>
<th>Mean reply length [characters]</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 201</td>
<td>85</td>
<td>35</td>
<td>25</td>
<td>313</td>
</tr>
<tr>
<td>201-400</td>
<td>34</td>
<td>35</td>
<td>77</td>
<td>416</td>
</tr>
<tr>
<td>401-600</td>
<td>22</td>
<td>34</td>
<td>78</td>
<td>331</td>
</tr>
<tr>
<td>601-800</td>
<td>24</td>
<td>25</td>
<td>32</td>
<td>374</td>
</tr>
<tr>
<td>&gt; 800</td>
<td>36</td>
<td>30</td>
<td>22</td>
<td>391</td>
</tr>
<tr>
<td>On average</td>
<td></td>
<td>33</td>
<td>40</td>
<td>362</td>
</tr>
</tbody>
</table>

ANOVA test

\[
\begin{align*}
F &= 0.687; \\
p &= 0.842
\end{align*}
\]

\[
\begin{align*}
F &= 2.487; \\
p &= 0.048
\end{align*}
\]

\[
\begin{align*}
F &= 2.486; \\
p &= 0.039
\end{align*}
\]

Note: A significance level of 0.05 for ANOVA test; bold results are significant.

Source: own elaboration based on acquired data.

Ismagilova et al. [2017], generating eWOM and responding to it are parts of the same process and should be mutually related. Similarly, Xie et al. [2016] found that the number of managerial replies was positively correlated with the number of reviews left by customers. The discrepancies between the results obtained in the Cracow study and those mentioned in the other ones are hard to explain as the sample size and reference periods were similar in all cases.
4.7. Facebook profile

The Facebook profile was chosen as another independent variable as it is the most popular social network in Poland, with 96% of the hotels having their profile. This nearly universal use of social media is a standard feature of the hospitality industry of today. For example, a recent qualitative study by Michopoulou & Moisa [2019] found that all hotels in their survey had a profile on at least one social media platform. As can be seen in Table 9, the ANOVA test results show significant differences in the dependent variables between hotels with and without a Facebook profile. Those in the former group respond to almost 1.5 times as many reviews and do so in roughly a third of the time compared to the latter one. On the other hand, there is almost no difference between the two groups in reply length. These findings are supported by the study of Mellinas et al. [2016] indicating that hotels that actively managed their social media presence were also better at managing their profiles on TripAdvisor or Booking.com.

Table 9. Results for “Facebook profile” variable

<table>
<thead>
<tr>
<th>Does the hotel have a Facebook profile?</th>
<th>Number of units</th>
<th>Mean percentages of replies [%]</th>
<th>Mean time taken to reply [days]</th>
<th>Mean reply length [characters]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>192</td>
<td>34</td>
<td>37</td>
<td>361</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>24</td>
<td>96</td>
<td>362</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>33</td>
<td>40</td>
<td>362</td>
</tr>
</tbody>
</table>

ANOVA test

\[ F = 3.933; \quad p = 0.045 \]

\[ F = 6.269; \quad p = 0.013 \]

\[ F = 0.916; \quad p = 0.340 \]

Note: A significance level of 0.05 for ANOVA test; bold results are significant.

Source: own elaboration based on acquired data.

4.8. Being part of a hotel chain

The results for the last independent variable are presented in Table 10. It turns out that hotels belonging to a chain reply to significantly more reviews and take much less time to post a response. On the other hand, independent hotels tend to provide longer responses. All in all, it can be said that being part of a hotel chain has a good impact on reputation management. This can be explained by the fact that hotel chains usually provide their hotels with standard operating procedures,
including those regarding ways of responding to customer reviews. Similar conclusions were reached by Liu, Kim & Pennington-Gray [2015], who also found that chain hotels tended to respond to reviews more frequently. Mellinas et al. [2016] reported that chain hotels were better at managing their online reputation than their independent counterparts.

5. Conclusion

There are significant difference between the way Cracow hotels manage their online reputation in terms of the number of replies to user reviews and the time taken to respond between hotels that are part of a hotel chain and those that are not, between hotels that have a Facebook profile and those that do not and between hotels with a high TripAdvisor rating and those with lower ratings. While none of these factors produced significant differences between the groups with respect to response length, there was significant variation between hotels with different user ratings. As regards the number of hotel rooms, star category and hotel type, their relationship with the way the hotel managed user reviews was not so unequivocal. Significant differences were observed with respect to the time taken to respond but not in the percentage of replies. The most surprising finding were very small differences between hotels with different number of reviews and hotel replies. Most studies on the subject agree that generating and responding to online content are strongly correlated. Another unexpected finding that contradicts previous studies is that hotels with the highest star ratings were the slowest in responding to user reviews.

As for the dimension of visibility, measured in terms of the number of replies, the study results show that Cracow hotels, on average, do better than hotels in
other locations analysed by previous studies. The average hotel response rate was 33% for Cracow, which is much higher than the result for Texas (19%) [Kwok, Xie 2016] or New York City (30%) [Liu, Kim, Pennington-Gray 2015]. This might suggest that Cracow hotel managers are more active when it comes to managing eWOM than hotel managers in different countries. The closest hotel response rate was observed in New York City, which has a similar market share of business and leisure travellers as Cracow does. In the case of consistency, Cracow hotels did not perform equally well. On average it took hotels 40 days to respond to reviews, which is much longer than the average of 15 days in the American market [Wang, Chaudhry 2016]. The authors of that study point out that delaying the moment of response can have a negative impact on the average TripAdvisor rating. The Cracow study supports this finding, as there were significant differences between average user ratings of hotels depending on the time it took them to reply to user comments. Finally, when it comes to the dimension of transparency, measured in terms of response length, the average reply was around 50 words. This dimension of reputation was found to be the least differentiating dependent variable, which might suggest that response length depends on other factors (not considered in the study). This finding contradicts the results obtained by Xie, Kwok & Wang [2017]. For this reason, it cannot be confidently stated that there are significant differences between hotels in terms of specific dimension of reputation that are related to the independent variables analysed in the study.

The results of the study should be of interest to hotel managers by providing insights into ways in which different kinds of hotels the Cracow hospitality market manage eWOM. This information can be used to adapt and optimise strategies in this field and thereby improve their reputation. Moreover, while Cracow hotels seem to do better than hotels in other cities in certain aspects of eWOM management, there is still much room for improvement, especially in terms of speed of response. The study has also partially addressed the need for further research expressed by Xie, Kwok & Wang [2017], especially in the context of quantitative analysis. It also provides new data about a segment of the Eastern European hotel market regarding the managing of eWOM.

The main limitation of the study was the fact that the quantitative data collected in the study could not be used for a more in-depth analysis of the dimensions of reputation. Also, the quantitative data collected in the study could not be used for a more in-depth analysis of the dimensions of reputation. This is why, a qualitative study should be conducted to verify the findings and to investigate the two missing dimensions – authenticity and distinctiveness. Finally, the study showed that the problem of online reputation management in the Polish hospitality industry needs further research, since the results differ from those obtained in different countries.
References


Ho V., 2018, Exploring the effectiveness of hotel management’s responses to negative online comments, *Lingua*, 216: 47-63.


Zarządzanie reputacją na portalu TripAdvisor na przykładzie krakowskiego rynku hotelarskiego

**Streszczenie.** Celem niniejszego artykułu było określenie, czy istnieją zależności między typami krakowskich hoteli a sposobami, w jaki zarządzają swoją reputacją poprzez zamieszczanie odpowiedzi do treści online. Zarządzanie reputacją określono na podstawie analizy odpowiedzi udzielanych przez pracowników hoteli na opinie zamieszczane w TripAdvisorze przez gości. Poszukiwano zależności między cechami obiektów hotelarskich a odpowiedziami na recenzje gości hotelowych. Badaniu poddano 1327 odpowiedzi do ponad 4000 recenzji zebranych za pomocą programu ParseHub. Istotność różnic między grupami w próbie sprawdzono za pomocą jednostroennej analizy wariancji ANOVA i testu HSD Tukeya. Analiza wyników wykazała, że czynniki mi istotnie różnicującymi odpowiedzi były zmienne niezależne: posiadanie hotelowego profilu w mediach społecznościowych, przynależność do sieci i ocena uzyskana na stronie TripAdvisor. Na podstawie przeprowadzonych badań można stwierdzić, że reputacja online krakowskich hoteli jest zarządzana lepiej niż w porównywalnych obiektach, analizowanych w innych pracach. Wykazano także, że widoczność, rozumiana jako liczba odpowiedzi na opinie w TripAdvisorze, jest najczęściej zarządzanym wymiarem reputacji.

**Słowa kluczowe:** reputacja online, elektroniczny marketing szeptany, TripAdvisor, recenzje

**Copyright and license:** This article is published under the terms of the Creative Commons Attribution – NoDerivatives 4.0 International (CC BY-ND 4.0) License, https://creativecommons.org/licenses/by-nd/4.0/