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How do hotel managers respond to online reviews? An Exploration of the Moroccan Context

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Summary

Within the dynamic landscape of the hospitality industry, the significance of online reviews in shaping a hotel's reputation cannot be overstated. As such, the role of managerial response in fostering a strong connection between customers and hotel managers in the online realm has garnered considerable attention. While previous studies have explored the impact of managerial responses on various outcomes such as online ratings, customer satisfaction, and customer revisits, a notable research gap exists regarding the actual response behaviour exhibited by managers towards customer reviews. To address this gap, we undertake an empirical investigation by collecting hotel review data from TripAdvisor, a prominent travel website, while focusing on the Moroccan context. Our study examines the response behaviour of managers, with a particular emphasis on the Moroccan hotel industry. By utilising linear regression models, we rigorously examine the influence of factors such as review length, sentiment, and the number of helpful votes on key aspects of response behaviour, including response priority, effort, speed, and sentiment. Through this comprehensive analysis, we aim to enhance our understanding of how managers in the Moroccan hotel industry engage with and respond to customer feedback.

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Introduction

In the digital age, travellers heavily rely on user-generated content, specifically online customer reviews, to plan their vacations and make informed decisions (Litvin, Goldsmith and Pan, 2008; Park and Allen, 2013; Kemp *et al.*, 2020). The rise of social media and travel platforms has led to the widespread consumption of electronic word-of-mouth (eWOM), emphasising the need for travel businesses to understand and analyse this content (Zhu *et al.*, 2021). The widespread adoption of eWOM has revolutionised the traditional one-way marketing communication from companies to consumers via mass communication channels (Campbell *et al.*, 2011). Modern-day consumers have diversified their approach to obtaining brand information and making purchasing decisions, as they no longer depend solely on advertising messages. The trustworthiness of online consumer opinions surpasses that of mass media ads, and eWOM from other consumers can influence consumer behaviour and trust (Nielsen, 2012).

The advent of eWOM has revolutionised communication between businesses and customers (B2C) or among customers themselves (C2C), presenting new challenges in the tourism and hospitality industry (Hennig-Thurau *et al.*, 2004). The uncontrollable nature of online reviews makes it difficult for companies to manage the spread of eWOM, mainly when negative opinions and emotions are expressed following unsatisfactory experiences (Kim *et al.*, 2016). Studies have shown that negative eWOM spreads faster than positive ones, as people find negative information more compelling and thought-provoking (Park and Lee, 2009; Kim *et al.*, 2016). Furthermore, negative eWOM has a more significant impact on sales than positive eWOM (Kim *et al.*, 2016), making it crucial for companies to take a proactive approach to manage negative reviews and feedback.

Managing online reviews poses challenges for firms as they cannot be selectively removed or avoided entirely, leading to the adoption of questionable practices such as soliciting fake positive reviews or threatening legal action against negative reviewers (Mayzlin, Dover and Chevalier, 2014; Luca and Zervas, 2016; Gössling, Hall and Andersson, 2018; Gössling *et al.*, 2019). However, publicly responding to consumer reviews (See figure 1) has become a popular reputation management strategy (Management responses or MR). This involves providing open-ended text beneath the reviewed content. The impact of a managerial-response strategy can vary, with responding hotels experiencing a 0.12-star rating improvement and a 12% increase in the number of predominantly positive reviews, alongside a decrease in the number of negative reviews that tend to be lengthier (Proserpio and Zervas, 2017). Also, timely and comprehensive responses have shown positive effects on financial performance (Xie, Zhang and Zhang, 2014; Xie, So and Wang, 2017).

Prior research has predominantly focused on the consequences of management responses to online reviews, neglecting the examination of response content and hotel managers' responding behaviour (Chang, Ku and Chen, 2020). A few papers attempted to identify hotel communication styles when responding to online reviews. For example, Sparks & Bradley, (2017) categorised hotels' management responses to negative online reviews into three types: Acknowledgment, Account, and Action, and identified three communication styles: Professional, Friendly-Informal, and Defensive. Additionally, an analysis of Jordanian 5-star hotels revealed that most of their management responses to negative online reviews were appreciative and empathetic but lacked specificity in addressing the issues raised by reviewers (Alrawadie and Dincer, 2019). Further, unknown travellers are often less likely to receive a response from hotel managers than other travellers (Chang, Ku and Chen, 2020).

Different studies yield conflicting results regarding hotel managers' responses to online reviews. For example, Proserpio & Zervas, (2017) indicate that hotels respond to positive, negative, and neutral reviews at roughly the same rate, suggesting that hotel managers engage with guests regardless of the sentiment expressed in the reviews. However, Wang et al., (2016) reveal that hotels are more likely to respond to severe devaluations than weaker ones, indicating that hotel managers might focus on reviews that significantly threaten their reputation. Equally, X. Liu & Law, (2019) uncover that managers prioritise digest, negative, and long reviews when responding to customers, indicating a preference for reviews that require detailed attention and potential service recovery. Conversely, Liang et al., (2021), within sharing accommodation industry, suggest that hosts appreciate responding to positive reviews rather than negative ones. Still, when they respond to negative reviews, their responses tend to be more prolonged and damaging, potentially indicating a perceived retaliation.

Considering the conflicting results observed above, it is imperative to expand the scope of research to encompass different cultural contexts. Our study aims to fill this gap by focusing on the specific context of Morocco, providing insights into how hotel managers in this region respond to online reviews. Known for their warm hospitality, Moroccans have been recognised for their welcoming nature, evident in their third-place ranking out of 140 countries in terms of their welcoming towards foreign tourists in the 2013 World Economic Forum's Travel and Tourism Competitiveness Report.⁵

Previous research has predominantly centred on response behaviour in different regions, such as China, as exemplified by studies conducted by Liu & Law, (2019) exploring hotels' response

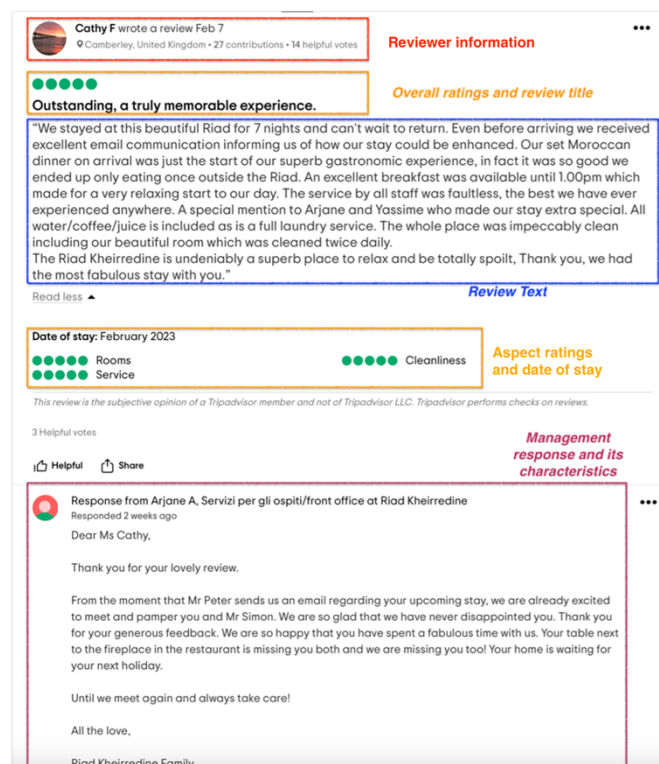


Figure 1. An example of a TripAdvisor review and the management response.

⁵ https://www3.weforum.org/docs/WEF_TT_Competitiveness_Report_2013.pdf

priority and length, and Liu & Law, (2019) investigating response priority length, and sentiment of hosts in peer-to-peer rental platforms. Our research extends the examination of response characteristics, including priority, effort, sentiment, and timeliness, in relation to review attributes such as valence, length, and helpful votes. To this end, this paper aims to address two research questions related to the factors influencing hotel managers' responding behaviour to guest reviews. First, we explore how the attributes of guest reviews, including valence, length, and helpful votes, impact the response design of hotel managers, aiming to enhance our understanding of manager responding behaviour. Second, we investigate how reviewer expertise and hotel class moderate this relationship, revealing the mechanisms influencing manager response patterns.

This study makes various theoretical contributions to the literature on MRs in the hotel industry. Firstly, it shifts the focus from externalities of management responses to managers' behaviour based on review characteristics. This shift provides a deeper understanding of how managers prioritise and tailor their responses. Secondly, we shed light on the influence of review helpfulness on hotel managers' response behaviour and highlight the role of reviewer expertise, overlooked in existing literature, as a moderating factor. Expert reviewers, characterised by their extensive review history, attract more attention due to their perceived knowledge, which can significantly impact other guests and hotel managers.

The findings of this study have important practical implications for businesses that handle management responses. Firstly, guests can use these findings to understand which types of reviews are more likely to receive responses from hotel managers and which hotel classes are more responsive to guest feedback. This empowers travellers who seek responses to their reviews to improve their review content strategically, increasing their chances of receiving managerial attention. Secondly, review and booking platforms can benefit from these findings by understanding hotel managers' response patterns. This knowledge can help them enhance their online designs, gain a competitive edge, and attract a more extensive customer base. Lastly, the study provides valuable insights for hotel managers and businesses involved in managing responses, enabling them to optimise their response strategies based on empirical evidence.

Methodology

We collect our dataset of hotel reviews from TripAdvisor. This renowned travel platform attracts monthly users, boasting over 1 billion reviews and posts for approximately 8 million businesses (TripAdvisor.com, 2023). The availability of diverse data, including online reviews, management responses, and hotel information, makes TripAdvisor an ideal source for our research in the field of hospitality. Previous research has utilised web crawlers to collect review and response data from prominent platforms (Liu and Law, 2019; Xu, 2020; Zhao *et al.*, 2020; Liang *et al.*, 2021; Xu and Zhao, 2022; Xu, Gong and Law, 2022). Following a similar approach, our study employs a web crawler to gather hotel reviews and responses from TripAdvisor in Morocco. We leverage the Python programming language and the Selenium package⁶ to accomplish this.

To ensure a substantial number of reviews, we selected hotels from the top six Moroccan cities listed on TripAdvisor: Marrakech, Fes, Agadir, Casablanca, Rabat, and Tangier. Using our custom-developed web crawler to streamline our analysis, we refined our list of hotels by

⁶ Selenium is a widely-used browser automation tool that offers support for multiple programming languages, including Python, Java, and C#. <https://www.nuget.org/packages/Selenium.WebDriver>.

excluding those without any reviews. Additionally, we focused only on English review texts, which allows for more accessible analysis and interpretation of the data. The collected data encompasses various aspects, such as reviewers' profiles, hotel information, and hotel reviews and responses. Our initial dataset comprises 3,318 hotels, 371,256 reviews, and 103,639 responses.

We focus on four crucial dependent variables in examining managers' response behaviour. Firstly, *Response Priority* indicates managers' responsiveness by determining whether they respond to customer reviews. Secondly, *Response Effort* measures the length of managers' responses, reflecting the effort invested in addressing customer feedback (Liu and Law, 2019). Additionally, *Response Speed* measures the time managers take to respond, providing insights into the timeliness of their actions. Lastly, the *Response Sentiment Score* quantifies the overall sentiment expressed in managers' responses, understanding their tone and attitude towards customers (Sheng, Wang and Amankwah-Amoah, 2021). Examining these variables gives us comprehensive insights into managers' response behaviour and customer interactions.

In our analysis of response behaviours, we examine several explanatory variables to understand the factors influencing managers' actions. These variables include *Review Valence*, which indicates the positivity or negativity of the review using a rating score from one to five as a proxy for customer satisfaction. We also consider the text length of reviews (*Review Length*) as an indicator of the effort exerted by customers when expressing their feedback. Additionally, we incorporate *Helpful Reviews* as another explanatory variable to explore how the perception of review helpfulness influences managers' responding behaviour. By considering these variables, we gain insights into the complex interplay between customer feedback and managerial actions, contributing to a thorough understanding of response behaviours.

In examining hotels' response behaviour, it is vital to consider the potential influence of hotel and reviewer characteristics. To delve deeper into these dynamics, we introduce two moderating variables. The first is reviewer expertise, measured by the total contributions of the reviewer, reflecting their experience in posting reviews. This allows us to investigate how reviewer expertise shapes managers' response behaviour. The second moderating variable is hotel class, distinguishing between premium and budget hotels and providing insights into potential variations in managerial responses based on the hotel type. These moderating variables enhance the depth of our analysis, facilitating a comprehensive understanding of the factors that drive response behaviour in the context of customer reviews and hotel management.

To detect emotional orientation expressed in managerial responses, we employ a machine learning-based approach, mainly *Naive Bayes* sentiment analysis, to determine the level of positivity or negativity conveyed in these responses. To accomplish this, we first pre-process textual data of the managerial responses by removing any irrelevant information, such as stop words and punctuation marks. Next, we create a labelled dataset by manually annotating a subset of responses as positive, negative, or neutral. Then, a *Naive Bayes* classifier is trained on the training dataset. Finally, we apply the trained classifier to the remaining unlabelled responses to assign sentiment polarities. To explore the research questions, we employ linear regression models.

The study's inclusion of response speed as an additional measure of response effort fills a crucial gap in previous research, which primarily focused on response length (Liu and Law, 2019; Liang *et al.*, 2021). By incorporating response speed, the study enhances our understanding of the efforts exerted by managers in responding to customer feedback. Furthermore, while Liang *et al.*, (2021) examined the factors influencing response sentiment

of hosts in peer-to-peer rental platforms, there is a distinct need to explore these influencing factors specifically within the hotel industry. This research addresses this gap and contributes to our understanding of the determinants of response sentiment in the hotel context, as hotels have a higher level of structure compared to hosts. The study's limitations include the use of cross-sectional data, hindering causal conclusions and capturing response behaviour dynamics over time. Utilising panel data analysis would enhance robustness and provide a more compelling analysis. Also, comparing response behaviour across platforms could reveal platform-specific dynamics and hidden factors. Lastly, focusing solely on Moroccan hotels limits generalisability, thus, comparing various culture would offer a broader understanding of response behaviour and identify region-specific or context-dependent factors.

Current stage and presentation at the conference

Currently, we are engaged in writing the literature review, while simultaneously conducting descriptive data analysis. During the BAM conference, we will present our primary data analysis.

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