Hotel Online Reviews and Their Impact on Booking Transaction Value

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Abstract

Online reviews have captured the attention of scholars and industry professionals alike. Often times the focus of attention is purchase decision-making and the building a positive online image. The present research examines the impact of consumer-generated feedback on the size of hotel bookings. Through collaboration with a consulting company, the research team gathered a sample of 178 hotels representing various companies and brands within the United States. Data was gathered concerning the hotel's ratings, rankings, and number of reviews on TripAdvisor. Additionally, financial data including the total revenues from bookings, number of bookings, and average transaction value was collected as well.After conducting multiple regression analysis, the researchers discovered a positive impact of both online ratings as well as the numbers of reviews on the average size of each booking transaction.

Key words: Consumer-generated feedback, Online Reviews, Hotel Finance, Lodging

Introduction

Online reviews have captured the attention and imagination of scholars and managers alike. In examining the existing literature on this nascent research area, three main areas were identified. First, some academicians have focused on the impact of online reviews on the consumer decision making process (Sparks & Browning, 2011; Williams et.al., 2010; Vermeulen&Seegers, 2009; Pavlou&Damoka, 2006). Second, others have been concerned about the impact that consumer-generated feedback has on a hotel's reputation (Schmallegger& Carson, 2007; O'Connor, 2010).

Finally, a third stream of research emphasizes the operational uses of online reviews (Torres, et al., 2013). Despite the amount resources devoted to monitoring online feedback in hotels and the amount of time and efforts scholars have devoted to conducting research, little is known about the impact of such feedback on incremental revenue generation. Consequently, the present research sought to contribute to the field of knowledge by discovering and quantifying the impact of online reviews on hotel revenues. In light of this, it can be stated that the purpose of this study is to explore the impact that a hotel's firm rating, relative ranking, and the overall number of reviews have on the average value of each booking transaction. The following research objectives were proposed:

- To study the impact of consumer-generated feedback on booking transactions
- Understand the role of a hotel's relative ranking on booking transaction
- Exploring the impact of the number of reviews on booking transactions

Literature Review

While small in size, a nascent stream of literature exists to explore the role of online feedback on financial performance. As an example; Ye, Law, and Gu (2009) developed a mathematical model to explain the impact of user generated comments on hotel sales and profitability. Accordingly, a 10% improvement in reviews led to a 4.4% increase in sales. In an industry interview, Brian Ferguson (Executive Vice-President of Expedia) disclosed that according to his records "A one- point increase in a review score equates to a 9% increase in ADR" (Lynch, 2012). Hoteliers want to see increased traffic to their company's website. Zhang, Ye, Law, and Li (2011) empirically tested such relationship and confirmed that there is a positive relationship between good reviews at a third party site and traffic to a business' proprietary website, in this a restaurant. If the same principle was applied to hotel's website; greater traffic can be seen as a positive indicator. However, does such traffic lead to booking transactions? Consequently, the researchers proposed the following hypothesis:

H 1: There is a significant relationship between a hotel's overall rating (i.e. 1, 2, 3 stars) on Trip Advisor and the hotel's average revenues from online transactions

Hotels have used social networking to help guests interact with one another before a stay and create contacts to socialize during their visit (Kasavana, Nusair, &Teodosic, 2010). Ye, et al. (2011) conducted an additional study in which they sought to explore the impact of positive online reviews on hotel sales. Nevertheless, due to the lack of financial data, the number of reviews was used as a proxy for hotel sales. Their study demonstrated that a higher valence of the average review rating leads to an increased number of reviews. Ogut and Tas (2012) sought to understand the impact of experts and consumer's opinions on hotel sales in two major tourist destinations: Paris and London. Their results revealed there was a positive relationship between consumer ratings and the hotel's average price of a standard double room during the data collection period (Ogut and Tas, 2012).

Much of the scholarly attention on the subject of consumer-generated feedback has centered on the idea of consumer-decision making. Research by Cox, Burgess, Sellitto, and Buutjens (2009) suggested, that consumers are more likely to utilize consumer – generated content at the information gathering stage of the purchase decision process. It has also been suggested that people rarely view comments beyond the first two pages in feedback sites (Pavlou and Domoka, 2006). Online reviews can increase the visibility of a hotel. In particular, sites like Trip Advisor rank hotels within their competitive market. Consequently, the following hypothesis was proposed:

H 2: There is a significant relationship between a hotel's overall ranking (1st, 2nd, 3rd) on Trip Advisor and the hotel's average revenues from online transactions

In their study of consumer decision making and social media, Vermeulen and Seegers (2009) reveled that reviews can help consumers move from a universal set of choices to a consideration set. Their research also revealed that the use of consumer-generated feedback had a greater effect on independent hotels (Vermeulen&Seegers, 2009). It has been suggested that some challenges commonly associated with online feedback include bias, statements that are very broadly written and the potential for information overload (O'Mahony& Smyth, 2009). Noone, McGuire, and Rohlfs (2011) posited that revenue managers have various opportunities to engage with customers through various social media channel. Essentially online feedback can inform their promotional and pricing decisions such as the configuration of promotions and packages, as well as the execution of push strategies.

Online feedback can serve as the basis for a series of management actions including responding to feedback, targeting investments in amenities that consumers would desire, and perpetuating positive actions that lead to customer delight. Torres, et al. (in press) studied the use of consumer-generated feedback for operational and quality purposes. It was discovered that 90% of all General Managers reviewed such feedback on a daily basis. One of the most important activities identified by General Managers was identifying patterns of complaints, whereas using such information to make changes in operating procedures was not as practiced by GM's. The researchers also discovered that those General Managers who placed greater value on consumer-generated feedback were more likely to improve the perceived hotel quality (Torres et al., in press). Park and Allen (2013) explored the impact of management responses to customers online. Their research identified three groups of companies: frequent responders, infrequent responders, and non-responders. Hotels that responded frequently believed that online feedback was mostly a fair representation of consumer's feelings. In contrast, those who did not respond frequently were more likely to perceive the reviews as extreme or biased. Whereas many managers have focused their efforts in minimizing the damage of negative reviews, encouraging positive reviews can be a more beneficial strategy. A recent study by Melian-Gomez, Bulchand-Gidumal, and Gonzalez-Lopez, (2013) proposes that as the number of online reviews increases, a better evaluation is obtained. Although this can point to the need to increase the number of reviews, the specific monetary impact of reviews is unknown. Consequently, the following hypothesis was proposed:

]H 3: There is a significant relationship between a hotel's overall number of online reviews on online feedback sites and the hotel's average revenues from online transactions

Methodology

The present research features collaboration between the University of Central Florida and Travel Click A sample of 178 hotels were utilized. Relevant information from these hotels included the number of online booking transactions, the total revenue derived from online bookings, and the average value of each booking transaction for several hotel companies. Data was collected from two months of revenue (July and August of 2013). Information was also

collected by Visiting TripAdvisor and verifying the relevant information for each hotel including the hotel's rating, ranking and number of reviews. Multiple regression analysis was performed. The outcome variable for the study was the average transaction value and the independent variables were: a) hotel rating, b) hotel ranking, and c) number of reviews. Analysis was conducted utilizing SPSS 21.0. Additionally, the appropriate testing for the regression assumptions was performed. No regression assumptions were violated during the analysis.

Results

The *"R"* for regression was significantly different from zero, F (3, 134) = 15.20, $p<$ .001, with R^2 at 0.25. The adjusted R-Squared *"$R^{2"}$"* value of 0.24 indicates that almost a fourth of the variability in average value of hotel's online transactions is predicted by the number of reviews, hotel rating, and hotel ranking on the websites. The multiple regression model under testing, demonstrated a p-value of 0.000 for the coefficient of differentiation, therefore such model can be considered to have acceptable levels of statistical significance. Of the regression coefficients, except for the hotel's overall ranking, all the other variables have a significance level of less than 0.001. Such results further confirmthe significant impact of the independent variables on the dependent variable. The first hypothesis proposed that a significant relationship exists between a hotel's rating on Trip Advisor and the average revenues generated per online transaction. Regression analysis revealed that H1 is significant at the .05 level.. The second hypotheses proposed that a hotel's raking (as revealed by the position in its competitive marketplace – 1st, 2nd, 3rd) on feedback sites is positively related to the average value per online transaction. Such hypothesis was not supported by the data. The third and final hypothesis proposed that the number of online reviews of a particular hotel will have a positive impact in the size of the average online transaction. Regression analysis revealed that there is a positive correlation between the number of reviews and the average revenues derived from each online transaction. Therefore, hypothesis was supported.

Discussion

The researchers examined the impact on a specific financial outcome: average value of booking transaction. A higher value per transaction generates more revenue per customer, which all things being equal could result in better profitability. Higher value per transaction may also

indicate a premium that customers are willing to pay based on the quality of the services the hotel provides. The number of reviews was also particularly relevant to the present study. A greater number of reviews can indicate more popularity for a hotel. Since the number of reviews positively impacted the average value per transaction, hoteliers can create strategies aimed at generating a large pool of customers who write reviews. While many hotel managers may fear the negative feedback, a pro-active approach to generating feedback can ensure not only that the hotel gets much needed volume of comments on Trip Advisor, but also that such comments are from delighted guests who will rank the hotel higher as opposed to their satisfied, dissatisfied, or outraged counterparts.

The hotel's ranking did not have a significant impact in the overall transaction. A hotel's ranking is its relative position in Trip Advisor when compared to competitors (i.e. 1st, 2nd, 3rd) in their local area. A possible explanation is that within a given city, hotels of various quality ratings (i.e. 3, 4, 5 stars) are paired together by Trip Advisor in the same competitive set. Since a lower star hotel generates typically commands a more inexpensive hotel rate, it's possible this could have an impact in the overall regression of ranking against average transaction value. In light of this, it can be stated that the most important thing for a hotel is not always to be first or second in their city, but rather to be first or second within their quality comparable competitive set. More importantly, such hotels should concern themselves more with their overall individual rating, as opposed to the market ranking based on research results.

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