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Article *in* International Journal of Contemporary Hospitality Management · January 2017

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Abstract

Purpose – The purposes of this study are to synthesize the current research findings reported in major hospitality and tourism journals and to discuss the knowledge gaps where additional research endeavors are needed.

Design / Methodology / Approach – The systematic review approach was adopted to analyze 67 research articles about online reviews that were published between January 2000 and July 2015 in seven major hospitality and tourism journals.

Findings – This study presents a thematic framework of online review research, which was advanced by integrating the interactions among quantitative evaluation features, verbal evaluation features, reputation features, and social features of online reviews to important outcomes of consumer decision making and business performance. The thematic framework helps researchers identify the areas in extant hospitality literature of online reviews and point out possible directions for future studies.

Research limitations / implications – The systematic review approach has a qualitative nature, where relevant literature was interpreted based on the authors' domain knowledge and expertise.

Practical implications – Practitioners can gain a comprehensive understanding of the dynamic relationships among the key influential factors in online reviews, as presented in the thematic framework of online review research. Accordingly, managers will be able to develop effective strategies to leverage the positive impacts of online reviews to the business outcomes.

Originality / value – This systematic review synthesizes the findings reported in most recent publications (January 2000 - July 2015; also including "Online First" articles) in seven major hospitality and tourism journals and develops an integrated research framework, anchoring on four meta research questions and showing the dynamic relationships among the key players/factors/themes in online review research. This framework provides a visual diagram to practitioners for a better understanding of the relevant literature and assists researchers in developing new research questions for future studies.

Article type: Literature Reviews

Keywords: Online reviews, Customer reviews, Systematic review, User-generated content, Literature review

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Disclosures

The authors declared no conflicts of interest with respect to the authorship and/or publication of this article.

Funding

This work received no fundings.

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1. Introduction

Online reviews have increasingly become a major source of information that affects consumers’ decision making of hospitality purchases (Sparks et al., 2013). It is reported that 53 percent of travelers would not commit to a hotel reservation until they check the online reviews about the hotel, and 77 percent stated they would usually or always refer to online reviews before choosing a hotel (Xie et al., 2014). Businesses are urged to treat online reviews as a new addition to the marketing communication mix (Chen and Xie, 2008). It is thus not surprising that online reviews have recently become the subject of extensive research.

The field of consumer reviews has come a long way since the inception of social media in 1994 (Arandilla, 2012). Sprouting from a small but eclectic group of scholars and professionals, research on online reviews stands in the front as an influential think tank in a technological landscape where changes and revolutions occur at great magnitude and speed. At this point in time, there are possibly hundreds of online-review studies that have been published. Most of the extant studies were written from the perspective of marketing or information systems, but there were also contributions from the field of hospitality management (De Maeyer, 2012). Methodologies encompassed experiments (e.g., Min et al., 2014, Zhao et al., 2015; Casalo et al., 2015), empirical data analytics (e.g., Xie et al., 2014; Ye et al., 2009; Xiang et al., 2015), survey studies (e.g., Lee et al., 2012b, Liu et al., 2013; Tsao et al., 2015; Yen and Tang, 2015), and conceptual work (e.g., Mkono, 2012, 2013a, 2013b; Schuckert et al., 2015b). Much of the previous work examined online reviews from a customer-centric perspective, focusing on the effect of review ratings on consumers' decision making (Zhao et al., 2015; Casalo et al., 2015; Ladhari and Michaud, 2015; Vermeulen and Seegers, 2009) and customer satisfaction (Briggs et al., 2007; Liu et al., 2013; Xiang et al., 2015). There was an emerging research interest of examining the effect of online reviews on business performance. Using field data collected from TripAdvisor (e.g., Zhang et al., 2011; Xie et al., 2014), Expedia (e.g. Stringam and Gerdes, 2010), restaurant review websites (e.g., Pantelidis, 2010), and other social media platforms (e.g., Ye et al., 2009; Zhang et al., 2010), studies have investigated the managerial implications and outcomes of online reviews for hospitality and tourism businesses.

Specifically, current literature has identified the critical factors that have important practical implications, including - but not limiting to - valence of consumer reviews (Duverger, 2013; Wang and Hung, 2015), volume of consumer reviews (Xie et al., 2014), variation of consumer reviews (Melián-González et al., 2013), reviews-based product rankings (Filieri and McLeay, 2014; Ghose et al., 2012), perceived usefulness of online reviews (Liu and Park, 2015), trust in online reviews (Ayeh et al., 2013; Filieri, 2015), and management responses to consumer reviews (Park and Allen, 2013; Liu et al., 2015; Lee and Cranage, 2014).

The hospitality literature on online reviews is now at a point where it would be useful to take stock of what is already known, identify areas of research intensity, tie them together into a “big picture,” and use this understanding to identify gaps in our knowledge. For academic researchers, a systematic comprehensive review will hopefully be helpful in identifying fruitful areas to which future studies can be added. Hospitality practitioners can probably achieve a more in-depth understanding of the different facets of online reviews and related constructs, providing additional and deeper insights into how businesses may harness our analysis to their advantages. In this vein, a few hospitality scholars have conducted similar comprehensive reviews of online review literature in hospitality. For example, Schuckert et al. (2015b) reviewed 50 online review articles published in 23 hospitality, tourism, and business journals between 2004 and 2013. They grouped these articles into five categories for discussion: online reviews and online buying, customer satisfaction and management, opinion mining and sentiment analysis, motivation, and the role reviews play in online reviews. Cantallops and Salvi (2014) gathered and analyzed articles published from 2008 to 2011 in six different

academically recognized journals of tourism and identified two main lines of research, namely review-generating factors (8 articles) and impacts of eWOM (20 articles) from consumers' and companies' perspectives.

Given the rapid growth of the knowledge body in online reviews, numerous studies in hospitality emerge recently but have not been synthesized to reflect the research trends in the current online review research. Thus, the objective of this study is to synthesize the current research findings reported in major hospitality and tourism journals and to discuss the knowledge gaps where additional research endeavors are needed. Our effort differs from the antecedents in numerous ways. First, our analysis focuses on the performance-driven factors rather than general characteristics of online reviews. Second, this study adapts the framework proposed by O'Mahony and Smyth (2010) as an instrument to synthesize the relevant research findings reported in seven major hospitality and tourism journals through the lens of review features (i.e., quantitative and verbal evaluation features) and the players involved in online reviews (i.e., reviewers, managers, and peer consumers). Third, this paper reports an analysis of the most recent publications in hospitality and tourism from January 2000 to July 2015 (including in-press articles that were only available online as of July 2015), with majority of the papers being analyzed published in 2014 and beyond. Finally, this study reports an integrated conceptual framework that outlines the important influential factors on online reviews, providing a visual diagram for a more comprehensive understanding of relevant literature and possible directions for future research. Therefore, this study serves as an important supplement to relevant review studies such as Schuckert et al. (2015b) and Cantallops and Salvi (2014), yet joins the research stream of synthesizing important

findings from extant online review literature in hospitality and tourism as well as identifying the areas that call for future research. It reports a modest effort of a comprehensive review, aiming to achieve an integration of our current knowledge on online reviews as well as to advance the field by pointing out the possible directions for future studies.

What is followed includes a brief discussion on the typical features of some popular online review, such as those on TripAdvisor and Yelp, a description of the journal articles being reviewed in this study, the procedures of our systematic review, as well as the key research findings about online reviews reported in the seven major hospitality and tourism journals. Particularly, the key research findings were reported under four themes: quantitative evaluation features, verbal evaluation features, reputation features, and social features. The research gaps and the possible directions for future studies are also discussed under each theme. In the end, an integrated framework is presented in a visual diagram to highlight the synthesized findings of our analysis.

2. Typical features of online reviews

Consumer reviews are defined as “a type of product information created by users based on personal usage experience” (Chen and Xie, 2008, p. 477). It serves two basic purposes: to provide product and service information and to make recommendations. As the Web 2.0 technology evolves, consumer reviews are now predominantly provided on social media platforms (Xie et al., 2014). The most significant difference between social media and prior mass communication platforms is the “bi-directional nature” of social media websites, which provides a low-cost method for organizations to reach out to consumers on a massive scale, as well as a convenient platform for individual consumers

to share their experiences, thoughts, and opinions to the global Internet community (Dellarocas, 2003).

Online reviews for hospitality products are mostly available on platforms such as TripAdvisor (e.g., hotel reviews), Yelp (e.g., restaurant reviews), Facebook (e.g., fan reviews for hotels and restaurants), and online travel agent (OTA) websites such as Expedia and Priceline (e.g., hotel reviews). All reviews on these platforms are available online and accessible by the public. While the layouts and interfaces may look differently among these platforms, the key features of most online reviews can be translated into a feature-based instance representation with three distinct factors: evaluation features (of the reviews), reputation features (of the reviewers), and social features (among reviewers, managers, and other internet users) (O'Mahony and Smyth, 2010). This three-factor framework can appropriately serve as a classification scheme or an instrument for our systematic analysis. First, it is a good approach to break down the information in online reviews and formulate a structured “typology” of the online review features. Second, it provides a good fit to organize/categorize our findings from extant online review literature. Third, it sets the boundary and directions for our inquiry, as suggested in a systematic review (Briner and Walshe, 2015). Finally, this approach has been cited by many other studies in similar fields such as online opinion analysis (Kaiser et al., 2011), knowledge classification (Kahraman et al., 2013), and online review recommendation systems (Monfil-Contreras et al., 2013).

2.1 Evaluation features

The rating or valence of an online review relates to how well consumers enjoy their experience with a business (Xie et al., 2014). It is usually presented in a five-star

scale, where a one-star rating indicates “terrible experience” and a five-star rating indicates “excellent experience.” Another important evaluation factor is the volume or the total number of consumer reviews posted by reviewers, signaling a business’ popularity (Xie et al., 2014). Based on the valence and volume of online reviews, websites such as TripAdvisor also calculate the variation of online reviews, or the level of inconsistency of reviewers’ opinion. Finally, some online review websites also rank businesses in a market (within a city or a vicinity) based on the review ratings. The valence, volume of online reviews, and a business’ ranking index are usually displayed in a prominent manner next to the name of each hotel being listed on the website. Besides the quantitative features of valence, volume, and variance, consumers are also allowed to provide textual comments about their experience with a business.

2.2 Reputation features

Reviewers may choose to display some personal demographic information such as age range, gender, and home location in their profile. In addition, online review websites such as TripAdvisor and Yelp will track and show how many years a reviewer has been with the website. Depending on how many reviews a user has completed, she/he will also receive a badge from the website, which is listed underneath the reviewer’s name as an indicator of her/his status (e.g., reviewer, senior reviewer, contributor, senior contributor, and top contributor on TripAdvisor). Additional information about the reviewers are also available with a “click” away, including the number of cities or businesses they have visited, the number of reviews they have posted in each city visited, and the total number of reviews they have published. These factors signal a reviewer’s reputation and expertise with respect to the set of reviews that the reviewer has authored in the past.

2.3 Social features

Besides posting reviews for a business, users are allowed to give votes to the helpfulness of an online review posted by other reviewers on TripAdvisor, Yelp, and OTAs, or “Like” a consumer review on Facebook. This feature provides consumers an easy access to helpful reviews among the massive amount of information available (O’Mahony and Smith, 2010). Meanwhile, online review websites also offer hospitality managers multifarious ways to interact with consumers (Hennig-Thurau et al., 2010), manipulate the online buzz of consumer-generated word-of-mouth (Lee et al., 2012b), and facilitate purchasing-related consumer behaviors (Gu and Ye, 2014). Hospitality managers increasingly take a proactive role in social media by responding to consumers’ comments about their company’s products and services online (Gu and Ye, 2014). On TripAdvisor and Yelp, managers may post one response to every comment, providing another means for managers to further engage and interact with customers (Park and Allen, 2013). Because of the transparency of social media, consumers can see reviews from their peer consumers and the manager response to the reviews.

3. Methods

A systematic review of relevant literature in hospitality and tourism was employed in this inquiry. According to Briner and Walshe (2015), a systematic literature review is different from a traditional or narrative literature review in numerous ways. Firstly, a systematic review usually focuses on specific and practice-relevant questions. Our study has specific goals that are relevant to literature and practices --- to achieve an integration of our current knowledge on online reviews and to advance the field by pointing out the possible directions for future studies. Secondly, a systematic review

requires researchers to adopt a structural approach with a set or sets of broad principles. In this study, we analyzed relevant literature according to the aforementioned O'Mahony and Smyth's (2010) framework, which is comprised of valuation features, reputation features, and social features of online reviews. Thirdly, because a systematic review is more structural, it helps researchers to make explicit decisions of what research to include or exclude and integrate the findings, where we only reviewed the relevant literature in major hospitality and tourism journals. Fourthly, a structural systematic review is more likely to identify the best evidence available. Through our analysis, we advanced a thematic framework of online review research from our analysis. Finally, a systematic review approach can easily be replicated in the future for continuous updates, which allows us and other researchers to continue our effort in reviewing additional literature. Today, a systematic literature review approach has also been widely adopted by other hospitality and tourism scholars (e.g., Fong et al., 2016; Law et al., 2012).

3.1 Subjects of interest

The intent of this review is not to present every single online review study that has been published in the past because reviewing all publications without a set criterion is normally not the case for a systematic review (Briner and Walshe, 2015). Rather, our purposes are to synthesize the key research findings reported in major hospitality and tourism journals and to discuss the knowledge gaps where more research endeavors are needed. Accordingly, our subjects of interest limit to those online-review studies that appeared in the eight most influential hospitality and tourism journals as suggested by Gursoy and Sandstrom (2016), including *International Journal of Hospitality Management (IJHM)*, *Journal of Hospitality and Tourism Research (JHTR)*, *Cornell*

Hospitality Quarterly (CQ), and *International Journal of Contemporary Hospitality Management (IJCHM)* for hospitality studies, as well as *Annals of Tourism Research (ATR)*, *Tourism Management (TM)*, *Journal of Travel Research (JTR)*, and *Journal of Sustainable Tourism (JST)* for tourism studies.

3.2 Literature search

An initial search in each journal's article database was conducted using relevant keywords such as "online reviews," "consumer reviews," "word-of-mouth," and "user-generated content". Considering the fact that the major online review websites (e.g., TripAdvisor and Yelp) were not launched until the early 2000s, we limited our search to the journal articles published in or after January 2000. Our articles of analysis include both published articles and those forthcoming (in-press) articles that were only available online as of July 2015. Finally, every author in the research team conducted another literature search by browsing all issues in the journals' database to ensure all relevant studies were downloaded and included in the analysis. In the end, a total of 67 relevant journal articles were included in analysis.

3.3 Classification instrument

According to Chrisman et al. (1988), a reliable classification system of literature should meet four major objectives: (1) it allows for appropriate levels of differentiation among various studies; (2) it enables generalizations about knowledge to be made, thus paving the way for comparative studies; (3) it allows for appropriate identification of studies, thereby ensuring consistency and comparability of findings; and (4) it enables quick retrieval of relevant information or knowledge. Hence, a classification system that is used for a systematic review must also reflect the main areas of inquiry relevant to

online reviews and address the purpose for greater synthesis and integration. Moreover, the classification system must facilitate scientific advancement by providing a coherent and inclusive scholarship framework that brings light to the frontiers or knowledge in the field, thus pointing out possible directions for future research. Last but not least, a well-defined classification system will also allow researchers to easily replicate the study in the future for continuous updates of the relevant literature, as suggested in a systematic literature review (Briner and Walshe, 2015). Accordingly, we used the aforementioned classification scheme of O'Mahony and Smyth (2010) as our coding instrument to organize the current knowledge of online reviews into the following research themes: evaluation features (of reviews) --- including quantitative and verbal evaluation features, reputation features (of reviewers), and social features (among reviewers, managers, and other internet users).

3.4 The coding process

Firstly, we assigned a label to each research article that was under review. Next, we developed a table (Table 1) that allowed us to capture our coding notes of each article being analyzed according to the classification scheme of O'Mahony and Smyth (2010). In addition to the four classification themes, we also included in Table 1 our coding notes of the research context, subjects, methodology, and the key research findings reported in each research article. Thirdly, each author in our research team reviewed and coded the thematic information of each article on his/her own. Fourthly, each author recorded his/her coding notes of the 67 research studies into Table 1 for easy comparison, which is highly recommended in a systematic literature review (Briner and Walshe, 2015). Because Table 1 was developed for a systematic literature review and each article was

labeled before coding, each author's coding notes could be easily compared for validity. Fifthly, after each author had completed writing his/her coding notes in the table, the research teams reviewed one another's coding notes and made comments and edits in the table. In the end, the research teams met numerous times together to review, compare, and cross-check the coding notes of all 67 articles, as well as the comments and edits on the table before Table 1 was finalized. Consensus was reached through discussion within the research team in the case of discrepancies.

(Insert Table 1 about here)

4. Descriptive Results

Out of the eight (8) journals being examined, *IJHM* published about one third of the 67 articles being analyzed (22 articles or 33%), followed by *TM* (17 articles or 25%), *JHTR* (8 articles or 12%), *CQ* (6 articles or 9%), *IJCHM* and *JTR* (5 articles or 7% each), and *ATR* (4 articles or 6%) (Figure 1). There was no article about online review published at *JST*. During our observation period (January 2000 to July 2015), majority of the articles being analyzed were appeared in 2015 (18 articles), followed by 17 articles in 2013, 13 articles in 2014, seven articles in 2012, five articles in 2011, three articles in 2009 and 2010, respectively, and one article in 2007 (Figure 2). Among 65 articles (excluding two literature review papers), majority of the articles (72% or 47 articles) focused on online reviews for hotels, 14% or nine articles studied online reviews for travel products such as destinations, resorts, etc. 12% or eight articles focused on online reviews for restaurants. There is only one article that examined online reviews for events (Figure 3).

(Insert Figure 1, Figure 2, and Figure 3 about here)

5. Research contexts and methods used in current literature

Figure 4 shows that over half of the research (55%) is contextualized in TripAdvisor, a major online review website for hospitality products (Lu and Stepchenkova, 2012; Levy et al., 2013; Liu et al., 2015; Liu et al., 2013; Stepchenkova and Zhan, 2013; Berezan et al., 2015; Mkono, 2012; 2013a; 2013b). Use of other contexts are distributed among Yelp (Park and Nicolau, 2015; Liu and Park, 2015; Lee and Cranage, 2014) and Dianping.com (Zhang et al., 2010; 2013) for restaurants, as well as Booking.com (Chaves et al., 2012; Radojevic et al., 2015), Facebook (Ladhari and Michaud, 2015; Tsao et al., 2015; Yen and Tang, 2015), and Ctrip (Wang and Hung, 2015; Ye et al., 2009) for hotels.

(Insert Figure 4 about here)

The methodologies used in extant online review research include mixed methods (4 articles or 6%), qualitative methods (16 articles or 24%), and quantitative methods (47 articles or 70%). For example, Wang and Hung (2015), Lu and Stepchenkova (2012), and Liu et al. (2015) used a mixed methods approach to analyze the numeric (e.g., ratings) and textual (e.g., textual review) information of online reviews. Such integration provides a triangulated understanding of a complex phenomenon being examined (Kwok, 2012). However, using mixed methods in investigations might also make it difficult to intertwine or integrate one method with another, and it becomes unclear of how to interpret the discrepancies of the online review findings from two very distinct methods (Brewer and Hunter, 2006).

Qualitative research consists of insightful information that the researchers gathered through case studies (e.g., Park and Nicolau, 2015), sentimental mining (e.g.,

Liu et al. 2013; Xiang et al. 2015), grounded theory (e.g., Papathanassis and Knolle, 2011), thematic analysis (e.g., Fu et al., 2015; Mkono, 2012, 2013a, 2013b; Nicely and Ghazali, 2014), and content analysis (e.g., Berezan et al., 2015; Pantelidis, 2010; Stepchenkova and Zhan, 2013). Qualitative analysis typically begins with aggregating the data (words, text, or cases) into categories of information and follows with a presentation of the diverse ideas gathered during data collection (Denzin and Lincoln, 2005). Through the lens of qualitative research, the phenomenon of online reviews can be evaluated in depth. However, rigidity is sometimes difficult to be assessed, demonstrated, or maintained because of researchers' personal idiosyncrasies and biases when they analyze online review information (Denzin and Lincoln, 2005).

Quantitative research mostly employs consumer-centric methods, particularly surveys (e.g., Lee et al., 2012a; Liu et al., 2013; Tsao et al., 2015) and experiments (e.g., Casaló et al., 2015; Ladhari and Michaud, 2015; Min et al., 2014) to investigate the implications of online reviews in consumer decision making. In terms of the effectiveness and limitations of the methods, experiments can test principles and isolate the impact of different variables, but might create concerns for external validity, whereas surveys can capture the first-hand data of customer responses, but the results may not be generalizable to the whole population due to the sample representation limitation (Given, 2008).

With advanced digital technology, a sub-stream of quantitative research employed big data analytics to examine the subject of online reviews (Duverger, 2013; Xiang et al., 2015; Xie et al., 2014; Ye et al., 2009). Today's hospitality businesses are in a data-rich environment. Millions of travelers today use digital devices in the course of their travel journeys: dreaming about, planning, booking, experiencing, and reflecting on their trip,

creating an “electronic trail” that lends itself to modeling and analysis for a better understanding of consumers. Technology-enabled big data analytics may provide a potentially better weapon in the arsenal of hotel managers as they seek to accurately assess the efficacy of manager responses, which otherwise might be difficult to measure with survey-based metrics or experiments. What sets the data analytics method apart is that the analytics metrics are often behavior-based, revealing the actual behaviors of reviewers, managers, and peer consumers on the Internet (Srinivasan et al., 2016). Such behavioral-tracking dataset can reveal many valuable insights such as platform optimization (Xie et al. 2014), business improvement (Duverger, 2013; Ye et al. 2009), and marketing effectiveness (Xiang et al., 2015). Thus, future research of data analytics is advocated to deepen our understanding in the area of online reviews.

6. Synthesized themes

Also being used as the tool to document the authors’ coding notes in our systematic review, Table 1 summarizes the information coded for analysis. Besides the bibliographic information of each journal article, six thematic data were also highlighted, including quantitative evaluation features, verbal evaluation features, reputation features, social features, methodology (the research context / subjects being studied / methods used in the investigation), and lastly the key findings of each study. The synthesized results of our systematic analysis were then interpreted based on the authors’ understanding of the research articles listed in Table 1. Particularly, the synthesized results can be used to answer the following questions: (a) What has been measured (or discussed) in the studies being analyzed? (b) What are the consistent findings or discrepancies? and (c) What has not been measured (or discussed) but deserve more research attention?

6.1 Theme 1: Quantitative evaluation features

Valence, variance, volume, as well as verbal features of online reviews, known as the “4Vs,” represent the fundamental evaluation features of consumer reviews (De Maer, 2012). By definition, valence, or review rating, reflects the level of consumer satisfaction and product evaluation. Variation, measured as the standard deviation to the average rating, captures the degree of disagreement among reviewers (Godes and Mayzlin, 2004). Volume, or the number of reviews, is a measure of the number of consumer reviews. It signals a product’s exposures and popularity on a social media platform (Duan et al., 2008; Zhu and Zhang, 2010). Verbal feature indicates the textual content of a consumer review written by a reviewer and helps readers to gather descriptive information beyond simply the numeric rating and deciphers the reason beyond specific ratings (De Maeyer, 2012). In this study, valance, variance, and volume of online reviews were coded and analyzed as the quantitative evaluation features. Verbal evaluation features, which contain rich textual data, were coded separately and will be reported in the next section.

It appeared that the quantitative evaluation features of online reviews have received the most attention from academic scholars, with 43 articles or 64% documented. Current literature has identified hotel ratings as a valid indicator of travelers’ experience and satisfaction (Xiang et al., 2015; Radojevic et al., 2015), reinforcing the idea that consumers can use online reviews as an important information source to evaluate a hospitality or tourism product for a purchasing decision. However, not all online reviews carry the same impact on consumers. While ratings in general can have positive effect on consumers’ perceived usefulness of online reviews (Liu and Park, 2015; Lee et al.,

2012a), consumers tend to perceive reviews with extreme ratings (either positive or negative) more useful and enjoyable than those with moderate ratings (Park and Nicolau, 2015).

Additionally, empirical studies also confirmed the eWOM effect of online reviews on business performance (Nieto et al., 2014). For example, the valence of online reviews is positively correlated with consumers' expectations and their purchasing intention of a hotel (Mauri and Minazzi, 2013; Ladhari and Michaud, 2015), in which positive reviews are more effective in enhancing consumers' booking intentions than negative reviews (Tsao et al., 2015). In the same vein, Casaló et al. (2015) concluded that travelers tend to have more favorable attitudes and higher booking intentions towards the hotels that are listed on the "Best Hotels List."

As far as online reviews' financial impact is concerned, better review ratings can lead to higher price (Kim et al., 2015; Zhang et al., 2011), more room sales (Ye et al., 2009; Kim et al., 2015), higher RevPAR (Revenue Per Available Room) (Xie et al., 2014; Phillips et al., 2015), and a higher market share (Duverger, 2013). Additionally, some of these positive impacts may vary among different hotel segments (Zhang et al., 2011). For instance, the effect of review ratings on RevPAR is identified among luxury hotels but not in lower-tier hotels (Blal and Struman, 2014).

Meanwhile, the influence of review valence on booking intentions and hotel performance can be magnified as the number of reviews increases (Tsao et al., 2015) or moderated by the variance of online reviews (Xie et al., 2014; Zhang et al., 2014). For example, while reviews of a business in the early time tend to be disproportionately negative, as the number of reviews increases, the valence becomes less variant (Melián-

González et al., 2013), which may in turn influence consumers' attitudes towards a business and their booking intentions. Likewise, Vermeulen and Seegers (2009) found consumers' being exposed to more online reviews would enhance their consideration of staying in a hotel, especially to lesser-known hotels. Vigla et al. (2014) suggested that as the number of reviews increase, consumers' preference increases; so does their booking intention, except for young males who would be more affected by review valence rather than the volume of reviews. It is concluded that the volume of online reviews is positively related to travelers' hotel booking intentions online (Ye et al., 2009; Zhao et al., 2015), as well as hotel performance (Xie et al., 2014); variance of rating is negatively related to hotel bookings (Ye et al., 2009).

Overall, current literature has provided abundant and consistent empirical evidence to support review valence' and review volume' positive impact, as well as review variance' negative impact on a hospitality and tourism business. The interactive effect among valence, volume, and variance were also widely documented (e.g. Kim et al., 2015; Xie et al., 2014; Ye et al., 2009). Moreover, a few studies examined whether review valence and review volume have various positive impact on different market segments within the lodging industry (e.g., Blal and Struman, 2014; Zhang et al., 2011). Nevertheless, there are still a few important research questions that remained unanswered in hospitality and tourism literature. For example, businesses can now pay online review websites a fee to be listed on the top of an online review website's page. According to the perceptual fluency model, repeated incidental exposures to banner ads would result in an increased perceptual fluency and thus lead to more positive evaluations (Fang et al., 2007). Therefore, an increase of exposure through paid advertisement may help a

business improve consumers' evaluations of the business. However, tourists may also perceive the advertisements on the Internet as spams (Sab, 2011) and hold negative attitudes towards the featured ads or featured companies on an online review website. Future research may consider evaluating the positive and negative effects of banner ads on online review websites.

6.2 Theme 2: Verbal evaluation features

Verbal evaluation feature allows consumers to decipher the content of reviews and develop in-depth awareness and perceptions of the product or service being evaluated. This area also received enormous attention from hospitality and tourism scholars, with 33 studies (49%) of the articles coded under this scheme. Overall, researchers analyzed the verbal evaluation feature with three distinguishing approaches: (a) using word counts as a variable in a quantitative analysis, (b) comparing different types of verbal feature in an experimental design, and (c) applying content analysis or big data analysis techniques to gain better understanding of travelers. Each approach yielded different but complimentary results about the importance of online reviews.

The length of a review, for instance, is usually measured with word counts. Depending on the research settings, studies on review length have reported some contradicting findings. Data from Yelp.com revealed that restaurant consumers tend to rate lengthier reviews more useful and enjoyable than shorter reviews (Liu and Park, 2015; Park and Nicolau, 2015). On the contrary, data from OTA websites suggested that the interaction between review length and review valence actually would have a negative effect on a hotel's market share (Duverger, 2013).

Studies using experimental designs often measured the various impacts of different types of verbal features. The results suggested that lengthier reviews or reviews with more information will positively influence consumers' attitudes towards adopting online reviews as an information source (Filieri and McLeay, 2014), perceptions of trust and consumer choice (Sparks and Browning, 2011), perceived usefulness and trustworthiness of an online review (Sparks et al., 2013), and booking intentions to a hotel (Zhao et al., 2015). In general, this conclusion also supports the results of Liu and Park' (2015) as well as Park and Nicolau' (2015) but not Duverger's (2013) study.

As far as the content of online reviews is concerned, research with in-depth qualitative analysis or the big data approach provides additional insights that address a variety of research topics, including the "popular" keywords used in positive or negative reviews (Stringam and Gerdes, 2010), customer expectations (Liu et al., 2013; Schuckert et al. 2015a), guest satisfaction of a loyalty program (Berezan et al., 2015), guest satisfaction in restaurants (Pantelidis, 2010), guest satisfaction in hotels or a lodging product (Wang and Hung, 2015; Xiang et al., 2015, Zhou et al., 2014; Zhang and Mao, 2012; Chaves et al., 2012; Lu and Stepchenkova, 2012), dimensions of service failure issues (Kim and Lehto, 2012), consumer complaints or their negative experience (Levy et al., 2013; Min et al., 2014; Nicely and Ghazali, 2014), tourist experience of a specific destination or an event (Mkono, 2012, 2013a, 2013b; Fu et al., 2015; Cong et al., 2014; Wu et al., 2014), crisis management (Liu et al., 2015), and attributes that trigger revisit and referral intentions (Zhang and Mao, 2012).

Current literature generally supports the uncertainty reduction theory (Daft and Lengel, 1986), in which reviews with more information (lengthier reviews) tend to be

perceived as more valuable than those with less information. Meanwhile, there is also empirical evidence pointing to the opposite direction (e.g., Duverger, 2013), suggesting long reviews might not necessarily have positive impacts on a business. It is possible that a review's "readability," rather than word counts or a manipulated variable in a lab setting, will actually play a critical role in influencing consumers' decisions. Grazian (1996) posited that shorter and simple sentences may increase the readability of a message. Very likely, consumers may prefer the reviews that are easy to read and provide the "necessary" information they need, as implied by Kwok and Xie (2016). Future studies are suggested to conduct a deeper analysis of a review's readability and its impact on consumers' decisions and on a business' performance.

6.3 Theme 3: Reputation features

It seems scholars put moderate research attention in understanding what role reputation features play in the online review context. In total, there are 13 studies (19%) being coded in this research theme.

When consumers register on an online review website, they are required to provide their demographic information. Alternatively, they may choose to register and log into an online review website with their Facebook accounts (Kwok and Yu, 2013). Online review websites then share reviewers' demographic information, in addition to their seniority and status in the community. Consumers' demographics and status thus provide additional information clue for other Internet users to evaluate the reviews.

In general, certain groups of consumers, such as those who are young, highly educated, and have higher incomes, are found to be more likely to share their travel experience online than other groups (Ip et al., 2012; Lee et al., 2014). Current literature

also suggests that it becomes critical for websites to disclose a reviewer's demographic information and status in the online community, especially to those consumers who rely on online reviews for travel information. For instance, research has found the presence of personal identification information will positively affect consumers' perceived credibility of the online reviews (Xie et al., 2011) as well as the usefulness and enjoyment of the reviews (Liu and Park, 2015), leading to higher hotel booking intentions if facing a positive review and lower hotel booking intentions if facing a negative review (Xie et al., 2011). Meanwhile, reviewer expertise and reputation/status in a review website are found positively influencing consumers' attitudes and trust towards online reviews (Ayeh et al., 2013; Filieri, 2015; Vermeulen and Seegers, 2009) as well as hotel booking intentions (Zhao et al., 2015).

Even though current literature has yielded some fruitful and consistent findings, our analysis also indicates additional research effort may be undertaken to further examine reviewers' reputation features in the online review setting. For example, according to the social identity theory (Ashforth and Mael, 1989) and the similarity-attraction paradigm (Byrne, 1971), consumers tend to be attracted to the reviewers who "look" similar to them or had similar experience in the past (e.g., staying in the same level of hotels or liking the restaurants with similar features, etc.). Then, will consumers feel inclined to seek information that is provided by the reviewers who are "similar" to them? Will consumers share similar backgrounds, travel experience, and/or status on a review website tend to submit similar ratings or post comments about the same service failure issues? In fact, many online review websites now list the reviews written by a consumer's (review reader's) "friends" on other social networking sites to the top,

followed by other recent reviews with helpful votes (e.g., reviews written by a consumer's Facebook friends will be listed on the top). However, it is unclear if there is a significant difference among the reviews written by a real friend, a "friend" on social networking sites, a reviewer who is similar to "self," and a complete stranger.

6.4 Theme 4: Social features

The social features on online websites not only allow consumers to interact with one another by casting a vote for the reviews that deem helpful or enjoyable, but also enable managers to respond to consumers' reviews. In total, 20 studies (30%) reported such interactions among consumers and managers.

Our analysis suggests that there are only a limited number of studies that investigated the interactions among consumers. Research studies have found consumers tend to vote the following reviews more useful and enjoyable: those with extreme ratings (Park and Nicolau, 2015), congruent with one another (Zehrer et al., 2011), expressing reviewers' emotions (Lee et al., 2012b), and posted by reviewers who disclose their identities and with higher reputation (Liu and Park, 2015). Furthermore, consumers' perceived usefulness of online reviews positively influences their hotel online booking intentions (Zhao et al., 2015).

Comparatively, more recent research attention was put on manager response to online reviews as hospitality managers often consider online reviews as a mechanism to identify and solve customer problems (Park and Allen, 2013) or as a strategy to improve online review ratings (Min et al., 2014). By responding to online reviews strategically, managers can possibly increase the perceived usefulness of an online review (Liu and Park, 2015), improve review ratings (Min et al., 2014), turn unsatisfied consumers into

loyal ones (Pantelidis, 2010), and result in higher hotel performance (Kim et al., 2015; Xie et al., 2014), with one exception in which the presence of manager response was found negatively affecting consumers' purchasing intentions of a hotel (Mauri and Minazzi, 2013). However, the speed of how soon a hotel manager responds to an online complaint has no effect on review ratings (Min et al., 2014).

As the importance of manager response has been recognized, there are also numerous research attempts to help managers identify the effective ways to respond to online reviews. Generally speaking, managers working in hotels with different characteristics (e.g., different start ratings and popularity; luxury hotels vs. lower-tier hotels) seem to adopt various tactics in responding to online reviews (Park and Allen, 2013; Liu et al., 2015), but at the same time, Liu et al. (2015) concluded in their qualitative analysis that bolstering and enhancing are the most dominant strategies used by hotels. In another study, Sparks and Bradley (2014) developed a "Triple A" typology that comprised 19 specific forms of manager responses. When Internet users demonstrate negative consumer engagement behaviors, specific manager responses turn out to be more effective than those with generic responses (Wei et al., 2013).

When it comes to manager responses to negative online reviews, Lee and Cranage (2014) analyze the effect of NWOM (online negative word-of-mouth) on consumers' evaluations about an organization. They concluded that NWOM consensus effects are contingent on the responding strategies adopted by the managers. Levy et al. (2013) examined the manager responses to one-star hotel reviews and found (a) hotels actually seldom offered compensation adjustments online and (b) highly rated hotels often

responded to online complaints with appreciation, apologies, and explanations for what had gone wrong.

Overall, it appears that relatively little research attention was put on analyzing the social features among consumers. More investigations in this area may provide additional insights to better understand consumer interactions on online review websites. Current literature only reveals the importance of disclosing reviewers' demographic information or their reputation status on an online review website, but there is a lack of empirical evidence to answer some specific research questions, such as: Do consumers tend to respond to the consumers in specific age groups? And what is the specific role that gender play in this context? Literature in social science has suggested that male and female have distinguishable writing styles (Ishikawa, 2015) and that people hold different stereotypes of others with various ages (Kite et al., 2005). Such differences may also apply to the online review settings.

Alternatively, the importance of manager response and the types of manager responses have been widely discussed in literature. According to the social exchange theory (Homans, 1958), a two-sided, mutually contingent and rewarding process involves an exchange of information between managers and consumers. Such exchange of information is important, as it addresses customers' concerns about the hotel quality (in the case of negative reviews) and reinforce the confidence of brand value (in the case of positive reviews). However, only one study reported the timing effect of manager response (i.e., Min et al., 2014). Davidow (2003) conducted a comprehensive review of literature in complaint handling and concluded that (a) reasonable response speed is important only to the complaints with no financial loss, (b) timeliness becomes a critical

factor when there is an unreasonable delay, and (c) the acceptable response time is context and mode specific. Therefore, future research should further investigate the possibly important role that timing plays in the online review settings. Additionally, how managers may (or may not) strategically respond to certain types of consumer reviews could be another important topic that deserves more research attention. Such findings will provide new insights to the interactions between consumers and managers.

7. Thematic framework of online review research

Based on our systematic review, it becomes clear that the thematic features of online review are also tied with the key players/factors in the online review phenomenon. As illustrated in Figure 5 (from left to right), reputation features (Theme 3) are associated with those reviewers who write online reviews. Social features (Theme 4) are tied with managers and review readers. Online reviews, situated in the center of this visual diagram, are tied with the quantitative evaluation features (Theme 1) and verbal evaluation futures (Theme 2). The box on the right shows the possible outcomes being examined in current literature.

In the online review settings (Figure 5), reviewers are free to post comments about their experience of a product/service, indicating a “blue” direction from reviewers to online reviews. At the same time, reviewers’ background (reputation) can influence review readers (i.e., subsequent consumers) when they use reviewers’ comments for decision making, suggesting another “blue” direction from reviewers to review readers.

As another player in online reviews, managers may choose to respond to the reviews written by certain reviewers or those with specific content (e.g., a complaint), suggesting two “orange” arrows, one pointing to reviewers and the other pointing to

online reviews. At the same time, our review also suggests that manager response to online reviews may have significant influence on review readers' perceptions of online reviews and their purchasing decisions. Such influential relationship is presented with another "orange" arrow.

Besides manager responses and reviewers' background, online reviews (quantitative and verbal evaluation features) are also found to have significant impact on review readers. Such influential relationship is illustrated with a "green" arrow. With three different arrows pointing towards review readers at the same time, it implies that consumers will use the information drawing from reviewers, managers, and online reviews when making a decision.

In the end, it is concluded that reviewers, managers, and review readers are interacting with one another on the Internet through the medium of online reviews. Such interactive dynamics among these four features, consequently, serve as the drivers of two outcomes of online reviews (consumer decision-making and business performance), of which the influential relationship was presented in a big "purple" arrow. Specifically, the outcomes of consumer decision making include trust (e.g., Ladhari and Michaud, 2015; Filieri, 2015; Sparks and Browning, 2011; Sparks et al., 2013), attitude (e.g., Ayeh et al., 2013; Sparks et al., 2013; Casaló et al., 2015; Lee et al., 2012b; Vermeulen and Seegers, 2009), booking intentions (e.g., Casaló et al., 2015; Sparks and Browning, 2011; Lee et al., 2012a; Mauri and Minazzi, 2013; Tsao et al., 2015; Wang and Hung, 2015; Xie et al., 2011), satisfaction (Liu et al., 2013; Schuckert et al., 2015a; Xiang et al., 2015; Zhang et al., 2013; Zhou et al., 2014; Crotts et al., 2009), and customer experience (e.g., Pantelidis, 2010; Fu et al., 2015; Wang and Hung, 2015; Xiang et al., 2015), whereas the outcomes

of business performance include RevPAR (e.g., Blal and Sturman, 2014; Phillips et al., 2015; Xie et al., 2014), price (e.g., Zhang et al., 2011; Ye et al., 2014; Radojevic et al., 2015), and market share (Duverger, 2013). The visual diagram in Figure 5 presents an integrated framework with the dynamic relationships among different players/factors/themes. It is hoped this visual diagram can help practitioners better understand the concurrent literature in the context of online reviews and assist researchers in developing new research questions for future studies.

(Insert Figure 5 about here)

8. Summary of suggested directions for future research

Although much is known about online reviews, the advancement of technology is constantly challenging our current understanding and asking for new insights. We reviewed existing online review research and outlined the areas of past research intensity. Such focal areas serve as the pillars that characterize past research accomplishments and serve to map out future directions in online review research. By synthesizing our current knowledge of the domain, we aim to answer what should be the priorities for future research? What areas have received inadequate attention relative to others and thus require additional investigation? And finally, what are the key issues?

Based on our systematic analysis, the research questions or future directions discussed in each of the research theme discussed above can be summarized in Table 2. Our analysis suggests that a review's quantitative and verbal features (Theme 1 and Theme 2) have received the most attention from hospitality and tourism researchers. Current literature also reported overall consistent results. Therefore, future studies should address new research questions with unique angles, aiming to advance new theories or to

test innovated research methods. Other areas regarding reputation features (Theme 3) and social features (Theme 4) seemed to be under investigated. Additional research efforts are encouraged to better understand the impact of various contents or different types of reviewers on review readers with a diverse background. It is also important to examine the interactions among consumers in the online review environments.

(Insert Table 2 about here)

9. Conclusion and Limitations

As the effects of social media appear to be more salient in the hospitality and tourism industry today (Zhang et al., 2010; Kwok and Yu, 2015), online reviews become a highly popular topic among scholars and practitioners in the field. It is important to examine the online review research pattern that has emerged over the past 16 years in order to shed light on how the knowledge has developed over time. This study integrates and synthesizes the research inquiries and themes that have been discussed in extant consumer review literature. The papers discussed in this study are expected to represent the extant research status on online reviews because they are published in seven major hospitality and tourism journals that are widely cited and respected in the field. We observe that the literature on online reviews has enjoyed a rapid growth since 2000. As consumers increasingly rely on online information to make purchase decisions, it is important for marketers to acquire a deep understanding of the concepts and phenomenon connected to online reviews. The literature is still relatively new, and more work is needed to guide a business' online review strategies, but enough is known to identify the large streams of investigation and report early results. Reviewing landmark papers on consumer reviews is important as a prelude to developing a comprehensive understanding

of the state of consumer review research. The broad overview of relevant literature provides insights into potential areas for further research.

9.1 Theoretical contributions

A major contribution of this paper is the distillation of an emergent online review research framework that serves as an important source for academic scholars to appreciate the current trends and insight within hospitality and tourism while fostering greater integration and synthesis. The framework features four research themes expressed as broad questions generated through an analysis of conceptual and empirical papers published in the major publication outlets. Because the framework's themes are expressed in terms of the highest level of abstraction in online review research questioning, the framework is capable of capturing the essence of major research areas in the field while remaining general enough as to be “evergreen” and thus able to straddle several research epochs. As a framework anchored on four meta research questions, it is possible to put the research attention to the concerns of online reviews rather than individual functional areas or factors that have served as the traditional basis for research classification. In so doing, the proposed framework also fosters a more interdisciplinary perspective of the field. The various research themes in the framework also suggest a movement of inquiry from one theme to another. The framework is effective in capturing the identity of consumer review research as well as the multidisciplinary and multi-level nature of research in the field. Most importantly, it presents an integrative perspective of the field, thus anchoring research efforts in online reviews while at the same time, providing an in-built mechanism to stimulate further research.

The important implications on the peer scholarly community in online reviews must also be noted here. Online review scholars are not only the primary producers of research in the field, but also the participants in the editorial and peer review process. They themselves are the gatekeepers to what research outputs are. It is important to reiterate that the results of this study present an opportunity for the field of online reviews to achieve the level of integration and synthesis that have remained elusive. The past two decades of online reviews research have generated much in terms of potential inputs into the formulation of more expanded and integrative online review theories that encompass the four research themes in the framework described here.

9.2 Practical contributions

Unique practical implication of this study are generated from a thematic research framework, which ties the thematic features that are often discussed in academic research with the key players that are widely discussed among business managers and owners. Because the dynamic relationships among different players/themes are now synthesized, it becomes easier for industry practitioners, such as hospitality managers and social media marketers, to understand how each critical factor may influence the effect of online consumer reviews on their business outcomes. Accordingly, firm-level business tactics and strategies of managing online reviews can be therefore aligned with these business outcomes. As such social media practice evolves in the hospitality industry, continuous effort of examining relevant online review literature can be accommodated in the thematic framework. The method outlined in this study can be easily replicated. When the contemporary literature in online reviews continues to grow, additional coding notes

can be added in Table 1, and a more comprehensive thematic framework can be advanced from Figure 5.

Another practical implication to industry practitioners, when examining the online review phenomenon, is to adopt the data analytics approach using field data. In reviewing prior literature, the trend of data analytics research emerges in the online reviews domain, though there are still some studies relying on lab experiments or surveys (De Maeyer, 2012). With advanced technologies, the real-time Internet-enabled data provide a potentially better weapon in the arsenal of industry professionals, as they seek to accurately assess the effect of online reviews in nudging consumers towards sales --- a key goal that predates business operators in hospitality and tourism for decades. What sets Internet-enabled data apart is that these new activity-based metrics record people's actual behavior online, such as consumers' and hotel managers' (Srinivasan et al. 2016). Moreover, the Internet-enabled data offer potentially lower tracking costs (in contrast, most surveys are costly) and the opportunity for earlier warning (in contrast, most surveys might take numerous months) (Srinivasan et al. 2016). Our report highlights the studies using real-time Internet-enabled data. Such studies set a great example of how hospitality scholars and practitioners can work closely together for the benefits of both parties. As a result, we expect more collaborative efforts between academics and industry practitioners in capitalizing on data analytics, adding new knowledge to literature in regards to the effect of strategically important online review components.

9.3 Limitations

It is important to note that online review research is on an evolutionary path and will continue to advance in the coming years. For example, many online review websites

recently introduced a new feature that allows reviewers to upload and attach pictures of a business to their reviews, whereas in the past, all pictures uploaded by consumers were only saved under one public folder without attaching to a particular review. According to the feature-integrait theory of attention (Treisman and Gelade, 1980) and the media richness theory (Daft and Lengel, 1986), pictures and text may attract consumers in very distinguishable manners. Empirical studies in hospitality and tourism have revealed that messages with photos tend to attract more attention from Internet users on Facebook (Kwok and Yu, 2013; Kwok et al., 2015). This newly-introduced photo feature on online review websites may also create new impact on consumers' attitudes towards the reviews they read as well as the business being reviewed, and thus deserves more new research attention. We expect the inquiries of online reviews will spur continuous interest in the line of research. As online reviews keep evolving, we welcome more scholars to join us in the modest but significant efforts of literature sythesization.

Although this study presents a modest effort to synthesize online review research published in seven major hospitality and tourism journals, it may have missed some valuable research from other peer-reviewed journals. In addition, the systematic review approach has a qualitative nature, which may limit the generalization of the results and advocate for cautions in interpretations. As the area of research keeps involving, the breadth and width of these topics are expanding fast. Studies with a focus on literature sythesization serve as an important funnel for academics and practictioners to appreciate the current trends and insights.

References

- Arandilla, R. (2012), "A history you will love: how online social networking began".
Webdesigner. Accessed on November 14, 2014 from
<http://www.1stwebdesigner.com/design/history-social-networking/>
- Ashforth, B.E. and Mael, F. (1989), "Social Identity Theory and the Organization",
Academy of Management Review, Vol. 14 No. 1, pp. 20-39.
- Ayeh, J.K., Au, N. and Law, R. (2013), "Do we believe in TripAdvisor? Examining
credibility perceptions and online travelers' attitude toward using user-generated
content", *Journal of Travel Research*, Vol. 52 No. 4, pp. 437-452.
- Berezan, O., Raab, C., Tanford, S. and Kim, Y.S. (2015), "Evaluating loyalty constructs
among hotel reward program members using eWOM", *Journal of Hospitality &
Tourism Research*, Vol. 39 No. 2, pp. 198-224.
- Blal, I. and Sturman, M.C. (2014), "The differential effects of the quality and quantity of
online reviews on hotel room sales", *Cornell Hospitality Quarterly*, Vol.55 No.4,
pp.365-375.
- Bradley, G.L., Sparks, B.A. and Weber, K. (2015), "The stress of anonymous online
reviews: a conceptual model and research agenda", *International Journal of
Contemporary Hospitality Management*, Vol.27 No.5, pp.739-755.
- Brewer, J. and Hunter, A. (2006), *Foundations of Multimethod Research: Synthesizing
Styles*. Thousand Oaks, CA: Sage.
- Briggs, S., Sutherland, J. and Drummond, S. (2007), "Are hotels serving quality? An
exploratory study of service quality in the Scottish hotel sector", *Tourism
Management*, Vol.28 No.4, pp.1006-1019.

- Briner, R.B. and Walshe, N.D. (2015), "From passively received wisdom to actively constructed knowledge: teaching systematic review skills as a foundation of evidence-based management", *Academy of Management Learning & Education*, Vol 2015 No. 1, pp. 63-80.
- Bulchand-Gidumal, J., Melián-González, S. and Lopez-Valcarcel, B.G. (2013), "A social media analysis of the contribution of destinations to client satisfaction with hotels", *International Journal of Hospitality Management*, Vol.35 pp.44-47.
- Byrne D. (1971), *The Attraction Paradigm*. New York: Academic Press.
- Cantallops, S.A. and Salvi, F. (2014), "New consumer behavior: A review of research on eWOM and hotels." *International Journal of Hospitality Management*, Vol. 36 (January), pp. 41-51.
- Casaló, L.V., Flavián, C., Guinalíu, M. and Ekinci, Y. (2015), "Do online hotel rating schemes influence booking behaviors?" *International Journal of Hospitality Management*, Vol. 49, pp. 28-36.
- Chen, Y. and Xie, J. (2008), "Online consumer reviews: Word-of-mouth as a new element of marketing communication mix", *Management Science*, Vol. 54 No. 3, pp. 477-491.
- Chaves, M. S., Gomes, R. and Pedron, C. (2012), "Analysing reviews in the Web 2.0: Small and medium hotels in Portugal", *Tourism Management*, Vol.33 No.5, pp.1286-1287.
- Chrisman, J.J., Hofer, C.W. and Boulton, W.B., (1988), "Toward a system for classifying business strategies", *The Academy of Management Review*, Vol. 13 No. 3, pp. 413-428.

- Cong, L., Wu, B., Morrison, A.M., Shu, H. and Wang, M. (2014), "Analysis of wildlife tourism experiences with endangered species: An exploratory study of encounters with giant pandas in Chengdu, China", *Tourism Management*, Vol.40, pp. 300-310.
- Crotts, J.C., Mason, P.R. and Davis, B. (2009), "Measuring guest satisfaction and competitive position in the hospitality and tourism industry an application of stance-shift analysis to travel blog narratives", *Journal of Travel Research*, Vol.48 No.2, pp. 139-151.
- Daft, R.L. and Lengel, R.H. (1986), "Organizational information requirements, media richness and structural design", *Management Science*, Vol. 32 No. 5, pp. 554-571.
- Davidow, M. (2003), "Organizational Responses to Customer Complaints: What Works and What Doesn't", *Journal Of Service Research*, Vol. 5 No. 3, pp. 225-250.
- De Maeyer, P. (2012), "Impact of online consumer reviews on sales and price strategies: a review and directions for future research", *Journal of Product & Brand Management*, Vol. 21 No. 2, pp. 132-139.
- Dellarocas, C. (2003), "The digitization of word of mouth: Promise and challenges of online feedback mechanisms", *Management Science*, Vol. 49 No. 10, pp. 1407-1424.
- Denzin, N.K. and Lincoln, Y.S., (Eds). (2005), *The Sage Handbook of Qualitative Research (3rd ed.)*. Thousand Oaks, CA: Sage
- Duan, W., Gu, B., and Whinston, A.B. (2008), "Do online reviews matter? An empirical investigation of panel data", *Decision Support Systems*, Vol. 45 No. 4, pp. 1007-1016.

- Duverger, P. (2013), "Curvilinear effects of user-generated content on hotels' market share: A dynamic panel-data analysis", *Journal of Travel Research*, Vol. 52 No. 4, pp. 465-478.
- Fang, X., Singh, S. and Ahluwalia, R. (2007), "An Examination of Different Explanations for the Mere Exposure Effect". *Journal of Consumer Research*, Vol. 34 No. 1, pp. 97-103.
- Filieri, R. (2015), "Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth", *Tourism Management*, Vol. 51, pp. 174-185.
- Filieri, R. and McLeay, F. (2014), "E-WOM and accommodation an analysis of the factors that influence travelers' adoption of information from online reviews", *Journal of Travel Research*, Vol. 53 No. 1, pp. 44-57.
- Fong, L.H.N., Law, R., Tang, C.M.F. and Yap, M.H.T. (2016), "Experimental research in hospitality and tourism: A critical review", *International Journal of Contemporary Hospitality Management*, Vol. 28, No. 2, pp. 246-266.
- Fu, X., Tanyatanaboon, M. and Lehto, X.Y. (2015), "Conceptualizing transformative guest experience at retreat centers", *International Journal of Hospitality Management*, Vol. 49, pp. 83-92.
- Ghose, A., Ipeirotis, P. G. and Li, B. (2012), "Designing ranking systems for hotels on travel search engines by mining user-generated and crowd-sourced content", *Marketing Science*, Vol. 31 No. 3, pp. 493-520.
- Given, L.M. (2008). *The Sage Encyclopedia of Qualitative Research Methods*. Los Angeles: Sage Publications.

- Godes, D. and Mayzlin, D. (2004), "Using online conversations to study WOM communications", *Marketing Science*, Vol. 23 No. 4, pp. 545-560.
- Grazian, F. (1996), "Frequently asked questions (FAQ) about readability", *Public Relations Quarterly*, Vol. 41 No. 3, pp. 19-20.
- Gu, B. and Ye, Q. (2014), "First step in social media: measuring the influence of online management responses on customer satisfaction", *Production and Operations Management*, Vol. 23 No. 4, pp. 570-582.
- Gursoy, D. and Sandstrom, J.K. (2016), "An updated ranking of hospitality and tourism journals", *Journal of Hospitality and Tourism Research*, Vol. 40 No. 1, pp. 3-18.
- Hennig-Thurau, T., Malthouse, E.C., Gensler, C.F.S., Lobschat, L., Rangaswamy, A. and Skiera, B. (2010), "The impact of new media on customer relationships", *Journal of Service Research*, Vol. 13 No. 3, pp. 311-330.
- Homans, G. (1958). *Social Behavior: Its Elementary Forms*. New York: Harcourt Brace Jovanovich.
- Ip, C., Lee, H.A. and Law, R. (2012). "Profiling the users of travel websites for planning and online experience sharing", *Journal of Hospitality & Tourism Research*, Vol. 36, No. 3, pp. 418-426.
- Ishikawa, Y. (2015). "Gender differences in vocabulary use in essay writing b university students", *Procedia – Social and Behavioral Sciences*, Vol. 192, pp. 593-600.
- Kahraman, H.T., Sagiroglu, S. and Colak, I. (2013). "The development of intuitive knowledge classifier and the modeling of domain dependent data", *Knowledge-Based Systems*, Vol. 37, pp.283-295.

- Kaiser, C., Schlick, S., and Bodendorf, F. (2011). "Warning system for online market research - Identifying critical situations in online opinion formation", *Knowledge-Based Systems*, Vol. 24 No. 6, pp.824-836.
- Kim, S. and Lehto, X. Y. (2012), "The voice of tourists with mobility disabilities: insights from online customer complaint websites", *International Journal of Contemporary Hospitality Management*, Vol. 24 No. 3, pp. 451-476.
- Kim, W. G., Lim, H. and Brymer, R.A. (2015), "The effectiveness of managing social media on hotel performance", *International Journal of Hospitality Management*, Vol. 44, pp. 165-171.
- Kite M, Stockdale G, Whitley B. and Johnson B. (2005), "Attitudes Toward Younger and Older Adults: An Updated Meta-Analytic Review", *Journal of Social Issues*, Vol. 61 No. 2, pp. 241-266.
- Kwok, L. (2012), "Exploratory-triangulation design in mixed methods studies: A case of examining graduating seniors who meet hospitality recruiters' selection criteria." *Tourism and Hospitality Research*, Vol. 12 No. 3, p. 125-138.
- Kwok, L. and Yu, B. (2013), "Spreading social media messages on Facebook: An analysis of restaurant business-to-consumer communications", *Cornell Hospitality Quarterly*, Vol. 54 No. 1, pp. 84-94.
- Kwok, L. and Yu, B. (2015), "Taxonomy of Facebook messages in business-to-consumer communications: What really works?" *Tourism and Hospitality Research*, OnlineFirst, DOI: 10.1177/1467358415600214.

- Kwok, L. and Xie, K.L. (2016), "Factors contributing to the helpfulness of online hotel reviews: Does manager response play a role?", *International Journal of Contemporary Hospitality Management*, Vol. 28 No. 11 (in press).
- Kwok, L., Zhang, F., Huang, Y.K., Yu, B., Maharabhushanam, P. and Rangan, K. (2015), "Documenting business-to-consumer (B2C) communications on Facebook: What have changed among restaurants and consumers?" *Worldwide Hospitality and Tourism Themes*, Vol. 7 No. 3, pp. 283-294.
- Ladhari, R. and Michaud, M. (2015), "eWOM effects on hotel booking intentions, attitudes, trust, and website perceptions", *International Journal of Hospitality Management*, Vol. 46, pp. 36-45.
- Law, R., Leung, D. and Cheung, C. (2012), "A systematic review, analysis, and evaluation of research articles in the Cornell Hospitality Quarterly", *Cornell Hospitality Quarterly*, Vol. 53 No. 4, pp. 365-381.
- Lee, C.H. and Cranage, D.A. (2014), "Toward understanding consumer processing of negative online word-of-mouth communication: The roles of opinion consensus and organizational response strategies", *Journal of Hospitality & Tourism Research*, Vol. 38 No. 3, pp. 330-360.
- Lee, H., Reid, E. and Kim, W.G. (2012a), "Understanding knowledge sharing in online travel communities: antecedents and the moderating effects of interaction modes", *Journal of Hospitality & Tourism Research*, Vol. 38 No. 2, pp. 222-242.
- Lee, W., Xiong, L. and Hu, C. (2012b), "The effect of Facebook users' arousal and valence on intention to go to the festival: Applying an extension of the technology

- acceptance model”, *International Journal of Hospitality Management*, Vol. 31 No. 3, pp. 819-827.
- Levy, S.E., Duan, W. and Boo, S. (2013), “An analysis of one-star online reviews and responses in the Washington, DC, lodging market”, *Cornell Hospitality Quarterly*, Vol. 54 No. 1, pp. 49-63.
- Li, G., Law, R., Vu, H.Q. and Rong, J. (2013), “Discovering the hotel selection preferences of Hong Kong inbound travelers using the Choquet Integral”, *Tourism Management*, Vol. 36, pp. 321-330.
- Li, G., Law, R., Vu, H.Q., Rong, J. and Zhao, X.R. (2015), “Identifying emerging hotel preferences using Emerging Pattern Mining technique”, *Tourism Management*, Vol. 46, pp. 311-321.
- Liu, B., Kim, H. and Pennington-Gray, L. (2015), “Responding to the bed bug crisis in social media”, *International Journal of Hospitality Management*, Vol. 47, pp. 76-84.
- Liu, S., Law, R., Rong, J., Li, G. and Hall, J. (2013), “Analyzing changes in hotel customers’ expectations by trip mode”, *International Journal of Hospitality Management*, Vol. 34, 359-371.
- Liu, Z. and Park, S. (2015), “What makes a useful online review? Implication for travel product websites”, *Tourism Management*, Vol. 47, pp. 140-151.
- Lu, W. and Stepchenkova, S. (2012), “Ecotourism experiences reported online: Classification of satisfaction attributes”, *Tourism Management*, Vol. 33 No.3, pp. 702-712.

- Mauri, A.G. and Minazzi, R. (2013), "Web reviews influence on expectations and purchasing intentions of hotel potential customers", *International Journal of Hospitality Management*, Vol. 34, pp. 99-107.
- Melián-González, S., Bulchand-Gidumal, J. and López-Valcárcel, B. G. (2013), "Online customer reviews of hotels as participation increases, better evaluation is obtained", *Cornell Hospitality Quarterly*, Vol. 54 No. 3, pp. 274-283.
- Min, H., Lim, Y. and Magnini, V.P. (2014), "Factors affecting customer satisfaction in responses to negative online hotel reviews: The impact of empathy, paraphrasing, and speed", *Cornell Hospitality Quarterly*, Vol. 56 No. 2, pp. 223-231.
- Mkono, M. (2012), "Authenticity does matter", *Annals of Tourism Research*, Vol. 39 No.1, pp. 480-483.
- Mkono, M. (2013a), "African and Western tourists: Object authenticity quest?", *Annals of Tourism Research*, Vol. 41, pp. 195-214.
- Mkono, M. (2013b), "Using net-based ethnography (netnography) to understand the staging and marketing of "authentic African" dining experiences to tourists at Victoria falls", *Journal of Hospitality & Tourism Research*, Vol. 37 No. 2, pp. 184-198.
- Monfil-Contreras E.U., Alor-Hernández, G., Cortes-Robles, G., Rodriguez-Gonzalez, A. and Gonzalez-Carrasco, I. (2013). "RESYGEN: A recommendation system generator using domain-based heuristics", *Expert Systems with Applications: An International Journal*, Vol 40 No. 1, pp.242-256.
- Nicely, A. and Ghazali, R. M. (2014), "Demystifying visitor harassment", *Annals of Tourism Research*, Vol. 48, pp. 266-269.

- Nieto, J., Hernández-Maestro, R.M. and Muñoz-Gallego, P.A. (2014), "Marketing decisions, customer reviews, and business performance: The use of the Toprural website by Spanish rural lodging establishments", *Tourism Management*, Vol. 45, pp. 115-123.
- Noone, B.M. and McGuire, K.A. (2014), "Effects of price and user-generated content on consumers' prepurchase evaluations of variably priced services", *Journal of Hospitality & Tourism Research*, Vol. 38 No. 4, pp. 562-581.
- O'Mahony, M.P. and Smyth, B. (2010), "A classification-based review recommender", *Knowledge-Based Systems*, Vol. 23 No. 4, pp. 323-329.
- Pantelidis, I. S. (2010), "Electronic meal experience: A content analysis of online restaurant comments", *Cornell Hospitality Quarterly*, Vol. 51 No. 4, pp. 483-491.
- Papathanassis, A. and Knolle, F. (2011), "Exploring the adoption and processing of online holiday reviews: A grounded theory approach", *Tourism Management*, Vol. 32 No.2, pp. 215-224.
- Park, S.Y. and Allen, J.P. (2013), "Responding to online reviews problem solving and engagement in hotels", *Cornell Hospitality Quarterly*, Vol. 54 No. 1, pp. 64-73.
- Park, S. and Nicolau, J.L. (2015), "Asymmetric effects of online consumer reviews", *Annals of Tourism Research*, Vol. 50, pp. 67-83.
- Phillips, P., Zigan, K., Silva, M. M. S. and Schegg, R. (2015), "The interactive effects of online reviews on the determinants of Swiss hotel performance: A neural network analysis", *Tourism Management*, Vol. 50, pp. 130-141.

- Radojevic, T., Stanistic, N. and Stanic, N. (2015), "Ensuring positive feedback: Factors that influence customer satisfaction in the contemporary hospitality industry", *Tourism Management*, Vol. 51, pp. 13-21.
- Sab, J. (2011), "Online advertising in the tourism industry and its impact on consumers", *Tourism & Management Studies*, No. 7, pp. 101-107.
- Schuckert, M., Liu, X. and Law, R. (2015a), "A segmentation of online reviews by language groups: How English and non-English speakers rate hotels differently", *International Journal of Hospitality Management*, Vol. 48, pp. 143-149.
- Schuckert, M., Liu, X. and Law, R. (2015b), "Hospitality and tourism online reviews: recent trends and future directions", *Journal of Travel and Tourism Marketing*, Vol. 32, pp. 608-621.
- Sparks, B.A. and Bradley, G.L. (2014), "A "Triple A" typology of responding to negative consumer-generated online reviews", *Journal of Hospitality & Tourism Research*, DOI: 10.1177/1096348014538052.
- Sparks, B.A. and Browning, V. (2011), "The impact of online reviews on hotel booking intentions and perception of trust", *Tourism Management*, Vol. 32 No. 6, pp. 1310-1323.
- Sparks, B.A., Perkins, H.E. and Buckley, R. (2013), "Online travel reviews as persuasive communication: The effects of content type, source, and certification logos on consumer behavior", *Tourism Management*, Vol. 39, pp. 1-9.
- Srinivasan, S., Rutz, O. J. and Pauwels, K. (2016), "Paths to and off purchase: quantifying the impact of traditional marketing and online consumer activity", *Journal of the Academy of Marketing Science*, Vol. 44 No. 4, pp. 440-453.

- Stepchenkova, S. and Zhan, F. (2013), “Visual destination images of Peru: Comparative content analysis of DMO and user-generated photography”, *Tourism Management*, Vol. 36, pp. 590-601.
- Stringam, B.B. and Gerdes Jr, J. (2010). “An analysis of word-of-mouth ratings and guest comments of online hotel distribution sites”, *Journal of Hospitality Marketing & Management*, Vol. 19 No. 7, pp. 773-796.
- Treisman, A.M. and Gelade, G. (1980), “A feature-integration theory of attention”, *Cognitive Psychology*, Vol. 12 No. 1, pp. 97-136
- Tsao, W.C., Hsieh, M.T., Shih, L.W. and Lin, T.M. (2015), “Compliance with eWOM: The influence of hotel reviews on booking intention from the perspective of consumer conformity”, *International Journal of Hospitality Management*, Vol. 46, pp. 99-111.
- Vermeulen, I. E. and Seegers, D. (2009), “Tried and tested: The impact of online hotel reviews on consumer consideration”, *Tourism Management*, Vol. 30 No.1, pp. 123-127.
- Viglia, G., Furlan, R. and Ladrón-de-Guevara, A. (2014), “Please, talk about it! When hotel popularity boosts preferences”, *International Journal of Hospitality Management*, Vol. 42, pp. 155-164.
- Wang, S. and Hung, K. (2015), “Customer perceptions of critical success factors for guest houses”, *International Journal of Hospitality Management*, Vol. 48, pp. 92-101.

- Wei, W., Miao, L. and Huang, Z. J. (2013), "Customer engagement behaviors and hotel responses", *International Journal of Hospitality Management*, Vol. 33, pp. 316-330.
- Wu, M.Y., Wall, G. and Pearce, P.L. (2014), "Shopping experiences: international tourists in Beijing's silk market", *Tourism Management*, Vol. 41, pp. 96-106.
- Xiang, Z., Schwartz, Z., Gerdes, J. H. and Uysal, M. (2015), "What can big data and text analytics tell us about hotel guest experience and satisfaction?", *International Journal of Hospitality Management*, Vol. 44, pp. 120-130.
- Xie, H.J., Miao, L., Kuo, P.J. and Lee, B.Y. (2011), "Consumers' responses to ambivalent online hotel reviews: The role of perceived source credibility and pre-decisional disposition", *International Journal of Hospitality Management*, Vol. 30 No.1, pp. 178-183.
- Xie, K.L., Zhang, Z. and Zhang, Z. (2014), "The business value of online consumer reviews and management response to hotel performance", *International Journal of Hospitality Management*, Vol. 43, pp. 1-12.
- Xu, J.B. and Chan, A. (2010). "A conceptual framework of hotel experience and customer-based brand equity: Some research questions and implications", *International Journal of Contemporary Hospitality Management*, Vol. 22, No. 2, pp. 174 – 193.
- Ye, Q., Law, R. and Gu, B. (2009), "The impact of online user reviews on hotel room sales", *International Journal of Hospitality Management*, Vol. 28 No. 1, pp. 180-182.

- Ye, Q., Li, H., Wang, Z. and Law, R. (2014), "The Influence of Hotel Price on Perceived Service Quality and Value in E-Tourism An Empirical Investigation Based on Online Traveler Reviews", *Journal of Hospitality & Tourism Research*, Vol. 38 No.1, pp. 23-39.
- Yen, C.L.A. and Tang, C.H.H. (2015), "Hotel attribute performance, eWOM motivations, and media choice", *International Journal of Hospitality Management*, Vol. 46, pp. 79-88.
- Zehrer, A., Crotts, J. C. and Magnini, V. P. (2011), "The perceived usefulness of blog postings: An extension of the expectancy-disconfirmation paradigm", *Tourism Management*, Vol. 32 No.1, pp. 106-113.
- Zhang, J.J. and Mao, Z. (2012). "Image of all hotel scales on travel blogs: Its impact on customer loyalty", *Journal of Hospitality Marketing & Management*, Vol. 21 No. 2, pp.113-131.
- Zhang, L., Wu, L.L. and Mattila, A.S. (2014), "Online reviews: The role of information load and peripheral factors", *Journal of Travel Research*, DOI: 10.1177/0047287514559032.
- Zhang, Z., Ye, Q. and Law, R. (2011), "Determinants of hotel room price: An exploration of travelers' hierarchy of accommodation needs", *International Journal of Contemporary Hospitality Management*, Vol. 23 No.7, pp. 972-981.
- Zhang, Z., Ye, Q., Law, R. and Li, Y. (2010), "The impact of e-word-of-mouth on the online popularity of restaurants: A comparison of consumer reviews and editor reviews", *International Journal of Hospitality Management*, Vol. 29 No. 4, pp. 694-700.
- Zhang, Z., Zhang, Z., Wang, F., Law, R. and Li, D. (2013), "Factors

- influencing the effectiveness of online group buying in the restaurant industry”, *International Journal of Hospitality Management*, Vol. 35, pp. 237-245.
- Zhao, X., Wang, L., Guo, X. and Law, R. (2015), “The influence of online reviews to online hotel booking intentions”, *International Journal of Contemporary Hospitality Management*, Vol. 27 No.6, pp. 1343-1364.
- Zhou, L., Ye, S., Pearce, P.L. and Wu, M.Y. (2014), “Refreshing hotel satisfaction studies by reconfiguring customer review data”, *International Journal of Hospitality Management*, Vol. 38, pp. 1-10.
- Zhu, F. and Zhang, X. (2010), “Impact of online consumer reviews on sales: The moderating role of product and consumer characteristics”, *Journal of Marketing*, Vol. 74 No. 2, pp. 133-48.

Table 1: The Journal Articles of Analysis (Coding Notes)

ID	Bibliography	Theme 1: Quantitative Features	Theme 2: Verbal Features	Theme 3: Reputation Features	Theme 4: Social Features	Research Context / Subjects / Methodology	Key Research Findings
1	ATR1: Mkono (2012)	-	Authenticity of reviews	-	-	Restaurant websites / 40 reviews for 2 restaurants / Qualitative (Netnography)	Tourists are no longer concerned with authenticity, which is, at best, an oversimplification, and at worst, false.
2	ATR2: Mkono (2013a)	-	Review text	-	-	TripAdvisor for hotels / 678 reviews / Qualitative (Netnography, Ethnography, and Thematic Analysis)	Object authenticity is not universally relevant as a touristic quest.
3	ATR3: Nicely and Ghazali (2014)	-	Review text	-	-	TripAdvisor for hotels / 53 reviews / Qualitative (Thematic Content Analysis and Phenomenology)	This study identified 26 specific visitor harassment behaviors, captured, and summarized the full spectrum of harassment behaviors (individual and group behaviors; contact and non-contact). Additionally, 12 visitor emotional responses to the local traders' aggressive seller behaviors were also identified.
4	ATR4: Park and Nicolau (2015)	Review ratings	Elaborateness and readability of reviews	Reviewer identity, expertise, and reputation	Votes of review usefulness and enjoyment	Yelp for restaurants / 5,090 reviews for 45 restaurants / Quantitative (Count model)	People perceive reviews of extreme ratings (positive or negative) as more useful and enjoyable than those with moderate ratings. In addition, the size of the asymmetric effect of online reviews depends on whether they are positive or negative.
5	CQ1: Blal and Sturman (2014)	Review ratings and volume	-	-	-	TripAdvisor for hotels / Reviews for 319 hotels / Quantitative (Hierarchical linear modeling)	The valence of reviews has a greater effect on luxury hotels' RevPAR, while the volume of reviews has a greater effect on lower-tier hotels.
6	CQ2: Levy et al. (2013)	Review ratings	Negative one-star review text	Reviewers' nationality	Management response	Ten popular online review websites for hotels / 1,946 one-star reviews and 225 management responses from 86 hotels in D.C. / Qualitative (Content analysis) and quantitative (Chi-square and logistic regression)	The most common complaints are related to front desk staff, bathroom issues, room cleanliness, and guestroom noise issues. Highly rated hotels often respond to online complaints with appreciation, apologies, and explanations for what had gone wrong. Compensation adjustments are rarely mentioned by any hotel.
7	CQ3: Melián-González et al. (2013)	Review ratings and volume	-	-	-	TripAdvisor for hotels / reviews of 16,680 hotels / Quantitative (Regression with ANOVA)	Early reviews of a business tend to be disproportionately negative. As the number of reviews increases, the valence becomes more balanced, and the negative effect is mitigated. Moreover, positive comments are more common than negative reviews.
8	CQ4: Min et al. (2014)	-	Review text	-	Management response	Experiment for hotels / 176 university students / Quantitative (ANOVA)	Inserting an empathy statement in response to negative reviews can improve a hotel's ratings. The speed with which the hotel responds to an online complaint did not influence survey participants' rating of the response.
9	CQ5: Pantelidis (2010)	Review ratings and volume	Review text	-	Management response	An online restaurant guide / 2,471 reviews for 300 restaurant / Qualitative (Content analysis)	Customers consider food, service, ambience, price, menu, and decor (in that order) when reflecting on their experiences. Restaurant managers who respond successfully to comments in electronic forums can turn an unsatisfied customer into a loyal one.
10	CQ6: Park and Allan (2013)	Review valence: positive vs. negative reviews	-	-	Management response	TripAdvisor for hotels / 5,639 reviews for 4 hotels / Qualitative (Case study)	Hotels responding frequently tended to consider reviews as an honest gauge of consumer sentiment and had a collaborative communication style; reviews were handled in-house. Non-responders believed that reviews represented only extremely positive or negative views and would meet only as needed; they tended to outsource the tasks. All four hotels viewed posted comments as one mechanism to identify and solve customer problems, with one hotel making customer reviews a part of a strategic approach to an ongoing relationship.
11	IJCHM1: Bradley et al. (2015)	Review valence: stress of negative reviews	-	-	-	Qualitative (literature review study)	This paper reports the major antecedents, correlates, and consequences of this phenomenon and proposed four broad strategies to reduce the prevalence and impact of negative online reviews.
12	IJCHM2: Kim and Lehto (2012)	-	Customer complaints reviews	-	-	Eleven popular online review websites for hotels / 316 customer complaints / Critical	Three dimensions of service failures from online complaints were identified: service delivery failure, unfulfilled special requests, and unsolicited employee conduct.

						Incident Technique	
13	IJCHM3: Xu and Chan (2010)	WOM (Phenomenon in general)	-	-	-	Qualitative (Literature review study)	WOM is proposed to generate strong effects on brand awareness. Advertising and WOM can be used to generate brand awareness and brand associations. Service performance should be nurtured to predominantly precipitate quality of experience, although WOM also has a strong effect on that.
14	IJCHM4: Zhang et al. (2011)	Review ratings	-	-	-	TripAdvisor for hotels / Reviews for 243 hotels / Quantitative (Regressions)	Room quality and location are important determinants of room price for the industry, but attributes that can influence room rates differ greatly among hotel segments.
15	IJCHM5: Zhao et al. (2015)	Review ratings and volume	Comprehensiveness of Review text	Reviewer expertise	Perceived usefulness	Experiment for hotels/ 269 questionnaires / Quantitative (Factor analysis, correlation and regression)	The usefulness of online reviews, reviewer expertise, the timeliness of online reviews, volume of online reviews, and comprehensiveness of online reviews will positively influence hotel online bookings while negative online reviews will negatively influence hotel online bookings.
16	IJHM1: Bulchand-Gidumal et al. (2013)	Review ratings	-	-	-	TripAdvisor for hotels / Reviews for 7,173 hotels / Quantitative (Multilevel regression)	About 14.03% of the ratings of hotels are due to the destination.
17	IJHM2: Casaló et al. (2015)	Review ratings	-	-	Perceived credibility and usefulness of various review sources	TripAdvisor for hotels/ Reviews of 200 users / Quantitative (ANOVA)	Online rating lists are more useful and credible when published by well-known online travel communities (e.g., TripAdvisor). More favorable attitudes toward a hotel and higher booking intentions emerge when the hotel appears in best hotels lists. For the entries on best hotels lists, better attitudes and higher booking intentions are seen on TripAdvisor. For entries on a worst hotel list, attitudes and booking intentions decrease even further if the list appears on TripAdvisor.
18	IJHM3: Fu et al. (2015)	-	Review text	-	-	TripAdvisor for resorts /119 online reviews for 4 retreats / Qualitative (Thematic analysis and cluster analysis)	Their analysis dissected the transformative retreat experience, including guests' pre-trip state of mind, domains of changes, retreat activity participation, and stimuli in the service environment. The changes were further conceptualized on a series of spectra based on durability, magnitude, and tangibility.
19	IJHM4: Kim et al. (2015)	Review ratings, volume, and variation	-	-	Management response	TripAdvisor for hotels / Reviews for 128 hotels in 65 US cities / Quantitative (regression)	Overall ratings are the most salient predictor of hotel performance, followed by response to negative comments. The better the overall ratings and the higher the response rate to negative comments, the higher the hotel performance.
20	IJHM5: Ladhari and Michaud (2015)	Review valence	-	-	Perceived trust to hotels	Facebook for hotels / Response from 800 students / Quantitative (ANOVA)	The valence of Facebook comments on a hotel is positively related to all the outcome variables (e.g., perceived trust to hotels). In addition, trust in the comments moderate the effects of the relationships.
21	IJHM6: Lee et al. (2012b)	Review valence	-	-	Perceived usefulness	Facebook for events / Survey with 800 Facebook event fans / Quantitative (SEM)	Users' emotions exhibited on the Facebook event page have a significant impact on the perceived usefulness, perceived ease of use, and perceived enjoyment of such social media marketing. However, only the last construct significantly influences users' attitudes and intentions toward an event.
22	IJHM7: Liu et al. (2015)	Review ratings and popularity ranking	Reviews about bed bug complaints	-	Manager response	TripAdvisor for hotels / 583 reviews and 176 manager response / Mixed methods (Logistic regression analysis and content analysis)	The quantitative findings revealed hotels' response behaviors were associated with organizational factors (e.g. hotel's popularity, average rating, and star rating) and the rating of online reviews. The qualitative results suggested hotels employed various types of strategies in responses, which were dominated by bolstering and enhancing strategies.
23	IJHM8: Liu et al. (2013)	Attribute ratings	Review text	Reviewer characteristics	-	TripAdvisor for hotels / 583 online reviews and 176 survey responses / Qualitative (Sentiment mining and association rule mining)	The empirical results demonstrate differences in both customer expectation and satisfaction when the same traveler engages in different trip modes
24	IJHM9: Mauri and Minazzi (2013)	Review valence	-	-	Manager response	Experiment for hotels/ 349 surveys / Quantitative (Correlation)	The valence of reviews is found positively related to both hotel purchasing intention and expectations of the customers. On the contrary, the presence of hotel managers' responses to guests' reviews has a negative impact on consumers' purchasing intentions.
25	IJHM10: Schuckert et al. (2015a)	Review ratings	Review text (English and non-English comments)	-	-	TripAdvisor for hotels / 86,000 reviews / Quantitative (Multiple t tests and correlation analysis)	English speaking guests prefer high-class hotels. English speaking guests desire bigger rooms in four-star hotels while non-English speaking guests are more fastidious about five-star hotels and demand higher service quality. Satisfaction difference is bigger in lower class hotels or in hotels with fewer English-speaking guests.

26	IJHM11: Tsao et al. (2015)	Review ratings and volume	-	-	-	TripAdvisor for hotels / 142 surveys in Study I and 391 surveys in Study II / Quantitative (Factorial design, ANOVA)	Positive reviews are more effective than negative reviews in enhancing booking intentions. Increasing the number of reviews can magnify the influence of review valence on booking intentions. Reading positive reviews can have a stronger effect on booking intentions among individuals who are strongly inclined toward conformity. A greater number of reviews proved to be more persuasive among individuals displaying a low degree of conformity. A larger number of negative reviews can be more damaging to the booking intentions of conformist individuals. In contrast, a larger number of positive reviews were shown to have a greater impact on non-conformists.
27	IJHM12: Viglia et al. (2014)	Review ratings and volume	-	Review readers' age and gender	-	Online experiment for hotels/ 168 surveys / Quantitative (Conjoint analysis, hierarchical Bayes regression)	Consumers' preference increases with the number of reviews, independently of the average evaluation being high or low. This novel result is mediated by demographics: young people, and in particular young males, are less affected by popularity, relying more on quality.
28	IJHM13: Wang and Hung (2015)	-	Opinion extracted from positive and negative review text	-	-	Ctrip for hotels / 211 reviews with return intention and 194 negative comments / Mixed methods (Content analysis and multiple regressions)	Seven major critical success factors were identified: home atmosphere, room facilities, other facilities, service, cleanliness, location, and value for money, with several sub-issues under each major aspect were also determined. Value for money was found to be the primary factor in influencing customer experience, followed by home atmosphere, and three other factors, including cleanliness, location and room facilities, all influence customer experience significantly.
29	IJHM14: Wei et al. (2013)	Review valence	-	-	Manager response: generic vs. specific	TripAdvisor for hotels / Response from 101 students / Quantitative (MANOVA)	Customers' perceived motivational drivers underlying consumer engagement behaviors (CEBs) vary with their targets, and positive CEBs enjoy more favorable evaluations than negative CEBs. For management responses to CEBs, the perceived motivational drivers were determined by the specificity of responses and the valence of CEBs. The effectiveness of specific management responses was rated higher than that of generic responses to negative CEBs.
30	IJHM15: Xiang et al. (2015)	Review ratings	Review text	-	-	Expedia for hotels / 60,648 reviews for 10,537 hotels / Qualitative (Text analytical approach)	Several dimensions of guest experience carry various weights and have novel, meaningful semantic compositions. The association between guest experience and satisfaction appears strong, suggesting that these two domains of consumer behaviors are inherently connected.
31	IJHM16: Xie et al. (2011)	-	-	Reviewer characteristics: identity disclosure)	Perceived credibility	Experiment for hotels / Response from 274 students / Quantitative (ANOVA and regression)	The presence of personal identification information (PII) positively affects the perceived credibility of the online reviews. When coupled with ambivalent online reviews, the presence of PII significantly lowers consumers' hotel booking intentions.
32	IJHM17: Xie et al. (2014)	Review ratings, volume, and variation	-	-	Management response	TripAdvisor for hotel / 4,994 observations of 843 hotels / Quantitative (Linear regression)	Overall rating, attribute ratings of purchase value, location and cleanliness, variation and volume of consumer reviews, and the number of management responses are significantly associated with hotel performance. In addition, variation and volume of consumer reviews moderate the relationship between overall rating and hotel performance. Management responses, together with variation and volume of consumer reviews, moderate the relationship between certain attribute ratings and hotel performance.
33	IJHM18: Ye et al. (2009)	Review ratings, volume, and variation	-	-	-	Ctrip for hotels / 3,625 reviews for 248 hotels / Quantitative (Log-linear regression)	A significant relationship between online consumer reviews and business performance of hotels is found. Hotel bookings are positively related to number of reviews, average rating of a hotel, and the star rating of a hotel, but negatively related to the variance of rating, price, and city rank.
34	IJHM19: Yen and Tang (2015)	-	-	-	-	Facebook and TripAdvisor for hotels / 252 surveys / Quantitative (Factor analysis, regressions)	Altruism and platform assistance motivations were positively correlated with consumer opinion sites. Extraversion, social benefits, and dissonance reduction were positively correlated with social network sites. Economic incentives did not improve the likelihood of posting eWOM on consumer opinion sites but reduced the likelihood of posting on social network sites. Hotel attribute performance had a significant effect only on extraversion and dissonance reduction motivations.
35	IJHM20: Zhang et al. (2010)	Review ratings and volume	-	-	Editor reviews (as compared to consumer reviewers)	Dianping.com for restaurants / 1,242 restaurants / Quantitative (Regression analysis)	Consumer-generated ratings about the quality of food, environment and service of restaurants, and the volume of online consumer reviews are positively associated with the online popularity of the restaurants; editor reviews have a negative relationship with consumers' intention to visit a restaurant's webpage.
36	IJHM21: Zhang et al. (2013)	Review ratings and volume	-	-	-	Dianping.com for restaurants / 862 restaurant group buying deals / Quantitative (SEM)	The results indicate that group buying effectiveness – namely, the number of coupons sold, satisfaction improvement, and return intention of group buying customers – can be affected by the discount depth of a deal as well as the service quality and popularity of a restaurant.
37	IJHM22: Zhou et al. (2014)	Review ratings	Review text	-	-	Agoda for hotels / 1,345 reviews of 97 hotels / Quantitative (ANOVA)	Seventeen attributes influencing customer satisfaction were identified. The attributes were classified on the type of influence exerted: satisfiers (work in a solely positive direction), dissatisfiers (work in an exclusively negative direction), bi-directional forces (influence either positive or negative outcomes), and neutrals (no marked influence). The approach enabled the comparison of customer satisfaction between 4 and 5 star hotels, properties with different ownership, and the views of guests from different origins.

38	JHTR1: Berezan et al. (2015)	-	Review text	-	-	Flyertalk.com for hotel loyalty programs / 1,519 reviews of 5 major hotel programs / Qualitative (Content analysis)	The core categories that emerged were program experience, value, process, obtaining status, company-created communication, customer-created communication, and defection motivators and inhibitors. A paradigm model indicated that communication is the most important loyalty antecedent, and that all antecedents influence loyalty via the program experience.
39	JHTR2: Ip et al. (2012)	-	-	Reviewer characteristics: demographics and share travel experience	-	Websites for travel planning / 1,697 answers in the phone lines / Quantitative (T-test, chi square, and descriptive analysis)	It is reported that 32.7% of the respondents had used at least one travel website for travel planning in the past two years and 24.5% of these respondents had shared their travel experience online. Overall, travel website users are young, highly educated, and have a high level of personal income. The propensity to share travel experiences decreased with age. In contrast, educational level up to college/university positively influenced the respondents' willingness to share travel experiences, but the propensity decreased with higher levels of education.
40	JHTR3: Lee and Cranage (2014)	Review consensus	-	-	Manager response: accommodative vs. defensive	Restaurant reviews on Yelp / 2,000 faculty and staff / Quantitative (ANOVA)	Consensus in online NWOM (negative word-of-mouth) communication plays a pivotal role in influencing how potential consumers incorporate NWOM into their evaluations about the organization. Additionally, these NWOM consensus effects are contingent on organizational response strategies.
41	JHTR4: Lee et al. (2012a)	-	-	Reviewers' membership duration	-	Online communities for travel / 271 surveys / Quantitative (CFA, saturated model, chi square)	Community identification is positively influenced by a member's travel involvement and community benefits. Strong identification strengthens a member's sharing intentions. The postulated relationships differ based on a member's interaction mode. In terms of knowledge sharing, relationship builders shared more frequently and to a greater extent than information seekers.
42	JHTR5: Mkono (2013b)	-	Review text	-	-	TripAdvisor for hotels / 43 marketing messages and 13 reviews / Qualitative (Netnography, ethnography, and thematic analysis)	The results identified two themes for marketing messages: communication of tangible cultural objects and the emphasis on active participation, as well as three themes for reviews: "performing not gazing," "roles tourists perform," and "performing the self."
43	JHTR6: Noone and McGuire (2014)	Review ratings	-	-	-	Experiment for hotels / 265 students / Quantitative (MANCOVA)	In the presence of UGC, price does not have a significant impact on perceived quality. Price and UGC have significant effects on perceived value, although consumers rely more on reviews than ratings when evaluating price-benefit trade-offs.
44	JHTR7: Sparks and Bradley (2014)	Review valence (negative reviews)	Review text	-	Manager response	TripAdvisor for hotels / 150 reviews and management responses / Quantitative (Content analysis and relationship analysis)	The final "Triple A" typology comprised 19 specific forms of managerial responses subsumed within the three higher-level categories of acknowledgements, accounts, and actions.
45	JHTR8: Ye et al. (2014)	Review ratings	-	-	-	TripAdvisor for hotels/ 43,726 reviews of 774 hotels / Quantitative (Regressions)	Price has a positive impact on perceived quality but has a negative impact on perceived value. Price also has a more significant impact on perceived quality for higher-star, luxury hotels than lower-star, economy establishments. Additionally, price has a significant influence on perceived quality for business travelers but the equivalent value for leisure travelers is not significant.
46	JTR1: Ayeh et al. (2013)	-	-	Reviewers' perceived expertise and source credibility	-	TripAdvisor for hotels/ 661 hotel reviews / Quantitative (SEM)	Results validate the Source Credibility Theory in the context of UGC but also accentuate the central mediating role of attitude. In addition, the study finds support for perceptual homophily as a critical determinant of both credibility and attitude. Theoretical and managerial implications are highlighted.
47	JTR2: Crotts et al. (2009)	-	Review text	-	-	TripAdvisor for hotels / 16,000 words of hotel reviews / Qualitative (Stance-shift analysis)	This paper applies the stance-shift analysis to produce relatively detailed evaluations of the online reviews to determine guest satisfaction, what they are telling others about their experiences, how properties perform in creating satisfying guest experiences when compared with the competition, and what the strengths and weaknesses in the competitive environment.
48	JTR3: Duverger (2013)	Review ratings	Review text: length	-	-	Orbitz for hotels / Reviews of 138 hotels / Quantitative (Curvilinear regression with GMM)	UGC has a positive impact on market share. A curvilinear mechanism explains the relationship between ratings and market share, discouraging lower-tiered firms from seeking a high rating. Moderating factors were also found to diminish the impact of a review length on market share.
49	JTR4: Filieri and McLeay (2013)	-	Info understandability, relevance, accuracy,	-	-	Travel products/ 565 surveys / Quantitative (Elaboration likelihood model)	Product ranking, information accuracy, information value-added, information relevance, and information timeliness are strong predictors of travelers' adoption of information from online reviews on accommodations. These results imply that high-involvement travelers adopt both central (information quality) and peripheral (product ranking) routes when they process information from online reviews.

			value-added, completeness, and quantity of review text				
50	JTR5: Zhang et al. (2014)	-	Information load of review text	-	-	Experiment for restaurants / 83 surveys in study 1 and 123 surveys in study 2 / Quantitative (MANOVA)	Information load has a dual function in influencing the effectiveness of peripheral cues, depending on which peripheral cue is used in hand
51	TM1: Briggs et al. (2007)	Review ratings	Review text	-	-	TripAdvisor for hotels / 132 surveys / Quantitative (ANOVA)	Service is being lost by the focus of the Scottish QA (quality assurance) scheme on tangibles. There are major inconsistencies in service quality performance across the sector.
52	TM2: Chaves et al. (2012)	-	Review text	-	-	Booking.com and TripAdvisor for hotels / 1,500 reviews from 50 hotels / Excel Pivot table	Room, staff, and location were the concepts most frequently appeared in the reviews, with cleanliness, friendliness, helpfulness, and centrality of position the terms most frequently used to qualify the concepts.
53	TM3: Cong et al. (2014)	-	Review text	-	-	TripAdvisor for hotels/ 153 reviews by 151 reviewers / Quantitative (Thematic analysis)	Although respondents' experiences were varied, satisfaction increased with closer encounters and interactions with the giant pandas. The thematic analysis identified three features of the wildlife tourism experiences at Chengdu Research Based of Giant Panda Breeding in Sichuan, China: tourists, giant pandas, and settings.
54	TM4: Filieri (2015)	Review information quality	-	Reviewer characteristics: source credibility	-	Reviews for travel products / 366 surveys / Quantitative (SEM)	Five factors are proposed for building consumer trust towards consumer-generated media: source credibility, information quality, website quality, customer satisfaction, and user experience with consumer-generated media.
55	TM5: Li et al. (2013)	Review ratings	-	-	-	TripAdvisor for hotels / 12,000 hotel reviews / Choquet Integral	This paper demonstrates the Choquet Integral approach can model hotel selection process and exploring travelers' hotel preferences.
56	TM6: Li et al. (2015)	-	Patterns of review text	-	-	TripAdvisor for hotels / 118,300 reviews about 1,740 hotels / Quantitative (Emerging pattern mining)	This paper adopted the emerging pattern mining method in analysis and demonstrates how this technique can be used to discover the emerging hotel features of interest to international travelers.
57	TM7: Liu and Park (2014)	Review ratings	Review length, perceived enjoyment, and review readability of review text	Reviewer characteristics: identity disclosure and reputation	Votes of review helpfulness	Yelp for restaurants / 4,908 reviews and 2,590 reviews about restaurants located in London and New York City, respectively / Quantitative (TOBIT regression)	Reviews with disclosure of reviewer's identity and high reputation are useful. Review ratings and review elaborateness positively affect the perceived usefulness. Enjoyment and readability of reviews have positive influences on the usefulness. A combination of both messenger and message characteristics positively affect the perceived usefulness of reviews. Qualitative aspects of reviews were identified as the most influential factors that make travel reviews useful.
58	TM8: Lu and Stepchenkov a (2012)	-	Review text	-	-	TripAdvisor for hotels / 373 reviews about customer satisfaction / Mixed methods (Content analysis and two-step non-parametric statistical procedure)	A total of 26 attributes that influence eco-tourists' satisfaction with their ecolodge stays were identified and further aggregated into seven categories: ecolodge settings, room, nature, service, food, location, and value for money.
59	TM9: Papathanassis and Knolle (2011)	Review valence: positive and negative reviews	Richness and accessibility of review text	-	-	Reviews for holiday travels / 22 interview sessions / Qualitative (Grounded theory)	Online reviews play a secondary, complementary role to holiday selection and they are subjected to a set of heuristics before being adopted and utilized.
60	TM10: Phillips et al. (2015)	Review ratings and volume	-	-	-	69 online sources for hotels / 59,688 reviews for 235 hotels / Quantitative (Neural network analysis and multiple regression analysis)	The empirical findings reveal four hidden nodes that have a significant impact on RevPAR. Three of these have negative impacts: room quality, positive regional review, hotel regional reputation; regional room star rating has a positive impact. Further, the findings imply that there may be boundaries to reputational benefits for Swiss hotels.
61	TM11: Radojevic et al. (2015)	Review ratings	-	-	-	Booking.com for hotels / ratings of 6,768 hotels in 47 capital cities in Europe / Quantitative	Hotel star rating is the single most important factor that influences customer experience. Furthermore, the presence of air-conditioning devices in rooms, a bar located within the hotel area, access to Wi-Fi Internet free of charge, membership in a branded hotel chain, and price have significant positive associations with

						(Linear mixed model)	customer satisfaction (ceteris paribus).
62	TM12: Sparks and Browning (2011)	Review valence	Review text	-	-	Experiment for hotels/ 554 community members / Quantitative (ANOVA)	Consumers seem to be more influenced by early negative information, especially when the overall set of reviews is negative. However, positively framed information, together with numerical rating details increases both booking intentions and consumer trust. The results suggest that consumers tend to rely on easy-to-process information, when evaluating a hotel based upon reviews. Higher levels of trust are also evident when a positively framed set of reviews focused on interpersonal service
63	TM13: Sparks et al. (2013)	-	Type and style of review text, i.e., specific vs. vague; customer vs. manager	Source: manager vs. reviewer; Credibility: certificate of eco standards	-	Experiment for resorts / 537 community members / Quantitative (ANOVA)	The interactions are complex, but broadly tourists treat specific information posted by customers as most useful and trustworthy. Their purchase intentions are influenced principally by their overall attitude toward the resort and their beliefs in its corporate social responsibility.
64	TM14: Stepchenkov a and Zhan (2013)	-	-	-	-	DMO website and Flickr for travel destinations / DMO (530) and Flickr (500) images / Qualitative (Content analysis and constructing maps of large pools of visual data)	This study compared the differences in several dimensions of the images from a destination marketing organization's (DMO's) site and from Flickr. The study visualized these differences by constructing maps representing "aggregated" projected and perceived images of Peru, as well as maps of geographical distribution of the images.
65	TM15: Vermeulen and Seegers (2009)	Review valence	-	Reviewer expertise	-	Experiment for hotels/ 168 informants / Quantitative (ANOVA)	Exposure to online reviews enhances hotel consideration among consumers. This is because positive as well as negative reviews increase consumer awareness of hotels, whereas positive reviews, in addition, improve attitudes toward hotels. These effects are stronger for lesser-known hotels. Reviewer expertise has only minor positive influence on review impact.
66	TM16: Wu et al. (2014)	-	Review text	-	-	TripAdvisor for destinations / 149 review items amounting to 32,606 words / Qualitative (Leximancer text analytics)	(Shopping) markets can be major tourism attractions and can provide important experiences for international tourists. Most international tourists were impressed with their Silk Market trip. The dominant narratives of their experiences were the "price" of the items they "bought", the "fun" of "bargaining", and the "fake" quality of the products. Further analyses show that different satisfaction groups used somewhat different narratives to represent their shopping experiences and that male international tourists enjoyed the Silk Market experiences more than their female counterparts.
67	TM17: Zehrer et al. (2011)	Review valence: negative reviews	-	-	Manager response	TripAdvisor for hotels/ 134 blog narratives / Quantitative (ANOVA)	The findings demonstrate that a higher percentage of blog users find multiple evaluations that are congruent with one another (both negative and positive) helpful, and that negative postings were not necessarily bad if followed by a positive counter reaction.

Table 2. Summary of Research Directions and Questions Remained Answered

Research Theme	Research Directions and Questions Remained Answered
Theme 1: Quantitative Evaluation Features - 43 studies / 63%	Drawing from the perceptual fluency model (Fang et al., 2007): <ul style="list-style-type: none"> • Will review valence, variance, and volume carry the same effect on consumers' decisions when they are exposed to the companies being featured because of paid advertisements as compared to those without paying for advertisements? • Does such paid advertisement have a direct impact on a business' bottom line? • Will paid advertisement have an impact on a business' bottom line through the influence of review valence, variance, and/or volume?
Theme 2: Verbal Evaluation Features - 33 studies / 49%	Drawing from the uncertainty reduction theory (Daft and Lengel, 1986): <ul style="list-style-type: none"> • Will a review's "readability," rather than word counts or manipulated variable in a lab setting, play a critical role in influencing consumers' decisions? • If consumers prefer the reviews that are easy to read and provide the "necessary" information they need, what will the "necessary" information be?
Theme 3: Reputation Features - 13 studies / 19%	Drawing from the social identify theory (Ashforth and Mael, 1989) and similarity-attraction paradigm (Byrne, 1971): <ul style="list-style-type: none"> • Will consumers feel inclined to seek information that is provided by the reviewers that are "similar" to them? • Will consumers share similar backgrounds, travel experience, and/or statuses on a review website tend to submit similar ratings or posting similar comments about the same issues?
Theme 4: Social Features - 20 studies / 30%	Drawing from the social exchange theory (Homans, 1958) <ul style="list-style-type: none"> • Very few studies were conducted to understand the interactions among consumers. • As to the interactions between consumers and managers, what is the best time for managers to respond to online reviews? • How managers may strategically respond to certain types of consumer reviews?

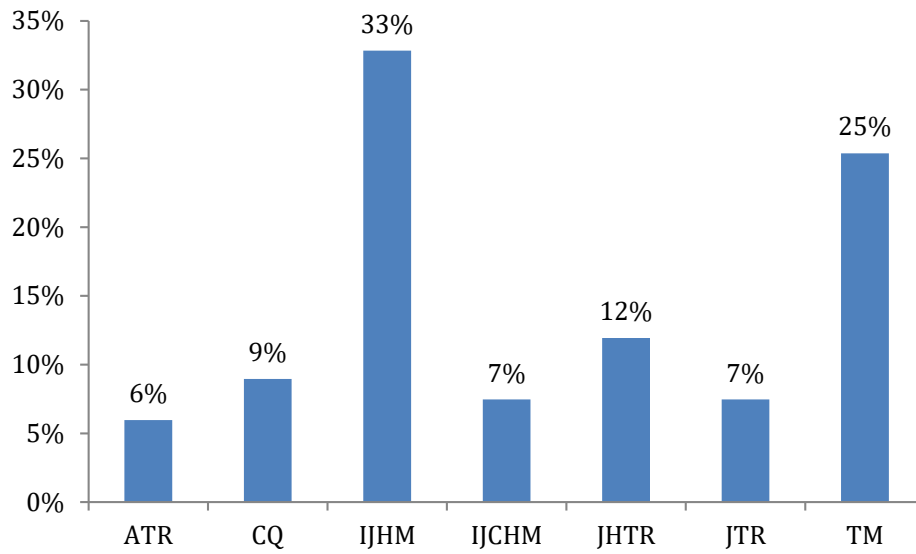


Figure 1. Distribution of the online review publications across journals (Jan 2000 – July 2015)

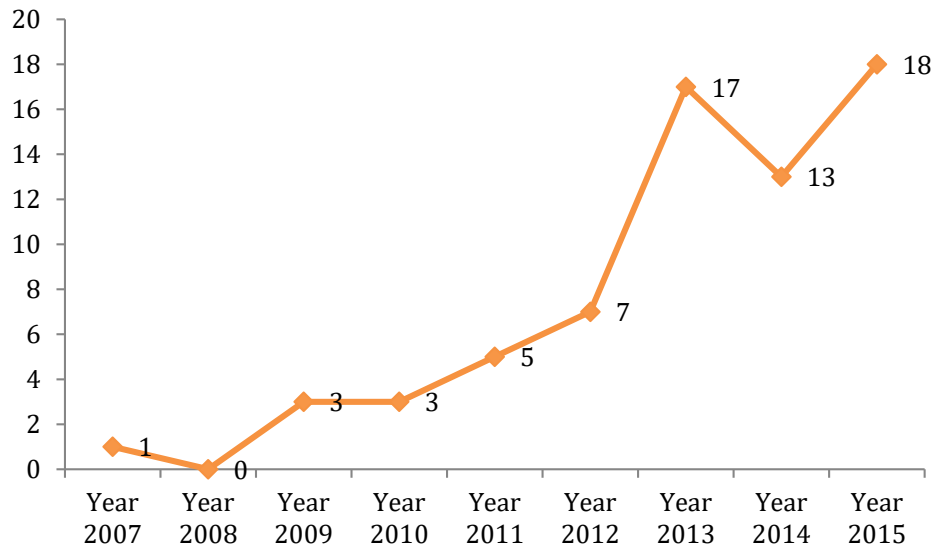


Figure 2. Trajectory of online review publications throughout the years (Jan 2000 – July 2015)

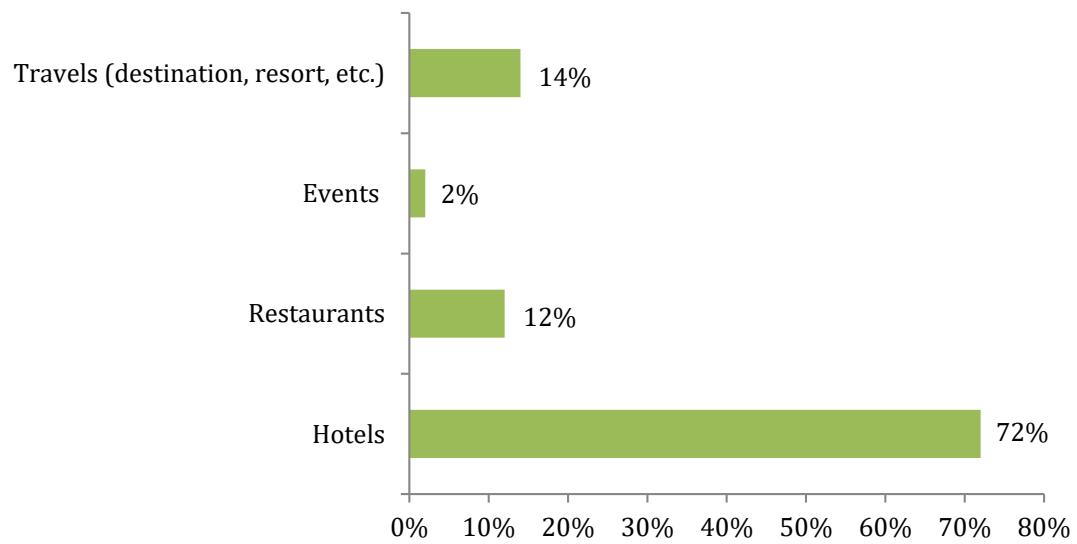


Figure 3. Distribution of the online review publications by context/product

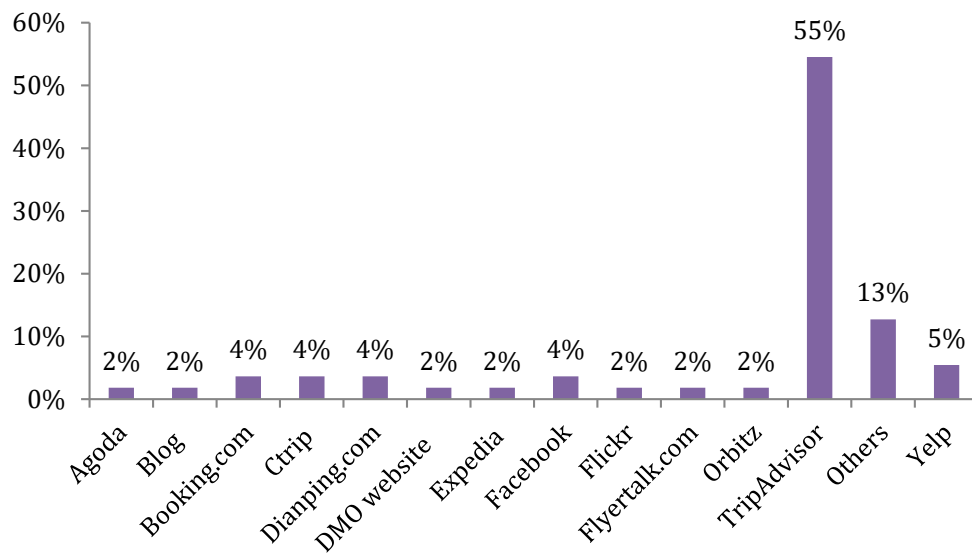


Figure 4. Distribution of online review publications by context

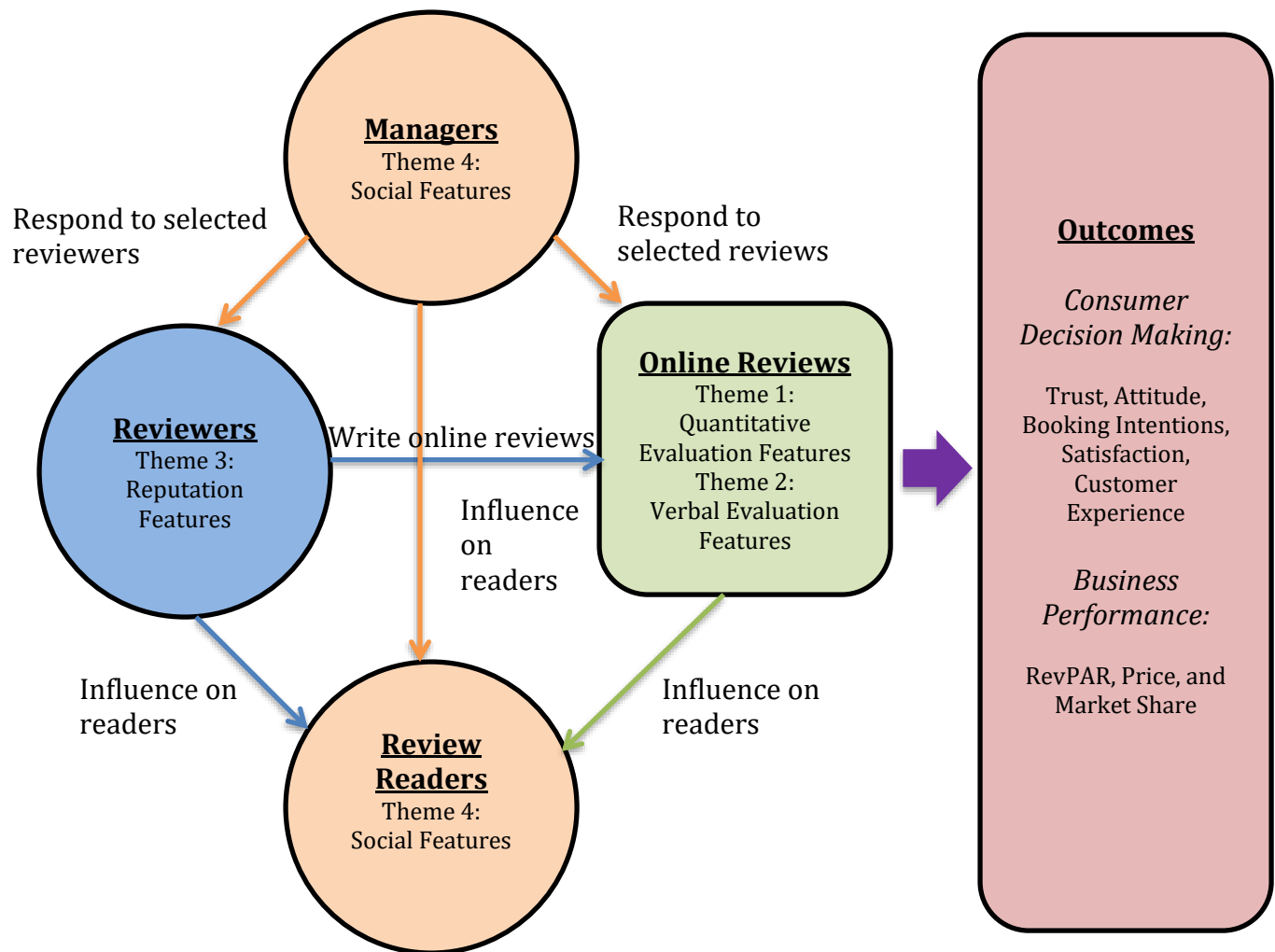


Figure 5. Thematic framework of online review research