

## **Influence of Online Hotel Consumer Review Sites on Hotel Visitors' Behavioural Intentions in Jordan**

*Eatedal Bsheer "Ahmad Amin"<sup>1</sup>, Malek Mohammad Al-Majali<sup>2</sup> and Rand Hani Al-Dmour<sup>3</sup>*

### **ABSTRACT**

Online consumer reviews are advantageous tools to manage the decision-making process. Nevertheless, knowledge about how consumers evaluate online consumer review sites is still sparse. This study will examine the effect of informational and normative influences on hotel visitors' behavioural intentions, specifically in Jordan. A quantitative approach was used to test the model on a purposive sample of Jordanian students. The questionnaire was distributed to 500 full-time students at the University of Jordan by e-mail and by hand and the response rate was 72.6%. Overall, the results indicate that normative and informative factors are interdependent and their combined impact is much more effective on behavioural intentions than taking each group separately. The findings also demonstrate that the impact of informational factors is much more than that of normative cues. In other words, consumers do not follow ratings or rankings spontaneously. Even with the availability of others' ratings, they still rely more on strong valid written comments and recommendations to formulate their purchase intentions. The research implications for the hospitality sector and its practices are presented and discussed in the last section.

**Keywords:** Online consumer review sites, Behavioral intentions, Developing countries, Informative influences, Normative influences, Dual-process theory.

---

1 Full-time Lecturer, Marketing Department, School of Business, The University of Jordan. e.albasheer@ju.edu.jo

2 Associate Professor, Marketing Department, Faculty of Business, Mutah University. dralmajalimalek@yahoo.com

3 Assistant Professor, Management Information Systems (MIS) Department, School of Business, The University of Jordan. Rand.aldmour@ju.edu.jo

Received on 12/9/2018 and Accepted for Publication on 8/11/2018.

## أثر المؤثرات المعلوماتية والمعيارية المقدمة عبر المواقع الإلكترونية في نية الزوّار لارتياح الفنادق في الأردن

اعتدال بشير<sup>1</sup>، أحمد أمين<sup>2</sup>، مالك محمد المجالي<sup>2</sup>، ورنند هاني الضمور<sup>3</sup>

### ملخص

يستعين الزبائن بالتقييمات والتوصيات والمعلومات المقدمة عبر الإنترنت من أشخاص آخرين عند اتخاذ قراراتهم الشرائية. ومع ذلك، لا تزال المعرفة محدودة حول كيفية تقييم الزبائن للمواقع الإلكترونية والمتصفحات الخاصة بتقييم المنتجات. لقد تم اعتماد نظرية العملية المزدوجة في هذه الدراسة لبيان أثر المؤثرات المعلوماتية والمعيارية المقدمة عبر المواقع الإلكترونية في نية الزوار لارتياح الفنادق في الأردن. تم اعتماد الأسلوب الكمي في تحليل البيانات من عينة مقصودة من الطلبة الأردنيين، وقد تم توزيع 500 استبانة على طلبة الجامعة الأردنية عن طريق البريد الإلكتروني وباليد في المحاضرات وأماكن تجمع الطلبة ووصلت نسبة الرد إلى 72.6%. لقد أظهرت النتائج أن العوامل المعلوماتية والمعيارية مترابطة ويعتمد كل منهما على الآخر، كما أن تأثيرهما مجتمعين في النية للشراء أعلى من تأثير كل منهما على حدة، كما أظهرت النتائج أن أثر العوامل المعلوماتية في النية للشراء أكبر بالمقارنة مع المجموعة الثانية من العوامل. بصيغة أخرى، على الرغم من وجود تصنيف إجمالي للفنادق يعتمد على الأرقام والنجوم، فإن الزائر يعتمد أكثر على التقييمات والتوصيات المكتوبة من مصادر موثوقة بشكل أكبر. وفي النهاية، تم تقديم مجموعة من التوصيات والمقترحات لإفادة قطاع الخدمات بشكل عام وقطاع السياحة بشكل خاص.

**الكلمات الدالة:** المواقع الإلكترونية الخاصة بتقييمات الزبائن للمنتجات، النية السلوكية، الدول النامية، المؤثرات المعلوماتية، المؤثرات المعيارية، نظرية العملية المزدوجة.

1 محاضر متفرغ، قسم التسويق، كلية الأعمال، الجامعة الأردنية.

e.albasheer@ju.edu.jo

2 أستاذ مشارك، قسم التسويق، كلية الأعمال، جامعة مؤتة.

dralmajalimalek@yahoo.com

3 أستاذ مساعد، قسم نظم المعلومات الإدارية، كلية الأعمال، الجامعة الأردنية.

Rand.aldmour@ju.edu.jo

تاريخ استلام البحث 2018/9/12 وتاريخ قبوله 2018/11/8.

## 1. INTRODUCTION

These days, people live in highly diversified societies, where technological improvements have led to different patterns of behaviour for both individuals and organizations. The Internet and other technological devices are among some very prominent inventions which have generated other essential tools, such as: blogs, e-mail, online videos, online reviews and social networks, as well as many other ideas which facilitate the distribution of information more than before. This conclusion implies that a variety of online, interactive marketing communication techniques are available to marketers for use in brand equity-building and consumers' reasoning processes (Keller, 2009). One of these technological communication networks is online reviews. Online reviews, which are a technological version of word of mouth, have a profound effect on consumers in their online product choices made according to online recommendations which are reviewed before making purchase decisions (Senecal & Nantel, 2004). A survey by ComScore (2007) found that about a quarter (24%) of Internet users check online reviews before paying for products offered offline (Zhu & Zhang, 2010).

Online reviews are increasingly consulted as a source of significant guidance to both consumers and organizations to make their decisions effectively. Several researchers have investigated the notable effect of those reviews on users' purchase decisions (Filieri, 2015; Filieri & Mcleay, 2014; Jimenez & Mendoza, 2013; Senecal & Nantel, 2004) and on the sales of books, games, movies and hotel rooms (Dellarocas et al., 2007; Godes & Mayzlin, 2004; Liu, 2006; Duan et al., 2005; Chevalier & Mayzlin, 2006; Zhu & Zhang, 2010; Ye et al., 2009; Vermeulen & Seegers, 2009; Ye et al., 2011). In the context of online reviews, consumers engage in information diagnosis using pieces of information that are beneficial to comprehend and assess the performance and outcomes of products which are

commercialized online (Filieri & Mcleay, 2014). Several consumer review platforms list and discuss normative evaluations to assist consumers in evaluating product quality. Until now, limited knowledge has been available about the combined effect of normative evaluations and informational influences on consumers' perceptions, attitudes, motives, behavioural intentions and finally overt behaviours (Vermeulen & Seegers, 2009; Filieri, 2015). This research is a further attempt to fill that gap and concentrates on the dual effect of normative evaluations and informational influences on consumers' purchase intentions using dual-process theory regarding hotels in Jordan, since travellers' use of consumer online review sites, predominantly comments, recommendations, ratings and feedback posted online by hotel visitors, has resulted in a greater impact on the response of large groups of prospective tourists (Xie et al., 2015).

Dual-process theory is adopted because it is helpful in demonstrating the impact of social and informational factors on individuals' psychological processes. Normative social influences are defined as the social pressure surrounding individuals to fit the expectations and attitudes of others in order to have feelings of self-approval or self-esteem, whereas informational influences depend on consumers' perceptions of the relevant content of a message and how they obtain information and evidence about truth (Deutsch and Gerard, 1955). Consistent with this research's purposes, normative influences are defined as crowd opinion information, such as customer rating as well as overall product rankings. Customer ratings give insight into reviewers' judgements of certain characteristics of a product, whereas overall product rankings are mostly shown by the number of stars or aggregate consumer evaluations of products

available in a certain category (Fileri, 2015). This study will examine the impact of online review sites in the context of hotels in Jordan, noting that Molinillo et al. (2016) found that the numbers of online customer reviews differ substantially for different hotels and hotel visitors give different ratings depending on the tourist areas in which hotels are situated. We strive to expand the knowledge about how online review sites may affect the responses of prospective tourists.

## **2. Research Problem**

This study adopts dual-process theory (Deutsch and Gerard, 1955), after expanding its implementation to the online context in Jordan, to answer the following primary questions:

1. What is the impact of online hotel consumer review sites on hotel visitors' behavioural intentions?
2. What is the impact of informative influences (information quality, information quantity and source credibility), separately and combined, on hotel visitors' behavioural intentions?
3. What is the impact of normative influences (overall product rankings and customer ratings), separately and combined, on hotel visitors' behavioural intentions?
4. What is the impact of informative influences and normative influences (combined) on hotel visitors' behavioural intentions?

## **3. Research Importance**

This study adds further insight to comprehend the link between online reviews and behavioural intentions. Moreover, this study has the following important aspects:

- 1- Given the scarcity of studies about the relationship between online reviews (more specifically, online consumer review sites) and consumers' purchase intentions in developing countries, particularly in Jordan, this study will help Jordanian managers start

thinking about their current and potential customers and organizing their online consumer review sites to enhance their positions, as well as to modify their strategies in order to manage their presence online.

- 2- Based on recently published figures and indicators on the usage of a multitude of social media platforms (Facebook, Twitter, Instagram, Snapchat, LinkedIn, among others), concluded in global research performed by the "Pew Research Center" in Jordan, Jordan came first globally in terms of social media users relative to Internet users, at 90 per cent (Jordan comes first in social media usage index) ([www.alghad.com](http://www.alghad.com)). Recent studies (Stringam & Gerdes, 2010; Leung et al., 2013; Xie et al., 2015) have found that when tourists rely on social media, essentially the views, likes, comments, ratings and feedback posted online by hotel visitors, that results in more positive consequences for other prospective visitors. Interestingly, research has revealed that potential visitors consider information posted online by other previous visitors to be more reliable and credible than pieces of information provided by authoritative destination-marketing or restaurant or hotel websites (Sparks et al., 2013). As a result, this study seeks to gain better knowledge of consumer behaviour, particularly their behavioural intentions on online customer review sites and the strategies that organizations should apply to strengthen their presence online.
- 3- Hospitality service providers, particularly restaurants and hotels, are amongst the fastest growing companies in the service sector in Jordan. This rapid expansion has been accompanied by other substantial changes that have begun to exert considerable pressure on restaurant and hotel

managers to improve their presence and sales, as well as provide better services than other rivals in the marketplace offer. Accordingly, the results of this empirical study will be very important for each restaurant or hotel that intends to enhance or maintain its competitive advantage in the marketplace.

- 4- This study adopts relatively well-structured modern scales for both overall product rankings and customer ratings to assess their effect on consumers' purchase intentions.
- 5- Previous literature has investigated online consumer review factors influencing decision-making processes and business performance, but usually in a singular and fragmented style with no concern for many aspects of online consumer reviews. For instance, Molinillo (2016) focuses mainly on overall customer ratings to assess the level of customer satisfaction, while Sun (2012) discusses review consistency and its impact on the degree of disagreement in consumer opinions. Accordingly, studies which investigate a holistic view of the impact of online consumer review factors are limited. This study is one of a few pieces of research seeking to reveal the combined effect of informational and normative determinants on consumers' purchase intentions. Moreover, it will discuss the impact of each single variable within each group of independent variables on the dependent variable in the context of hotels in Jordan.

#### **4. Theoretical Background and Literature Review**

E-wom (electronic word of mouth) has become a tremendous marketing force. It is a form of communication which transmits positive or negative information, knowledge, experiences or anything else through actual, potential and former customers about any type of product *via* the Internet. There are different types of e-wom (online discussion forums, online consumer review sites, blogs,

social networking sites and online brand/ shopping sites). Most e-wom studies have concentrated on online consumer reviews on e-commerce websites, in discussion forums or on rating sites (Cheung & Thadani, 2012). Sharing information through online consumers' reviews has become a prevalent research domain in recent years. Sharing information successfully includes both contributing and receiving information (Zhang & Watts, 2003). Several studies on e-wom have primarily concentrated on users' contribution behaviours, while the receiving part has attracted comparatively little interest. Indeed, online consumer reviews are designed to be a place for sharing each piece of information, as well as having considerable potential to materially affect reviewers who intend to use online comments and recommendations to influence buying behaviours. To be more specific, online reviews can formulate reviewers' attitudes towards a product, which may result in simplifying their purchase intentions and overt behaviour, finally leading to better levels of overall sales. Accordingly, e-wom is important not only as a virtual meeting place, but also to decide several subsequent consumer activities. For example, Hennig-Thurau and Walsh (2004) found that people mostly read online reviews to quicken their decisions and have better choices at minimal cost, although their study (like many other studies) did not explore how reviewers interpret information (online reviews) to eventually affect their buying behaviours. This research attempts to fill that gap by adopting Deutsch and Gerrard's dual-process theory.

Early research on online reviews investigated the effect of consumer ratings on behavioural intentions (Godes & Mayzlin, 2004; Chevalier & Mayzlin, 2006), while modern research concludes that consumers are more concerned about written

comments and recommendations in online reviews. Schlosser (2011) notes that ratings and written comments are interdependent and customer ratings are more convincing when they are congruous with written recommendations. In addition, Forman et al. (2008) found that when consumers perceive that a reviewer belongs to an online community, that reviewer is more likely to change consumers' decisions. Research on e-wom highlights the impact of the quality of information on behavioural intentions in high-involvement situations (Park et al., 2007; Lee et al., 2007). Jointly, recent research has found that the written parts of reviews affect (positively or negatively) consumers' perceptions of the level of credibility of information presented in online reviews. Previous studies have found that detailed wom recommendations about product characteristics or recommenders' belongness and knowledge of objects are more convincing than generic reviews, as recommendations become more helpful and advantageous in purchase-decision processes at all stages (Dholakia & Sternthal, 1977; Herr et al., 1991). Moreover, Filieri & McLeay's (2014) findings are consistent with previous results in that information quality has more impact than information quantity in high-elaboration conditions (Park et al., 2007; Gupta & Harris, 2010). Additionally, Barreda et al. (2015) demonstrate the powerful impact of information content quality, as this can enhance brand awareness, which results in prompting WOM.

According to Jimenez & Mendoza (2013), knowledge about the influence of the level of detail in a review and the level of a reviewer's agreement with it on purchase intentions is limited. They found that there is a positive relationship between the credibility of online reviews and purchase intentions. Moreover, research findings point out that review credibility is determined differently for search and experience products. The level of detail in a review determines the credibility of an online review of a search product, while the degree of reviewer agreement decides

the credibility of online review of an experience product. Filieri & McLeay (2014) found that information accuracy is the strongest predictor (among information quality dimensions) of travellers' reliance on information from online reviews in their decision-making processes. The researchers attributed this finding to the idea that travellers are influenced by information as they think information comes from actual users who share others' accurate assessment of actual experiences. Moreover, they stress the importance of information relevance to relying on information from online reviews.

All the aforementioned findings are consistent with rational action theory (Becker, 1976), which states that consumers are rational and try hard to avoid risk. When consumers make purchases, they refuse items of dubious quality rather than other items with more certain quality (Zhu & Zhang, 2010). Ghose et al. (2012) showed that lower levels of variability in review quality may decrease the risk and suspicion associated with hotel quality perceived by visitors and thus result in better outcomes.

According to previous literature, scholars have found that "experts' statements can be trusted" and "experts know best" are generally reasonable heuristic cues for individuals (Chen & Chaiken, 1999; Chaiken & Ledgerwood, 2012). Moreover, online review sites commonly permit enrolled users to originate their own pages to describe the quality of their experiences. A comprehensive ranking system generally depends on users' review quality and contribution frequency to identify users with different levels of "reputation" or numbers of "stars". Based on such ranking information and personal pages, consumers become more able to deduce the extent to which sources of online reviews are credible. Online reviews provided by credible others are expected to

present reliable information, which helps users know more and eventually improve their buying behaviour (Zhang et al., 2014). Zhang et al. (2014) found that when consumers perceive the credibility of review sources (the second factor of heuristic cues), their behavioural intentions can be enhanced.

Recent studies have found that source credibility has a substantial influence on consumers' online information adoption behaviours (Zhang & Watts, 2008). Consumers who read comments and take advice from credible sources are more likely to choose suitable items (Senecal & Nantel, 2004). On the other hand, several studies on the impact of source credibility on information usefulness and adoption have presented conflicting results. In such a study in Hong Kong on an online food community, Cheung et al. (2008) show that source knowledge, expertise and trustworthiness do not affect perceived information usefulness. In contrast, Zhang & Watts (2008) found that source credibility has a positive and considerable impact on information adoption from online travel websites, though its impact was less important in a community of computational fluid dynamics professionals in China. Moreover, Ayeh et al. (2013) found a weak or insignificant relationship between source trustworthiness and users' intention to use user-generated content for travel planning, suggesting that attitudes play a mediating role.

Scholars have concluded that information quantity is a strong predictor of product sales (Duan et al., 2005; Chevalier & Mayzlin, 2006; Liu, 2006; Dellarocas et al., 2007). Also, it exerts influence on consumers' purchase intentions in low- and high-involvement situations (Park & Lee, 2008; Park et al., 2007). On the other hand, Filieri & Mcleay (2014) found that information quantity does not significantly affect travellers' adoption of information from online reviews for decision-making. Zhang et al. (2014) found that information quantity is one of two heuristic factors that can be classified as essential determinants of

behavioural intention. Xie et al. (2015) found that quality and quantity of information are the primary determinants among all other discussed factors for hotel occupancy rate. In addition, the impact of information quality on offline hotel popularity lasts for at least six months. On the other hand, the influence of information quantity decreases quickly in the following three months.

In the e-wom area, the concept of product-ranking or product-rating has received more attention than before. Cheung et al. (2009) validated the positive relationship between ratings given to a review and the credibility of information. Moreover, Benedicktus (2011) highlights the significance of rankings in how users perceive retailers' trustworthiness. Filieri & Mcleay (2014) found that product-ranking is the first and foremost predictor of how travellers perceive information in online reviews when making decisions and it is of utmost importance compared with other dimensions of information quality. This conclusion conflicts with Petty & Cacioppo (1986), who state that consumers are concerned about the quality of arguments in advertisements when making their decisions in high-involvement situations. Also, Chevalier & Mayzlin (2006) reveal that customers are more concerned with review text, rather than depending only or more on summary statistics to make purchasing decisions. The study by Filieri (2015) improved the constructs of overall product rankings and the researcher also revealed that overall product-ranking is a significant determinant of information diagnoses and then consumers' purchasing decisions.

Research on the impact of customer ratings on consumer behaviour is scant in the literature (Filieri, 2015). The study by Filieri (2015) established the construct of consumer ratings and the researcher

revealed the strong positive impact of customer ratings, which is an important determinant of information diagnoses and users' buying behaviours. Chevalier & Mayzlin (2006) revealed the positive role of average star-ranking summary statistics given by websites in consumers' purchase intentions. Additionally, Molinillo et al. (2016) found that when users visit hotels, their satisfaction levels tend to increase consistently according to overall customer ratings for those hotels. These findings are consistent with the theory of social contagion (Sutherland, 1995), which states that peer consumers are influenced by the judgements of previous users in order to align with a peer group (Zhang et al., 2009). When consumers share their experiences and recommendations on social networking sites, they are trying to convince their peer consumers to adopt their opinions and then affect their behaviour (Chu & Kim, 2011). Preceding research supports the existence of social contagion in online consumer reviews. For example, Moe & Trusov (2011) show that reviews from previous consumers have a positive and significant impact on consumer behaviour. Additionally, Schlosser (2005) concludes that users who decide to share their recommendations tend to negatively modify their assessments after reviewing negative reviews from previous customers.

Among several identified e-wom papers, numerous theories have been utilized to explore the way(s) in which individuals are affected by information received, including the elaboration likelihood model (ELM), the heuristic systematic model (HSM), Yale's model and Deutsch and Gerrard's dual-process theory of information and normative influences. The first two theories mentioned (ELM & HSM) represent the most generally applied theoretical foundation to study the influence of e-wom contact. Furthermore, a considerable part of this research uses literature about source credibility to demonstrate the properties of e-wom. Other researchers have examined the

influence of e-wom on consumers' buying behaviours by employing the perspective of interpersonal influence (Cheung & Thadani, 2012). Yale's model suggests that source, message and audience are the primary factors which determine the levels of individuals' comprehension, attention and agreement with information that might eventually affect their preferences, attitudes and behaviours (Janis & Hovland, 1959, pp. 1-26).

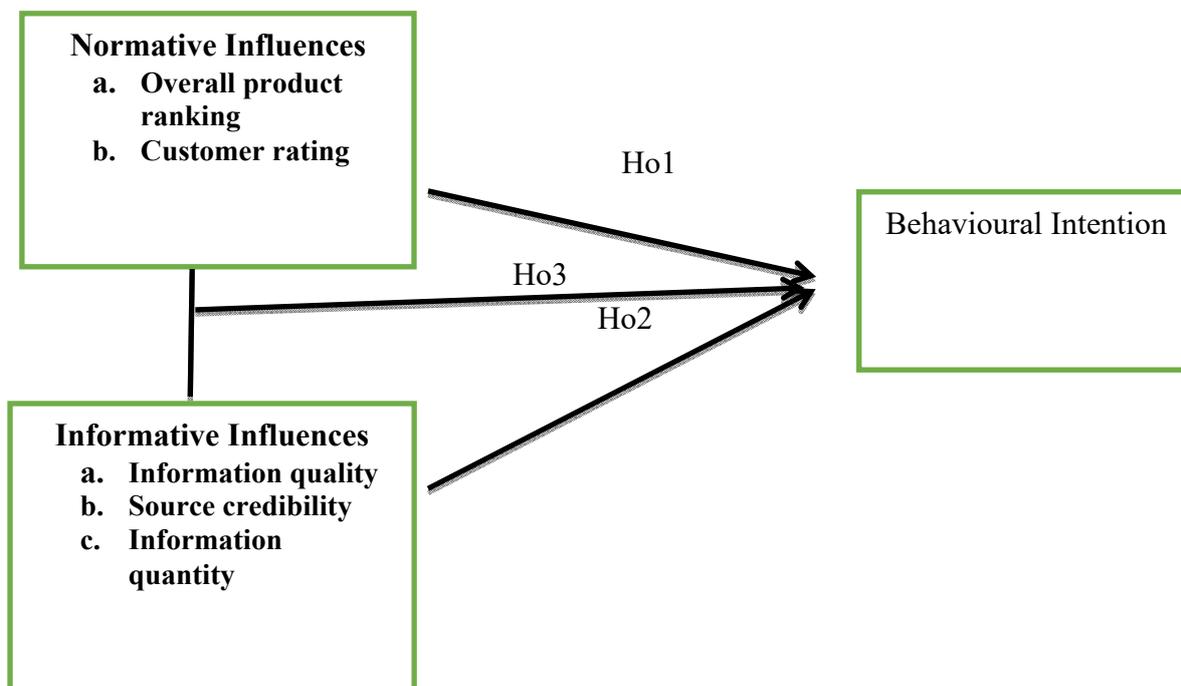
ELM presents central and peripheral routes which individuals use to explain the persuasive power of e-wom communication, relying on their motivation and cognitive capabilities. The theory states that individuals use a central route if they are closely involved with a product, focusing on the quality of comments / recommendations. On the other hand, people rely heavily on a peripheral route for information-processing if they are less capable of thinking about a message, less motivated or intend to buy low-involvement products. As a result, peripheral routes are soft rules or information shortcuts, such as source attractiveness and brand image, which customers use to evaluate received information (Petty et al., 1983). Similarly, HSM mentions other information processing routes, the first systematic and the second heuristic, to determine the degree of information persuasiveness. Systematic information processing implies that individuals investigate all related pieces of information to interpret their validity with maximum cognitive effort. However, the heuristic route indicates that individuals examine a few informational cues as simple rules to form their judgements. The choice of which route an individual pursues relies on its sufficiency and efficiency to assess information validity (Chaiken, 1980; Cheung et al., 2009). Generally, these two theories are based on how different *levels/ depths/ scales* of information

processing affect convincing communication (Cheung et al., 2009). However, Deutch & Gerrard's dual-process theory demonstrates how different *types* of influence affect the persuasiveness of online consumer reviews (Deutch & Gerrard, 1955).

**5. The Study's Conceptual Framework**

This study will apply dual-process theory as the theoretical grounding to understand how and to what extent these two forms of determinants of online consumer reviews affect consumers' purchase intentions. Informational influence highlights the importance of message content (is the information obtained viewed as evidence about the reality by a user or not?), while

normative influence explores the effect of social aggregation techniques, which are defined as influence to go along with others' positive expectations. This theory concentrates on a model of communication influence depending on the normative power of other social surroundings and the receiver's self-judgement of the message. It is helpful in clarifying communication effectiveness with the presence of discussion or group opinions (Briggs et al., 2002; Sia et al., 2002). Online consumer reviews are open discussions which encompass many participants. The proposed research model is depicted in Figure 1 below.



**Figure (1): The study's conceptual framework**

The study's conceptual framework consists of independent and dependent variables as follows:

**5.1 Independent Variables**

**Informational Influences:** Certainly, the message itself is crucial to assess information credibility.

Ideally, pieces of information should be harmonic, coherent and clearly discussed. In addition, audience characteristics are vital in determining the level of information credibility. Turning to source influences, individuals respond clearly to the merits of information; they see knowledge, expertise and trustworthiness as major qualities that may mark credible sources of information (Wathen & Burkell, 2002). To sum up, three information-based determinants that have been widely discussed in previous informational influence research—information quality, source credibility and information quantity—are explored in this research.

1) Information quality is the quality of a review's content from the perspective of information characteristics. Plenty of research on this dimension in the marketing context focuses primarily on message content (Park et al., 2007). Researchers conclude that reviews which include objective and understandable comments with adequate reasons for recommendations are much more persuasive than those which explore emotions and experience but with no reasons. Generally speaking, people will not readily approve reviews posted on web sites unless they contain enough information, as many buyers on the Internet are unknown or nameless (Ratchford et al., 2001). Message evaluation and source impressions are clearly affected by the argument quality used by individuals needing cognition and individuals needing cognition exert more cognitive efforts and recollect more message arguments, regardless of argument quality (Cacioppo et al., 1983). Nevertheless, information quality in e-wom has been defined differently by diverse researchers; for example, Park et al. (2007) assessed the quality of reviews in terms of relevance, objectiveness, understandability and sufficiency, whereas Churchill (1979) measured reviewed quality in terms of information depth, breadth, relevance, factuality and credibility. We define each of these measures below.

Information depth and breadth is the extent to which information is perfectly adequate and detailed for a specific duty or function (Wang & Strong, 1996). Information factuality is determined by the level to which a recommendation or a comment in a review is logical, depends on particular facts about a product and is free from emotional, subjective and idle comments (Filiari, 2015). Information relevance refers to the extent to which a review is applicable and helpful for a specific task and relies on different customer needs in particular conditions (Wang & Strong, 1996). Lastly, information credibility or accuracy is determined by the extent to which a consumer perceives a review as accurate, correct or believable (Cheung et al., 2009). Moreover, Cheung et al. (2008) selected different criteria to assess review quality (completeness, timeliness, accuracy and relevance).

2) Source credibility: Simply put, credible sources are defined as "trustworthy" and demonstrating "expertise". According to traditional WOM literature, credible sources are essential predictors of consumers' acceptance of information (McGinnies & Ward, 1980). Sources are viewed as credible depending on perceived composure, competence, character, sociability and dynamism (Burgoon et al., 2000). Actually, online reviews are presented by unknown sources with no previous relationship with the audience (Sen & Lerman, 2007). Thus, assessing source credibility is challenging. Individuals interact directly with particular qualities of information sources; they consider reputation, labels (such as professor or doctor) and assumptions (such as halo effects and stereotypes about group members) as prime criteria to evaluate credibility. Another important issue is the consistency or matching between

source and receivers (Wathen & Burkell, 2002; Campbell et al., 1999).

- 3) Information quantity is defined as the number of online consumer reviews about a product. It is a strong indicator about a product's popularity, which may directly affect the product's sales volume (Chatterjee, 2001). The more online reviews there are, the more popular and essential the product is, as more argumentation about a product serves to enhance awareness of that product and thus increase its sales volume (Liu, 2006). Furthermore, the volume of reviews will probably motivate consumers to rationalize their purchase decisions by telling themselves: "Many other people also bought that product." Relying on other individuals' comments (experiences) is a perceived risk-reduction approach (Buttle, 1998; Park et al., 2007).

## 5.2 Normative Influences

According to Deutsch and Gerrard's dual-process theory, normative-based determinants may exert a salient and massive influence in assessing e-wom communication. Two normatively-based determinants (overall product rankings and customer ratings) are examined in this research.

- 1) Overall product rankings: Overall product ranking is one of the most common and important indicators frequently used to assess the persuasive power of e-wom communication (Cheung et al., 2009; Filieri, 2015; Filieri and Mcleay, 2014; Park et al., 2007). Overall product ranking is conceptualized as a reviewer's overall rating of a product in a certain category and is commonly presented as an average/mean star rating next to a product. It is not an indicator of the quality of comments/ experience. Indeed, it points to an information cue with respect to how all reviews have assessed one product and other products

in a particular product category (Filieri, 2015). When most reviewers give a high score to an argument, it presupposes that most reviewers approve the content of the argument. In contrast, if most reviewers give a low score to the message, this implies that most users disagree with it. This may increase the suspicions of the user, which could consequently decrease the probability of a purchase (Cheung et al., 2009).

- 2) Customer ratings: Customer rating is another measure of categorical crowd opinion. It is known as the average evaluation that reviewers assign to each characteristic of a product. Similar to overall product ranking, customer rating is a unique trait of e-wom communication. Conversely, through face-to-face wom communication, it is not feasible to sort through all users' evaluations and gain a brief evaluation of a product's characteristics. Because customer ratings summarize users' assessments of the major qualities of a product, they help users learn about the quality of products, which in turn will affect their behaviour (Filieri, 2015).

## 5.3 Dependent Variable

Purchase intention (behavioural intention): One of our research objectives is to investigate which informative and normative determinants can determine behavioural intention, which is the willingness of consumers to purchase products resulting from processing issues related to online reviews (Zhang et al., 2014). This research is similar to previous research, as it will largely restrict the analysis to positive online consumer reviews.

## 6. Research Hypotheses

Based upon theoretical background and literature

review, the following hypotheses are examined in this study:

- Ho.1: There is no significant relationship between normative factors (overall product ranking and customer rating) and purchasing behavioral intention, taken together.
- Ho.2: There is no significant relationship between informative factors (information quality, source credibility and information quantity) and purchasing behavioral intention, taken together.
- Ho.3: There is no significant relationship between normative and informative factors as a combined and purchasing behavioral intention, taken together.

## **7. Research Methodology**

This research encompasses empirical testing of three substantial hypotheses. We utilize online review sites as the research context to explore the effect of online reviews.

### **7.1 Sampling and Data Collection**

The data for this research was collected through a self-administered questionnaire. To better capture the effect of online reviews, we focused on review site users who had recently and repeatedly read online reviews in the last six months and considered visiting real hotels listed on TripAdvisor, Yelp, Booking.com... and so on. The questionnaire was distributed to 500 full-time students by e-mail and by hand and the response rate was 72.6 per cent (in total, 363 usable questionnaires were collected for this study). Sample-size decisions were primarily based on cost considerations and in line with studies on consumers' adoption of online buying behaviour, where the sample sizes used were between 114 and 1,167 respondents. In this survey, some variables are factual (for example, individuals' demographic characteristics, such as sex, age, income and education), whereas others are perceptual (i.e., normative, informative and buying intention). The

questionnaire's contents (constructs and measures) were mainly selected from previous studies. Information quality was measured by a scale developed and used by Filieri (2015). Information quantity was measured by two items derived from Park et al. (2007) and recently used by Zhang et al. (2014) and Filieri (2015). Source credibility/trustworthiness was measured on a scale developed by Ohanian (1990) and then used by Senecal & Nantel (2004), Zhang et al. (2014) and Filieri (2015). Furthermore, the scales for measuring overall product ranking and customer rating were developed and used recently by Filieri (2015). Finally, behavioural intention was measured by two items improved and used by Pavlou & Fygenon (2006) and then used by Zhang et al. (2014). All items use a 5-point Likert scale. We slightly modified the wording of these items to fit the present research context. To administer the survey in Jordan, the original English questionnaire was translated into Arabic (i.e., from English to Arabic) and then back again (i.e., from Arabic to English) with the aid of three English language doctoral students. Those students are proficient in both Arabic and English and familiar with most popular online review sites, like TripAdvisor and Yelp. Any inconsistencies in the translation process were resolved to make sure that the final Arabic version had sufficient quality. Moreover, we conducted a pilot study on five professional academic staff in this field. We distributed the questionnaire to a convenient sample of 20 users of TripAdvisor. The resulting feedback included modifying the wording of certain questions to fit the Jordanian environment context. Accordingly, the final questionnaire was improved based on those comments.

### 7.2 Respondents' Demographic Profile

In this study, the respondents comprised 45.2% males and 54.8% females. The majority of the respondents in this study; that is, 64.2%, were in the age group between 19 and

26 years. In terms of their monthly income, about 72.5% of the respondents have a monthly income of more than 250 JD. Table (1) summarizes the demographic characteristics of the respondents.

**Table 1. The Demographic Characteristics of the Respondents**

Characteristics	Categories	Number	Percentage
Gender			
	Male	164	45.2
	Female	199	54.8
Age			
	18 years	55	15.2
	19-26	233	64.2
	27-34	45	12.4
	35-42	23	6.3
	Above 42 years	7	1.9
Monthly Income			
	150 JD	52	14.3
	151-249 JD	48	13.2
	250-349 JD	59	16.3
	350-499 JD	74	20.4
	500 and above	130	35.8

**7.3 Descriptive Statistics:** All the item scales (normative, informative and buying intention) included in the study were tested for their means, standard deviations, skewness and kurtosis. According to descriptive statistics presented in Table (2), a positive disposition towards the items is indicated. The standard deviation (S.D.) values ranged from 0.740 to 0.950, indicating a narrow spread around the mean. Also, the mean values of all items were greater than

the midpoint (3) and ranged from 3.270 to 4.170. However, after careful assessment by using skewness and kurtosis, the data was found to be normally distributed. Indeed, skewness and kurtosis were normally distributed, since most of the values were inside the adequate ranges for normality (i.e., -1.0 to +1.0) for skewness and less than 10 for kurtosis (Hair et al., 2017).

**Table 2. Means, Standard Deviations and Normality of Scale Items**

Construct /Items		Mean	S.D.	Skewness	Kurtosis
<b>1. Normative Influences</b>					
<b>1.a Overall Product Ranking</b>					
a1	Overall hotel ranking has reduced the number of alternative hotels that I was considering visiting.	4.2259	0.74220	-1.467	4.512
a2	Overall hotel ranking has helped me rapidly identify the best and the worst hotels.	3.8981	0.71580	-1.090	2.498
a3	Overall hotel ranking has guided my purchase decision to a specific hotel.	4.0441	0.78878	-0.599	0.398
a4	Overall hotel ranking has facilitated my purchase decision.	4.1708	0.79239	-1.318	3.237
a5	Overall hotel ranking has enabled me to identify the hotel that could satisfy my needs.	4.1708	0.74591	-0.930	1.615
<b>1.b Customer Ratings</b>					
a6	Customer ratings have helped me learn about the hotels.	4.1928	0.81169	-0.928	1.013
a7	Customer ratings have improved my understanding of the quality of the hotels' features.	4.0937	0.82572	-0.886	1.133
a8	Customer ratings were useful in order to evaluate the quality of hotel specifications/features.	3.9917	0.85556	-0.703	0.412
<b>2. Informational Influences</b>					
<b>2.a Information Quality</b>					
a9	The information from online review sites is credible.	3.2066	0.89118	-0.041	0.062
a10	The information from online review sites is relevant to my needs.	3.3702	0.94209	-0.200	-0.719
a11	The information from online review sites is based on facts.	3.3774	0.97382	-0.328	-0.604
a12	The information from online review sites is of sufficient depth (degree of detail).	3.2204	0.95820	-0.131	-0.663
a13	The information from online review sites is of sufficient breadth (spanning different subject areas).	3.2893	0.91734	-0.281	-0.765
<b>2.b Source Credibility</b>					
a14	The reviewers are credible.	3.2700	0.85000	-0.276	0.061
a15	The reviewers are experienced.	3.3223	0.87836	-0.284	-0.363
a16	The reviewers are trustworthy.	3.2700	0.88502	-0.147	-0.078
a17	The reviewers are reliable.	3.2479	0.85992	-0.186	-0.230
<b>2.c Information Quantity</b>					
a18	The quantity of review information is sufficient to satisfy my needs.	3.5262	0.80828	-0.353	0.040
a19	The quantity of review information is large.	3.4050	0.79618	-0.363	-0.312
<b>3. Behavioral Intention</b>					
a20	I intend to visit the hotels listed on online review sites.	3.7190	0.83325	-0.701	0.718
a21	I planned to stay at the hotels listed on online review sites.	3.7906	0.84109	-0.681	0.465

#### 7.4 Data Analysis Techniques

For the analysis, the collected data was coded into SPSS, Version 24. The analysis part consists of several different statistical analyses and tests, including factor analysis and multiple regression analysis. The main purpose behind the use of factor analysis techniques is to reduce the large number of variables that underlie each construct of both major constructs (i.e., **normative influences, informational influences and behavioral intention**) into orthogonal indices for further analysis by regression analysis. Furthermore, by employing the principal component analysis techniques, it may be possible to explore the patterns of factors that underlie each major construct. It was considered an appropriate method to overcome the potential problems of multicollinearity among the variables that pertain to each construct.

A pre-analysis was conducted to examine the appropriateness of the data for factor analysis. Then, the results of factor analysis were examined using multiple criteria, including eigenvalues, interpretability and internal consistency, as recommended by Hair et al. (2017).

Therefore, items determined to have eigenvalues greater than one and factor loadings less than 0.40 had little or no relationship with one another; hence, they were discarded (Hair et al., 2017). The results of principal components analysis indicate that 2 factors can be extracted from the normative influence, 4 factors form the informative influence and 1 factor from the behavioral intention. In summary, based on the preliminary analysis, the evaluation of the data by factor analysis and reliability estimates indicated that all scale items were appropriate and valid for further statistical analysis. Finally, Cronbach's alpha reliabilities were examined for each variable. Each coefficient greater than 0.60 for adapted and 0.70 for existing scales was considered a reliable indicator of the constructs under study (Hair et al., 2017). Reliability analysis was carried out for each construct (**normative influences, informational influences and behavioral intention**). The scores obtained ranged from 0.88 to 0.90.

**Table 3. Factors Underlying the Constructs of the Study's Model**

Factors	No. of items	Eigenvalue	% of Variance	Cumulative %
<b>(1) Normative Influences</b>				
Overall Product Ranking	5	3.566	35.537	35.537
Customer Ratings	3	1.529	28.153	63.690
<b>(2) Informative Influences</b>				
Information Quality	5	5.079	25.909	25.909
Source Credibility	4	1.247	24.371	50.280
Information Quantity	2	1.163	17.797	68.077
<b>(3) Behavioral Intention</b>				
Behavioral Intention	2	1.653	82.645	82.645

#### 7.5 Testing the Study's Hypotheses

Multiple regression analysis is used to examine the

study hypotheses. Table (4) summarizes the results of multiple regression analysis, with the F-ratio test, for

the study hypotheses (Ho.1, Ho.2 and Ho.3). The results indicate that each of these hypotheses (Ho.1, Ho.2 and Ho.3) is significantly correlated with the **behavioral intention** at 0.000 level of significance. Accordingly, it

may be concluded that there is a significant relationship between each dimension (i.e., normative influences, informative influences and combined) and **behavioral intention**.

**Table 4. A Summary of Multiple Regression Results Taken Together**

Hypotheses	Dimensions	Multiple R	R-square	Adjusted R-square	F	F-Sig.
Ho.1	Normative	0.401	0.16	0.156	34.405	0.000
Ho.2	Informative	0.508 <sup>a</sup>	0.258	0.252	41.703	0.000
Ho.3	Together	0.555 <sup>a</sup>	0.308	0.298	31.734	0.000

**Interpretation of Multiple Regression Findings**

According to the stepwise multiple regression method, the factors which are highly correlated with the dependent variable (i.e., **behavioral intention**) are expected to enter into the regression equation. The F-value at 0.00 level of significance is used to determine the “goodness of fit” for the regression equation. The F-value is the ratio of explained to unexplained variance accounted for by the regression equation, when the total variance is low, the interpretation of the individual beta coefficient has little meaning.

Therefore, when the adjusted R-square is around 0.10 or above and the F-value of the regression equation reaches 0.05 level of significance, the individual beta weight is explained. Prior to interpreting the results of multiple regression analysis, the severity or degree of multicollinearity is tested by examining the relative size of the pairwise correlation coefficient between the explanatory independent factors. An examination of the correlation matrix indicates that the correlation for each coefficient is less than (0.50). Therefore, it is possible to interpret the findings, since multicollinearity is not severe (Hair et al., 2017).

Hair et al. (2017) recommended assessing the tolerance

and variance inflation factor (VIF). Tolerance refers to the assumption of the variability in one independent variable that does not explain the other independent variables. VIF reveals much of the same information as the tolerance factor. The common cuts-off threshold is a tolerance value of 0.10, which corresponds to a VIF- value above 10. Multicollinearity was indicated in a tolerance level of less than 0.10 or a VIF value above 10. The tolerance value for each independent variable above the ceiling tolerance value of 0.10 is consistent with the absence of serious level of multicollinearity. This judgment was further supported by a VIF-value for each independent variable above the threshold value of 1.0. For more details, see Table (5).

**Table 5. Collinearity Diagnostics**

Independent Factors	Tolerance	VIF
<b>(1) Normative</b>		
Overall Product Ranking	0.845	1.184
Customer Ratings	0.953	1.049
<b>(2) Informative</b>		
Information Quality	0.898	1.113
Source Credibility	0.973	1.028
Information Quantity	0.916	1.091

The findings of stepwise regression analysis are presented and discussed here under the following subsections:

1. **Stepwise Multiple Regression (Normative Dimension):** The results of stepwise regression analysis indicate that the **Normative Dimension** (i.e., the two factors: overall product rating and customer ratings, taken together) is significantly related to **behavioral intention**. The direction of this relationship is positive. The results support the findings of previous studies (e.g., Filieri & Mcleay, 2014; Filieri, 2015). The

findings also indicate that these two explanatory independent factors of normative dimension explanatory independent factors are included in the regression equation. These two factors in terms of their order of importance are: customer ratings and overall product ranking. The adjusted R-square for these two factors is 0.16, as shown in Table (4). This indicates that about 16% of the variation of behavioral intention can be explained by the normative dimension.

**Table 6. Stepwise Regression Analysis: Normative Dimension**

Factors	Step	R	R-square	Adjusted R	Beta	Sig.
Overall Product Ranking	1	0.332 <sup>a</sup>	0.110	0.108	0.332	0.000
Customer Ratings	2	0.401 <sup>b</sup>	0.160	0.156	0.224	0.000

2. **Stepwise Multiple Regression (Informative Dimension):** The results of stepwise multiple regression analysis indicate that the **informative dimension** (i.e., the three factors which were extracted from the Informative Dimension taken together) is importantly related to behavioral intention. The findings indicate that all these explanatory independent factors (information quality, source credibility and information quantity) are included in the regression equation. The adjusted R-square of these factors is 0.25, as shown in

Table (4).

Comparing the results shown in Table (6) with those of the normative dimension, it may be concluded that the informative factors (0.25) produce a much higher explanation of the variance of the behavioral intention than the normative dimension factors (0.16). This might indicate that factors of informative dimension are much more critical to behavioral intention than those related to the normative dimension.

**Table 7. Stepwise Regression Analysis: Informative Dimension**

Factors	Step	R	R-square	Adjusted R	Beta	Sig.
Information Quality	1	0.422 <sup>a</sup>	0.178	0.176	0.422	0.000
Source Credibility	2	0.477 <sup>b</sup>	0.228	0.223	0.222	0.000
Information Quantity	3	0.510 <sup>c</sup>	0.260	0.254	0.181	0.000

As shown in Table (7), these three important factors included in the regression equation are discussed according

to their order of importance as follows: information quantity, source credibility and information quality,

respectively. In other words, the higher the importance attached to these factors, the higher the behavioral intention will be.

**3. Stepwise Multiple Regression (Combined Findings):**

This approach is expected to provide evidence of the determinants of behavioural intention when compared with the solution for each dimension (i.e., each one acting alone). More of the predicting factors are expected to enter in the regression equation. The findings of multiple regression indicate that the

combination of the two dimensions (i.e., all five factors, acting together) is associated with the behavioural intention. The findings also indicate that all of the five factors are included in the regression equation. The most important factors included in the regression equation in terms of their order of importance are: information quality, information quantity, source credibility, overall product ranking and customer ratings, respectively.

**Table 8. Stepwise Regression Analysis: Combined Dimensions**

Factors	Step	R	R-square	Adjusted R	Beta	Sig.
Customer Ratings	1	0.422 <sup>a</sup>	0.178	0.176	0.354	0.000
Overall Product Ranking	2	0.477 <sup>b</sup>	0.228	0.223	0.178	0.000
Source Credibility	3	0.513 <sup>c</sup>	0.263	0.257	0.194	0.000
Information Quantity	4	0.545 <sup>d</sup>	0.297	0.289	0.165	0.000
Information Quality	5	0.556 <sup>e</sup>	0.309	0.300	0.115	0.000

Comparing this solution with the other two solutions previously presented (i.e., the results of each dimension acting alone), it may be concluded that combining the two dimensions together (normative and informative dimensions) would give a slightly better explanation (predictive power) of the variation of the behavioural intention than in case each dimension acting alone. The rate of explanation which they account for is increased from 16% (normative dimension) and 25% (Informative dimension) to about 30%, as presented in Table (4).

This conclusion implies that a better understanding of the determinants of behavioral intention requires that the two dimensions (normative and informative dimensions) should be viewed together rather than viewing each dimension alone. Furthermore, viewing the informative dimension alone would give a stronger explanation than viewing the normative dimension alone.

**8. Results and Discussion**

The prevalence and adoption of product reviews has become more popular among consumers. As mentioned in the introduction, poor knowledge is available about the combined effect of normative evaluations and informational influences on consumers’ perceived diagnosis of information from online reviews and their impact on decision-making. This research adopts dual-process theory (Deutsch & Gerard,1955) by expanding its implementation to the online context and exploring the impact of normative influences and informational influences (separately and combined) on hotel visitors’ behavioural intentions in the context of Jordanian culture. From a theoretical perspective, the tested model proves that dual-process theory can be used to explain the relationship between online customer-review websites

and behavioural intention. Factor analysis findings indicate that customer ratings and overall product ranking are true measures of normative factors. In addition, information quantity, source credibility and information quality are true

measures of informative measures. This result is supported by previous studies (e.g. Zhang et al., 2014; Filieri, 2015).

**Table 9. Ranking of Independent Variables in Terms of Their Importance, Taken Separately and Together**

Independent variable	Taken separately		Taken together
	Normative influences	Informative influences	
1. Overall product ranking	2	-	4
2. Customer ratings	1	-	5
3. Informative quality	-	3	1
4. Source credibility	-	2	3
5. Information quantity	-	1	2
Adjusted R-square	0.16	0.25	0.30

Regression and correlation analyses were conducted to determine the nature and magnitude of the relationship between normative and informative factors and buying behavioural intention regarding hotels in Jordan. The results show that there is a direct and moderate relationship between buying behavioural intention and normative or informative influences, or in combination. Furthermore, as presented in Table 9, the findings provide empirical evidence that the approach of integrating normative and informative factors can produce a better explanation of variation in the combination of buying behavioural intention dimensions, rather than taking each dimension separately. In other words, normative and informative factors together can influence buying behavioural intention more positively. This finding is consistent with recent studies which have concluded that normative and informative factors are interdependent and their combined impact is much more effective than taking each group separately (Schlosser, 2011; Filieri & Mcleay, 2014; Filieri, 2015). Another valuable finding is that the impact of informative factors is much more than that of normative

cues (either separately or combined) and that result is consistent with some studies which have revealed that consumers are more concerned about recommendations and written comments than average star-ranking summary statistics given by websites (Chevalier & Mayzlin, 2006; Schlosser, 2011), while it contradicts with other studies which have assumed the opposite (Benedicktus, 2011; Filieri & Mcleay, 2014). This result may have appeared, because consumers' purchasing intentions, especially in developing countries such as Jordan, are more influenced by the quality of information in online reviews in high-involvement conditions, like choosing hotels (Park et al., 2007). Additionally, the findings show that information quality is the most important item among all other informative and normative factors in determining a hotel visitor's behavioural intention (Table 9, column 3), an outcome supported by several studies (Park et al., 2007; Cheung et al., 2008; Gupta & Harris, 2010; Zhu & Zhang, 2010; Ghose et al., 2012; Filieri, 2015).

This finding is also consistent with rational action theory (Becker, 1976). Information quantity is the second most important item in determining the intensity of behavioural intention, followed by source credibility. Source credibility is the least important item among informative factors; a conclusion which may result from debatable perspectives regarding the credibility of reviewers, since offline and online communication is used to transmit reports about hotel managers who post negative reviews about their rivals or offer incentives to reviewers in exchange for favourable reviews on their review sites. As a result, reviewers have no guarantee of credible or reliable content (Lim et al., 2010; Tuttle, 2012). The least important items are overall product ranking and customer ratings, respectively.

Accordingly, we can conclude that consumers prefer to rely on high-quality reviews together with reliable crowd opinions on a hotel's performance rather than depending on a great number of online review sites as credible indices of the quality of a hotel in order to determine the intensity of behavioural intention. Referring back to the impact of normative and informative factors (separately) on a hotel visitor's behavioural intention, Table 9, column 2 indicates that based on the data analysis results, it was found that informationally based determinants; namely, information quality, source credibility and information quantity; positively and significantly influenced behavioural intention. Information quantity is the most important determinant of behavioural intention among all other informational factors. This finding is congruous with the findings of previous researches, like Park & Lee (2008), Park et al. (2007) and Zhang et al. (2014), while it is inconsistent with Filieri & Mcleay (2014), who found that information quantity does not significantly affect a traveller's adoption of information from online reviews for decision-making.

Source credibility is the second most important determinant of behavioural intention. This result is in

agreement with several previous studies, such as Zhang & Watts (2008), Senecal & Nantel (2004) and Zhang et al. (2014), whereas Ayeh et al. (2013) revealed a significant relationship between source credibility and a user's intention to rely on user-generated content for travel planning. Surprisingly, information quality is the least important factor, though it still affects behavioural intention. This result is consistent with previous studies, as almost all agree that there is a positive relationship between these two factors, but with differing opinions on the degree of correlation; other studies, such as Xie et al. (2015), Barreda et al. (2015), Filieri & Mcleay (2014), Dholakia & Sternthal (1977) and Herr et al. (1991), have stressed the greater importance of information quality compared with other informational factors.

Regarding normative factors, both customer rating and overall product rankings have been found to be essential determinants of behavioural intention. This result enriches researchers' knowledge about the importance of crowd opinions and their influence on e-wom communication. Customer rating is the most important factor and this result is consistent with recent studies (Filieri, 2015; Molinillo et al., 2016) which have restructured the concept and manifested its superior importance. Overall product ranking is the second most important normative factor. This result is consistent with previous studies which have concentrated on the importance of product rating (e.g. Schlosser, 2005; Benedictus, 2011; Filieri & Mcleay, 2014; Filieri, 2015). The results for normative factors are at odds with social-cognition theory, which assumes that while consumers are making judgements, they underestimate basic rating information, like the average/ mean star ratings next to each product, in favour of more detailed and reliable written information (Bar-Hillel, 1980; Borgida & Nisbett, 1977). In addition, the findings contrast with several

recent studies which assume that consumers pay more attention to a single negative review and may therefore neglect the aggregate rating/ ranking (Qiu et al., 2012). This study concludes that consumers use aggregate ratings to know more about hotels and their performance. On the other hand, the results are in agreement with the theory of social contagion (Sutherland, 1995), as peer consumers are prone to rely on the judgements of previous reviewers in order to align with a peer group (Zhang et al., 2009).

## 9. Research Implications

This study has important implications for studies aiming to understand the relationship between normative and informative influences and buying behavioural intention in developing countries. Hotels in such areas can take advantage of the increasingly widespread use of iPad, tablets, smartphones and many other mobile Internet devices and offer their customers effective free Wi-Fi access to share their experiences immediately with others during their stay as travellers, thus becoming co-marketers (Sigala et al., 2012). Actually, travellers might perceive other travellers' ratings and rankings more favourably than the overall rating reported by tourism experts or business-oriented firms. Another advantage is that hotels can motivate customers to classify their reviews by service or any other criterion, which will result in richer and more concentrated evaluations of several aspects of their visit. Moreover, hotels should motivate their customers to share their feedback online within a given period of time after check-out, as their emotional engagement with their visit is still fresh and very memorable and their social surroundings are waiting for their response. In addition, hotels should be aware of that they ought to use different types of incentives to encourage their customers to access the Internet through a certain online customer review website where the hotel intends to strengthen its presence.

Hoteliers must ensure that the quality of reviews hosted

on their websites is high. Moreover, hotel managers can adopt reviews with high information quality published on independent review websites to promote their brands and services; thus, they might identify the best reviews (based on information quality) published on independent consumer review websites and display them on their own websites as another form of information for their current and potential customers. Finding that customer ratings and overall product rankings are strong determinants of hotel visitors' behavioural intentions may encourage hotel managers to make ratings and rankings more visible and accessible to enhance consumers' experiences and hotels' brand images. Also, more and more information shortcuts will help consumers make their decisions quickly and smoothly.

Hotel managers in Jordan should recognize that online hotel customer-review websites are beneficial for several strategic and operational reasons. First, in a more reflective strategic view, comparisons with other equivalent hotels in the same region will aid hospitality business people to position themselves more effectively in the marketplace. Second, it is helpful for hotel managers to detect and resolve operational and technical issues quickly, when customer review sites are administered effectively, utilizing a real-time approach (Molinillo et al., 2016). This study, like many other related studies, approves the notion that online hotel review sites can support hoteliers. For instance, it is suggested that exploring product quality information online decreases consumers' sensitivity level to price information (Lynch & Ariely, 2000). This implies lower levels of price competition among hotels, especially in developing countries such as Jordan and thus higher profit margins. Moreover, Vermeulen & Seegers (2009) concluded that positive reviews have a

positive influence on consumer behaviour, while negative ones have little influence. Also, they believe that changes in hotel considerations are indeed attributable to exposure to online reviews. In response, hotels should motivate their customers to post comments on customer review websites

so as to balance out any negative feedback. To conclude, hotel marketers should realize the technological dynamics of greater reach-out and promote their destinations and services to online clients.

## REFERENCES

- 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*, 52 (4): 437-452.
- Bar-Hillel, M. 1980. The Base Rate-fallacy in Probability Judgments. *Acta Psychologica*, 44 (3): 211-233.
- Barreda, A.A, Bilgihan, A., Nusair, K. and Okumus, F. 2015. Generating Brand Awareness in Online Social Networks. *Computers in Human Behavior*, 50: 600-609.
- Becker, G.S. 1976. *The Economic Approach to Human Behavior*. Chicago, IL: University of Chicago Press.
- Benedicktus, R.L. 2011. The Effect of 3<sup>rd</sup> Party Consensus Information on Service Expectations and Online Trust. *Journal of Business Research*, 64 (8): 846-853.
- Borgida, E. and Nisbett, R.E. 1977. The Differential Impact of Abstract vs. Concrete Information on Decisions. *Journal of Applied Social Psychology*, 7 (3): 258-271.
- Briggs, P., Burford, B., De Angeli and Lynch, P. 2002. Trust in Online Advice. *Social Science Computer Review*, 20 (3): 321-332.
- Burgoon, J.K., Bonito, J.A., Bengtsson, B., Cederberg, C., Lundeberg, M. and Allspach, L. 2000. Interactivity in Human-Computer Interaction: A Study of Credibility, Understanding and Influence. *Computers in Human Behavior*, 16: 553-574.
- Buttele, F.A. 1998. Word of Mouth: Understanding and Managing Referral Marketing, *Journal of Strategic Marketing*, 6 (3): 241-254.
- Cacioppo, J.T., Petty, E. and Morris, K.J. 1983. Effects of Need for Cognition on Message Evaluation, Recall and Persuasion. *Journal of Personality and Social Psychology*, 45 (4): 805-818.
- Campbell, M.K., Bernhardt, J.M., Waldmiller, M., Jackson, B., Potenziani, D., Weathers, B. and Demissie, S. 1999. Varying the Message Source in Computer-tailored Nutrition Education. *Patient Education and Counseling*, 36: 157:169.
- Chaiken, S. and Ledgerwood, A. 2012. A Theory of Heuristic and Systematic Information Processing. In: P.A.M.V. Lange, A.W., Kruglanski and E.T. Higgins (Eds.). *Handbook of Theories of Social Psychology*. Volume1, SAGE Publications Ltd., London, 246-267.
- Chaiken, S. 1980. Heuristic versus Systematic Information Processing and the Use of Source versus Message Cues in Persuasion. *Journal of Personality and Social Psychology*, 39 (5): 752:766.
- Chatterjee, P. 2001. Online Reviews: Do Consumers Use Them? *Advances in Consumer Research*, 28: 129-133.
- Chen, S. and Chaiken, S. 1999. The Heuristic-Systematic Model in Its Broader Context. In: Chaiken, S. and Y. Trope (Eds.). *Dual Process Theories in Social Psychology*. Guilford Press, New York, NY, US, 73-96.
- Cheung, C.M.K, Lee, M.K.O. and Rabjhon, N. 2008. The Impact of E-wom: The Adoption of Online Opinions in Online Customer Communities. *Internet Research*, 18 (3): 229-247.
- Cheung, C.M.K. and Thadani, D.R. 2012. The Impact of Electronic Word-of-Mouth Communications: A Literature Analysis and Integrative Model. *Decision*

- Support Systems*, 54: 461-470.
- Cheung, M.Y., Luo, C., Sia, C.L. and Chen, H. 2009. Credibility of Electronic Word-of-Mouth: Informational and Normative Determinants of Online Consumer Recommendations. *International Journal of Electronic Commerce*, 13 (4): 9-38.
- Chevalier, J. and Mayzlin, D. 2006. The Effect of Word-of-Mouth on Sales: Online Book Reviews. *Journal of Marketing Research*, 43 (August): 345-354.
- Chu, S.C. and Kim, Y. 2011. Determinants of Consumer Engagement in Electronic Word-of-Mouth (e-WOM) in Social Networking Sites. *International Journal of Advertising*, 30 (1): 47-75.
- Churchill, G.A.J. 1979. A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16 (1): 64-73.
- Dellarocas, C., Zhang, X.M. and Award, N.F. 2007. Exploring the Value of Online Product Reviews in Forecasting Sales: The Case of Motion Pictures. *Journal of Interactive Marketing*, 21 (4): 23-45.
- Deutsch, M. and Gerard, H.B. 1955. A Study of Normative and Informational Social Influences upon Individual Judgment. *The Journal of Abnormal and Social Psychology*, 51 (3): 629-636.
- Dholakia, R.R. and Sternthal, B. 1977. Highly Credible Sources: Persuasive Facilitators or Persuasive Liabilities? *Journal of Consumer Research*, 3 (4): 223-232.
- Duan, W., Gu, B. and Whinston, A.B. 2005. Do ORs Matter? An Empirical Investigation of Panel Data. *Decision Support Systems*, 45 (4): 1007-1016.
- 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*, 53 (1): 44-57.
- Filieri, R. 2015. What Makes Online Reviews Helpful? A Diagnosticity Adoption Framework to Explain Informational and Normative Influences in E-wom. *Journal of Business Research*, 68: 1261-1270.
- Forman, C., Anindya, G. and Batia, W. 2008. Examining the Relationship between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets. *Information Systems Research*, 19 (3): 291-313.
- Ghose, A., Ipeiritos, 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*, 31 (3): 493-520.
- Godes, D. and Mayzlin, D. 2004. Using Online Conversations to Study Word-of-Mouth Communication. *Marketing Science*, 23 (4): 545-560.
- Gupta, P. and Harris, J. 2010. How E-wom Recommendations Influence Product Consideration and Quality of Choice: A Motivation to Process Information Perspective. *Journal of Business Research*, 63 (9-10): 1041-1049.
- Hair, J.F.J., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. 2017. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2<sup>nd</sup> Edition, Sage, Thousand Oaks, CA.
- Hennig-Thurau, T. and Walsh, G. 2004. Electronic Word-of-Mouth: Motives for and Consequences of Reading Customer Articulations on the Internet. *International Journal of Electronic Commerce*, 8 (2): 51-74.
- Herr, P.M., Kardes, F.R. and Kim, J. 1991. Effects of Word-of-Mouth and Product-attribute Information on Persuasion: An Accessibility-diagnosticity Perspective. *Journal of Consumer Research*, 17 (4): 454-462.
- <http://www.alghad.com/articles/933171>. Published on 20/April/2016
- Janis, I.L. and Hovland, C.I. 1959. An Overview of Persuasibility Research. In: C.I. Hovland and I.L. Janis (Eds.), *Personality and Persuasability*. New Haven: Yale University Press, 1-26.
- Jimenez, F.R. and Mendoza, N.A. 2013. Too Popular to Ignore: The Influence of Online Reviews on Purchase Intentions of Search and Experience

- Products. *Journal of Interactive Marketing*, 27: 226-235.
- Keller, K.L. 2009. Building Strong Brands in a Modern Marketing Communications Environment. *Journal of Marketing Communications*, 15 (2-3):139-155.
- Lee, J., Park, D.H. and Han, I. 2007. The Effect of Negative Online Consumer Reviews on Product Attitude: An Information Processing View. *Electronic Commerce Research and Applications*, 7 (3): 341-352.
- Leung, D., Law, R., Vanhoof, H. and Buhalis, D. 2013. Special Media in Tourism and Hospitality: A Literature Review. *Journal of Travel and Tourism Marketing*, 30 (1-2): 3-22.
- Lim, E.P., Nguyen, V.A., Jindal, N., Liu, B. and Lauw, H.W. 2010. Detecting Product Review Spammers Using Rating Behaviors. *Proceedings of the 19<sup>th</sup> ACM International Conference on Information and Knowledge Management*, 939-948.
- Liu, Y. 2006. Word-of-Mouth for Movies: Its Dynamics and Impact on Box Office Revenue. *Journal of Marketing*, 70 (3):74-89.
- Lynch, J. Jr. and Ariely, D. 2000. Wine Online: Search Costs Affect Competition in That Matter.
- McGinnies, E. and Ward, C.D. 1980. Better Liked Than Right: Trustworthiness and Expertise As Factors in Credibility. *Personality and Social Psychology Bulletin*, 6 (3): 467-672.
- Moe, W. and Trusov, M. 2011. The Value of Social Dynamics in Online Product Rating Forums. *Journal of Marketing Research*, 48 (3): 444-456.
- Molinillo, S., Ximénez-de-Sandoval, J.L., Fernández-Morales, A. and Coca-Stefaniak, A. 2016. Hotel Assessment through Social Media: The Case of TripAdvisor. *Tourism and Management Studies*, 12 (1): 15-24.
- Ohanian, R. 1990. Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness and Attractiveness. *Journal of Advertising*, 19 (3): 39-52.
- Park, D. and Lee, J. 2008. E-wom Overload and Its Effect on Consumer Behavioral Intention Depending on Consumer Involvement. *Electronic Commerce Research and Applications*, 7 (4): 386-398.
- Park, D., Lee, J. and Han, L. 2007. The Effect of Online Consumer Reviews on Consumer Purchasing Intention: The Moderating Role of Involvement. *International Journal of Electronic Commerce*, 11 (4): 125-148.
- Pavlou, P.A. and Fygenon, M. 2006. Understanding and Predicting Electronic Commerce Adoption: An Extension of the Theory of Planned Behavior. *Management Information Systems Quarterly*, 30 (1): 115-143.
- Petty, R.E., Cacioppo, J.T. and Schumann, D. 1983. Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement. *Journal of Consumer Research*, 10 (20): 135-146.
- Petty, R.E. and Cacioppo, J.T. 1986. The Elaboration Likelihood Model of Persuasion. In: *Communication and Persuasion: Springer Series in Social Psychology*. Springer, New York, NY.
- Price, Quality and Distribution. *Marketing Science*, 19 (1): 83-103.
- Qiu, L., Pang, J. and Lim, K.H. 2012. Effects of Conflicting Aggregated Rating on E-WOM Review Credibility and Diagnosticity: The Moderating Role of Review Valence. *Decision Support Systems*, 54 (1): 631-643.
- Ratchford, B.T., Talukdar, D. and Lee, M.S. 2001. A Model of Consumer Choice of the Internet As an Information Source. *International Journal of Electronic Commerce*, 5 (3): 7-22.
- Schlosser, A. 2005. Posting versus Lurking: Communicating in a Multiple Audience Context. *Journal of Consumer Research*, 32 (2): 260-265.
- Schlosser, A.E. 2011. Can Including Pros and Cons Increase the Helpfulness and Persuasiveness of Online Reviews? The Interactive Effects of Ratings and Arguments. *Journal of Consumer Psychology*, 21 (3): 226-239.
- Sen, S. and Lerman, D. 2007. Why Are You Telling Me

- This? An Examination into Negative Consumer Reviews on the Web. *Journal of Interactive Marketing*, 21 (4): 76-94.
- Senecal, S. and Nantel, J. 2004. The Influence of Online Product Recommendations on Consumers' Online Choices. *Journal of Retailing*, 80: 159-169.
- Sia, C.L., Tan, B.C.Y. and Wei, K.K. 2002. Group Polarization and Computer Mediated Communication: Effects of Communication Cues, Social Presence and Anonymity. *Information Systems Research*, 13 (1): 70-90.
- Sigala, M., Christou, E. and Gretzel, U. 2012. *Social Media in Travel, Tourism and Hospitality: Theory, Practice and Cases*. Surrey, UK: Ashgate.
- 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*, 39: 1-9.
- 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 and Management*, 19 (7): 773-796.
- Sun, M. 2012. How Does the Variance of Product Ratings Matter? *Management Science*, 58 (4): 696-707.
- Sutherland, S. 1995. *Macmillan Dictionary of Psychology*. London: Macmillan Press.
- Tuttle, B. 2012. Why You Shouldn't Trust Positive Online Reviews or Negative Ones for That Matter. Aug. 28, 2012. Accessible at: <http://business.time.com/2012/08/>
- Vermeulen, I.E. and Seegers, D. 2009. Tried and Tested: The Impact of Online Hotel Reviews on Consumer Consideration. *Tourism Management*, 30 (1): 123-127.
- Wang, R.Y. and Strong, D.M. 1996. Beyond Accuracy: What Data Quality Means to Data Consumers. *Journal of Management Information Systems*, 12 (4): 5-34.
- Wathen, C.N. and Burkell, J. 2002. Believe It or Not: Factors in Influencing Credibility on the Web. *Journal of the American Society for Information Science and Technology*, 53(2): 134,134-144.
- Xie, K.L., Chen, C. and Wu, S. 2015. Online Consumer Review Factors Affecting Offline Hotel Popularity: Evidence from Tripadvisor. *Journal of Travel and Tourism Marketing*, 33: 211-223.
- Ye, Q., Law, R., Gu, B. and Chen, W. 2011. The Influence of User-generated Content on Traveler Behavior: An Empirical Investigation on the Effects of E-Word-of-Mouth to Hotel Online Bookings. *Computer in Human Behaviour*, 27 (2): 634-639.
- Ye, Q., Law, R. and Gu, B. 2009. The Impact of Online User Reviews on Hotel Room Sales. *International Journal of Hospitality Management*, 28 (1): 180-82.
- Zhang, K.Z.K., Zhao, S., Cheung, C.M.K. and Lee, M.K.O. 2014. Examining the Influence of Online Reviews on Consumers Decision-making: A Heuristic- Systematic Model. *Decision Support Systems*, 67: 78-89.
- Zhang, L., Pan, B., Smith, W.W. and Li, X. 2009. An Exploratory Study of Travelers' Use of Online Reviews and Recommendations: A Qualitative Approach. *Information Technology and Tourism*, 11 (2): 157-167.
- Zhang, W. and Watts, S. 2003. Knowledge Adoption in Online Communities of Practice. In: S.T. March, A. Massey and J.I. De Gross (Eds.), *24<sup>th</sup> International Conference on Information Systems*. Atlanta: AIS: 96-109.
- Zhang, W. and Watts, S. 2008. Capitalizing on Content: Information Adoption in Two Online Communities. *Journal of the Association for Information Systems*, 9 (2): 73-94.
- Zhu, F. and Zhang, X.M. 2010. Impact of Online Consumer Reviews on Sales: The Moderating Role of Product and Consumer Characteristics. *Journal of Marketing*, 74: 133-148.