Your comments are important to me! The impacts of online customer reviews in shopping websites

Ismail Erkan*
Faculty of Economics and Administrative Sciences,
Izmir Katip Celebi University,
Izmir, Turkey
Email: ismail.erkan@ikc.edu.tr
*Corresponding author

Abdulaziz Elwalda
Faculty of Economics and Political Science,
Misurata University,
Misurata, Libya
Email: elwaldaa@eps.misuratau.edu.ly

Abstract: The aim of this study is to examine the influence of Online Customer Reviews (OCRs) on consumers’ purchase intentions, and to understand the role of attitude on information adoption within the computer-mediated communication platforms. For this purpose, a research model was developed based on the Information Adoption Model (IAM). The model was empirically tested and validated through Structural Equation Modelling (SEM). The data were collected from a sample of 384 university students. The results confirm that attitude plays an important role on information adoption; and the following are among the key factors which influence consumers’ purchase intentions: eWOM quality, eWOM credibility, attitude towards eWOM, perceived eWOM usefulness, and eWOM adoption. Theoretical and practical implications are discussed as well as recommended for future studies.

Keywords: OCRs; online customer reviews; eWOM; electronic word of mouth; shopping websites; purchase intention; information adoption model; OCRs adoption model.

Reference to this paper should be made as follows: Erkan, I. and Elwalda, A. (2018) ‘Your comments are important to me! The impacts of online customer reviews in shopping websites’, Int. J. Internet Marketing and Advertising, Vol. 12, No. 1, pp.1–18.

Biographical notes: Ismail Erkan received his PhD from Brunel University London. His research interests are electronic word of mouth (eWOM), social media, customer engagement and purchase intention. His previous papers have been published in Computers in Human Behavior and Journal of Marketing Communications. Currently he is working as a research assistant at Izmir Katip Celebi University.

Abdulaziz Elwalda is a Lecturer in Marketing at Misurata University. He received his PhD from Brunel University London. His research interests include virtual community, electronic word of mouth, consumer behaviour, and IT adoption. His research articles have been published in well-established
1 Introduction

The importance of word of mouth (WOM) conversations in advertising, which refer to the conversations among consumers about brands and their products and services (Arndt, 1967; Westbrook, 1987), has been rapidly increasing (Colliander et al., 2015; Kim et al., 2015). WOM was considered worthy of study by researchers, and was found to be influential on consumers’ product judgements (Bone, 1995; Engel et al., 1969; Feldman and Lynch, 1988) as well as their purchase intentions (Brown and Reingen, 1987; Herr et al., 1991). However, it has gained a new perspective with the advent of the internet, since the information can now spread among a huge number of people in a very short period of time (Alboqami et al., 2015; Brown et al., 2007; Phelps et al., 2004; Phillips et al., 2014). This new form of WOM has been called electronic word of mouth (eWOM) (Hennig-Thurau et al., 2004). eWOM can occur through a variety of platforms such as shopping websites, social media websites, consumer review websites, discussion forums, and blogs (Cheung and Thadani, 2012; Kudeshia and Mittal, 2016). In this study, however, eWOM on shopping websites is examined since Online Customer Reviews (OCRs) are considered to be the most preferred eWOM source by customers (Yeap et al., 2014).

OCRs are a form of eWOM within shopping websites which refers to the content posted by customers (Elwalda et al., 2016; Kim et al., 2015). OCRs present the perspective of consumers who previously purchased and used the product (Park et al., 2007; Scholz and Dorner, 2013). OCRs are considered as a rich source of product information since they consist of experiences, opinions, and evaluations of former customers (Elwalda et al., 2016; Park et al., 2007; Utz et al., 2012). People therefore find OCRs useful for making better purchase decisions (Cheung et al., 2008; Park and Kim, 2008; Senecal and Nantel, 2004; Yayli and Bayram, 2012). As a result of this customer interest, researchers also gave importance to eWOM on shopping websites; it is thus studied by many researchers (Chevalier and Mayzlin, 2006; Gu et al., 2012; Li and Zhan, 2011). Previous studies investigated the role of consumer ratings (Chevalier and Mayzlin, 2006; Godes and Mayzlin, 2004), valence (Moe and Trusov, 2011; Sen and Lerman, 2007), valence intensity (Floh et al., 2013), level of detail (Jiménez and Mendoza, 2013), volume (Liu, 2006), ratings-text congruence (Schlosser, 2011) and the source of the review (Forman et al., 2008), on consumers’ purchase intentions. However, little attention has been paid to the determinants of eWOM in shopping websites which influences consumers’ purchase intentions; this study therefore focuses on this gap.

In order to understand these determinants, different theories and models have been applied by previous researchers such as Technology Acceptance Model (TAM) (Davis, 1989) and Theory of Planned Behaviour (TPB) (Ajzen, 1985; Ayeh, 2015; Elwalda et al., 2016). However, Sussman and Siegal (2003) particularly propose the Information
Adoption Model (IAM) in order to explain how people adopt the information posted on computer-mediated communication platforms. IAM is therefore considered applicable to studies regarding the eWOM; and it is applied by many researchers (Cheung et al., 2008; Cheung et al., 2009; Shu and Scott, 2014). On the other hand, although it is a widely used model, we claim that the role of attitude towards information is relatively ignored in the IAM. This paper therefore introduces a new model by extending the IAM. Our model explains the determinants of eWOM in shopping websites which influence consumers’ purchase intentions and offers several theoretical contributions for the literature:

i) Information usefulness is not the only antecedent of information adoption. Attitude is also influential on information adoption as well as usefulness.

ii) Purchase intention has two antecedents: information adoption and information usefulness.

iii) Information quality has influence on information credibility.

The objective of this study is to examine the influence of OCRs on consumers’ purchase intentions, and to understand the role of attitude on information adoption within the computer-mediated communication platforms. For this purpose, we empirically test and validate our research model through using Structural Equation Modelling (SEM). More specifically, our model tests quality, credibility, attitude, perceived usefulness, and adoption as the main precursors of purchase intention. The results provide substantial theoretical insights to information systems (IS) researchers, and contribute to the literature regarding eWOM on shopping websites. On the managerial side, the determinants provided by this study are valuable as they allow marketers to utilise eWOM in digital marketing activities.

2 Theoretical background of the research model

The rapid and extensive growth of virtual communities has introduced a new type of eWOM that of OCRs. OCRs are defined ‘as a peer-generated product evaluation that facilitates the consumer’s purchase decision process’ (Mudambi and Schuff, 2010, p.186). Studies have revealed that OCRs are the one of most important types of eWOM (Purnawirawan et al., 2012; Sen and Lerman, 2007).

OCRs are regarded as the new element in the marketing mix (Product, Promotion, Price, and Place) (Chen and Xie, 2008) and also have become a vital source of feedback (Dwyer, 2007). Therefore, companies have started using them as a tool for understanding customers’ attitudes (Dellarocas et al., 2007), which can help companies build their marketing strategies (Zhang et al., 2012). Previous researches have reported the significance of OCRs in online shopping. For example, Zhu and Zhang (2010) find that the volume of OCRs in the video games sector has an impact on sales. Moe and Trusov (2011) also report that OCRs valence in the beauty industry has an influence on sales. Liu (2006) shows that the volume of OCRs significantly impacts box office revenues. Furthermore, 61% of customers refer to one of the OCRs forms prior to making a purchase (eMarketer, 2008).

In this study, therefore, we develop a theoretical model to identify the determinants of eWOM in shopping websites which influence consumers’ purchase intentions. For this purpose, the IAM (Sussman and Siegal, 2003) was expanded with two constructs which
are attitude and intention. The developed model in this study is named as OCRs Adoption Model. Our model shows that attitude towards information plays an important role on information adoption within the computer-mediated communication platforms, and is also influential on consumers’ purchase intentions along with the other constructs of IAM.

2.1 Information adoption model (IAM)

eWOM communication consists of basic information exchange; however, the impact of information may change from one person to another (Chaiken and Eagly, 1976; Cheung et al., 2008). The same message can stimulate different outcomes among people due to their personal perceptions (Shu and Scott, 2014). In order to understand how people adopt the information posted on computer-mediated communication platforms, Sussman and Siegal (2003) propose the IAM. This model was developed by considering the Elaboration Likelihood Model (ELM) (Petty and Cacioppo, 1986; Petty et al., 1981) which posits that people can be influenced by a message in two routes: central and peripheral (Shen et al., 2013; Sussman and Siegal, 2003). The central route refers to the basis of the message, where the peripheral route refers to the issues which are indirectly related to the basis of the message (Petty and Cacioppo, 1986; Shu and Scott, 2014). In the IAM, the ‘argument quality’ represents the central route, while the ‘source credibility’ represents the peripheral route. Through this model Sussman and Siegal claim that argument quality and source credibility are the two antecedents of information usefulness which is the antecedent of information adoption. Figure 1 presents the IAM.

Figure 1   Information adoption model

As mentioned earlier, the IAM is considered as an applicable model to study eWOM since it explains how people adopt the information posted on computer-mediated communication platforms (Cheung et al., 2008; Cheung et al., 2009; Shu and Scott, 2014). However, although it is a widely accepted model, this study criticises the IAM as it ignores the ‘attitude’ of consumers while focusing on the attributes of information (i.e. quality, credibility, usefulness). In other words, this study claims that the ‘attitude’ of consumers should be considered in conjunction with the attributes of information, in order to understand how people adopt the information.
3 Research model and hypotheses development

In order to understand the determinants of eWOM in shopping websites which influence consumers’ purchase intentions, this study introduces OCRs adoption model by extending the IAM (Sussman and Siegal, 2003). IAM is a powerful and widely accepted model for online information adoption (Cheung et al., 2008; Cheung et al., 2009; Filieri and McLeay, 2014). However, information adoption in IAM is predicted by only one antecedent variable: information usefulness. Information usefulness is the basis of information adoption, yet it merely explains a little of information adoption variance. Moreover, IAM ignores both the ‘attitude’ of consumers and the relationship between quality and credibility, whereas information credibility is likely a consequence of information quality.

Addressing these limitations, we extend IAM by introducing attitude as an antecedent of information usefulness and adoption, and as a result of quality and credibility factors. Firstly, our OCRs adoption model regards attitude as another antecedent of information adoption, suggesting that information adoption variance can be better explained by customer attitudes towards OCRs. Customer attitude is a cognitive process that represents customers’ positive or negative affection about adopting OCRs (Ajzen, 1991). According to Theory of Reasoned Action (TRA), an individual will perform a task based on his or her pre-existing attitudes (Fishbein and Ajzen, 1975). Supporting this notion, prior studies have revealed that the overall attitude towards eWOM significantly impacts the behavioural intention to use eWOM communication (Shen et al., 2013). Therefore, considering customer attitudes towards OCRs in IAMs is of importance. Secondly, building an attitude towards a task is a stage that is prior performing it (Ajzen, 1991); hence, OCRs adoption model conceptualises customer attitude in the IAM to be influenced by the quality and credibility of OCRs.

The OCRs adoption model is the first to provide an understanding of the role of ‘attitude’ in IAMs, and to investigate the weight of ‘quality’ in affecting ‘credibility’. The model also shows that eWOM adoption is not only based on the perceived eWOM usefulness, but also on the customers’ attitudes towards eWOM. The OCRs adoption model delivers an understanding of the factors affecting eWOM adoption including: eWOM quality, eWOM credibility, attitude towards eWOM, and perceived eWOM usefulness. Furthermore, it explains the impact of usefulness and adoption on customer behavioural intention. Figure 2 presents the model of this study.

Figure 2  The proposed research model
3.1 Hypotheses development

According to IAM, information quality is considered to be a central influence in information adoption (Sussman and Siegal, 2003). The quality has evidently shown to be an important component that individuals use to evaluate eWOM communication (Cheng and Zhou, 2010). Individuals do not simply follow reviews thoughtlessly; they rather evaluate the review quality (Cheung et al., 2009). Once individuals are satisfied with the review quality, they will develop a positive attitude supporting credibility of the review. To some extent individuals evaluate both the trustworthiness and believability of reviews depending on their quality. Cheung et al. (2009) suggest that the credibility of a review depends on its quality. Supporting this, Park et al.’s (2007) study reveals that a high-quality review is likely to enhance OCRs’ persuasiveness. Moreover, eWOM quality is found to significantly affect online trust (Awad and Ragowsky, 2008). Similarly, argument strength that is an essential part of eWOM quality is reported to significantly affect eWOM credibility (Cheung et al., 2009). The present study, therefore, hypothesises the following:

Hypothesis 1: eWOM quality is positively related to eWOM credibility.

The interpersonal nature of OCRs can affect customers’ attitude (Lee et al., 2008). Quality and credibility are concerned with the degree to which a customer perceives the reviews to be valid, credible, and convincing by which that customer’s position is supported (Cheung et al., 2008; Cheung et al., 2009). Individuals consult OCRs to assist with the purchasing decision in hand (Kim and Choi, 2012). The level of credibility and quality assigned by individuals to the source of OCRs will determine how influential OCRs would be to the purchasing decision (Kim and Lee, 2017; Koo, 2016). According to the TRA, the beliefs of the consequences of performing behaviour are the base of accomplishing an attitude towards that behaviour or object (Suh and Han, 2003). Therefore, when individuals experience a review from a highly trustworthy and credible source, they are more likely to adopt it, changing their attitude towards eWOM. Supporting this notion, Harmon and Coney (1982) report that a highly credible source is more effective than a lower credible source when the communication recommended purchasing a product or a service. Furthermore, prior studies have revealed that customer attitudes are positively and directly affected by the argument strength (Cacioppo et al., 1983; Sia et al., 1999). Additionally, highly credible reviews are perceived to be useful (Cheung et al., 2008; Filieri and McLeay, 2014; Sussman and Siegal, 2003), and thus enables knowledge transfer (Ko et al., 2005), which in return is likely to affect customers’ attitudes towards the reviews.

In addition, attitudes are subject to change based on social influence and motivation (Eagly and Chaiken, 1995). OCRs deliver both social influence and motivation presented in the degree of the quality and credibility of information provided. Hence, individuals’ attitudes towards eWOM are likely to be affected by the quality and credibility of eWOM. The present study, therefore, proposes the following:

Hypothesis 2: eWOM quality is positively related to attitude towards eWOM.

Hypothesis 3: eWOM credibility is positively related to attitude towards eWOM.

Attitudes refer to an individual’s cognitive assessment or evaluation of an object (George and Jones, 1996), and are associated with the one’s views whether the behaviour is
positive or negative (Fishbein and Ajzen, 1975). Attitudes deliver importance to an object or behaviour by placing it within the individual’s existing knowledge (Gawronski and Bodenhausen, 2007). Studies have shown that when opportunity is given to individuals to select information that will empower them to use their attitudes, they are likely to do so (Visser et al., 2003). Attitudes also lead individuals to process information more deeply and focus on it more closely (Celsi and Olson, 1988; Holbrook et al., 2005). For instance, individuals have a tendency to spend more time processing information that is in line with their attitudes (Holbrook et al., 2005). Moreover, rather than focusing equally on a huge selection of information, individuals tend to focus on information that is relevant to their attitudes (Holbrook et al., 2005). Therefore, having a favourable attitude towards eWOM will possibly lead to the reviews to be perceived as useful. Additionally, in consonance with TRA, individuals adopt certain behaviour whenever they believe it will lead to positive consequences (Compeau and Higgins, 1995). Given these arguments, one can conclude that attitudes towards eWOM will impact the perceived eWOM usefulness and eWOM adoption. This study, hence, hypothesises the following:

Hypothesis 4: Attitude towards eWOM is positively related to perceived eWOM usefulness.

Hypothesis 5: Attitude towards eWOM is positively related to eWOM adoption.

Perceived usefulness is defined as ‘the degree to which a person believes that using a particular system would enhance his or her job performance’ (Davis, 1989, p.320). Perceived usefulness is an essential predictor of customers’ adoption (Cheung et al., 2008; Davis, 1989). According to the IAM, the decision to adopt information is determined by the degree of usefulness of the information presented (Sussman and Siegal, 2003). In online communities and the majority of shopping websites, ideas, opinions, and experiences of other customers about products and services are offered. Therefore, if such reviews are perceived as useful information, the intention of adopting these reviews by potential customers is likely to be greater (Cheung et al., 2008). OCRs and eWOM communications were examined in the eWOM literature. For example, Cheung et al. (2008), Liu and Zhang (2010), Tseng and Kuo (2014), and recently Yan et al. (2016) found that information usefulness has a positive direct effect on eWOM adoption. Thus, this study proposes the following:

Hypothesis 6: Perceived eWOM usefulness is positively related to eWOM adoption.

When individuals classify that a specific system or scheme can improve their performance, they tend to adopt it (Davis, 1989). If the system is useful, individuals will have positive attitudes towards it, which will eventually lead to them using it. Therefore, the perceived eWOM usefulness is associated with customers’ intention (Elwalda et al., 2016). Previous studies have reported the relationship between usefulness and intention. For example, Hsu et al.’s (2013) study finds that the perceived usefulness of blogs has a positive impact on customer intention. This positive relationship has been reported by many other studies (Elwalda et al., 2016; Park et al., 2007; Trivedi and Kumar, 2014; Ye et al., 2011). This study, consequently, hypothesises the following:

Hypothesis 7: Perceived eWOM usefulness is positively related to purchase intention.
EWOM on shopping websites are considered as a type of social influence that impacts consumers’ purchase intention (Cheung and Thadani, 2012). In addition, comparable to the role of social impact in the TRA, information from an outside source may improve purchase intention (Ajzen, 1991; Cheung and Thadani, 2012). Hence, we believe that eWOM adoption will have a direct influence on consumers’ purchase intentions. Accordingly, this study hypothesises the following:

Hypothesis 8: eWOM adoption is positively related to purchase intention.

4 Method

To test the hypothesised relationships among the key variables in the research model, a self-administered survey was employed.

4.1 Sample

Participants were chosen from the university students in the UK. University students were deemed appropriate for this study since the younger age groups are more familiar with online shopping websites. Latest reports show that 90% of 25–34-year olds and 83% of 16–24-year-old UK consumers use online shopping (National Statistics, 2014). A total of 384 university students participated in the study. Among the participants 42.7% were undergraduate students, 22.9% were Master students, and 34.4% were PhD students. Other sample characteristics are presented in Table 1.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–22</td>
<td>153</td>
<td>39.8</td>
</tr>
<tr>
<td>23–27</td>
<td>94</td>
<td>24.5</td>
</tr>
<tr>
<td>28–32</td>
<td>98</td>
<td>25.5</td>
</tr>
<tr>
<td>33–37</td>
<td>28</td>
<td>7.3</td>
</tr>
<tr>
<td>38 or above</td>
<td>11</td>
<td>2.9</td>
</tr>
<tr>
<td>Online reviews usage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>108</td>
<td>28.1</td>
</tr>
<tr>
<td>Frequently</td>
<td>127</td>
<td>33.1</td>
</tr>
<tr>
<td>Sometimes</td>
<td>132</td>
<td>34.4</td>
</tr>
<tr>
<td>Never</td>
<td>17</td>
<td>4.4</td>
</tr>
<tr>
<td>Online shopping frequency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than once a month</td>
<td>175</td>
<td>45.6</td>
</tr>
<tr>
<td>Once a month</td>
<td>113</td>
<td>29.4</td>
</tr>
<tr>
<td>Very rare</td>
<td>89</td>
<td>23.2</td>
</tr>
<tr>
<td>Never</td>
<td>7</td>
<td>1.8</td>
</tr>
</tbody>
</table>
4.2 Measures

A multi-item approach was used to design the survey. Each variable was measured by several items in order to enhance reliability and validity. A five-point Likert scale ranging from 'strongly disagree' to 'strongly agree' was employed for each of the constructs. Items were borrowed from the prior literature and modified for this study. A total of 16 items measuring the following six variables were rated by participants: (1) eWOM quality (Park et al., 2007), (2) eWOM credibility (Prendergast et al., 2010), (3) attitude towards eWOM (Park et al., 2007), (4) perceived eWOM usefulness (Bailey and Pearson, 1983), (5) eWOM adoption (Cheung et al., 2009), and (6) purchase intention (Coyle and Thorson, 2001).

5 Results

5.1 Measurement model evaluation

The research model was tested through an SEM technique (with AMOS 20 software) as this is well suited for predictive models (Bentler and Chou, 1987). Firstly, the reliability and validity of the scales were assessed to understand whether they achieved satisfactory levels. For this purpose, internal reliability, factor loadings, convergent validity, and discriminant validity were employed.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item</th>
<th>Factor loading</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>eWOM quality</td>
<td>EQ1</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(M = 3.57, SD = 0.76, α = 0.81)</td>
<td>EQ2</td>
<td>0.82</td>
<td>0.814</td>
<td>0.594</td>
</tr>
<tr>
<td></td>
<td>EQ3</td>
<td>0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eWOM credibility</td>
<td>EC1</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(M = 3.61, SD = 0.82, α = 0.81)</td>
<td>EC2</td>
<td>0.82</td>
<td>0.810</td>
<td>0.681</td>
</tr>
<tr>
<td>Attitude towards eWOM</td>
<td>ATE1</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(M = 3.88, SD = 0.87, α = 0.86)</td>
<td>ATE2</td>
<td>0.85</td>
<td>0.859</td>
<td>0.670</td>
</tr>
<tr>
<td></td>
<td>ATE3</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived eWOM usefulness</td>
<td>PEU1</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(M = 3.91, SD = 0.84, α = 0.87)</td>
<td>PEU2</td>
<td>0.84</td>
<td>0.867</td>
<td>0.766</td>
</tr>
<tr>
<td>eWOM adoption</td>
<td>EA1</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(M = 3.80, SD = 0.89, α = 0.84)</td>
<td>EA2</td>
<td>0.87</td>
<td>0.843</td>
<td>0.728</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>PI1</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(M = 3.78, SD = 0.56, α = 0.86)</td>
<td>PI2</td>
<td>0.84</td>
<td>0.847</td>
<td>0.583</td>
</tr>
<tr>
<td></td>
<td>PI3</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PI4</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: CR – composite reliability, AVE – average variance extracted.

The internal reliability of the scales was assessed by using Cronbach’s α. As a rule of thumb, figures between 0.70 and 0.90 are considered as high reliability (Hinton et al., 2014); and since the figures for each constructs fell from 0.81 to 0.87, they highlight...
internal consistency for all the scales employed in this study. Additionally, the factor loadings of each item are acceptable as they are greater than 0.50 (Hair et al., 2010). Furthermore, convergent validity, which presents how the measures are related to each other, was examined using the composite reliability (CR) and the average variance was extracted (AVE). The lowest acceptable value is 0.70 for CR and 0.50 for AVE (Fornell and Larcker, 1981; Hair et al., 2010); since CR of each variables ranging from 0.810 to 0.867, and AVE of each variables ranging from 0.583 to 0.766, the convergent validity is achieved. Table 2 shows the figures for each instrument. Finally, discriminant validity was assessed to understand whether a measurement is not a reflection of any other measurements. To reach adequate discriminant validity in this assessment, each of the square roots of AVE should be greater than the other correlation coefficients (Fornell and Larcker, 1981). The figures which state the achievement of discriminant validity in this study are shown in Table 3.

Table 3  Correlation matrix of key variables

<table>
<thead>
<tr>
<th></th>
<th>EQ</th>
<th>EC</th>
<th>ATE</th>
<th>PEU</th>
<th>EA</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>eWOM quality (EQ)</td>
<td>0.771</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eWOM credibility (EC)</td>
<td>0.729</td>
<td>0.825</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude towards eWOM (ATE)</td>
<td>0.671</td>
<td>0.674</td>
<td>0.818</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived eWOM usefulness (PEU)</td>
<td>0.703</td>
<td>0.685</td>
<td>0.688</td>
<td>0.875</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eWOM adoption (EA)</td>
<td>0.608</td>
<td>0.652</td>
<td>0.707</td>
<td>0.791</td>
<td>0.853</td>
<td></td>
</tr>
<tr>
<td>Purchase intention (PI)</td>
<td>0.515</td>
<td>0.496</td>
<td>0.505</td>
<td>0.606</td>
<td>0.650</td>
<td>0.763</td>
</tr>
</tbody>
</table>

Notes: Italicised elements are the square root of AVE for each variable.

5.2 Structural model evaluation

As the measurement model was found acceptable, the second stage, the goodness-of-fit for the hypothesised structural model was examined. Six goodness-of-fit indices were employed, all indicating that the model fits the data very well: χ²/df = 1.790; p < 0.001; GFI = 0.947; AGFI = 0.925; CFI = 0.979; RMSEA = 0.045; PCLOSE = 0.744. Moreover, eight hypothesised relationships were found statistically significant. Specifically, eWOM quality was found to have a positive influence on eWOM credibility and attitude towards eWOM: (respectively) H₁ (β = 0.73, p < 0.001), H₂ (β = 0.40, p < 0.001). H₃, which predicts the positive influence of eWOM credibility on attitude towards eWOM, was supported (β = 0.43, p < 0.001). Further, the positive effect of attitude towards eWOM on perceived eWOM usefulness and eWOM adoption was supported: (respectively) H₄ (β = 0.74, p < 0.001), H₅ (β = 0.36, p < 0.001). Also, perceived eWOM usefulness was found to have a positive effect on eWOM adoption and purchase intention: (respectively) H₆ (β = 0.52, p < 0.001), H₇ (β = 0.24, p < 0.012). Finally, H₈, which predicts the positive influence of eWOM adoption on purchase intention, was supported (β = 0.46, p < 0.001). Table 4 presents both the results for hypotheses testing, and the goodness-of-fit indices of the structural model.
Table 4  Results and goodness-of-fit indices

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Std RW</th>
<th>CR</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 eWOM quality</td>
<td>eWOM credibility</td>
<td>0.73</td>
<td>10.625 ***</td>
</tr>
<tr>
<td>H2 eWOM quality</td>
<td>Attitude towards eWOM</td>
<td>0.40</td>
<td>4.912 ***</td>
</tr>
<tr>
<td>H3 eWOM credibility</td>
<td>Attitude towards eWOM</td>
<td>0.43</td>
<td>5.266 ***</td>
</tr>
<tr>
<td>H4 Attitude towards eWOM</td>
<td>Per. eWOM usefulness</td>
<td>0.74</td>
<td>12.293 ***</td>
</tr>
<tr>
<td>H5 Attitude towards eWOM</td>
<td>eWOM adoption</td>
<td>0.36</td>
<td>4.942 ***</td>
</tr>
<tr>
<td>H6 Per. eWOM usefulness</td>
<td>eWOM adoption</td>
<td>0.52</td>
<td>7.050 ***</td>
</tr>
<tr>
<td>H7 Per. eWOM usefulness</td>
<td>Purchase intention</td>
<td>0.24</td>
<td>2.519 0.012</td>
</tr>
<tr>
<td>H8 eWOM adoption</td>
<td>Purchase intention</td>
<td>0.46</td>
<td>4.545 ***</td>
</tr>
</tbody>
</table>

Goodness-of-fit indices

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$/df</td>
<td>1.790</td>
</tr>
<tr>
<td>Goodness-of-fit index (GFI)</td>
<td>0.947</td>
</tr>
<tr>
<td>Adjusted GFI (AGFI)</td>
<td>0.925</td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>0.979</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.045</td>
</tr>
<tr>
<td>PCLOSE</td>
<td>0.744</td>
</tr>
</tbody>
</table>

Notes:  Std RW – standardised regression weights, CR – critical ratio.  *** $p < 0.001$.

6 Discussion and conclusion

The rapid development of web 2.0 technologies has brought traditional WOM into the online world, transforming the way that customers make a purchasing decision. In order to understand the determinants of eWOM in shopping websites which influence consumers’ purchase intentions; in this study, we introduce OCRs adoption model by extending the IAM.

In this study, the point of departure was to move beyond traditional models of information adoption. Through the use of attitude in the IAM this study yields a rich set of insights. Firstly, one question of concern in the current study was whether or not the eWOM quality affects its credibility. The results revealed that eWOM quality has a positive influence on eWOM credibility, suggesting that a high-quality review will possibly improve its credibility. This insightful result further supports the idea of Park et al. (2007) who claim that that a high-quality review is likely to improve the persuasiveness of such a review.

Secondly, eWOM quality and credibility were conceptualised in this study as affecting attitudes towards eWOM. Major theatrical findings of the present study acknowledge the relationship between quality and credibility of eWOM and attitudes, as it was suggested that attitude was part of IAM. To the extent of our knowledge, such relationships have not been considered in the literature. The results report significant associations between eWOM quality and credibility and customer attitudes towards eWOM. Consistent with the TRA, we provide evidence that the beliefs of the results of performing behaviour are the base of performing an attitude towards an object. When
individuals are exposed to high-quality and credibility reviews, they are likely to have a positive attitude towards eWOM. Our work fills the gap in the literature and suggests that attitudes are affected by quality and credibility, proposing that customer attitudes need to be considered in IAM.

A further key theoretical result of this study is the relationships between attitudes and eWOM usefulness and adoption. To the best of our knowledge, this is the first attempt to show the influence of customer attitude on usefulness and adoption of eWOM. The results suggest that customers’ perception of eWOM usefulness is significantly affected by their attitudes towards eWOM. Furthermore, interestingly, this study shows that customer adoption of eWOM is also impacted by their attitudes towards eWOM. Such results are better explained in the light of the notion that individuals process information more deeply and closely when they have a favourable attitude (Celsi and Olson, 1988; Holbrook et al., 2005). Once customers have a favourable attitude towards eWOM, they tend to pay more attention to the information presented, and process it more closely. Such results, additionally, propose extraordinarily that customers do not focus on all online information that is presented by customers equally; they rather pay attention to the information or reviews that are relevant to their attitudes.

Furthermore, we evidently found that information usefulness had a strong effect on information adoption. Previous work such as Cheung et al. (2008), and Sussman and Siegal (2003) report similar results. However, the present study expands their work to establish that eWOM adoption is significantly affected by eWOM usefulness. The results also yield that both eWOM usefulness and eWOM adoption have a significant impact on consumers’ purchase intentions. This suggests that comparable to the idea of Ajzen (1991) and Cheung and Thadani (2012) information provided by OCRs as an outside source affect behavioural intention.

Several theoretical implications are drawn from the findings of the present study. Firstly, this study introduces OCRs adoption model for understanding the adoption behaviour. The OCRs adoption model advances our understanding of customer adoption of online information and extends the current adoption models to investigate the role of OCRs adoption in affecting behavioural intention. Secondly, the present study empirically examined the relationship between quality and credibility. To the best of our knowledge, it is the first attempt to investigate this relationship. Another major contribution is that attitude was employed as an antecedent for both information usefulness and information adoption. Attitudes were relatively ignored in the literature of information adoption, particularly in the field of eWOM adoption. The results show that attitude significantly affects both usefulness and adoption. Furthermore, OCRs adoption model explains the influence of eWOM usefulness and adoption on behavioural intention.

Results from this study also offer important managerial implications. Firstly, this study helps companies to understand customers’ attitudes towards eWOM and how it develops eWOM adoption. Therefore, companies need to, first, encourage their customer to post positive reviews, and, second, to have a special unit within the company concerned with eWOM to enable them to build their marketing strategies according to the customer’s feedback. Secondly, as this study shows that quality and credibility reviews significantly affect customer attitude, marketers should encourage customers to post high-quality, credible and trustworthy reviews. Companies might achieve that by,
for example, building a tool that enables high level of two-way communication between themselves and their customers, which in turn can lead customers to post honest, trustworthy, and high-quality reviews. Thirdly, the results of this study reveal that eWOM adoption leads consumers to purchase intention. These results suggest that firms and marketers must take eWOM adoption factors into account when deciding marketing strategies. Finally, attributes such as quality, credibility and usefulness are the key drivers for developing eWOM adoption. Thus, reviews which hold such attributes should be encouraged.

6.1 Limitations and further research

The study proposes a new model in order to understand the determinants of eWOM in shopping websites which influence consumers’ purchase intentions; nonetheless, the generalisability of the results is subject to some limitations. Firstly, although younger age groups are more familiar with online shopping websites; university students might not represent the whole population who use these websites. Therefore, future studies could use a larger data set with different groups of participants. Besides, the present study was conducted in the UK, where the lifestyle and culture differ from that of other countries. Henceforward, it is recommended to test the research model in different countries. Furthermore, a questionnaire method was believed to be appropriate for the present study. However, a controlled experiment, for instance, may further be used in the future studies to examine the research model.

References


