Intention to Provide Online Reviews: An Expectation-Confirmation Model with Review Involvement

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Abstract

Online reviews have become a good source of information for shoppers with increase in e-commerce activity. Although research has examined various factors behind customer online review posting behaviour, the role of online reviews in further propagating online reviews has not been given enough attention. In this study, we use the expectation-confirmation theory for examining customer review posting behaviour based on their examination of online reviews from other shoppers. The study reveals a few interesting and counter-intuitive findings that add to research and practice in understanding online review posting behaviour. The study also examines the role of review involvement and its effect on shoppers' behaviour. The results show that shoppers are more inclined to write reviews when confirmation leads to lower satisfaction. Theoretical and managerial implications based on the findings have also been presented.

Keywords: Online reviews, Confirmation, Usefulness, Review involvement, Expectation-confirmation theory

Introduction

Online reviews are a good source of information for shoppers about various products and services (Schmallegger and Carson, 2008). The reviews provided by shoppers play an important role in spreading information, enabling trust, and encouraging e-commerce (Xie et al., 2016). Online review mechanisms help reduce uncertainty in transactions ranging from that related to the quality of the product to that related to the honesty of the e-retailer (Chen et al., 2004). KPMG (2017) reported that more than 50% of shoppers refer to online reviews, though they prefer to shop offline. Online reviews are the most common source of product awareness, particularly for customers from Europe and Asia. The report also found that nearly 30% of the sampled online consumers posted their reviews on the websites and the number is likely to cross 50% mark for customers in Asia (KPMG, 2017).

Researchers have examined online reviews considering various characteristics of the reviews (such as argument quality, volume, valence, text size, length, etc.) leading to shopper's buying behavior (e.g. Banerjee and Chua, 2014; Huang et al., 2015; Huang and Korfiatis, 2015; Kim and Gupta, 2012; Reimer and Benkenstein, 2016; Shan, 2016; Zhang et al., 2014). However, only a few studies have attempted to examine one's motive behind writing online reviews (e.g. Cheung and Lee, 2012; Fu et al., 2015; Wolny and Mueller, 2013). Existing studies attribute reasons such as altruism, product involvement, and self-enhancement as motivation behind online reviewers writing product reviews (e.g. Hennig-Thurau et al., 2004). There are other studies that have examined the impact of factors such as reviewers' characteristics (Forman et al., 2008), product type and category (Mudambi and Schuff, 2010), earlier reviews (Moe and Trusov, 2011), and the price of the product (Li and Hitt, 2010) on reviewers' behaviour. However, little examination has been done about the fact that online review providers,

by sharing their product related experiences, are actually providing confirmation (disconfirmation) of the expectations that the product has fulfilled (not fulfilled).

The online reviews either confirm or disconfirm the expectations that a prospective buyer forms by studying online reviews. This confirmation or otherwise leads to (dis)satisfaction, which the shoppers share through their reviews. It is well-known that negative experience of customers become quickly viral as compared to positive experiences (Arndt, 1967; East et al., 2008). If the experience after purchasing the product is negative, customers are more likely to post their reviews. In other words, presence of online reviews will further propagate customer reviews. Moreover, online reviews (particularly the positive ones) may induce certain bias about the product/service which may induce further purchase of the product (negative inclination may not induce any purchase and hence no further propagation). According to the principle of positivity bias (Matlin and Stang, 1978), exceedingly positive reviews may induce a positive bias towards the product leading to enhanced expectations of the customers about the product. There are hardly any studies on the effect of online reviews on shoppers' review posting behavior.

The present study, therefore, examines reviewers' online review posting behavior from the perspective of expectation-confirmation theory (ECT) (Oliver, 1980). ECT has been extensively used to evaluate customer satisfaction (e.g. Kopalle and Lehmann, 2001; Santos and Boote, 2003; Tse and Wilton, 1988), and has also been used in other fields such as information systems (Chou et al., 2010; Hsu and Lin, 2015; Kim, 2010; Oghuma et al., 2016). The present study argues that shoppers' expectations can be shaped by online reviews, which may lead to confirmation of their expectations and ultimately influence satisfaction. This satisfaction could further result in shoppers' willingness to share their experiences with the product and the review

sites. Specifically, the paper addresses the following research questions: (a) *How do online reviews influence buyer's expectation and further review posting behavior?* As exceedingly positive reviews may induce heightened expectations about the product, it examines (b) *What is the influence of reviews on a customer's satisfaction with the product/service under question?* Furthermore, development of expectations by studying online reviews depends upon how involved a customer is while examining those reviews. Therefore, (c) *What is the role of review involvement on one's satisfaction and review posting behaviour.*

The rest of the paper is organized as follows. In the next section, review of literature and the theoretical background for this study is presented, followed by a discussion on the proposed research model and related hypotheses. In the fourth and fifth section, the methodology and the results of the empirical study are presented. The subsequent part of the manuscript details the discussion and implications of the

findings of this study. Finally, the last section discusses the conclusions of this study along with avenues for further research.

Literature Review and Theoretical Background

Online Reviews

Online consumer reviews can be advantageous or could be disastrous for a product, brand or a business contingent on the positivity or negativity of the reviews. Hence, it is pertinent for businesses to be on top of their reviews to avoid sales loss and to promote, not demote, their products (Gelard and Negahdari, 2011). Research on online consumer reviews has gained wide attention during the last few years. Table 1 presents a snapshot of studies related to online reviews.

Table 1 - Research on Online Reviews			
No	Authors	Dependent Variable	Major Findings
1	Chevalier and Mayzlin (2006)	Book sales	The authors reported that one-star reviews had greater influence that five-star ones. The study also found that as the reviews for a book improve, the relative sales tend to increase.
2	Liu (2006)	Box office revenues	Volume of reviews was shown to have significant impact on revenues whereas valence did not have any explanatory power.
3	Dellarocas et al., (2007)	Box office revenues	The study developed forecasting models that incorporated review metrics and were found to outperform previous models.
4	Park, Lee and Han (2007)	Purchase intention	Quality and quantity of reviews had significant impact on shoppers purchase intention. Low-involved consumers were influenced by review quantity, whereas consumers with high involvement focussed on review quality.
5	Cheung et al., (2008)	Information adoption	Reviews with extensive and significant argument quality was found to influence information adoption.
6	Duan et al., (2008)	Box office revenues	The study found that rating of online reviews did not have any impact on movie revenues. Whereas, the volume of reviews was found to have significant impact.
7	Park and Lee (2009)	Purchase influence of online reviews	Culture plays an important role in how reviews are being assessed. It moderated the association between reviews and its precursors.
8	Mudambi and Schuff (2010)	Helpfulness of the customer reviews	Type of product–search vs. experience, determine the helpfulness of the reviews. Averagely rated reviews were more helpful than extremely positive or negative reviews for experience products. Increase in review length increases its

			helpfulness for search products.
9	Baek et al., (2012)	Review helpfulness	Rating and message not always congruent. A review is deemed helpful when it is similar to majority of reviews, it is lengthy, contains less negative words and has been written by top reviewer.
10	Cheung et al., (2012)	Review Credibility	Argument quality of the review had a significant impact in establishing the credibility of that review.
11	Cui et al., (2012)	New product sales	In case of search products the valence of reviews and volume of page views were significant. On the other hand, for experience products volume of reviews had greater influence. Negative reviews had greater influence.
12	Utz et al., (2012)	Perceived trustworthiness	Consumer reviews were found to be significant determinant of shoppers trust towards an e-commerce store. The reputation of the store did not have any influence on trust.
13	Huang et al. (2013)	Perceived review helpfulness	For search products, review content describing attributes were found helpful. For experience products, review message depicting experience was found helpful.
14	Zhang et al., (2013)	Digital camera sales	Number of reviews, price of the product and features of the product influenced product sales. Also, change in volume of reviews, ratings and price had significant impact on future sales.
15	Banerjee and Chua (2014)	Review authenticity	The study posited three characteristics that would help shoppers to differentiate between genuine online reviews as against manipulative reviews.
16	Jin et al., (2014)	Perceived influence of reviews	New and recent posts influence whose consumers who are buying goods in 17very short period of time, whereas co18nsumers who are going to buy good19s in distant future are influenced by old and outdated posts.
17	Yin et al., (2014)	Perceived review helpfulness	Reviews with mild negative content were found more helpful.
18	Huang et al. (2015)	Review helpfulness	No of words in reviews was deemed helpful to a certain limit, beyond which it had no effect. Reviewer popularity and rank did not have any impact on helpfulness.
19	Lee and Koo (2015)	Message usefulness	Negative reviews were useful for shoppers with assessment orientation. Positive reviews for shoppers with locomotive orientation.
20	Ullrich and Brunner (2015)	Purchase intentions	Positive reviews provided by consumers tend to overpower the negative reviews. This effect is greater than the brand's response to the negative reviews.
21	Wang, Liu and Fang (2015)	Product sales	Variance is consumer reviews results in declining sales. On the other hand variance in both critics and consumer reviews leads to increase in sales.
22	Weathers et al., (2015)	Review helpfulness	Reviews that were poised, were based on personal experience, did comparative analysis with other brands, was similar to other reviews were deemed to be helpful for experience products. On the other hand, reviews that just listed the attributes of the product were found helpful.
23	Reimer and Benkenstein (2016)	Purchase intention	When online shoppers perceive reviews to be trustworthy, the valence of the review works in the anticipated path. Whereas when the reviews are perceived untrustworthy (from a biased source) it does work in the anticipated way.
24	Xie et al., (2016)	Hotel occupancy	Quality and quantity of reviews tend to improve hotel's popularity, whereas inconsistency in reviews does not impact the hotels.

Three distinct themes emerge from the ongoing research on online reviews. Studies by Chevalier and Mayzlin (2006), Cui et al., (2012), Dellarocas et al., (2007), Duan et al., (2008), Liu (2006), Wang et al., (2015), Xie et al., (2016) investigate the *influence of consumer reviews on sales of product/service.* Another set of studies focus on examining the *helpfulness of online reviews to prospective consumers*

(e.g. Baek et al., 2012; Huang et al., 2013; Huang et al., 2015; Lee and Koo, 2015; Mudambi and Schuff, 2010; Weathers et al., 2015; Yin et al., 2014). The third group of studies including Bailey (2005), Chen et al., (2011), Dellarocas et al., (2010), Kumar and Benbasat (2006), etc., examine *various other aspects related to online consumer reviews.* This includes online shoppers' impetus for providing reviews.

This is a relatively sparsely studied theme and only a few studies have examined the motivation behind providing online reviews from the perspective of the theory of reasoned action and its variants (such as the theory of planned behaviour). Most of these studies report that the need for self-enhancement (or altruism) is the main force behind providing online reviews. Moe and Schweidel (2012) posit that products that already have numerous positive reviews have a greater likelihood to attract reviews, since posting experiences in their reviews are considered as a way for shoppers to support their own expertise. Furthermore, while less experienced reviewers tend to follow a popular opinion, those who believe themselves to be more experienced relative to a particular product, purposefully post reviews that stand out (Moe and Schweidel, 2012). Hennig-Thurau et al. (2004) identify different motives (such as concern for others, self-enhancement, economic gains, social benefits) for consumers to spread e-word-of-mouth (e-WOM). Wolny and Mueller (2013) state that, for fashion oriented consumers, commitment towards a brand, product involvement and need for social interaction act as the motivators to engage in e-WOM. Similarly, Fu et al. (2015) examined the drivers that influence shoppers to post their purchase experiences. Their findings reveal that consumers who provide positive reviews are influenced by attitudinal factors, whereas social pressure influence people to post negative reviews.

Cheung and Lee (2012) also examined the reasons and the associated factors that drive shoppers to share positive electronic word-of-mouth. Selecting the sample from an online opinion platform – OpenRice.com, they found that sense of belongingness and enjoyment in helping others had a significant influence on their e-WOM intention, whereas reputation had a marginal effect. On the other hand, moral obligation and self-efficacy didn't have any impact on consumers' intention. Explaining on the basis of extended theory of planned behaviour and big-five personality traits model, it was found that shoppers' intention to post reviews was influenced by 'attitude, perceived pressure, neuroticism, and conscientiousness' (Picazo-Vela et al., 2010). Yoo and Gretzel (2008) also examined the motivations of travellers to post online travel reviews. They found that besides enjoyment and self-enhancement, helping the company and other company were the main reasons behind consumers writing travel reviews. While understanding the role of review involvement, it was observed that gender had a significant influence on involvement and men were found to be more active while sharing reviews (Mangold and Smith, 2012). Similarly, Pinch and Kesler (2011) noted that male shoppers had greater involvement in online reviews and that they were driven by enjoyment, expressiveness, and rewards. Shen (2010) indicated that reviewers' online review involvement is affected by their need for attention.

In summary, previous studies have examined motivation behind providing online reviews, mainly from a cost-benefit perspective whereby the review provider obtains some form of altruistic feelings in doing so. However, research ignores the role of how online reviews provided by others play a significant role in influencing others in provide their own reviews. In this study, we examine this phenomena using expectation-confirmation theory.

Expectation-Confirmation Theory (ECT)

Based on the expectation–confirmation theory (Oliver, 1993), Bhattacherjee (2001b)

developed the expectation-confirmation model to explain an individual's intention to continue using an information system. Predicting the influence of confirmation on usefulness, this model explains that confirmation of preconceived expectations and usefulness results in satisfaction, whereas perceived usefulness and satisfaction act as the predictors of an individual's behavioural intention (Bhattacherjee, 2001b).

According to this theory, customers' motives behind post-purchase behaviour are largely decided through their (dis)satisfaction with the previous experience of using the product (Anderson and Sullivan, 1993; Oliver, 1993). The post-purchase satisfaction achieved by a customer is the result of a confirmation between their expectations and perceived performance, thereby further influencing their post-purchase behaviour (Oliver, 1980). Thong, Hong and Tam (2006) posit that individuals continue to update their expectations from products/services as they add experience of using the same. This post-adoption expectation translates into perceived usefulness that becomes an appropriate determinant of customers' satisfaction with the product, service or a system (Bhattacherjee, 2001b; Thong et al., 2006).

This theory has been extensively applied in the field of marketing on various themes such as examining the determinants of customer satisfaction (e.g. Churchill and Surprenant, 1982; Selnes, 1998), post-purchase behavior, customer loyalty (e.g. Lin et al., 2009) and service marketing (e.g. Fornell, 1992; Caruana, 2002). The model has also been applied to explain customers' sustained intention to use information system in settings such as online banking (e.g. Bhattacherjee, 2001a; Vatanasombut et al., 2008), web portal (e.g. Lin et al., 2005), online services (e.g. Lee and Kwon, 2011; Ahn et al., 2007), e-learning (e.g. Chiu et al., 2005; Lee, 2010) and mobile services (Hsu and Lin, 2015; Oghuma et al.,

2016). Since individuals' choice of continuing using a system is comparable to shoppers' post-purchase behaviour, expectation-confirmation model is apt as a theoretical base for the study aimed at examining shoppers' post-purchase behavior with respect to online reviews.

The model elucidates post-purchase behaviour by suggesting that perceived usefulness and confirmation are key factors that influence customer satisfaction. Perceived usefulness is defined as "customers' perception of the expected benefits of IS use," and confirmation is the "customers' perception of the congruence between prior expectation and actual performance," (Bhattacherjee, 2001b; Churchill and Surprenant, 1982). Both the constructs affect customers' satisfaction, which is "an ex-post evaluation of the users' initial trial experience with the service and is captured as a positive feeling, satisfaction, indifference or negative feeling (dissatisfaction)," (Bhattacherjee, 2001a). In the present study, two constructs – perceived site usefulness and perceived product usefulness have been used to represent perceived usefulness. This is owing to the fact that shoppers tend to have different perceptions regarding usefulness of online reviews as well as the product. When the reviews posted in a site help consumers in making informed decisions, their usefulness with the site would increase. On the contrary, usefulness for the sites which are unhelpful would be negligible. Similarly, shoppers expectations about the product based on the reviews can be judged by the degree of usefulness they perceive from the product. If shoppers' expectation from the reviews are met they will perceive greater usefulness of the product, and on the contrary, if the expectations are not met their usefulness will decline. The present study is a pioneer attempt to apply the theoretical base of expectation-confirmation theory in the context of shoppers' intention to write online reviews.

Research Model and Hypotheses

Based on the above discussion, we propose the following research model (Figure 1).
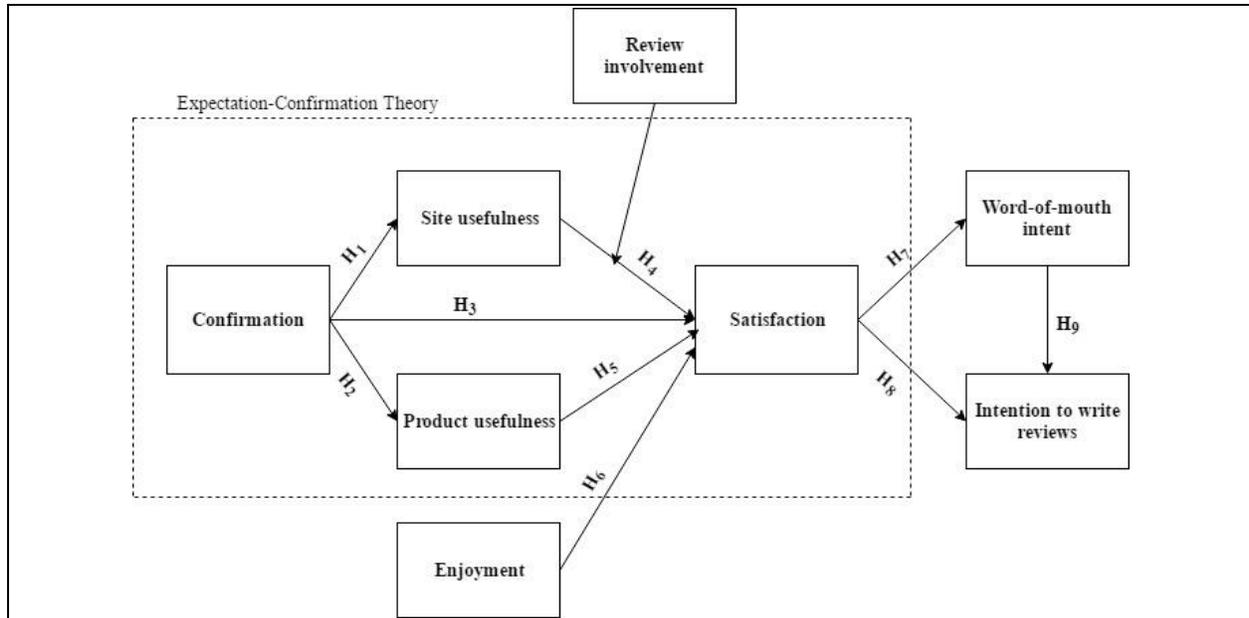
Figure 1 - Proposed Research Model

Confirmation

According to the expectation-confirmation theory, customers' satisfaction is contingent to the degree to which they feel that their prior expectations from a product have been confirmed upon actually using the product (Oliver, 1980). Other researchers, such as Lee and Kwon (2011) and Mathieson (1991) have also observed that satisfaction is a function of a reasoned interpretation of benchmarking expectations vis-a-vis realised experience. As per the expectation-confirmation theory, confirmation denotes the fulfilment of anticipated outcomes, whereas disconfirmation indicates that expected outcomes were unsuccessful in realizing expectations (Bhattacherjee 2001b). This confirmation acts as a cognitive belief that states the extent to which customers' expectations from a product are met. Shoppers draw satisfaction when their initial expectations from the product are confirmed, leading to

continuance intention. On the other hand, incongruence if any, results in dissatisfaction and intention to discontinue. Prior studies have empirically confirmed the impact of confirmation on perceived usefulness (e.g., Chea and Luo, 2008; Recker, 2010). In the present study, two constructs – perceived site usefulness and perceived product usefulness have been used to represent perceived usefulness. In line with this, it is hypothesised that:

H_1: Confirmation is positively related to review site usefulness

H_2: Confirmation is positively related to product usefulness

As stated earlier, expectation reflects customers' conviction regarding the usefulness of a product or service, which is similar to the concept of perceived usefulness. The degree to which initial expectations are fulfilled changes their future expectations and satisfaction level

(Davis et al., 1992). Once the initial expectations are confirmed (or rejected), consumers tend to adjust their future expectations and these newer set of expectations (higher or lower) motivates (or demotivates) further usage (continuance) intention. Chiu et al. (2012) opine that satisfaction replicates shoppers' agreeableness or frustration subsequent to their evaluation of a product/service's performance with their expectations. As a result, as soon as consumers perceive that expected benefits surpass expectations, it leads to satisfaction (Recker, 2010). Previous studies (e.g., Lee and Kwon, 2011, Limayem et al., 2007; Lin et al., 2005) have found that confirmation significantly influences customer satisfaction. Hence, it is hypothesized:

H₃: Confirmation is positively related to satisfaction.

Usefulness

Perceived usefulness is stated as individuals' conviction that any technology/process or any other element will escalate his/her performance in future (Davis, 1989). This perceived usefulness is directly related to consumer's adoption and is associated with usage. Ahn et al. (2004) found a positive and significant relationship between perceived usefulness and behavioural intention. This relationship has also been established by a number of studies (e.g., Ahn et al., 2007; Chen et al., 2002; Vijay et al., 2017a). Moon and Kim (2001) have also postulated that usefulness has a significant influence on consumers' intention to accept the online medium. Therefore, perceived usefulness can be considered as a vital element that influences shoppers' intention to adopt and use online reviews. Shoppers tend to form opinions about the usefulness of such reviews, which help other buyers in accepting the reviews (Moon and Kim, 2001). Moreover, previous studies (e.g., Casalo et al., 2010; Cheung et al., 2008; Hsu, Lin and Chiang, 2013) emphasize the important role of perceived usefulness in

online consumer reviews. Mudambi and Schuff (2010) indicate that online reviews offer valuable information throughout the different phases involved in the purchase decision.

In the present study, we consider two types of usefulness, namely, review site usefulness and product usefulness. Accordingly, if consumers perceive online review site as useful, as these review sites helped them in choosing the product, they will exhibit greater intention to accept the review sites, ultimately leading to satisfaction. Consumers believe that usefulness of a system would increase their satisfaction level (Calisir and Calisir, 2004). Similarly, shoppers' believe that using a particular product that will improve their performance will lead to the satisfaction. Hence, it is hypothesized:

H₄: Site usefulness is positively related to satisfaction

H₅: Product usefulness is positively related to satisfaction

Enjoyment

As stated by Davis, Bagozzi and Warshaw (1992), the construct enjoyment refers to internal stimulus that using a product (or a system; in the present study a smartphone) would be pleasurable in its own right. As against the two constructs of TAM - perceived usefulness and perceived ease of use, which are regarded as external motivations, enjoyment is considered as an inherent motivation to use the product (or technology) (Venkatesh and Speier, 2000). Previous research (e.g., Van der Heijden, 2004) note that perceived enjoyment acts as an antecedent to consumers' behavioural intention. Previous studies have also shown that the benefit component comprises perceived enjoyment, in addition to perceived usefulness and that enjoyment and fun have a significant effect on behavioural intention (e.g. Davis, 1989; Sweeney and Soutar, 2001).

Consumers experiencing instantaneous satisfaction or delight by means of a product, recognise any activity performed using the product to be personally gratifying, besides its contributory value. Such people are more likely to adopt these products and use them more extensively than others (Davis et al., 1989). Enjoyment, thus epitomizes an emotional and inherent value. Petrick (2002) characterized what customers receive as emotional response/joy received from purchase and product quality. A number of studies (e.g., Ha and Stoel, 2009; Kim et al., 2007; Wu and Liu, 2007; Chen et al., 2014) have found that enjoyment influences behavioural intention. Enjoyment is found to have strong influence on shopper's intention to revisit the store (online/offline) (e.g., Reynolds and Ruiz de Maya, 2013; Bauer et al., 2006). Besides, extant literature has also noticed enjoyment as one of the major influential factors encouraging shoppers' contribution in online communities (Cheung and Lee, 2012). In the context of online chat group, enjoyment had been observed to have a significant influence on participants' satisfaction (Van Dolen et al., 2007). Hence, it is hypothesised:

H6: Enjoyment is positively related to satisfaction

Satisfaction

Satisfaction portrays an emotional state of mind in response to a favourable experience (Westbrook, 1981). Anderson et al. (1994, p. 54) define customer satisfaction as "a post-choice evaluative judgment of a specific purchase occasion." A post-purchase reaction, satisfaction is defined as "*the favourability of the individual's subjective evaluations of outcomes and experiences associated with his or her consumption activities*" (Westbrook, 1980). In the present connected world, satisfying consumers is a critical factor that results in increased shopping by customers and higher customer retention (Chen, 2012). A number of studies (e.g. Gounaris et al., 2010; Jiang and Rosenbloom, 2005; Prashar et al., 2017;

Zeng et al., 2009) have examined the direct and positive association between satisfaction and behavioural intention. Shoppers who are satisfied with firms' offerings tend to exhibit greater loyalty and positive word-of-mouth intention (Augusto de Matos et al., 2009 and Wangenheim and Bayón, 2007).

In the e-retailing scenario, shoppers sense a state of imbalance whenever the expectation are fulfilled or exceeded (satisfaction) or not fulfilled (dissatisfaction). In these circumstances, customers make every effort to attain firmness in their feelings by focussing on post-purchase behaviour such as word-of-mouth (Hennig-Thurau et al., 2004). As per Wangenheim and Bayón (2007), contented customers are more likely to respond positively to the retailer and intend to spread positive word-of-mouth. As stated earlier, the construct satisfaction has been investigated comprehensively by previous researchers, and it has been established that satisfaction predicts many other consumer behavioral responses, such as adoption, (re)purchase intention, word-of-mouth, and loyalty (Anderson, 1998; Homburg and Giering, 2001; Hsiao et al., 2016; Shankar et al., 2003; Vijay et al., 2017b). It can be claimed that satisfied customers are more likely to engage or generate or share information in order to be advocates of a firms' offerings (Van Dolen et al., 2007). Extending the discussion to the present scenario, it can be stated that greater satisfaction will translate to greater word-of-mouth intention and greater intention to write reviews. Hence, it is hypothesized:

H7: Satisfaction has a positive influence on word-of-mouth intention

H8: Satisfaction has a positive influence on intention to write reviews

Word-of-Mouth Intention

Word-of-mouth communication is defined as "*oral, person-to-person communication between a receiver and a communicator, whom the receiver perceives as non-*

commercial, regarding a brand, a product, a service or even a system" (Stokes and Lomax, 2002). As per Kozinets (2002), online discussion sites and forums help in creating urge for the products being discussed. This can be considered as a type of post-purchase behaviour, where the shoppers are free to share their ideas, opinions, experiences and information about products/services/ or even firms (Litvin et al., 2008; Brown et al., 2007). More often than not, shoppers give more credibility to word-of-mouth information as against to the information provided by the businesses, as it is considered more consistent, truthful, sincere and honest (Brown et al., 2007). Shoppers in the e-commerce platform use or terminate using online services depending on the previous prior experiences. This might also lead to other post-purchase behavior, such as word-of-mouth, grievances, switching the shopping channel or their willingness to pay (Li and Liu, 2014). On the similar lines, we argue that word-of-mouth intention will influence intention to write online reviews. Hence, it is hypothesized:

H_9: Word-of-mouth intention has a positive influence on intention to write online reviews

Review Involvement

Zaichkowsky (1985; 1994) define involvement as "*the personal relevance of an object based on inherent needs, values, and interests.*" Dichter (1966) categorise four types of involvement, namely, product involvement, self-involvement, other-involvement, and message-involvement. These involvement types persuade consumers to talk about products/services (word-of-mouth). Suggesting a characterization that identifies consumer electronic word-of-mouth involvement, Hennig-Thurau et al. (2004) posit that shoppers' aspiration for socializing, financial rewards and individual improvement are the key elements that inspire them to share their views about products online. Extending the definition of Gardner et al. (1985), the

present study considers review involvement as a personal, intrinsic element that specifies the extent of urge, interest or drive that is aroused while reading an online review. It brings forth the explicit individual feelings for a particular activity. An extremely involved shopper is likely to display high arousal, interest and drive when reading an online product review. Shen (2010) indicated that reviewers' online review involvement is affected by their need for attention. Despite the number of studies on online consumer reviews, the influence of review involvement on reviewers is poorly understood and limited attention has been given to it (Zhang, 2014). Hence, we hypothesize:

H_{10}: Review involvement moderate the relationship between site usefulness and Satisfaction

Since the major dependent variable of the study is intention to provide reviews, the binary variable of "writing reviews in general" has been considered as a major construct that affects the subject's continuous intention to write reviews. Based on this requirement, the following hypothesis has been proposed:

H_{11}: Shoppers who tend to write reviews in general will have greater intention to continuously write reviews than those who do not write reviews in general

Research Methodology

The measures for the constructs were adapted from existing studies to the context of this study. Items for site usefulness were adapted from Wang and Liao (2007) and Zhou (2011). Measures for product usefulness and confirmation were adapted from Bhattacherjee's (2001a, 2001b). Measures for enjoyment were adapted from Agarwal and Karahanna (2000). Measures for Review involvement were adapted from Zhang (2014). Satisfaction was measured using items adapted from McKinney, Yoon and Zahedi (2002). Measures for word-of-

mouth intent were adapted from Bruggen et al. (2011). Finally, measures for intention to write online reviews were adapted from Cronan and Al-Rafee (2008). Items related to the constructs – review involvement and satisfaction were measured on seven-point semantic differential scales. All the other constructs were measured on seven-point Likert scales, where 1 represented 'strongly disagree' and 7 represented 'strongly agree.' The last part of the survey instrument consisted of demographic information, where the survey participants were asked to share information about their age, gender and income. Besides these, few other questions like, where did they purchase smartphone from, did they read online reviews before purchasing the product, etc., were also asked. To check the suitability of the questionnaire, a pre-test was conducted with eight participants who were frequent online shoppers and avid readers of online reviews. Further, pilot testing of the instrument was carried out by distributing it to fifty participants for testing the reliability of the instrument. Before commencing the final survey, the instrument was pilot tested among twenty doctoral scholars. All of them had experience of buying smartphones after going through online reviews. Their suggestions were incorporated in the instrument.

The respondents were asked to participate in the research only if they had purchased a mobile phone after reading reviews about it from an online review site. They were also told that it did not matter whether they had purchased the mobile phone subsequently from any online site or from an offline store. The context of the study (online reviews) made it pertinent to distribute and collect data through the online medium. The instrument was distributed using the online survey software 'Qualtrics'. The link to the survey was distributed and posted in social media sites such as Facebook, Linkedin, as well as mailed using personal mail ids. The respondents had the freedom to take part in the research at any point in the time as per their convenience by clicking on the link provided. The data was collected during the period of February-March, 2017. Overall 399 respondents participated in the research. After eliminating the incomplete and erroneous responses, we were left with 203 usable data points. In agreement with Garver and Mentzer (1999) and Hoelter (1983), the sample size of 203 was considered appropriate for undertaking SEM analysis. This is also in confirmation with Bagozzi and Yi (1988), who have advocated a minimum of five cases for every measure for achieving successful model fit.

Data Analysis and Results

Demographic Profile

Nearly two-third of the sample respondents were males and more than sixty percent were below thirty years of age. The modal income class (42.9%) had a monthly income between INR 50,001 and 100,000. Nearly three-fourth of the sample had purchased smartphones from online retailers and around thirty percent of the sample had confirmed that they had posted reviews on websites. Table 2 summarizes the demographics of the respondents.

In concurrence with the comprehensive report on the Indian online market (Economic Times, 2017), these demographics adequately reflect the market that strongly associates with online buying in India. The sample of the study formed a very good representation of the Indian online consumer market. However, in order to increase the strength of the results, two control variables – 'gender' and 'income of the respondents' were included in the study.

Table 2 - Demographic Profile of Respondents			
Measure	**Categories**	**Frequency**	**Percentage**
Gender	Male	133	65.5%
	Female	70	34.5%
Age	Below 21 yrs	--	--
	21-30 yrs	125	61.6%
	31-40 yrs	50	24.6%
	Above 40 yrs	28	13.8%
Income (Rupees)	Less than 50,000	69	34%
	50,001 - 100,000	87	42.9%
	100,001 - 150,000	17	8.4%
	More than 150,000	30	14.8%
Purchased the smartphone	Online retailer	155	76.4%
	Offline retailer	48	23.6%
Write reviews in general	Yes	64	31.5%
	No	139	68.5%

Descriptive Statistics

Table 3 presents the descriptive characteristics of the respondents. Respondents have given positive responses to three constructs - site usefulness, satisfaction and word-of-mouth intent (all the mean values being more than 4). On the other hand, product usefulness, confirmation, enjoyment and intention to write reviews were rated negatively. The table also presents VIF values, which are a measure of multicollinearity. All the constructs had values less than four, indicating no presence of multicollinearity, against a cut-off value of 7 and above (Hair et al., 2010).

Table 3 - Descriptive Statistics			
Constructs	**Mean**	**SD**	**VIF**
Site usefulness	4.39	1.45	2.16
Product usefulness	3.07	1.34	1.87
Confirmation	3.08	1.14	1.78
Enjoyment	2.78	1.26	1.93
Satisfaction	5.29	1.35	3.23
WOM intent	4.13	1.73	2.01
Intent to write review	3.90	1.52	1.25

Common Method Bias (CMB)

Since the data was collected from a single source at one point of time, it was decided to vary the structure and measurement scales used in the survey instrument. As suggested by Podsakoff et al. (2003), the instrument was developed using multiple type of scales - Likert scales, Semantic differential scales and dichotomous scales. Further, it was decided to statistically check for common method bias by undertaking Harman's single factor test (Podsakoff et al., 2003; Podsakoff and Organ, 1986). The outcome showed that the highest contributing factor explained twenty-six percent of the total variance, which is substantially below the cut-off of fifty percent (Podsakoff et al., 2003). This result confirmed that common method bias is not likely be a problem in our study.

Measurement Model

With the help of SmartPLS 3.0 (Ringle et al., 2015), the research model was analysed and hypotheses were examined. PLS is a statistical tool that permits evaluation of measurement model and analyze the path coefficients (Mun and Hwang, 2003). In order to obtain the path coefficients and t-statistics, bootstrapping technique was employed with n = 5000. The measurement model is evaluated by reporting internal consistency (Cronbach's α), convergent and discriminant validity. As suggested by Fornell and Larcker (1981), the constructs

reliability is considered adequate if it achieves α values greater than 0.70. As a measure for convergent and discriminant validity, the AVE values should be greater than 0.5 and the square root of AVE values should be more than 0.70. Also, the square root value obtained should be greater than the construct's correlation with other constructs. The factor structure matrix with loadings, internal consistency reliability, average variance extracted and composite reliability is presented in Table 4. α values for all the constructs were much above 0.70. Also, all the items displayed high loading on their respective constructs (above 0.60).

Table 4 - Factor Structure Matrix				
Factor and Items	**Factor Loadings**	**ICR (α)**	**Average Variance Extracted**	**Composite Reliability**
Site usefulness		0.968	0.939	0.979
makes purchase decision easier	0.974			
allows to easily gather the information	0.975			
the review sites are useful	0.959			
Product usefulness		0.913	0.790	0.938
enhanced effectiveness	0.854			
enhanced productivity	0.915			
useful in all activities	0.873			
has improved performance	0.913			
Confirmation		0.868	0.641	0.877
experience was better than what was expected	0.792			
extent of help provided was better than expected	0.798			
expectations were confirmed	0.834			
was better than what was perceived	0.778			
Enjoyment		0.859	0.730	0.914
have fun using this product	0.878			
this product provides lot of enjoyment	0.931			
enjoy using this product	0.941			
Using this product makes feel bored	0.629			
Satisfaction		0.962	0.843	0.970
Very Satisfied	0.916			
Very Pleased	0.919			
Contented	0.953			
Delighted	0.940			
will continue using it	0.915			
will definitely recommend it to friends	0.863			
Word-of-mouth intention		0.959	0.891	0.970
likely to say positive things	0.932			
likely to recommend	0.959			
likely to say positive things in general	0.954			
likely to encourage friends and relatives	0.930			
Intention to write reviews		0.930	0.827	0.950
would like to provide review	0.901			
likely to provide review	0.923			
intend to provide review	0.906			
will make an effort to provide review	0.906			

Table 5 shows that discriminant validity was confirmed by comparing the square root of AVE (represented by diagonal values of the matrix) against the correlation between the corresponding construct with other constructs. The values themselves were all greater than 0.70 and were higher than the correlation values (Fornell and Larcker, 1981).

Table 5 - Test of Discriminant Validity							
Construct	SU	PU	CON	ENJ	SAT	WOMI	INTWR
Site usefulness	**0.969***						
Product usefulness	0.086	**0.888***					
Confirmation	-0.008	0.545	**0.800***				
Enjoyment	0.024	0.592	0.527	**0.854***			
Satisfaction	0.187	-0.176	-0.337	-0.338	**0.918***		
Word-of-mouth intention	0.711	0.049	-0.044	-0.062	0.176	**0.943***	
Intention to write review	0.420	0.131	0.140	0.063	0.040	0.502	**0.909***

Notes: * Diagonal values are square root of AVE, others are correlation coefficients.

Structural Model: Hypotheses Testing

The final hypothesised PLS model with standardized coefficients, their significance for each hypothesis and the variance explained (R^2 values) are reflected in Figure 2.
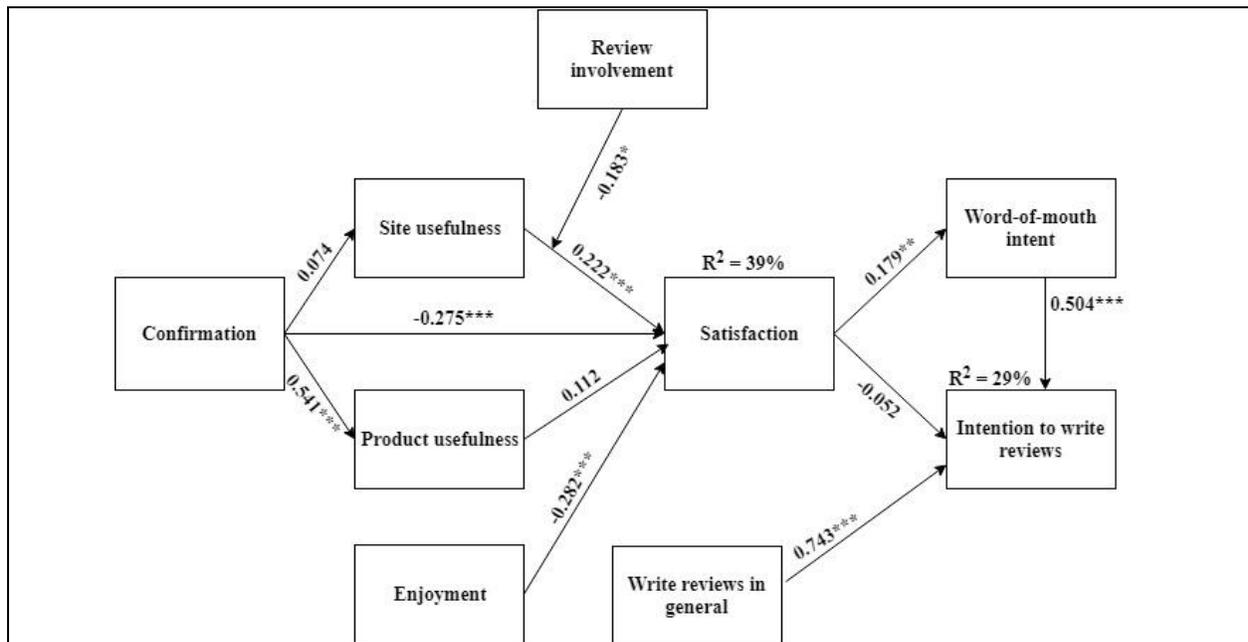
Figure 2 - Structural Model

Table 6 reflects structural estimates along with the path coefficients. The hypothesis H_1, representing the relationship between confirmation and site usefulness, is rejected ($\beta = 0.074$, $p = .347$). Hypotheses H_2 ($\beta =$ 0.541, $p = .000$) was accepted, suggesting confirmation to have significant effects on product usefulness and satisfaction. However, the findings showed a significant albeit negative relationship between

confirmation and satisfaction (β = -0.275, p = .001), therefore H_3 was rejected. This finding was contradictory to the earlier findings in the literature. Furthermore, the empirical analysis (β = 0.222, p = .000) supported the influence of site usefulness on satisfaction, thereby accepting H_4. On the contrary, the study didn't find any statistical support to the claim of product usefulness having any influence on satisfaction (β = -0.112, p = .207). Hence H_5 was not accepted. The results are presented in Table 6.

Enjoyment had a significant but negative influence on satisfaction (β = -0.282, p = .001) thereby rejecting hypothesis H_6.

This finding was again contradictory to what was expected. Similarly, satisfaction was found to influence word-of-mouth intent (β = 0.179, p = .006), which had significant effect on intention to write reviews (β = 0.504, p = .000). Therefore, both the hypotheses H_7 and H_9 were accepted. Finally, the results of the study (β = -0.052, p = .387) rejected hypothesis H_8, and it was concluded that satisfaction didn't have significant influence on intention to write review.

It is noted that the control variables, gender (β = 0.162, p = .456) and income (β = 0.078, p = .450) did have any significant impact on intention to write reviews.

Table 6 - Structural Parameter Estimates			
Hypotheses	Estimate	T statistics (p-value)	Result
H_1: Confirmation ➡ Perceived usefulness of Site	0.074	0.941 (0.347)	Rejected
H_2: Confirmation ➡ Perceived usefulness of product	0.541	8.73 (0.000)	Supported
H_3: Confirmation ➡ Satisfaction	-0.275	3.389 (0.001)	Rejected
H_4: Perceived usefulness of Site ➡ Satisfaction	0.222	4.113 (0.000)	Supported
H_5: Perceived usefulness of product ➡ Satisfaction	0.112	1.263 (0.207)	Rejected
H_6: Enjoyment ➡ Satisfaction	-0.282	3.26 (0.001)	Rejected
H_7: Satisfaction ➡ Word of mouth intention	0.179	2.744 (0.006)	Supported
H_8: Satisfaction ➡ Intention to write review	-0.052	0.865 (0.387)	Rejected
H_9: Word of mouth intention ➡ Intention to write review	0.504	8.110 (0.000)	Supported

The moderating effect of 'review involvement' on the relationship between antecedents – site usefulness and satisfaction was also examined. The findings confirm that review involvement moderated the relationship between site

usefulness and satisfaction (β = -0.183, p = .039). Table 7 exhibits significant influence of 'review involvement' as a moderating variable on the relationship between site usefulness and satisfaction. Thus, hypothesis H_{10} is supported.

Table 7 – Moderating Effect			
Hypothesis	Estimate	T statistics (p-value)	Result
H_{10}: Review involvement : Site usefulness and Satisfaction	-0.183	2.063 (0.039)	Supported

Further, the influence of writing reviews in general, on intention to write reviews was hypothesised. The hypothesis H_{11}, representing this relationship was accepted with β = 0.763 and p = .000, and it can be said that shoppers who tend to write reviews in general have greater intention (β = 0.763) to continuously write reviews than those who do not write reviews in general.

Alternative Models

In order to test the correctness of the aforesaid analysis, it was decided to develop and test alternative models.

a) A link from confirmation to enjoyment was added and tested. In this case, the relationship between confirmation and enjoyment was established (β = 0.947, p = .000). However, as a result of this relationship, the relationship between enjoyment and satisfaction became insignificant (β = 0.009, p = .908). Also, the link between site usefulness and satisfaction became insignificant (β = -0.096, p = .069).

b) Other alternative models were developed tested and it was noted that none of them were able to change the findings that were observed in the original model.

Therefore, it was decided to proceed with the results of the original model.

Discussion and Implications

The limited amount of research on the topic of shoppers' intention to spread word-of-mouth and to write online reviews has motivated the present study to explicate the antecedent factors driving them to engage in sharing reviews on online media. Using the expectation-confirmation theory, this study attempts to identify the moderating role of review involvement in the relationship between site usefulness and shoppers' satisfaction. The findings of the study reflect significant effect of confirmation of prior expectations (H_3), site

usefulness (H_4), and perceived enjoyment (H_6) on shoppers' satisfaction with the product. This satisfaction with the product is significantly associated with the word-of-mouth intention (H_7), which triggered shoppers' intention to write reviews (H_8). However, the study could not establish the effect of product usefulness on satisfaction (H_5). Also, the study notes that the antecedents of satisfaction explain significant variance (R^2 = 39%) in satisfaction. Similarly, word-of-mouth intention explains 29% variance in intention to write reviews. Though satisfaction has a significant impact on WOM, it explains a mere three percent of impact on word-of-mouth intent. This suggests that satisfaction displays restricted relationship with reviewers' behaviour. This study further extends past research to the context of online reviews and states that, while satisfaction/dissatisfaction might be necessary requirement for word-of-mouth to occur, it is not enough to explain shoppers' intention.

The salient aspect of the study pertains to the negative association between confirmation and satisfaction. The study also examined the role of perceived enjoyment in explaining consumers' satisfaction related to a product. It is imperative that consumers sense enjoyment/ fulfilment after using any product/service in order to be satisfied. Enjoyment also has been observed to be negatively related to satisfaction. This could be due to the greater expectations formed after reading reviews, once such expectations were not confirmed, consumers sense of enjoyment from the product may get diminished. These findings are contradictory to the earlier studies that have reported a positive relationship between the above mentioned constructs (e.g. Hsu and Lin, 2015; Kim et al., 2007; Li and Liu, 2014; Stone and Baker-Eveleth, 2013).

This research work empirically establishes the degree and relative significance of variables that explain shoppers' word-of-

mouth intention to communicate in the online media. The study has advanced the existing literature by making a few interesting contributions. By explaining substantial variance in the dependent variable, the present research offers justification in using expectation-confirmation theory in the context of examining shoppers' intention to provide online reviews. Thus, this is an attempt in applying Bhattacherjee's (2001b) expectation-confirmation model to the field of online reviews. Accordingly, shoppers are more likely to think about the confirmation of expectations from the products, based on the reviews provided by other consumers. The confirmation could be founded on understanding the usefulness of the review site as well as usefulness of the product, which would ultimately lead to satisfaction.

The study presents implications having theoretical value for academicians and practical value for online managers. The objective of the present work was to examine shoppers' post-satisfaction behaviour – word-of-mouth intent and intention to provide reviews and to explore any possible associations between those behaviours. This objective was accomplished by adopting the expectation-confirmation theory that examines shoppers' satisfaction behaviour and helps us examine the post-adoption behaviour. Perceived usefulness of the site, enjoyment and confirmation were found to have significant influence on satisfaction that further affected WOM and review intention. Quite surprisingly, product usefulness was found not to be a determinant of consumers' satisfaction. This is a strange outcome, shoppers' gave more importance to site usefulness but at the same time usefulness of the product was not given prominence.

This research contributes to the literature in interesting ways. It contributes to the present literature by developing a model based on ECT, which is in line with other studies that have used ECT to assess satisfaction in online settings (e.g. Brown and Jayakody, 2008; Doong and Lai, 2008;

Limayem et al., 2007). Most of the current studies emphasise the influence of reviews (WOM) on shoppers buying behaviour. There are limited studies examining how and why shoppers are eager to devote their time to share their buying experiences with other shoppers in the online medium. The present work attempts to augment the present literature by offering a theoretical model that explains shoppers' word-of-mouth intention.

The findings of the study indicated that confirmation was negatively related to satisfaction. From this result it can be stated that when the expectation of the shoppers do not confirm it leads to lower levels of satisfaction. This could be due to the fact that reviews raise the expectations of the customer which were later reduced when the product is used. The expectation-confirmation theory states that when the prior expectations formed are confirmed, shoppers are satisfied with the product/service/system or artefact. The analysis of the data reveals another counterintuitive finding, which is the significant but negative impact of confirmation on satisfaction. In the present context it can said that the users of the product had much higher expectations, which were not met and this resulted in lower levels of satisfaction. This implies that when the product/service/system/artefact does not confirm to shoppers expectations, it results in lower satisfaction. Consumers read reviews on websites and most likely the performance is not congruent with the reviews being provided thus resulting in lower satisfaction. This incongruence could also result in shoppers' dissatisfaction with product usefulness. Our study found no effect of product usefulness on satisfaction. The lower level of satisfaction influences their word-of-mouth intent finally resulting in intention to write reviews. It can be inferred that those shoppers who find greater incongruence between the expectations and performance are more willing to share their experience with other shoppers.

The findings also noted the significant but negative influence of intrinsic factor enjoyment on satisfaction. Smartphone was used as a product in the present research context. The negative relationship between enjoyment and satisfaction could be explained in two ways. Firstly, being a technology based product, shoppers depend on other consumers' opinion before purchasing the product. Later on the level of enjoyment from the product would not have been the same as they heard from other consumers, leading to lower satisfaction levels. Secondly, technology related products lose their charm as they become old. The market has always something new to offer and this results in consumers' lack of enjoyment with the present product that impacts their satisfaction levels. The study also investigates the relative importance of various antecedent factors for consumers' word-of-mouth intention. The study also found that satisfaction had a limited influence on consumers' intention to provide review.

Another contribution of the study lies in its explanation of the role of review involvement on shoppers' satisfaction. Although extant literature discusses about examining involvement as a construct, the moderating role of review involvement has received very less attention. The findings suggest that the influence of site usefulness on satisfaction is not only direct but is also moderated by review involvement. Intuitively, as shoppers' involvement while reading reviews increases, their usefulness of the site also increases, resulting in greater amount of satisfaction. The results show a significant moderating effect of review involvement albeit with a negative beta coefficient. This suggests that more the shoppers' get involved in reading reviews, the usefulness of site resulting in satisfaction decreases. This is a counter intuitive finding and e-retailers should take a special note of this result. As the negative coefficient of the interaction term indicates that this construct has a negative impact on satisfaction.

The present work has implications for e-retail managers also. The study found that confirmation was a significant (but negative) predictor of satisfaction and usefulness (of product but not website) in the proposed model. It becomes pertinent for e-retailers to ensure a good congruence between their expectations (formed by the existing reviews on the site) and product's performance. Overly positive reviews of the products that do not have the capability of meeting such expectations could lead to dissatisfaction among the shoppers. It is important for online managers to be able to identify shoppers who provide genuine reviews and segregate those who provide reviews either without using the product or providing false reviews. The retail site should incorporate checks to filter out improper reviewers. This will not only help the retailers but would also be fruitful for other shoppers who tend to form their expectations based on other shoppers' reviews.

It is a well-known fact that confirmation is a part of coherent decision making process that shoppers go through before forming satisfaction and subsequent behavioural intentions. Although most of the phases in the decision-making process may be not in the control of e-retailers, they can try to influence this process (confirmation) by developing appropriate levels of expectations among shoppers and be able to meet those expectations. Comprehending the optimum level of shoppers' expectation is really a difficult, intricate and perplexing job. As high levels of expectation could result in disconfirmation and low expectation level (or low perceived usefulness) could lessen the inspiration to continue using the product/service. Moreover, the levels of expectations tend to differ significantly in a population and so managers should think about developing and framing customer profiling (typology) by segmenting the market. This segmentation should be based on shoppers' product/ service requirements and firms abilities and should come out with

separate marketing programs for each segment.

From the management's perspective, it is important for online marketers to construct an atmosphere that is favourable for encouraging positive but meaningful reviews. As the trend of shopping through online medium (e-commerce) turns into a common practice, the e-tailing managers are increasingly being scrutinized to the same business-performance standards as businesses in traditional markets. E-retailers need to have real-time monitoring of shoppers satisfaction with their websites to be able to survive in the competitive online market. This should be undertaken with the objective of ensuring the information content on the website (given by company and reviews provided by other shoppers) and the ultimate performance of the site as well as the product. This is important because once shoppers realise incongruence between what has been stated and what actually is, they will never make a purchase on the site.

Conclusion, Limitations and Future Research

Of late in the past, a significant amount of attention has been given to the impact of online reviews on sales, and their helpfulness to other shoppers. Studies are still needed to analyze other roles of online reviews in e-commerce transactions. One such area is the behaviour of consumers as reviewers of products. The study has made an attempt to understand when shoppers share their opinions and experiences – when they are satisfied after confirmation of expectations or when they are dissatisfied when the expectations are not met. In the present paper, we examined shoppers' confirmation of expectations and analyzed its effect on customer satisfaction. The study proposed that prior online reviews shape expectations that later impact customer satisfaction and developed a theoretical model based on expectations-

confirmation theory. This work should encourage other researchers to further examine the influence of expectations, performance and confirmations in the context of online reviews. Empirical studies only depending on satisfaction/dissatisfaction are unlikely to account for much effect in reviewing intentions.

Also, as some of the findings were contradictory to the theory, further research must be carried out in this context to validate these findings. The findings from this research must be understood in the light of its limitations. We have used smartphones as the product for this study. Other researchers can undertake related studies by employing different category of products. This will help in generalising the results. Future studies can also do a comparative analysis between the reviews present on review sites as against the reviews on social media (e.g. Facebook, Twitter, Google+, etc.). We did not take any cultural factor into account, scholars can undertake work to examine the influence of, if any, cultural factors on shoppers review posting behaviour.

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Appendix

Questionnaire Items

Online review involvement (7 point semantic differential scale)

Paid very little attention………Paid a lot of attention

Did not think about the review content……...Thought about the review content

Concentrated very little………. Concentrated very hard

Expended very little effort……....Expended lots of effort

Was not involved at all ………...Was highly involved

Confirmation (7 point Likert scale)

Experience was better than what was expected from reading online reviews

The extent of help provided by online reviews was better than expected

Overall, most of the expectations based on online reviews were confirmed

Expectations based on online reviews were met after using it

The Product was better than perceived when reading online reviews about it

Product Usefulness (7 point Likert scale)

Has enhanced effectiveness

Has enhanced productivity

Useful in all activities

Has improved performance

Enjoyment (7 point Likert scale)

Have fun using this product

Using this product provides lot of enjoyment

Enjoy using this product

Using this product makes me feel bored (R)

Satisfaction (7 point semantic differential scale)

Very Dissatisfied ……….Very Satisfied

Very Displeased ……....Very Pleased

Frustrated………………Contented

Terrible…………………Delighted

Will never use it again………Will continue using it

Will never recommend to my friends ………Will definitely recommend it to my friends

Intention to provide online reviews (7 point Likert scale)

Would like to provide review on the online review site

It is likely for me to provide review on the online review site

Intend to provide review on the online review site

Will make an effort to provide review on the online review site

Word-of-mouth intention (7 point Likert scale)

Likely to say positive things to other people

Likely to recommend this to a friend or colleague

Likely to say positive things in general

Likely to encourage friends and relatives

Site usefulness (7 point Likert scale)

The review sites makes purchase decision easier

The review sites allows to easily gather the information needed to make purchase decision

Overall, the review sites are useful

The reviews sites make me feel confused regarding my purchase decision (R)

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