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How do electronic word of mouth practices contribute to mobile banking adoption?

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ABSTRACT

Mobile banking (m-banking) is the fastest growing and most cost-effective channel for delivering banking services. Electronic word of mouth (eWOM) plays a crucial role in the success of e-commerce. Therefore, the main purpose of this study is to investigate a comprehensive moderated mediated mechanism for enhancing m-banking adoption behavior through positive eWOM triggers using the elaboration likelihood model (ELM). Argument Quality, valence, consistency and volume were considered eWOM triggers, and the conceptual model also included initial trust in m-banking as a mediator and consumer involvement in m-banking as a moderator. A total of 1153 useable surveys completed by the Indian users of social networking websites were used for analysis. The findings showed that of the triggers, argument quality, valence, and consistency enhance intention to adopt m-banking. These effects were mediated by initial trust in m-banking. The mediation effects of initial trust between valence – Intention varied between high and low consumer involvement in m-banking. These findings make several contributions to the literature on marketing communication, particularly to eWOM research and ELM theory. Practically, this study provides several recommendations to banks about how to use positive eWOM for motivating consumers to adopt m-banking.

1. Introduction

Information technology development has enabled financial institutions to revolutionize their service delivery patterns (Shaikh and Karjaluoto, 2015; Shankar and Jebarajakirthy, 2019). Financial institutions, especially banks, offer a variety of innovative electronic channels for satisfying consumer expectations and for maintaining competitive advantage (Wessels and Drennan, 2010). Along with physical branch banking, banks offer a variety of substitute channels, such as ATMs, online banking, and mobile banking (m-banking) to provide their banking services. Among all new service delivery platforms, m-banking has emerged as the most cost effective and efficient channel for delivering banking services (Moser, 2015). Although m-banking services provide several unique services to users, the adoption rate of m-banking is below the expectation (Moser, 2015; Shaikh and Karjaluoto, 2015) and still parked in the early phase of adoption (Mullan et al., 2017). Despite the increasing number of m-banking users, globally it has been subscribed by only 15% of total smartphone users (Juniper Research, 2013; Shaikh and Karjaluoto, 2015). Similarly, in India, mobile phone usage and internet subscriptions are booming, yet the m-banking adoption rate is not up to the mark (Singh and Srivastava, 2018). In light of the importance of m-banking to several stakeholders, researchers have begun to examine the factors affecting m-banking adoption. They have increasingly used the technology acceptance model (TAM) (Aboelmaged and Gebba, 2013; Kalinic et al., 2019), the theory of planned behavior (TPB) (Cheah et al., 2011; Giovanis et al., 2019) and the unified theory of acceptance and use of technology (UTAUT I & II) (Zhou et al., 2010; Yu, 2012; Alalwan et al., 2017) as underpinning models to explore m-banking adoption intention.

To this end, it is important to note that before adopting a new technology, consumers generally want to know the experience of existing users (Cheung and Lee, 2012; Augusto and Torres, 2018). As m-banking is an emerging channel for providing banking services, customers are interested in knowing more about other customers' experience of m-banking, as well as the features, facilities and performance of m-banking. Therefore, information and the channels through which information is communicated play a crucial role in m-banking adoption (Sreejesh et al., 2016). Online word of mouth communication or electronic word of mouth (eWOM) and play a vital role in the popularity and success of m-commerce (Zhang et al., 2010; Krishnamurthy and

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Kumar, 2018). Consumers are looking for information posted by previous customers to make themselves more confident in adopting a new technology (Pitta and Fowler, 2005). EWOM can be either positive or negative, and accordingly its effects on purchase intention can differ (Roy et al., 2017). This study focuses only on the effects of positive eWOM.

In the past, several studies investigated the effects of positive eWOM on consumers' purchase intention (See-To and Ho, 2014; Matute et al., 2016; Kudeshia and Kumar, 2017). As consumer-perceived risk is a major hurdle in m-banking adoption (Akturan and Tezcan, 2012; Shankar and Kumari, 2016), the positive usage experience shared by other users on different platforms plays a crucial role in m-banking adoption. M-banking is an innovative service delivery platform in the financial services industry; however, consumers have greater concerns with the privacy and security risk in adopting or using financial services, such as m-banking (Shankar and Kumari, 2016; Shareef et al., 2018). Hence, customers want to know the experience of existing users to gain a better knowledge of features, utilities and performance of m-banking (Sreejesh et al., 2016). Therefore, eWOM plays a more important role in the m-banking context than the other services context. In essence, eWOM can increase the awareness level of consumers (Teng et al., 2014; Sreejesh et al., 2016), leading to the acceptance of m-banking.

The way in which positive eWOM can influence m-banking adoption intention was not investigated in detail. In other words, no study examined the impact of various triggers of the eWOM on m-banking adoption intention. This indicates a gap in the literature. Here, the term 'triggers' means the dimensions or characteristics of eWOM (Amed et al., 2017). Positive eWOM has several dimensions (triggers), which will be discussed in detail in the literature review section. In this study, argument quality, valence, review consistency, and volume of reviews are used as eWOM triggers influencing m-banking adoption intention.

It is also important to note that in the literature, attempts were made to examine the effects of eWOM triggers on the intention to purchase or adopt in the context of other products or services (Ladhari and Michaud, 2015; Erkan and Evans, 2016); however, research has focused mainly on the simple direct effects of eWOM triggers on the intention which may disguise the true relationships between the variables. It has been argued that the link between eWOM triggers and the intention is unlikely to be straightforward, and the association between eWOM triggers and the intention is beyond simple direct relationships (Cheung and Thadani, 2012). In other words, it is a mechanism rather than a simple direct relationship (Cheung and Thadani, 2012). Accordingly, attempts were made to examine the mediating and moderating effects of different variables on the association between eWOM triggers and the intention (Weisstein et al., 2017). However, these moderators and mediators can also operate simultaneously, and affect the eWOM triggers – the intention relationship. These mediating and moderating effects have been investigated separately in previous studies (Lee et al., 2008; Weisstein et al., 2017). The extant literature does not show how moderators and mediators can work together simultaneously in changing the association between eWOM triggers and adoption intention. This research addresses this gap. Hence, this study combines both the mediation and moderation variables in the same model (in the same study) to comprehensively examine the how these variables affect the association between eWOM triggers and the intention to adopt or the intention to purchase.

Thus, the main purpose of this study is to propose and empirically investigate a comprehensive moderated mediation mechanism for examining the impact of eWOM triggers on m-banking adoption intention using an elaboration likelihood model (ELM) (explained in the literature review section). First, this study investigates the influence of the eWOM triggers on m-banking adoption intention. This study also proposes initial trust as a mediator for the association between the eWOM triggers and m-banking adoption intention and suggests that these mediation effects vary depending on the different levels of the consumer involvement. This study demonstrates how moderators and mediators can work together simultaneously in explaining the association between eWOM triggers and m-banking adoption intention, thereby revealing a complex moderated mediation mechanism to examine the impact of positive eWOM triggers on m-banking adoption intention.

2. Literature review and hypotheses development

2.1. M-banking

Advancements in information technology have transformed the traditional retail banking delivery system (Shaikh and Karjaluoto, 2015; Laukkanen, 2016). Today, financial institutions are providing their services through different channels, such as branch banking, automated teller machines (ATMs), internet banking, and m-banking. However, among all channels, m-banking is the most promising and innovative channel with greater degrees of ubiquity and localization (Koenig-Lewis et al., 2010). The ubiquity of m-banking means customers can get the banking services irrespective of time and geographical location (Ko et al., 2009). Localization is another distinctive characteristic of m-banking which means m-banking can locate the geographical location of the mobile user and provide location-specific banking services (e.g., letting the customer know the exchange rates of the location, availability of ATMs and availability of money transfer facilities) (Junglas and Watson, 2006). Because of these distinctive characteristics, m-banking is considered the most flexible and useful channel for availing banking services. Financial institutions are currently using m-banking as a strategic tool to satisfy customer expectations and to gain competitive edge in the banking sector (Tam and Oliveira, 2016).

M-banking is an extension of online banking which enables customers to perform all banking transactions through the mobile platform (Mallat et al., 2004; Moser, 2015; Laukkanen, 2016). M-banking services provide greater benefits to consumers, banks and telecommunication service providers (Koksal, 2016; Shareef et al., 2018). Thus, m-banking is considered one of the most valuable and promising mobile commerce applications in recent years (Laukkanen, 2016).

Several researchers have investigated m-banking adoption behavior (Shaikh and Karjaluoto, 2015; Shankar and Kumari, 2016; Shareef et al., 2018; Chaouali and Souiden, 2019). The information passing through online retail stores and social networking websites, such as Facebook and Twitter, influences technology adoption behavior (Mills et al., 2014). Consumers share their positive and negative experiences on various social media and retail websites after experiencing and using technology-related services (Berezina et al., 2016). Customer reviews over various online communication channels and websites have a significant impact on technology adoption behavior and m-banking is no exception (Tran and Corner, 2016).

2.2. EWOM

Word of mouth (WOM) has been well-recognized in the consumer behavior literature (Richins, 1983; Cheung and Thadani, 2012) as an informal type of communication which influences the consumer purchase decision-making process (Dichter, 1966; Mortazavi et al., 2014; Yang, 2016; Augusto and Torres, 2018). Electronic word of mouth (eWOM) has emerged with the advent of information technology (Cheung and Lee, 2012). eWOM has been defined as "any positive or negative statement made by potential, actual or former customers about a product or company that is made available to a multitude of people and institutions via the internet" (Hennig-Thurau et al., 2004, p. 39).

Social networking websites, online retailing stores, blogs, Google play stores, weblogs, discussion forums, newsgroups and review websites are popular virtual places where consumers share their views (Sigala et al., 2012; Luo and Zhong, 2015). Although eWOM communication is an extension of WOM, it has several unique characteristics

that differentiate it (Li and Hitt, 2008; Steffes and Burgee, 2009). Speed of information diffusion, wider reach, multi-way exchange of information, anytime availability, more credibility and more measurability are the major characteristics which make eWOM more effective than WOM (Park and Lee, 2009; Cheung and Thadani, 2012; Augusto and Torres, 2018).

EWOM can be either positive or negative. Although several studies have examined the impact of eWOM on purchase intention (Lee, 2009; Matute et al., 2016), only a few studies have classified the reviews into positive (Roy et al., 2017) and negative eWOM (Lee et al., 2008) and explored their impact on purchase intention. The scope of this study is limited to examining the impact of only positive eWOM on m-banking adoption. Previous studies have recognized that positive eWOM communication is an effective promotional tool (Chu and Kim, 2011; Mo Kwon et al., 2013). Compared to information provided by marketers, consumers have more trust in the information shared by other consumers (Kim et al., 2015). Before adopting any technology, consumers critically analyze online reviews provided by other consumers (Muskat et al., 2013; Chen et al., 2016). Therefore, eWOM plays a crucial role in shaping the consumer adoption behavior of technology-related products and services (Kim et al., 2015). Pursuing this line of argument, researchers have proposed that consumers consider various aspects of positive eWOM to make a decision to adopt or not adopt technology-related products and services (Cheung and Thadani, 2012; Kim et al., 2015). For example, they consider the credibility and quality of positive eWOM when they decide whether or not to adopt a new technology (Kim et al., 2015).

2.3. Elaboration likelihood model (ELM)

Researchers have used ELM, a dual-process information processing theory, to explore the impact of positive eWOM on consumer behavior (Petty and Cacioppo, 1986; Park and Lee, 2008; Chan and Ngai, 2011). Several theories have been proposed in the literature to explore users' adoption intentions of information technology-related products and services, such as TAM, UTAUT, and TPB (Shaikh and Karjaluoto, 2015). However, these theories focus on different motivators or factors – such as perceived usefulness, perceived ease of use, and relative advantages – to explore the adoption intention. These theories are not appropriate for investigating the influence of online reviews or eWOM on m-banking adoption intention. The ELM theory tends to be used to demonstrate how information drives consumer behavior and consumer responses (Petty and Cacioppo, 1986; Cheung and Thadani, 2012; Ruiz-Mafe et al., 2018). ELM theory shows how eWOM can influence consumer behavioral responses, such as adoption intention and consumer trust (Cheung and Thadani, 2012; Yang, 2016). M-banking services are provided through an internet-based platform, and this study is aimed at investigating the effects of positive eWOM triggers on the intention to adopt m-banking; hence, ELM seems a relevant theoretical model to explain this phenomenon.

According to ELM theory, the "central route" and "peripheral route" are the two routes of eWOM that influence consumer behavioral responses. Consumers who are motivated to rationally analyze information take the central route and critically analyze information on the basis of the quality of the reviews (Cheung and Thadani, 2012). However, consumers who are less motivated to do so take the peripheral route and make decisions on the basis of the volume of reviews (Petty and Cacioppo, 1983). Accordingly, consumers who adopt a central route normally consider relevance, timeliness, accuracy, comprehensiveness, understandability, dynamism, consistency and personalization of the reviews to decide on a purchase and use of a product or service (Delone and McLean, 2003; Bhattacherjee and Sanford, 2006; Park and Lee, 2008). Those who adopt a peripheral route mainly consider the volume of reviews to determine their consumption behavior (Chan and Ngai, 2011; Cheung and Thadani, 2012). The above indicated central and peripheral route characteristics of eWOM are also known as the central route and peripheral route triggers of eWOM (Cheung and Thadani, 2012).

Previously, scholars have mainly used ELM theory to investigate the influence of eWOM on consumer adoption behavior in online stores (Yang et al., 2015), food service (Zhang et al., 2016), travel (Filieri and McLeay, 2014), mobile shopping (Yang, 2016), and hotel booking (Ladhari and Michaud, 2015) contexts. However, as far as the authors know, no previous studies have examined the impact of positive eWOM on financial services adoption behavior using the underpinnings of ELM theory (central route and peripheral route triggers). We use argument quality, review consistency and information valence as central route eWOM triggers influencing m-banking adoption behavior and the volume of reviews as a peripheral route eWOM trigger influencing m-banking adoption intention.

In a meta-analysis carried out on 47 papers published between 2001 and 2010, Cheung and Thadani (2012) found argument quality, valence, consistency, and volume as the main eWOM triggers. The quality of the reviews has been considered the crucial central route trigger (Cheung and Thadani, 2012). The relevant, accurate, informative, and updated reviews grab the attention of the consumers and those reviews have more persuasive effects on consumers (Liao and Shi, 2017). Similarly, valence has received widespread attention in the eWOM-related studies (Sen and Lerman, 2007; Lee and Lee 2009; Lee and Youn, 2009; Bronner and de Hoog, 2016; Roy et al., 2017). Generally, researchers have argued that the valence of the positive review has a persuasive effect on the credibility of positive eWOM as well as the consumer evaluations of products and services (Cheung et al., 2009; Mortazavi et al., 2014; Bronner and de Hoog, 2016). The valence of the positive review enables customers to understand both the strengths and weaknesses of the products and services (Liu, 2006).

The next eWOM trigger is consistency. Nowadays consumers share their experiences via various online platforms and evaluate the reviews received from different sources. Hence, if positive reviews coming through various online platforms and sources are found to be consistent, such reviews have a more persuasive impact on customers' responses to products and services (Mortazavi et al., 2014). The final eWOM trigger is the volume of the reviews. The number of the positive reviews on products is significantly related with consumers' positive attitudes towards the products (Zhu and Zhang, 2010). eWOM volume also creates an awareness effect (Duan et al., 2008) and indicates the performance and popularity of the product (Chevalier and Mayzlin, 2006). Further explanation for each of eWOM triggers, and the importance of each trigger for m-banking adoption intention are provided in the following section.

2.4. Impact of eWOM triggers on m-banking adoption intention

This section articulates how the above indicated triggers of eWOM influence m-banking adoption intention. The first eWOM trigger is argument quality. The eWOM literature has suggested that argument quality plays an important role in the consumer evaluations of products and services (Bhattacherjee and Sanford, 2006; Park and Lee, 2008; Liao and Shi, 2017). In the eWOM context, argument quality refers to "the strength or plausibility of persuasive argumentation" (Eagly and Chaiken, 1993). That is, argument quality includes the relevance, timeliness, accuracy, and comprehensiveness of the reviews (Bhattacherjee and Sanford, 2006; Lee and Chung, 2009; Teng et al., 2014; Sreejesh et al., 2016; Zhang et al., 2017). Liu and Arnett (2000) argue that consumers will evaluate arguments and reviews more positively if they find them relevant to their needs. Correct information and reviews are also likely to have a positive impact on consumer decision making (Cheung et al., 2009). Additionally, the comprehensiveness of the reviews plays a crucial role in the adoption of technology services (Cheung and Thadani, 2012), whereby comprehensiveness means the completeness of the review (Zhang et al., 2017).

The above-mentioned aspects of online reviews might influence m-

banking adoption intention. M-banking services are dynamic, with banks updating their m-banking applications frequently. Therefore, up-to-date reviews relating to m-banking applications over various online platforms positively influence consumer adoption intention. Similarly, in the m-banking context, accurate information on m-banking applications may result in favorable consumer attitudes towards m-banking. Furthermore, because m-banking is a new service, consumers have less information on m-banking. Therefore, incomplete reviews may create confusion in consumers' minds, making them reluctant to adopt m-banking. If consumers find reviews are specific and complete, they will feel more encouraged to adopt m-banking. Based on the preceding discussion, it is plausible to hypothesize that:

H1. The argument quality of positive eWOM influences m-banking adoption intention.

The next eWOM trigger is positive-mix valence. The valence of the positive reviews means how a review has been framed (Liu, 2006). That is, whether the review has been framed only positively or it also contains some negative arguments (Liu, 2006; Gopinath et al., 2014). Some studies have claimed that positive eWOM enhances consumers' purchase decisions and purchase intentions (Yin et al., 2016; Roy et al., 2017). However, other recent studies have shown that positive eWOM having a mix of some negative reviews or negative contents has a greater impact than pure positive eWOM (Cheung and Thadani, 2012; Bronner and de Hoog, 2016; Roy et al., 2017). Therefore, in this study we use positive-mixed eWOM (positive valence reviews with some negative arguments) as a positive eWOM trigger.

The valence of positive eWOM also affects the intention to adopt m-banking. Consumers' perceived risks play a pivotal role in financial services adoption behavior (Akturan and Tezcan, 2012) and m-banking is no exception. Positive reviews motivate consumers to adopt m-banking; however, in the m-banking context, a positive-mixed eWOM reduces the doubt of consumers. In eWOM communication, reviews are written by unknown people, and so positive-mixed eWOM is considered genuine and trustworthy, and consumers believe that they are given by customers and not by marketers. Based on the preceding discussion, it is plausible to hypothesize that:

H2. The valence of positive eWOM (positive mixed eWOM) influences m-banking adoption intention.

The next eWOM trigger is review consistency, which refers to "whether the review is consistent with other contributors' reviews concerning the same product or service" (Zhang, 1996). In online discussion platforms, more than one user can write reviews, allowing potential consumers to gather reviews and compare them. If consumers find a positive review consistent with other reviews on the same platform and other platforms, they will be more to likely to trust the reviews, which positively influences their decision to purchase a product or service (Mortazavi et al., 2014). In contrast, if the positive eWOM recommendation is inconsistent with other reviews on the same platform or other platforms, they feel a sense of confusion and consider this review less credible, which leads to a negative impact on adoption intention (Mortazavi et al., 2014).

Trust in positive eWOM relating to technology-driven financial services, such as m-banking, influences consumers' intentions to adopt them. If consumers are confused by inconsistent reviews, they will lose trust in the positive reviews which will negatively influence their m-banking adoption. However, if they find reviews consistent then they will tend to rate the reviews credible and respond positively to m-banking adoption. Consumers also consider consistency between the review rating and contents. If they find that the reviewer gives a poor overall rating but with favorable content or vice versa, consumers will tend to disbelieve the review and resist adopting m-banking. Based on the preceding discussion, it is plausible to hypothesize that:

H3. The consistency of positive eWOM influences m-banking adoption intention.

The next eWOM trigger is review volume, which refers to the number of posted reviews for a specific product or service (Wang and Strong, 1996). EWOM volume is considered a peripheral route to review processing because there are consumers who make decisions on the basis of the number of reviews without critically analyzing the reviews (Park et al., 2007; Filieri and McLeay, 2014). The literature suggests that many positive reviews of any product or service denote to customers that a significant number of people have previously used the product or service (Dellarocas et al., 2007). Previous studies have shown a positive association between the volume of positive eWOM and sales (Duan et al., 2008). If consumers find a significant number of positive reviews on a product then they will tend to trust that product (Teng et al., 2014). The quantity of positive reviews also reduces the perceived risk and uncertainty of potential users (Chen et al., 2004). The volume of positive reviews enhances the purchase intention of a product or service by reducing consumer anxiety (Zhu and Zhang, 2010; Cheung and Thadani, 2012).

M-banking is a new type of technology-driven banking channel, meaning that many customers have a lack of awareness of this emerging channel. Perceived risk is a major barrier to m-banking adoption intention (Shankar and Kumari, 2016), and a sizeable number of positive reviews can reduce consumers' perceived risks and help them form positive attitudes towards m-banking. When consumers see a large number of positive reviews about a particular m-banking application, they tend to consider the application creditworthy which will motivate them to adopt it. Based on the preceding discussion, it is plausible to hypothesize that:

H4. The review volume of positive eWOM influences m-banking adoption intention.

2.5. Mediating effects of initial trust

Trust means a positive belief about reliability and dependency on anyone or any object (Soares et al., 2012, p. 48). Initial trust and cumulative trust are two phases of trust (Kim et al., 2009). As cumulative trust is followed by initial trust, building initial trust is very crucial in the adoption of online services. Over the past decade, initial trust has received significant attention in the information system literature (Kim et al., 2009; Cheung and Thadani, 2012; Yang, 2016). The mobile commerce context does not involve face-to-face interactions (Lee and Chung, 2009); therefore, in such a context, initial trust reduces consumer-perceived risk and plays a crucial role in business transactions between consumers and firms (Matute et al., 2016). The role of initial trust is also imperative in the mobile commerce contexts because of customer concerns regarding the smaller screen size of the mobile device and the network instability that can affect the functioning of mobile commerce applications (Yang, 2016). Therefore, in this study we examine the mediating impact of initial trust on the association between eWOM triggers and m-banking adoption intention.

The first trigger of eWOM concerns argument quality. Normally, there is limited information on the banking facilities provided via the m-banking channel. If consumers find online reviews are relevant, timely, accurate and comprehensive, they will likely believe these assessments of a product or service (Park and Lee, 2008; Mortazavi et al., 2014; Yang, 2016), consequently forming intentions to adopt or purchase that product or service. The next trigger of positive eWOM is valence. When customers see positive eWOM reviews with some counter arguments (negative contents) rather than only positive reviews, they tend to believe that the former reviews are more credible (Bronner and de Hoog, 2016). Accordingly, the customers develop trust in the product or service, and consequently form the intention to purchase the product or adopt the service. Review consistency is another important aspect of eWOM. If consumers find reviews consistent with

other reviews, they will deem them genuine and trustworthy (Mortazavi et al., 2014). As such, if consumers consistently find positive reviews about m-banking, then they will develop trust in this innovative banking channel and intend to adopt it.

Volume is the next eWOM trigger. When consumers find a large number of online reviews relating to any product or service, they tend to develop initial trust in that product or service (Teng et al., 2014). Consequently, they will become potential users of that product or service. The above discussion suggests that initial trust in m-banking might mediate the association between eWOM triggers and m-banking adoption intention. Hence, the following battery hypothesis is formulated:

H5. Initial trust in m-banking mediates the association between the a) argument quality; b) valence; c) consistency; and d) volume of the positive eWOM; and m-banking adoption intention.

2.6. Moderating effects of consumer involvement in m-banking

The impact of eWOM on intention to adopt or use products and services varies among customers depending on their involvement in the product or service (Cheung and Thadani, 2012; Krishnamurthy and Kumar, 2018). Involvement in the product or service refers to the perceived personal relevance of a product or service based on the interests, needs and values of consumers (Park et al., 2007). In the eWOM literature, researchers have shown that the processing of eWOM varies depending on the involvement in the product or service (Lee et al., 2008; Park and Lee, 2008; Krishnamurthy and Kumar, 2018).

This study proposes that consumer involvement in m-banking might moderate the strength of the mediation effects that initial trust in m-banking has on the association between eWOM and m-banking adoption intention. According to ELM theory, consumers who are highly involved in any product or service tend to engage in critical and effortful processing of information via the central route elements of eWOM (argument quality, consistency of review, and review valence) (Park et al., 2007; Cheung et al., 2009). Individuals with high involvement are likely to consider the contents of reviews important because they are motivated to critically analyze the reviews (Lee, 2009; Cheung and Thadani, 2012; Herold et al., 2016). Therefore, they process the reviews through central route elements (argument quality, consistency of review, and review valence). However, when consumers have low involvement, they rely on (non-content elements) peripheral cues (eWOM volume) for information processing (Petty and Cacioppo, 1984; Cheung and Thadani, 2012). It is also important to note that customers' trust in the product also varies depending on their level of involvement in the product (Shankar and Jebarajakirthy, 2019). That is, customers with high involvement in a specific product/service tend to have more trust in the product/service than those with a lack of involvement (Shankar and Jebarajakirthy, 2019). The preceding discussion indicates that customers' evaluations of eWOM triggers and initial trust vary depending on their degree of involvement in the product or service, and it is therefore plausible to suggest that the mediation effects of initial trust in m-banking on the association between eWOM and m-banking adoption may vary between high and low levels of involvement in m-banking.

Consumer evaluations of each eWOM trigger also vary depending on the degree of consumer involvement in m-banking. High-involved consumers are more likely to analyze the relevance, timeliness, accuracy, and comprehensiveness of the reviews in detail than low-involved consumers (Cheung and Thadani, 2012; Herold et al., 2016; Krishnamurthy and Kumar, 2018); accordingly, high-involved consumers will have more trust in m-banking, leading to its adoption. Similarly, individuals who have high involvement examine the consistency of the reviews over different platforms (Lee et al., 2009; Cheung and Thadani, 2012). Furthermore, individuals who have low involvement in m-banking may not critically analyze the content of the positive valence reviews (Cheung et al., 2009) but follow the rating given by reviewers before considering m-banking adoption. However, individuals with high involvement in a product or service critically analyze whether the reviews are positive or mixed (positive reviews with some negative contents) (Cheung et al., 2009). High-involved customers will develop greater initial trust in a product that has positive-mixed eWOM, resulting in its adoption. However, in relation to forming initial trust in m-banking and adoption intention, the volume of reviews has more impact on low-involved individuals than high-involved individuals (Lee et al., 2008) because low-involved customers consider the performance of a service based on the number of reviews (Lee et al., 2008). We therefore propose that the indirect effects of each eWOM trigger on m-banking adoption intention via initial trust might vary across the levels of consumer involvement in m-banking and accordingly, we hypothesize the following:

H6. Consumer involvement in m-banking moderates the mediation effects of initial trust on the association between a) argument quality; b) valence; c) consistency; d) volume of the positive eWOM, and m-banking adoption intention.

2.7. The proposed conceptual model

Based on the review of literature and the hypothesized relationships, a conceptual model is proposed. Fig. 1 illustrates this conceptual model.

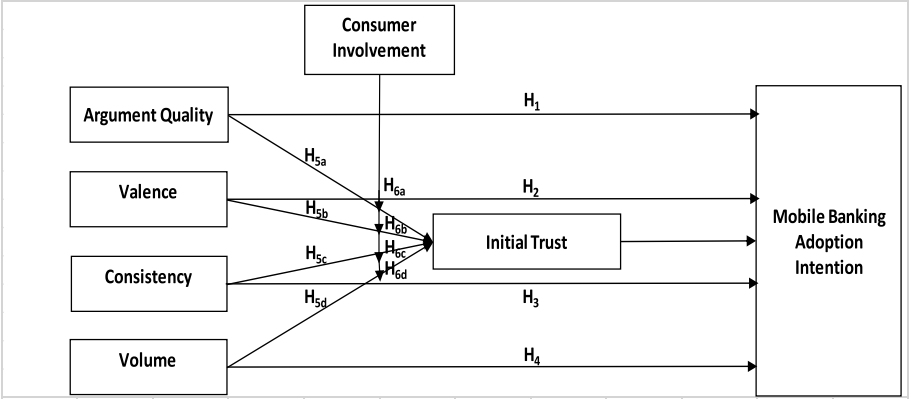

Fig. 1. The conceptual model for this study.

3. Research methodology

3.1. Research paradigm and method

The positivist paradigm is most suitable for this study (Saunders et al., 2009). Positivists tend to adopt a deductive approach to research; that is, they test and review existing theories and previous studies from which they elicit research questions and hypotheses (Robson, 2011; Bryman, 2012). The main purpose of this research is to examine the impact of positive eWOM triggers on m-banking adoption intention. The ELM provides explanation for this phenomenon. The impact of positive eWOM triggers on adoption intention and purchase intention has been investigated for other products, suggesting that the extant theories need testing in the context of this study. From the extant theoretical foundations, hypotheses (causal relationships) were developed. Hence, the positivist paradigm was considered most suitable for this study (Saunders et al., 2009).

Positivists collect quantifiable data and analyze them using statistical techniques. This enables them to test hypotheses before making generalizations and conclusions (Robson, 2011; Bryman, 2012). There are extant theoretical models and empirical studies that underpin this study. From the extant literature, hypotheses (causal relationships) are proposed and tested, hence quantitative method-survey strategy was adopted for data collection and its analysis. That is, this study adopted a quantitative method to examine the impact of eWOM triggers on m-banking adoption intention.

3.2. Sample and survey administration

Responses have been collected from a sample of Indian users of social networking websites. Advanced information and communication technology and the widespread use of the internet and smartphones are the key drivers of the m-banking system (Stewart, 2009; Luo et al., 2010). With more than one billion wireless subscribers and 544 million internet connections (TRAI, May 2019), India is placed second across the globe in internet connections and smartphone penetration (The State of Broadband, 2016). Internet users also follow eWOM via social networking sites (Floyd et al., 2014). The growth in internet penetration and increase in the use of smartphone apps motivate Indian consumers to search for product information via online platforms and social media sites prior to purchase. In India, about 40–50% of online purchases are influenced by eWOM (Roy et al., 2017). These statistics suggest that there is enormous potential growth for m-banking in India, and that there might be a likely association between eWOM and m-banking adoption in India.

Data were collected through structured questionnaires from a sample of social media users in India. To ensure data were collected from the users of social networking websites, we asked a screening question “Do you use any social networking websites?” and listed several social networking websites as examples for their ease of understanding the term “social networking websites”. Only the respondents who answered yes to this screening question were asked to proceed with the rest of the survey.

The questionnaire was administered through both online and offline modes. These two methods are most commonly used for survey administration in business research (Burns and Bush, 2003; Hair et al., 2010; Robson, 2011). Each of these methods have got its own strengths and weaknesses (Duffy et al., 2005); however, we realized that using the combination of both methods enables us to overcome the weaknesses of one method via the strengths of other method. Accordingly, we used both online and offline methods for administering the surveys. It is also important to note that using both methods increases the number of responses which will enhance the generalization of the findings.

The online questionnaire was sent to the email addresses of social networking website users gathered from a marketing research firm. One follow-up email was sent one week after sending the initial email invitation. A total of 507 useable surveys were received from online survey administration and used for analysis. The offline survey was carried out by visiting bank branches, educational institutions, cyber cafes, shopping malls and ATMs in four metro cities of India (Delhi, Chennai, Mumbai, and Kolkata) and adjacent suburban areas. To ensure the variability and representativeness of the entire country, the four cities and suburban areas were chosen from four regions; north, south, east and west of India. Permission to administer the survey in each of these institutions was formally sought from an authorized person representing the institution. Participants had the option of responding to the survey either immediately or at a time of their own convenience. We gave postage paid self-addressed envelopes to those respondents who were unable to immediately return the survey. 500 surveys were handed in each of the four cities. A total of 168, 151, 170 and 157 useable responses were received from Delhi, Chennai, Mumbai, and Kolkata, respectively. The response rate ranged between 34 and 39% in each city. A total of 646 useable surveys were received from offline survey administration and used for analysis.

A total of 1153 responses were used in this study. Data collection took place for three months, between January and March of 2018. Table 1 presents the demographic profiles of the respondents. Independent Samples T-Test showed that there was no significant difference between early and late respondents either in regard to their demographic profiles or study constructs. This also indicates the absence of non-response bias. Independent Samples T-Tests were also conducted to compare the responses between online and offline survey modes. The results showed no significant differences between online and offline survey respondents in terms of demographic profiles or study constructs (Deutskens et al., 2006).

3.3. Measures and instrument development

The items used in the survey instrument were taken from prior validated scales. However, minor modifications were made to the wording of the scale to suit the m-banking context. The questionnaire contains three sections: the first contains a screening question; the second comprises items relating to the study constructs; and the third asks respondents to provide their demographic information.

The items operationalizing the four triggers of eWOM (argument

Table 1
Demographic profiles of the respondents (n = 1153).

Category	N	%
Gender		
Male	674	58.5
Female	479	41.5
Age		
18–30 years	487	42.2
31–45 years	386	33.5
46–60 years	197	17.1
Above 60	83	7.2
Income		
Less than USD 200	317	27.5
USD 201-400	503	43.6
USD 401-600	198	17.2
Above USD 600	135	11.7
Educational Qualification		
Secondary or below qualification	221	19.2
Higher Secondary	346	30
Bachelor's Degree	443	38.4
Postgraduate Degree or higher	143	12.4
Occupation		
Unemployed	39	3.4
Government or semi-government sector	359	31.1
Private sector	488	42.3
Self-employment	202	17.6
Retired	65	5.6

quality, valence, consistency, and volume) were obtained from Park et al. (2007) and Cheung et al. (2009). Specifically, argument quality was operationalized using five items obtained from Park et al. (2007); valence, using five items taken from Cheung et al. (2009); consistency, using three items derived from Cheung et al. (2009); and volume, using three items obtained from Park et al. (2007). M-banking adoption intention was measured using the four items derived from Jebarajakirthy et al. (2015). The measures of initial trust comprise six items adapted from Premazzi (2010) and Mortazavi et al. (2014). Six items adapted from Premazzi et al. (2010) were used to operationalize consumer involvement. A five-point measurement (1 = strongly disagree, 5 = strongly agree) scale was used to operationalize all the constructs. Since the age, income and educational qualifications of the respondents may influence m-banking adoption intention (Glavee-Geo et al., 2017), these variables were used as control variables in this study.

The survey instrument was content tested by a group of experts including bank managers, professors in the marketing field, and e-commerce experts. The survey instrument was made available in both English and Hindi languages and respondents had the choice to respond in either as per their language proficiency. A translation and back translation process by bilingual researchers ensured the reliability and validity of the translated survey instrument. Two focus groups were organized to pretest the survey instrument. Each focus group comprised eight active users of social networking websites. Some minor modifications were made to the survey questionnaire based on the feedback of the focus groups.

4. Analysis and results

4.1. Measurement model

Table 2 showed that the values of the Cronbach's Alpha coefficients for all constructs were higher than 0.7, ensuring the reliability of the measures in their respective constructs (Hair et al., 2010). To ensure validity of the measures, confirmatory factor analysis (CFA) using AMOS version 23 was performed. The results presented in Table 2 indicated that the values of the average variance extracted (AVE) and composite reliability (CR) for all the constructs were above the threshold levels of 0.5 and 0.8 respectively, ensuring the convergent validity of variables (Hair et al., 2010). The factor loadings of all the constructs were significant ($p < 0.01$) and above 0.7, the minimum threshold value which is an additional indicator of the convergent validity of measures (Hair et al., 2010). The method suggested by Fornell and Larcker (1981) was applied to determine the discriminant validity of the measures. Table 3 showed that the values of the square root of AVE for each construct in the upper diagonal were greater than the corresponding off-diagonal correlation coefficients, indicating the discriminant validity of the measures (Fornell and Larcker, 1981). The goodness-of-fit indices in Table 2 showed acceptable model fit (CMIN/DF = 4.386 ($p < 0.001$), CFI = 0.95, GFI = 0.90, NFI = 0.94, TLI = 0.94, RMSEA = 0.054), confirming the unidimensionality of the measurement model (Hair et al., 2010).

The descriptive statistics (mean, standard deviation and correlation coefficients) of the variables presented in Table 3 showed that most of the correlation coefficients were significant and vary between 0.01 and 0.69. All the correlation coefficients were less than 0.9, indicating the absence of multi-collinearity among study constructs (Tabachnick and Fidell, 2012).

Table 2
Summary of the measurement model.

Construct	Statements	FL
Argument Quality αAVE (.70), CR (.95), = .92	Online reviews on m-banking are complete	.87
	Online reviews on m-banking are timely	.86
	Online reviews on m-banking are accurate	.86
	Online reviews on m-banking are comprehensive	.85
	In general, the quality of each review on m-banking is high	.75
Valence α AVE (.72), CR (.96), = .93	M-banking reviews include both pros and cons of m-banking	.83
	M-banking reviews include only positive comments [a]	.85
	M-banking reviews include two-sided comments (positive and negative)	.84
	Positive reviews on m-banking also highlight some weaknesses of m-banking	.85
	M-banking reviews that have positive ratings also have some negative comments	.88
Consistency α AVE (.75), CR (.94), = .90	Reviews on m-banking are consistent with other reviews	.91
	Reviews on m-banking are similar to other reviews	.86
	Review ratings on m-banking and their review contents are consistent	.83
Volume α AVE (.76), CR (.95), = .90	There is a large number of consumer reviews on m-banking	.85
	A great number of consumers write their recommendations on m-banking	.87
	The number of reviews on m-banking is adequate	.89
Initial Trust α AVE (.68), CR (.97), = .93	M-banking applications usually fulfil their commitments	.78
	I can trust in the promises given by m-banking providers	.86
	M-banking providers are concerned with the present and future interests of users	.84
	M-banking applications are mutually beneficial to service providers and users	.88
	M-banking providers have the necessary experience to provide banking services	.80
	M-banking providers have the necessary resources to carry out commercial activities successfully	.79
Consumer Involvement α AVE (.66), CR (.95), = .92	M-banking services are important to me	.76
	M-banking services are of no concern to me[a]	.85
	M-banking services are relevant for me	.88
	M-banking services are very meaningful to me	.80
	M-banking services do not matter to me[a]	.85
	M-banking services are significant for me	.71
M-banking adoption α AVE (.60), CR (.91), = .85	I intend to use m-banking applications in the future	.84
	I expect that I would use m-banking applications in the future	.71
	I plan to use m-banking applications in the future	.77
	I will make an effort to use m-banking applications in the future	.77

Notes: Fit indices CMIN/DF = 4.386 ($p < 0.001$), CFI = 0.95, GFI = 0.90, AGFI = 0.89, NFI = 0.94, TLI = 0.94, RMSEA = 0.054, FL-Factor Loading, α - Cronbach's Alpha, CR-Construct Reliability, AVE = Average variance extracted, CFI = comparative fit index; GFI = goodness-of-fit index, AGFI = adjusted goodness of fit index, NFI = normed fit index, TLI = Tucker-Lewis index, RMSEA = root mean square error of approximation.

[a] Reverse coded.

Table 3
Descriptive statistics and correlation matrix for the study constructs.

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1.Argument Quality	3.36	.86	.84[a]									
2.Valence	3.53	.89	.36**	.85[a]								
3.Consistency	3.93	.75	.34**	.34**	.87[a]							
4.Volume	3.87	.80	.33**	.37**	.62**	.87[a]						
5.Initial Trust	3.53	.79	.36**	.33**	.59**	.57**	.83[a]					
6.Consumer Involvement	3.74	.70	.36**	.34**	.69**	.67**	.58**	.81[a]				
7. M-banking Adoption	3.72	.94	.21**	.24**	.29**	.26**	.30**	.30**	.77[a]			
8.Age[b]	1.89	.93	.04	.05	.04	.06	.03	-.09**	-.04	–		
9.Income[c]	2.13	.95	.01	.05	.07	.07	.03	.10**	.01	.29**	–	
10.Education[d]	–	–	.05	.06*	.05	.02	.06	.12**	.02	.35**	.38**	–

Notes: ** Correlation is significant at $p < 0.01$, * Correlation is significant at $p < 0.05$.
[a] Diagonal value indicates the square root of AVE of individual latent construct.
[b] 1 = 18–30, 2 = 31–45, 3 = 46–60, 4 = Above 60.
[c] 1 = below USD 200, 2 = USD 201–400, 3 = USD 401–600, 4 = Above USD 600.
[d] 1 = Secondary or below qualification, 2 = Higher Secondary, 3 = Bachelor's Degree, 4 = Postgraduate Degree or higher.

4.2. Common method bias

Responses on both independent and dependent variables were collected from the same respondents, hence there was a possibility of common method bias (CMB). We used several methods to test CMB. A market variable, which was theoretically unrelated with independent and dependent variables was added to the survey instrument. The correlation between marker variable and study variables was found to be very low, indicating the absence of CMB in the data (Malhotra et al., 2006). Harman's one-factor test (Podsakoff and Organ, 1986) was also performed to examine the presence of CMB. A factor examination of seven main variables brought about a seven-factor result, which represented 74.26% of the total variance with factor one representing 20.15% of the variance. Since a solitary factor did not appear and factor one did not explain the majority of the variance, a CMB is unlikely occur in the data. Finally, this study used a complex moderated mediation model reducing the chances for CMB because the respondents were unable to apply psychological maps to picture such connections (Podsakoff and Organ, 1986). That is, when using complex models, such as moderated mediation models, which involve direct effects, mediation effects and moderated mediation effects, it is harder for the respondents to predict cause and effect associations, which will reduce the chances for CMB.

4.3. Hypothesis testing with structural equation modelling

Hypotheses were tested at three stages: testing direct effects ($\mathbf{H_1}$ – $\mathbf{H_4}$), testing mediation effects ($\mathbf{H_{5a}}$ – $\mathbf{H_{5d}}$) and testing moderated mediation effects ($\mathbf{H_{6a}}$ – $\mathbf{H_{6d}}$). A structural equation model (SEM) using AMOS version 23 was performed to test both direct effects ($\mathbf{H_1}$ – $\mathbf{H_4}$) and mediation effects ($\mathbf{H_{5a}}$ – $\mathbf{H_{5d}}$). The VIF value for all the variables were below 5.0, indicating the nonappearance of multi-collinearity in the model. The results are presented in Table 4. This structural model explained 65.3% of the variance in m-banking adoption intention.

The results in Table 4 showed that of the central route triggers, argument quality ($\beta = 0.10, p < 0.05$), valence ($\beta = 0.16, p < 0.001$) and consistency ($\beta = 0.38, p < 0.01$), had significant positive influences on m-banking adoption intention. Hence, $\mathbf{H_1}$, $\mathbf{H_2}$, and $\mathbf{H_3}$, were accepted. However, peripheral route trigger, volume ($\beta = -0.14$, $p > 0.05$) did not have significant impact on m-banking adoption intention. Hence, $\mathbf{H_4}$ was rejected.

Next, mediation effects were examined. First, we examined the conditions required for the presence of mediation effects. Schneider et al. (2005) suggest the conditions for mediation are satisfied when there is a significant relationship between predictor and mediator, and between mediator and outcome variable. Accordingly, the direct effects of each central route and peripheral route trigger on initial trust were examined, and the results showed that – except for the peripheral route trigger, volume ($\beta = 0.15$, $p > 0.05$) – all central route triggers, argument quality ($\beta = 0.15$, $p < 0.001$), valence ($\beta = 0.07$, $p < 0.05$), and consistency ($\beta = 0.43$, $p < 0.05$), had a significant effect on initial trust. Initial trust also had a significant effect ($\beta = 0.14$, $p < 0.01$) on m-banking adoption intention. Following the recommendations of Byrne (2009), we next examined the significance of indirect effects using the bootstrapping method recommended for determining the mediation effects. Bias-corrected bootstrapping was performed for 2000 resamples with a confidence interval of 95% to assess indirect effects on m-banking adoption intention. The bootstrap procedure in AMOS version 23 was utilized for this test. The results of this test are exhibited in Table 4.

Mediation effects can be divided into partial and full mediation effects. Partial mediation is anticipated when both direct and indirect effects are significant. When the indirect effect is significant whereas the direct effect is not significant then full mediation is assumed (Cheung and Lau, 2008). The bootstrapping results in Table 4 showed that initial trust partially mediated the effects of all central route triggers including, argument quality (direct effect = 0.10, $p < 0.05$; indirect effect = 0.02, $p < 0.01$), valence (direct effect = 0.16,

Table 4
The results of the structural model.

Proposed hypothesis/path relationships	(β)	SE
Direct Effects		
Argument Quality → m-banking adoption	.10*	.04
Valence → m-banking adoption	.16***	.03
Consistency → m-banking adoption	.38**	.19
Volume → m-banking adoption	-.14 [ns]	.16
Initial Trust → m-banking adoption	.14**	.05
Argument Quality → Initial Trust	.15***	.03
Valence → Initial Trust	.07*	.02
Consistency → Initial Trust	.43*	.15
Volume → Initial Trust	.15 [ns]	.13
Age → m-banking adoption	-.07*	.03
Income → m-banking adoption	.07*	.02
EQ → m-banking adoption	-.02 [ns]	.02
Indirect Effects		
Argument Quality → Initial Trust → m-banking adoption	.02**	.01
Valence → Initial Trust → m-banking adoption	.01*	.01
Consistency → Initial Trust → m-banking adoption	.06**	.03
Volume → Initial Trust → m-banking adoption	.02 [ns]	.03

Notes: ***$p < 0.001$; **$p < 0.01$; *$p < 0.05$; ns = not significant. EQ-Educational Qualification, Fit indices CMIN/DF = 2.353 ($p < 0.001$), CFI = 0.98, GFI = 0.96, AGFI = 0.95, NFI = 0.97, TLI = 0.98, RMSEA = 0.034. CFI = comparative fit index; GFI = goodness-of-fit index, AGFI = adjusted goodness of fit index, NFI = normed fit index, TLI = Tucker-Lewis index, RMSEA = root mean square error of approximation.

Table 5
The summary of the mediation effects.

Hypothesis	Direct effect	Indirect effect	Result
Argument Quality → Initial Trust → m-banking adoption	.10*	.02**	Partial
Valence → Initial Trust → m-banking adoption	.16***	.01*	Partial
Consistency → Initial Trust → m-banking adoption	.38**	.06**	Partial
Volume → Initial Trust → m-banking adoption	-.14 ^{ns}	.02 ^{ns}	No Mediation

$p < 0.001$; indirect effect = 0.01, $p < 0.05$), and consistency (direct effect = 0.38, $p < 0.01$; indirect effect = 0.06, $p < 0.01$) on m-banking adoption intention. Hence, **H_{5a} H_{5b}** and **H_{5c}** were accepted. However, there were no mediation effects of initial trust on the association between peripheral route trigger, volume (direct effect = −0.14, $p > 0.05$; indirect effect = 0.02, $p > 0.05$) and m-banking adoption intention. Nor was the condition of mediation satisfied (that is, volume →initial trust β = 0.15, $p > 0.05$) for volume, and so **H_{5d}** was not accepted. The summary of the mediation effects is shown in Table 5.

4.4. Moderated mediation

Next, moderated mediation effects were examined. Prior to testing moderated mediation (Muller et al., 2005; Preacher et al., 2007), two conditions for the moderated mediation were examined: (a) significant interactions between independent constructs and moderator on mediator variable; and (b) significant interactions between mediator and moderator on outcome variable. In order to examine these conditions, two regression analyses were performed where initial trust was considered a dependent variable for first regression analysis, and the m-banking adoption intention for the next. The results of the regression analyses appear in Table 6 which suggested that, apart from the interaction between valence and involvement (β = 0.24, $p < 0.01$), other interaction effects were not significant in predicting initial trust. These results indicated that the first condition for moderated mediation was supported only for valence. The results also showed the significant interaction effect of consumer involvement and initial trust on m-banking adoption intention (β = 0.33, $p < 0.001$), thereby supporting the second condition.

After testing these conditions, to examine whether the mediation effects vary depending on the degree of the consumer involvement (that is, between low and high levels of consumer involvement), we executed moderated mediation tests using the regression bootstrapping technique in the PROCESS module (Model 7). Moderated mediation was assumed when the indirect effects of triggers of eWOM on m-banking adoption intention via initial trust differed significantly between one standard deviation above (+SD) and below (-SD) the mean value of consumer involvement. The results of this test are presented in Table 7.

Table 6
Moderation effects of consumer involvement.

	Dependent variable: Initial Trust	Dependent variable: Adoption Intention
Direct effect variables		
Argument Quality	.15***	
Valence	.07*	
Consistency	.43*	
Volume	.15^{ns}	
Involvement	.35***	.23 ***
Initial Trust		.33***
Interactions		
Argument Quality X Consumer Involvement	.013^{ns}	
Valence X Consumer Involvement	.24**	
Consistency X Consumer Involvement	-.20^{ns}	
Volume X Consumer Involvement	-.15^{ns}	
Initial Trust X Consumer Involvement		.33***
R^2 value	15.5	17.7
F value	52.54***	138.07***

***p < 0.001, **p < 0.01, *p < 0.05, ns = not significant.

Table 7
Results of the conditional indirect effects for lower and higher consumer involvement.

Paths		Consumer Involvement	β	SE	Bootstrap 95% CIs	
					Lower	Upper
Argument Quality	Adoption	Low	.045	.011	.024	.069
		High	.047	.013	.024	.076
Valence	Adoption	Low	.023	.01	.005	.042
		High	.049	.011	.029	.071
Consistency	Adoption	Low	.089	.018	.054	.125
		High	.079	.018	.047	.117
Volume	Adoption	Low	.088	.016	.058	.121
		High	.076	.015	.048	.108

Adoption = M-banking adoption intention.

As shown in Table 7, the indirect effect of valence on adoption intention through initial trust was positive and significant for both lower (β = 0.023) and higher levels of consumer involvement (β = 0.049). The confidence intervals for both high and low levels of consumer involvement do not cross the value of zero, indicating that the indirect effect was significant at both low and high levels of consumer involvement. The overall moderated mediation index for this indirect effect was also significant (β = 0.018, with confidence intervals varying between 0.005 and 0.034), indicating that the meditation effect (indirect effect) significantly increased as the consumer involvement increased from low to high levels. Thus, **H_{6b}** was supported.

The results showed that the indirect effects of argument quality (β = 0.045 for low consumer involvement; β = 0.047 for high consumer involvement), consistency (β = 0.089 for low consumer involvement; β = 0.079 for high consumer involvement) and volume (β = 0.088 for low consumer involvement; β = 0.076 for high consumer involvement) on adoption intention through initial trust were positive and significant for both lower and higher levels of consumer involvement. The confidence intervals for both low and high levels of consumer involvement for these indirect effects do not cross the value of zero, indicating that these indirect effects were significant at both lower and higher levels of consumer involvement. However, the overall moderated mediation index for the associations between argument quality and adoption intention (0.002, with confidence intervals varying between −0.02 and 0.014), consistency and adoption intention (−0.006, with confidence intervals varying between −0.02 and 0.003), and volume and adoption intention (−0.008, with confidence intervals varying between −0.02 and 0.002) through initial trust were not significant. This indicated that the meditation effects (indirect effects) did not significantly differ as the consumer involvement increased from low to high levels. The conditions for the moderated mediation were not satisfied either for argument quality or consistency or volume. Thus, **H_{6a}, H_{6c}** and **H_{6d}** were not accepted.

Finally, in line with Woodside (2013), the sample was randomly

split into two sub-samples (with 50% in each sample) to test the predictive validity of the findings. Specifically, sub-sample model coefficients were used to predict intentions to adopt m-banking among the hold-out sample. The correlation between the predicted scores and actual scores was 0.63, suggesting that the original model had acceptable predictive validity.

5. Discussion

This section discusses the results of the three sets of tested hypotheses. The first set of hypotheses concerns the direct effects of the triggers of eWOM on m-banking adoption intention. The findings show that except for volume, the other three triggers of eWOM (i.e., argument quality, valence and consistency) significantly drive the intention to adopt m-banking. In other words, all three central route triggers enhance the intention to adopt m-banking, but the peripheral route trigger does not. Consistent with the literature (Liu and Arnett, 2000; Cheung and Thadani, 2012), up-to-date, accurate and complete reviews enhance customer intention to adopt m-banking. Similarly, positive-mixed reviews (the valence of positive eWOM) enhance intention to adopt m-banking. This means that when customers find positive comments and reviews in online platforms that also contain some negative comments in them or highlight the weaknesses of m-banking, their intentions to adopt m-banking increase. This finding also confirms those reported in the previous studies relating to valence of positive eWOM on the intention to adopt other products and services (Cheung and Thadani, 2012; Roy et al., 2017). In line with the findings reported in the literature (Cheung and Thadani, 2012), the consistency of the reviews also enhances intention to adopt m-banking, indicating that when customers find that the online reviews are similar to other reviews and that reviews and ratings are consistent, their intentions to adopt m-banking increase.

However, contrary to our expectation, the volume of reviews does not significantly enhance the intention to adopt m-banking. This might be owing to the fact that all central route triggers of eWOM have significant influences on the intention, indicating that customers rationally analyze the reviews on the basis of their quality. Customers do not use any information shortcuts, such as volume, to make decisions about adopting m-banking. What's more, most websites nowadays contain large numbers of reviews (Park and Lee, 2008; Matute et al., 2016); therefore, volume does not have a significant impact on consumer adoption behavior.

The second set of hypotheses relates to the mediation effects of initial trust. The findings show that initial trust partially mediates the effects of all central route triggers (i.e., argument quality, valence and consistency) on m-banking adoption intention. Accordingly, when customers come across up-to-date, accurate and comprehensive reviews, they discern these reviews to be trustworthy and show positive intentions to adopt m-banking. This finding is consistent with studies relating to eWOM in other products and services (Matute et al., 2016; Yang, 2016). As the findings showed, when customers find that the reviews are overall positive but contain some counter arguments and highlight the weaknesses of m-banking, they consider the reviews trustworthy and credible which in turn enhances their intention to adopt m-banking. This finding is consistent with that reported in the previous studies relating to eWOM in the other products (Doh and Hwang, 2009; Cheung and Thadani, 2012). The findings also revealed that initial trust partially mediates the association between consistency of reviews and m-banking adoption intention. In line with the findings reported in the previous studies relating to eWOM in the other products (Cheung et al., 2009; Mortazavi et al., 2014), this finding indicates that if customers find that reviews are consistent over various online platforms, they tend to trust those reviews which encourage them to adopt m-banking. Initial trust does not have any mediation effects on the association between the peripheral route trigger, volume and m-banking adoption intention. This might be because, as shown earlier, these consumers tend to rationally analyze the reviews and place their initial trust in their quality rather than quantity.

The third set of hypotheses relates to the moderation effects of consumer involvement in m-banking on the mediation effects that initial trust has on the association between eWOM triggers and m-banking adoption intention. The findings show that the mediation effects significantly differ between low and high-involved consumers only for the association between valence and m-banking adoption intention. This finding indicates that consumers with high involvement in m-banking critically analyze whether the reviews are positive or positive-mixed, forming greater initial trust in the latter which results in the adoption of m-banking. This finding is consistent with that reported in the literature (Lee et al., 2008; Cheung and Thadani, 2012; Zhou, 2012). Additionally, evaluations of the valence of the review require high levels of cognitive effort and only those who are highly involved in the product tend to put in that effort (Cheung et al., 2009; Herold et al., 2016). Accordingly, customers with high involvement in m-banking tend to put their efforts into evaluating the valence of the reviews, which in turn increases their initial trust in m-banking and results in the intention to adopt m-banking.

Currently, customers have increased access to eWOM in general and eWOM on m-banking in particular via growing social media platforms (Cheung and Thadani, 2012) and therefore, disregarding their level of involvement, they consider whether eWOM reviews are up-to-date, complete, comprehensive and consistent over time (Sreejesh et al., 2016). This might possibly explain why the mediation effects of initial trust on the associations between argument quality and m-banking adoption intention, and between consistency and m-banking adoption intention do not differ significantly between high and low involvement levels. As previously discussed, neither the direct effects of volume of reviews on m-banking adoption nor its indirect effects via initial trust are significant and consequently the indirect effects (the mediation effects) do not differ between high and low involvement levels.

6. Theoretical implications

This study makes several academic contributions. The impact of eWOM triggers on the adoption of financial services is still at the early stage of development. With the support of the ELM model, this study investigates the influence of eWOM triggers on m-banking adoption intention. M-banking is an emerging banking channel and customers increasingly publish reviews on this channel via online platforms. Consumer-perceived risk is typically high for adopting the financial services, such as m-banking, and hence eWOM plays a more important role in the adoption of m-banking than other services. However, the influence of eWOM triggers on the adoption intention of this emerging channel has not yet been investigated. This study contributes to filling this important gap in the literature.

More importantly, this study proposes a comprehensive moderated mediated mechanism to investigate the effects of eWOM triggers on m-banking adoption intention. We suggest that the effects of eWOM triggers on m-banking adoption intention are mediated by the initial trust in m-banking and these mediation effects are moderated by involvement in m-banking. The findings support the mediation effects except for the volume of the reviews and the moderated mediation effects are supported only for the association between valence and m-banking adoption intention. Thus, these findings provide a partial support for the moderated mediation mechanism that we introduce in this study. A moderated mediated mechanism was introduced recently and shows how both a mediator and moderator can work together simultaneously in changing the association between predictor (independent) and outcome (dependent) variables (Hayes, 2012). We have applied this insightful and complex mechanism to examine the association between eWOM triggers and intention to adopt or purchase product or services, particularly intention to adopt m-banking. A moderated mediation model has not yet been proposed in the eWOM

literature. Out study contributes to filling this gap, thereby contributing to the marketing communication literature, particularly to eWOM research.

This study also contributes to ELM theory. The conceptual model is supported by ELM theory which suggests that there are two routes or approaches to process eWOM: the "central route" and "peripheral route" (Petty and Cacioppo, 1986). In the literature, ELM theory has been mainly applied to investigate the influence of positive eWOM on consumer adoption behavior in the contexts of online stores (Yang et al., 2015), food services (Zhang et al., 2016), travel (Filieri and McLeay, 2014), mobile shopping (Yang, 2016), and hotel bookings (Ladhari and Michaud, 2015). This study appears to be the first to apply ELM theory to investigate the effects of eWOM triggers on financial services adoption behavior. Thus, this study has applied ELM theory to a new issue and a new context. Our findings are very interesting such that volume, the "peripheral route" trigger, has neither direct nor indirect effects on m-banking adoption intention. Rather, the results indicate that consumers critically analyze the contents of the reviews prior to deciding to adopt m-banking. The findings also show that the valence of eWOM tends to vary between high and low involvement in m-banking, indicating that high-involved customers prefer positive eWOM with some negative contents in it. These findings contribute to better understanding ELM theory, particularly in the m-banking context.

Also related to the contribution to the ELM theory, it is important to note that previous studies tended to examine the effects of central route and peripheral route of eWOM triggers on purchase/adoption intention and showed how the triggers of the two routes affect consumer intention to adopt products or services (Yang, 2016). However, so far no study has applied ELM theory to examine the simultaneous effects of mediating and moderating variables on the eWOM triggers–intention relationship. This study enriches the ELM literature by applying it to propose a moderated mediated framework that demonstrates that the effects of central route and peripheral route eWOM triggers on m-banking adoption intention are simultaneously influenced by mediator and moderator, so that future researchers could use ELM theory to examine moderated mediated model in other contexts.

The study also explores the impact of positive eWOM triggers on initial trust in m-banking. Several studies have attempted to explain the importance of initial trust for technology adoption (Kim et al., 2009; Lin, 2011; Chemingui and Ben lallouna, 2013); this study uniquely explores the initial trust-building process with the underpinnings of ELM theory. The findings validate ELM as an appropriate theoretical base for explaining initial trust in technology adoption, thereby suggesting another contribution to the ELM literature.

This study modifies the items measuring eWOM triggers to suit the m-banking context. Future researchers can readily apply these items while investigating eWOM triggers in the m-banking context. Finally, most of the previous studies have used eWOM as a second order construct (Mortazavi et al., 2014; Kudeshia and Kumar, 2017) and examined its impact on intention to adopt or purchase a product or service. However, in this study we consider eWOM triggers first order constructs and investigate their effects on m-banking adoption which provides more insights into eWOM literature.

7. Managerial implications

Besides providing academic contributions, the study provides several practical implications for banks and financial services providers. Social media sites are considered most suitable platforms for receiving consumers' feedback which accordingly help marketers understand consumers' perceptions and develop marketing strategies (Canhoto and Clark, 2013). Therefore, understanding the dynamic impact of eWOM is crucial for marketers.

The findings are useful to banks and financial services providers in enhancing both m-banking adoption intention and initial trust in m-banking through eWOM practices. The findings suggest that all the central route triggers – argument quality, valence and consistency – drive both initial trust and the intention to adopt m-banking, further indicating that improving these triggers of eWOM will enhance both outcomes. However, since the online reviews of a product or service are written by customers and people outside the organization, it is not possible or ethical for the organization to alter the reviews to enhance the influence of these triggers. Alternatively, they can develop a strategy to effectively respond to online reviews of customers via their social media sites, such as Facebook, Twitter and Instagram. Accordingly, in order to enhance the influence of argument quality, banks should regularly check whether the reviews in online platforms are up-to-date with the changes introduced to the m-banking applications. If the reviews do not include current information, they should highlight the latest developments of m-banking in their response to customers. Similarly, if they find online reviews are vague, incorrect or incomplete, they need to provide detailed, correct and specific responses to their customers via their social media sites.

Valence is an important trigger influencing both initial trust in and intention to adopt m-banking. Positive-mixed reviews are more trustworthy and have a greater influence on customer behavior and their purchasing decisions; therefore, banks should encourage and welcome their existing customers to write reviews indicating both pros and cons of m-banking services. It is also important that banks and financial services providers check whether reviews are positive or positive-mixed and if they find positive-mixed reviews, they need to quickly respond to those mixed comments (i.e., negative comments). When customers see their negative comments are addressed, customers will get a positive impression towards banks and m-banking services. Such positive-mixed reviews are of great interest to customers who are highly involved in m-banking. Hence, quickly responding to negative comments will enhance their initial trust in and intention to adopt m-banking. Banks can also consider opening a separate online page in their website or other contact loops to enable customers to directly make their complaints and suggestions to the bank and, as a result, negative public online comments might be reduced.

The findings also show that the consistency of reviews plays an important role in enhancing the initial trust in and adoption intention of m-banking. To enhance the influence of this trigger, banks need to regularly check whether reviews are consistent over various online platforms and if they find that any reviews are inconsistent with other reviews, they can correct them by giving correct and consistent response to customers.

8. Limitations and future research directions

The findings of the study are subject to some limitations; which future researchers may resolve. This study is confined to eWOM and m-banking in India. Hence, the proposed model should be replicated in other countries for better generalization. Moreover, banks and financial institutions are early adopters of advanced technology. Consequently, consumer perceptions of m-banking services tend to vary over time which indicates that using cross-sectional data is another limitation of the current study. In the future, replicating this study with longitudinal data may show some interesting aspects relating to m-banking adoption behavior.

This study suggests some directions for future research. First, the moderated mediated model proposed in this study can be expanded in the future. There may be additional moderating and mediating factors affecting the association between eWOM triggers and intention to adopt m-banking. Hence, future studies may use different mediating and moderating variables in the model to explore m-banking adoption intention. Second, this study explores the impact of positive eWOM on m-banking adoption. In the future, the same study can be attempted in other mobile commerce contexts, such as mobile payment, mobile shopping, mobile health, and mobile internet. Furthermore, this study

uses m-banking adoption as a dependent variable. In the future, the impact of eWOM triggers on other customer behavioral outcomes, including customer loyalty and consumer satisfaction, could be analyzed.

Next, though our study has introduced a complex and insightful moderate mediated mechanism to investigate the effects of eWOM triggers on the adoption intention/purchase intention, our study has provided only a partial support for the moderated mediation model. Building upon our study, future researchers can apply the moderated mediation model to investigate eWOM triggers on purchase intention/adoption intention in other contexts-in other geographical areas, as well as for other products- and examine whether additional support can be given for the model. Finally, it is interesting to see differences in the eWOM triggers–intention relationship based on customer demographic profiles. That is, similar studies can be conducted between different groups of customers (e.g., between young and elderly customers and between different income earning customers) and the comparative results between them can be analyzed. Such studies may provide useful insights to the banks and financial services providers to develop marketing communication strategies targeting specific customer groups.

9. Conclusion

M-banking is an emerging service delivery platform in the financial services industry, and positive eWOM triggers can play an important role in enhancing the intention to adopt m-banking. With the underpinnings of the ELM theory, a comprehensive moderated mediated model has been proposed including initial trust as a mediator and consumer involvement as a moderator to explore the impact of positive eWOM triggers on m-banking adoption intention. Although the effects of eWOM triggers on the intention to purchase or adopt has been shown investigated in the context of other products or services, the literature does not show how positive eWOM triggers impact adoption intention via a moderated mediation mechanism. The results indicated that of the eWOM triggers, argument quality, valence, and consistency significantly enhance intention to adopt m-banking. Initial trust mediates the association between these eWOM triggers and m-banking adoption intention. The mediation effects of initial trust on the association between valence and m-banking adoption intention is significantly moderated by consumer involvement in m-banking. The findings of the study contribute to the marketing communication literature, particularly eWOM literature as well as to ELM theory and provide several recommendations to banks about how to use positive eWOM to encourage consumers to adopt m-banking services.

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