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ELECTRONIC WORD OF MOUTH AND CONSUMERS' INTENTION TO PURCHASE

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Abstract

There has been a rapid growth in internet usage over the years; online shopping is becoming more and more popular. The ability of internet users to write reviews and share their experiences over the internet has created electronic word of mouth. Electronic word of mouth, commonly known as online reviews, can strongly influence purchase; therefore, companies need to effectively monitor and control these reviews to perform better in the market. In this paper, we have examined online reviews in terms of their quality (valence) and quantity (volume). These attributes of online reviews are then linked with the theory of reasoned action to provide an understanding of their subsequent impact on attitude, subjective norms and their ability to enhance intention to purchase. A structured questionnaire was used to collect data from 199 respondents selected through purposive sampling, and the research model was tested through PLS-SEM. Findings corroborated with the literature. The results empirically proved that online review volume and review valence both significantly influenced consumers' intention to purchase. Corporations and marketers are encouraged to effectively monitor and use electronic word of mouth to have sustainable growth in the market.

Keywords: Electronic Word of Mouth, Online Review Valence, Online Review Volume, Theory of Planned Behavior, Purchase Intention.

Introduction

Consumers' buying behavior, especially related to new products, will result in higher information searches. The increasing popularity and use of the Internet have made online consumer reviews an important information source for consumers. (Zhu & Zhang, 2010). Consumers, when shopping online, generally go through online reviews before developing an intent to purchase (Mo, Li, & Fan, 2015). However, the impact of consumers' reviews on purchase decisions is not confined to online shopping. Research has shown that many consumers access online reviews before purchasing products that will be delivered offline. Therefore, many companies have started considering online reviews as a marketing tool through which they attempt to influence consumer purchase behavior. (Dellarocas, 2003).

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Many studies have demonstrated that online reviews significantly influence consumers' purchase decisions. One reason for this influence is that online reviews are one form of word of mouth (WOM), which, if positive, increases the likelihood of product selection during the buying behavior process. (Zhu & Zhang, 2010). Research has shown a positive relationship between online reviews or WOM and likeness towards the product. (Liu, 2006). Senecal and Nantel (2004) In their research finding, they reported that consumers who have reviewed product recommendations are twice as likely to select the product as compared to those who have not reviewed the recommendations. Godes and Mayzlin (2004) demonstrated a positive relationship between online WOM and television show viewership. Chevalier and Myzlin (2006) found that online consumers' reviews and ratings significantly influence book sales. They found that consumers not only read reviews in detail but also check out the review's summary statistics.

Theory of reasoned action (TRA) entails the strength of subjective norms on behavioral intention. According to the theory, the fundamental factors that influence behavioral intention are subjective norms and attitude. Subjective norms are basically social pressures exerted on an individual that influence behavior. (Ajzen, 1991). Online reviews relating to products and services are one form of social influence which are very common on the internet and is therefore becoming one of the most convenient and valuable sources of information available that has the potential to influence consumer intention to purchase (Miao, Li, & Zeng, 2010; Dellarocas, 2003). One of the reasons for their strong influence is that consumers generally consider these reviews more reliable and authentic than information generated by marketers. (Jiang & Benbasat, 2007).

Subjective norms in the case of online reviews do not immediately affect the intention to purchase, and a certain quantity of reviews relating to products and services is required to influence consumers towards purchase. The higher quantity of reviews portrays popularity, market performance and fame of a particular product or service. Research has shown a significant relationship between a higher quantity of reviews and consumers' buying intention (Obiedat, 2013). Chevalier and Mayzlin (2006) Reported an increase in sales of online books due to an increase in the number of reviews over time. Consumers generally provide reviews based on a star rating, which is based on their opinion about a product. These star ratings are averaged out among the reviewers to derive an overall star score known as review valence. The star rating and the number of reviewers behind deriving these ratings create a social influence on the viewers, which in turn influences their intention to purchase (Yang, Sarathy, & Walsh, 2016; Hu, Koh, & Liu, 2012). This study examines the impact of subjective norms on intention to purchase for those products where there is a high quantity of reviews available. Prior research in the area considered the theory of reasoned action (TRA) in explaining the impact of online reviews' valence and volume on intention to purchase. However, this study examines the impact of online review valence and volume on perceived risk and subjective norms and their influence on purchase attitude and finally, intention to purchase.

Rationale

Thanks to a rapid rise in internet access, digital platforms now shape how consumers act. Online reviews and ratings now form eWOM, mirroring what people

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used to say about products, affecting the way consumers judge goods, feel less risk when buying and decide what to buy (Zhu & Zhang, 2010; Alzate, Arce-Urriza, & Cebollada, 2021). Along with advertising their wares, organizations must now watch over the online discussions surrounding their products. The topic is well-timed since it examines how the opinion and amount of reviews impact consumers' attitudes and intentions, based on the Theory of Reasoned Action (Ajzen, 1991).

Problem Statement

EWOM impact is growing, yet it is not clear exactly how the characteristics of online product reviews affect people's decisions to purchase. Often, these factors are treated entirely separately, or researchers forget to consider what influences them, like perceived risk and subjective norms (Yang, Sarathy, & Walsh, 2016). Besides, insufficient research on Internet markets such as Pakistan makes it important to find local insights to support electronic and digital marketing strategies.

Research Questions

1. In what ways does the tone of online reviews impact someone's decision to buy?
2. How does the amount of online feedback affect consumer views on risk?
3. How much do subjective norms aid and shape the link between eWOM and someone intending to buy an item?
4. Does seeing risk online change how consumers feel about making purchases online?
5. What difference do consumers' attitudes and subjective norms make in their purchasing plans?

Research Objectives

- To study how review valence affects consumers' beliefs about risk and their feelings towards others' opinions.
- To study how many reviews influence people's judgments about risk.
- To discover the effect of subjective norms on different people's purchase choices.
- To understand how perceived risk changes a person's opinion about buying something.
- To find out how the combination of attitude and subjective norms shapes what consumers decide to purchase.

Theoretical Framework

This research is structured on TRA, a framework first introduced by Fishbein and refined by Ajzen in 1991. According to the TRA, attitudes toward the behavior and subjective norms play a key role in influencing behavioral intention. Such

components play a key role in eWOM, as consumers use what others do and say to decide what to buy.

Instead of noticing social signals, people use the positive or negative wording of reviews and the number of reviews they see when shopping online. Evaluating information in reviews, such as their valence, can change a shopper's view of a product. In contrast, the total number of reviews suggests to consumers if others are using or recommending the product (Yang, Sarathy, & Walsh, 2016).

In addition, perceived risk is included in the framework to represent the uncertainty felt by people making online purchases. As shopping online means products are not checked before buying, reviews help protect consumers from making mistakes. Experts have demonstrated that a higher score and a larger number of reviews decrease perceived risk and raise positive opinions (Chen & Kou, 2016; Zhang & Yu, 2020).

The model is built on top of TRA by incorporating review valence, review volume, perceived risk, attitude, subjective norms and purchase intention. Together, these concepts describe the ways in which online reviews affect what consumers choose to buy online.

Literature Review

Past research has indicated multiple reasons for consumers to consider online reviews: information seeking, risk reduction, quality seeking and social belonging. (Zhu & Zhang, 2010; Burton & Khammash, 2010). Information search is one of the stages in the consumer decision-making process, in which consumers collect information from different sources. (Schmidt & Spreng, 1996). Online reviews are a low-cost, convenient source of information that consumers use to make rational purchase decisions. (Klein & Ford, 2003). The second reason is risk reduction; consumers generally are uncertain about their purchase, especially over the internet, therefore online reviews are commonly used by consumers to reduce perceived risk. (Burton & Khammash, 2010). Thirdly, researchers have shown that consumers use online reviews to determine the product quality and make informed decisions about purchases. (Zhu & Zhang, 2010). Lastly, online reviews are also used to create a sense of belongingness and bonding with a social group, and thus, the intention to purchase is formed because of social pressure. (Hennig-Thurau & Walsh, 2003). In this research, two of these four reasoning, i.e., perceived risk and social belongingness (subjective norms), have been used to determine intention to purchase.

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Conceptual Framework

The proposed conceptual relationship has been presented in the following diagram:

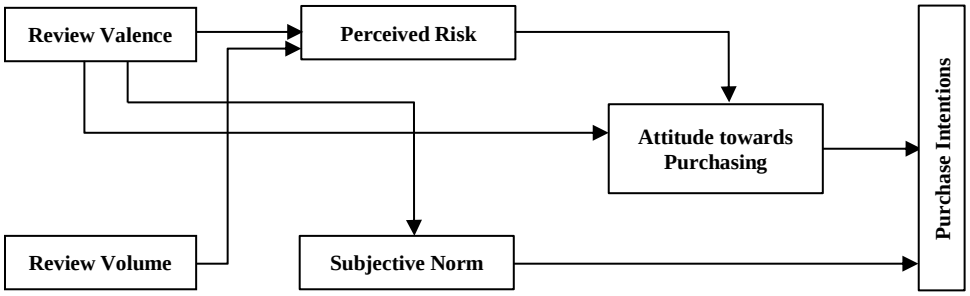


Figure 01: Research Models

Review Valence

The online review valence comprises positive and negative reviews about the product (self1-s) that are averaged out and represented in a rating measure. (Duan, GU, & Whinston, 2008; Dellarocas, Zhang, & Awad, 2007). The positive reviews tend to influence consumers' perception of a product and thus can subsequently increase sales. (Chen. & Kou, 2016). Similarly, negative reviews also influence consumer perception and can adversely affect sales. Comparison of both types of reviews revealed that consumers generally consider negative reviews to be more credible and authentic than positive reviews. (Lee & Koo, 2012). Therefore, negative reviews have a much stronger influence than positive reviews. Online review valence represents a collective opinion of consumers' experience, and therefore, positive review valence means that a higher number of customers are happy with their purchase and therefore, reduces the perceived risk of the current buyer. (Yang, Sarathy, & Walsh, 2016). This relationship has been hypothesized as follows:

H_1: Review valence is inversely related to perceived risk.

Since review valence is a collective representation of users' opinions, it shows the opinions of others regarding their purchase of the product. (Yang, Sarathy, & Walsh, 2016). According to TRA, subjective norms can influence behavior. The concept of 'important others' is all those whose opinions are considered important in formulating behavior (Ajzen, 1992). Previous research has used this meaning in online review valence context, the 'important others' are taken as all those whose opinions influence the purchase decision and provide a motivation to comply with the opinion of others to make an effective purchase decision (Yang, Sarathy, & Walsh, 2016). In this research, a relationship between online review valence and subjective norms has been established, which entails that high valence in the form of higher positive ratings from a large group of reviewers generates subjective norms. The same has been hypothesized as under:

H_2: Review valence is positively related to subjective norms.

Previous literature shows that online reviews have a direct impact on consumers' attitudes towards the purchase of products and services. Online reviews' valence influences attitude development as well as attitude reinforcement. Users generally will develop an attitude about a product by reviewing a set of reviews, whereupon further reviews will either reinforce the developed attitude or will modify it (Walther et al., 2012). Researchers in the field of social psychology have proved the impact of information processing on attitude change (Petty, Tormala, Brinol, & Jarvis, 2006). Individuals, while processing information, will undergo an attitude change, and the more effective this information processing is, the higher the impact on attitude will be. (McGuire, 2013). Since online reviews' valence is considered an effective source of information, the relationship has been hypothesized as follows:

H_3: Review valence is positively related to attitude towards purchasing.

Review Volume

Review volume and valence are considered the most important attributes of word of mouth and have been examined by many researchers. (Neelamegham & Chintagunta, 1999). Review volume refers to the quantity or the total amount of word-of-mouth (WOM) interactions that occurred related to the product. (Liu, 2006). Numerous research studies have found that the volume of WOM strongly influences consumers' behavior and can generate favorable market outcomes for the product. (Zufryden, 1996). One of the prime reasons is that buyers generally consider information provided by the seller less credible. Therefore, the element of perceived risk is always present in buyers' minds. Consumers always try to reduce their risk, and one of the methods employed is electronic word of mouth in the form of reviews. The audience considers these reviews credible as they are an unbiased evaluation of the product. (Huang, Lurie, & Mitra, 2009). Businesses that place online reviews on their websites are considered more trustworthy by consumers (Alzate et al., 2021).

Online review volume entails another dimension; it is conceivable that consumers' experience with the product influences WOM communication. (Anderson, 2003) Therefore, review volume, which is the number of reviews, indicates to the buyer the number of people who have tried the product. (Liu, 2006). Researchers have raised arguments that review volume, although it can influence consumers, is subject to situational factors like the level of involvement in the purchase decision and the strength of the review. Generally, it is believed that the impact of review volume is significant on consumers, especially in low-involvement products as compared to high-involvement products. (Petty & Cacioppo, 1984). Irrespective of involvement, consumers will be influenced by online reviews (volume and valence) whenever they perceive a higher level of risk in each product category. (Forman, Ghose, & Wiesenfeld, 2008).

Online reviews for popular products become more significant. When products receive a greater number of reviews, they seem more trustworthy and credible to consumers. (Zhu & Zhang, 2010). Kirby (2000) writes, "may not trust just one nonexpert, but if 9 out of 10 nonexperts agree, it is probably worth buying." In summary, an increasing number of online reviews increases trust in the product and reduces perceived risk (Chen, Shin-Yi, & Jungsun, 2004). The said relationship has been hypothesized as under:

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H_4: Review volume is inversely related to perceived risk.

Perceived Risk

Academic research has long focused on the concept of perceived risk. Consumers' perceived risk is associated with their uncertainty about loss or gain in any particular transaction or purchase. (Murray, 1991). In other words, perceived risk refers to the psychological cost associated with consumers' purchase behavior that results from their uncertainty about the future. This uncertainty that consumers have about the future tends to directly influence their attitude and intention to purchase (Wei, Wang, Zhu, Xue, & Chen, 2018). The concept of perceived risk is a subjective expectation of a kind of loss that consumers expect in online shopping. (Forsythe & Shi, 2003; Featherman & Wells, 2010). It is an inner experience of a consumer that cannot be observed directly and can only be inferred through certain indicators. (Hilverda, Kuttschreuter, & Giebels, 2018). Perceived risk in online shopping is consumers' concerns about the products that they have purchased online. These concerns are with respect to poor quality, performance and that the product may not be able to deliver as per their expectation. The perceived risk in online shopping gets further enhanced because of consumers' inability to touch, directly feel or try the product. (Forsythe & Shi, 2003; Zhang & Yu, 2020). Eventually, consumers will evaluate all these indicators and formulate their attitude and intention to purchase a particular product. (Hilverda, Kuttschreuter, & Giebels, 2018; Zhang & Yu, 2020). Studies have shown that perceived risk has a significant impact on consumers' attitudes and subsequently on their intention to purchase (Lim, 2018). This relationship has been hypothesized as follows:

H_5: Perceived risk has a significant impact on attitude towards purchase.

Attitude towards Purchasing

The theory of reasoned action (TRA) entails that individuals' intention to behave is the function of their attitude towards performing a specific act and their subjective norm (Ajzen, 1975). Attitude, in general, refers to "an enduring organization of motivational, emotional, perceptual and cognitive processes with respect to some aspect of our environment" (Hawkins, Best, & Coney, 2004). Specifically, "attitude refers to knowledge and positive or negative feelings about an object or activity" (Pride & Ferrell, 1991). Individuals' beliefs about the consequences of any behavior result in the formation of an individual's attitude, followed by an evaluation or estimation of how good or bad it would be if they believed consequences were to occur. (Trafimow, 2009). It is also important to mention that in TRA, attitude is referred to as an effective response towards performing some behavior and not towards any generalized object. It is this attribute of attitude that makes it a significant contributor towards the formation of behavioral intention and, more specifically, behavioral intention related to purchase. (Hale, Householder, & Greene, 2002; Fang, 2014). This relationship has been formalized as follows:

H_6: Attitude towards purchase significantly influences purchase intention.

Subjective Norm

As mentioned before, behavioural intention, according to TRA, is a function of attitude and subjective norm (Ajzen, 1975). According to the theory, subjective norms are individuals' beliefs about significant others, whether they would approve or disapprove of the performance of the target behaviour. In other words, it is what an individual thinks significant others feel about whether the targeted behaviour should be performed or not. (Hale, Householder, & Greene, 2002). Subjective norms are the development of perception about the expectations of significant others. (Kaiser & Gutscher, 2003). An individual's evaluation of significant others in determining what they think an individual should do, along with the level of motivation to comply with the beliefs of significant others, formulates behavioural intention and eventually leads to behaviour. (Trafimow, 2009; Kaiser & Gutscher, 2003). The proposed relationship has been hypothesized as follows:

H_7: Subjective norms influence purchase intention.

Purchase Intention

The readiness of an individual customer to purchase over the internet is considered an explanation for purchase intention. (Kamalul Ariffin, Mohan, & Goh, 2018). Customer intention to purchase plays a pivotal role in actual purchase, and the same holds true in online shopping as well. (Dewi, Mohaidin, & Murshid, 2020; Duen-Ren, W.-H., & Po-Huan, 2013). The ability of intention to cause behaviour is also supported by the theory of reasoned action, which states that for any behaviour to occur, the intention to perform such behaviour must be formed first (Ajzen, 1975). Few studies attempted to establish a direct relationship between electronic word of mouth (eWOM), i.e., online reviews and intention to purchase (Mishra, 2021). However, other research has demonstrated that eWOM would first formulate an individual's attitude, which will subsequently establish an intention to purchase. It is believed that a positive attitude will have a strong and significant impact on the establishment of the intention to purchase (Abedi, Ghorbanzadeh, & Rahehagh, 2020).

Methodology

A survey was conducted to collect the empirical data required for this research. A total of 370 questionnaires were circulated, from which 310 were returned, generating a return ratio of 83.7%. After adjusting for invalid and incomplete questionnaires, this study analyzed a total of 199 questionnaires. Purposive sampling technique was employed because the respondents needed to be online shoppers. The sample consisted of 74.4% males and 25.6% females. Almost 88% of the entire sample were between the two age groups, i.e., 21 to 30 years and 31 to 40 years. A structured questionnaire was developed and circulated among the sample. To test the data, we used multiple statistical methods for cleaning of data, validity, reliability and hypotheses. The cleaning was done using Excel to avoid the incomplete and invalid responses. It was then moved to test the measurement and structural model using partial least squares structural equation modeling through SmartPLS software. This was done in two stages. At first, the validity, reliability and fitness indicators were obtained. After receiving the finalized values as per thresholds, we then used the bootstrapping technique using 5000 subsamples (Hair et al., 2016).

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Analyses and Interpretations

The demographic analysis shows that the sample represented 148 males and 51 as females whereas 89 respondents were in the age group of 31 to 40, 86 respondents were in the age group of 21 to 30 years, 16 respondents were in the age group of below 20 years, the remaining were in the age group of 41 and above. To test the measurement model, we have used the PLS algorithm approach to test the data on SmartPLS. However, the preliminary model was not satisfactory regarding the outer loadings of the model, as shown in Figure 2. Hence, we have deleted RV4 of the review valence construct and then reapplied the model.

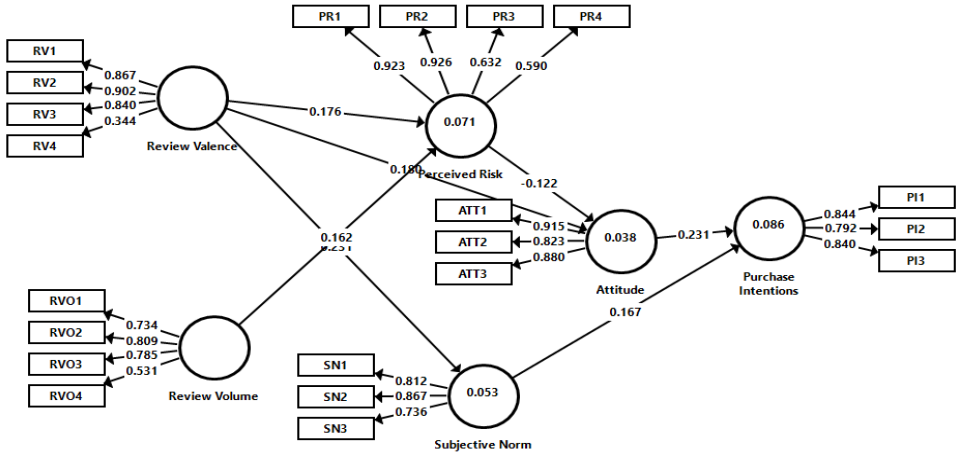


Figure 02: Preliminary Measurement Model

Once the observation was deleted, the final measurement model was applied, and the values were acquired. Despite having some outer loadings of less than 0.7, we have decided to continue with those items as they did not harm the composite reliability and convergent validity values (Hair. et al. (2016). The study also found that all other values were meeting the standard threshold of the reliability indicators.

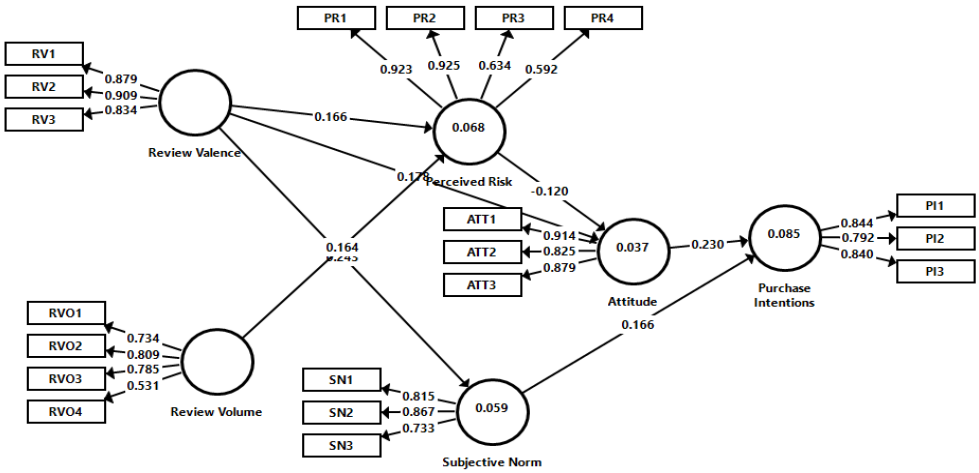


Figure 03: Final Measurement Model

Table 1 of the study has several reliability, validity, and other indicators. The outer loadings of the study were discussed earlier; the composite reliability and the AVE are dependent on the outer loadings. Both indicators are found satisfactory as per the statistical requirements (Hair et al., 2016; Khan et al., 2022). The values of composite reliabilities were greater than 0.7. Hence, the data were found to be consistent. The AVE values were above 0.5, which means the items explained more variance than the variance explained by the error (Hameed & Khan, 2020).

Table 01: Measurement indicators

Constructs	Items	Outer loadings	Composite Reliability	Average Variance Extracted (AVE)	VIF	Q square
Attitude	ATT1	0.914	0.906	0.763	2.169	0.021
	ATT2	0.825			1.933	
	ATT3	0.879			2.097	
Purchase Intentions	PI1	0.844	0.865	0.682	1.575	
	PI2	0.792			1.605	
	PI3	0.840			1.543	
Perceived Risk	PR1	0.923	0.860	0.615	2.823	
	PR2	0.925			2.982	
	PR3	0.634			2.620	
	PR4	0.592			2.437	
Review Valence	RV1	0.879	0.907	0.765	2.143	
	RV2	0.909			2.666	
	RV3	0.834			1.819	
Review Volume	RVO1	0.734	0.811	0.523	1.330	
	RVO2	0.809			1.708	
	RVO3	0.785			1.694	
	RVO4	0.531			1.065	
Subjective Norm	SN1	0.815	0.848	0.651	1.552	
	SN2	0.867			1.718	
	SN3	0.733			1.301	

All the VIF values were less than 5. Hence, it is concluded that no multicollinearity was found in the data. Kock (2015) noted that if the VIF values are less than 3.3, it may be concluded that the study is free from common method bias. Common method bias is a condition where self-reporting of the instrument is used to collect data from similar respondents at similar timings. Hence, the data of this study were free from any such issues.

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Table 02: Discriminant Validity using the Fornell-Larcker Approach

	Attitude	Perceived Risk	Purchase Intentions	Review Valence	Review Volume	Subjective Norm
Attitude	0.874					
Perceived Risk	-0.083	0.784				
Purchase Intentions	0.241	0.049	0.826			
Review Valence	0.153	0.206	0.082	0.874		
Review Volume	-0.022	0.205	0.253	0.245	0.723	
Subjective Norm	0.062	-0.005	0.181	0.243	0.377	0.807

To find the fitness of the model used, we applied the R-squared using the Blindfolding method (Hair et al., 2016). The value of the Q square was found to be greater than 0. Hence, the model and the data are statistically fit to predict the outcomes. After achieving the indicators mentioned above, we used the discriminant validity indicators. The Fornell-Larcker criterion shows that all the diagonal values are greater than their left side and the values mentioned below.

Table 03: Discriminant Validity Using HTMT

	Attitude	Perceived Risk	Purchase Intentions	Review Valence	Review Volume	Subjective Norm
Attitude						
Perceived Risk	0.089					
Purchase Intentions	0.280	0.132				
Review Valence	0.173	0.192	0.104			
Review Volume	0.149	0.242	0.367	0.327		
Subjective Norm	0.083	0.088	0.239	0.306	0.526	

The discriminant validity using the HTMT indicator was the second method used as part of triangulation in the data. Hair et al. (2016) consider this method more appropriate than other approaches used to determine the discriminant validity issues. Table 3 represents all the values far lower than the threshold of 0.85. Hence, it is concluded from both methods that there is no issue of discriminant validity in the data (Khan et al., 2021). This also means that the indicators used in the study explain their constructs rather than explaining the other constructs taken in the study. Hence, both methods satisfy the discriminant validity requirements in the data.

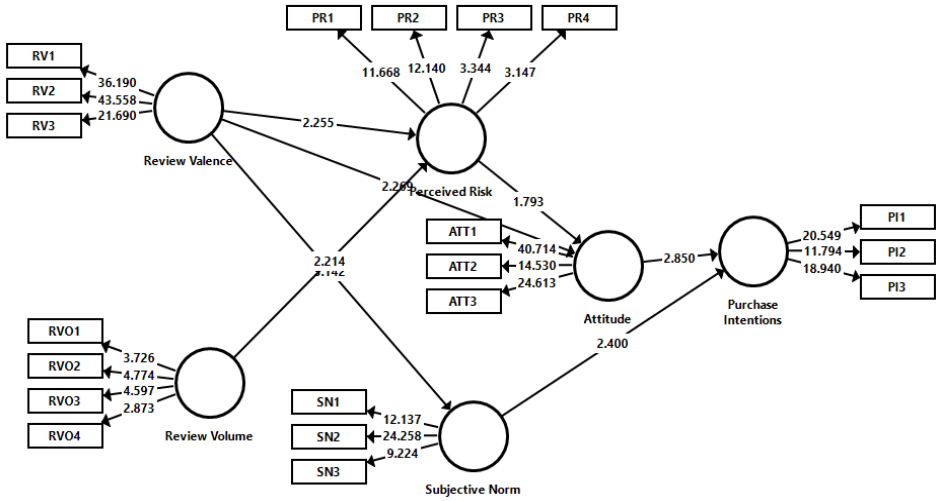


Figure 4: Hypotheses Testing

Table 4 and Figure 4 belong to the study's hypothesis testing. We used 5000 subsamples to test the seven hypotheses. The relationship between attitude and purchase intentions was found to be positive and significant, as the p-value was below 0.05 and the T-value was above 2. The relationship between perceived risk and attitude became insignificant.

Table 04: Hypotheses using 5000 Subsamples

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values	Comments
Attitude > Purchase Intentions	0.230	0.231	0.081	2.850	0.004	Significant
Perceived Risk > Attitude	-0.120	-0.120	0.067	1.793	0.073	Insignificant
Review Valence > Attitude	0.178	0.180	0.079	2.269	0.023	Significant
Review Valence > Perceived Risk	0.166	0.165	0.074	2.255	0.024	Significant
Review Valence > Subjective Norm	0.243	0.253	0.077	3.142	0.002	Significant
Review Volume > Perceived Risk	0.164	0.192	0.074	2.214	0.027	Significant
Subjective Norm > Purchase Intentions	0.166	0.180	0.069	2.400	0.016	Significant

The third path model tested was between the relationship of review valence and attitude; the p-value was 0.023, and the T-value was appropriate. The relationship between review valence and perceived risk was found to be positive and significant. The *P* and *T* values of the relationship between review valence and subjective norms were found to be positive and significant. The review volume and perceived risk relationship found *a* p-value less than 0.05, *a* t-value above 2, and the variance explained was more than 16%. The final hypotheses were the relationship between subjective norms and purchase intentions, which was also found to be positive and significant, and the variance explained was around 17%.

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Discussion

Electronic word of mouth (eWOM) has been discussed in many research studies as an effective factor that influences purchase. The impact of EWE has been based on two aspects of online reviews: valence and volume. In initial testing of the preliminary model, outer loading of the model revealed unsatisfactory results. This was due to the lowest value of beta, i.e., 0.344 of one of the factors related to review valence, which resulted in generating error and therefore, as proposed by researchers, was removed. The model was applied again and revealed an acceptable result. All values related to Average Extracted Variance (AVE) were above 0.5; therefore, the results were acceptable. Data analysis revealed that review valence and volume both were significant and had an impact. Hypothesis testing revealed that Attitude and Purchase Intention were positively and significantly related, the relationship was derived from the theory of reasoned action, meaning that customers' purchase intent will increase if there exist a positive attitude towards purchase and vice versa meaning the higher the positive attitude towards the product the greater would be the intention to purchase. The relationship, i.e., review valence, impacted on perceived risk, subjective norm and attitude towards purchase all proved significant. Therefore, it is concluded that the quality of review valence is highly influential in developing customers' attitudes towards purchase. This study tested the relationship between review volume and perceived risk; results proved this relationship to be significant as well. As the quantity or volume of reviews increases, customers generally consider this a sign of popularity among the masses. Therefore, their perceived risk decreases. One of the proposed relationships, the impact of perceived risk on attitude towards purchase, proved to be insignificant. The primary reason for the result being insignificant is due to the influence of the level of involvement and product categorization. Generally, in low involvement products, the perceived risk is lower and therefore is considered insignificant by the consumer during the purchase decision.

Conclusion

It becomes apparent from the findings that online reviews help drive consumers to buy products or services. From the results, we see that both review valence and review volume help to predict how consumers will behave. Apparently, having a better attitude due to online reviews is a positive and highly significant predictor ($\beta = 0.230$, $T = 2.850$, $p = 0.004$) of proceeding with the purchase. Review valence was found to improve how people feel about the product ($\beta = 0.178$, $T = 2.269$, $p = 0.023$) and how much they think others will press them to buy it ($\beta = 0.243$, $T = 3.142$, $p = 0.002$). In the same way, the number of reviews was found to lower perceived risk ($\beta = 0.164$, $T = 2.214$, $p = 0.027$), showing that seeing more reviews gives buyers confidence in the product's reliability. In addition, the results suggest that social approval matters for online buying, as subjective norms increased purchase intent ($\beta = 0.166$, $T = 2.400$, $p = 0.016$). Still, perceived risk had little impact on attitude ($\beta = -0.120$, $T = 1.793$, $p = 0.073$), and this may mean that perceived risk is not very important when consumers use little effort with purchases. Basically, the results show how important online reviews are for consumers and urge companies to ensure both the accuracy and the amount of product reviews they get to make customers trust them more and want to buy.

Policy Implication

This study will help organizations understand the importance and effect of online reviews on consumer purchases. Companies will become more effective online if they can manage electronic word of mouth properly. Ever-increasing product choices make purchase decisions more and more difficult for customers, thus making it necessary for companies to generate a positive customer attitude towards their product or brand. This research is also helpful in reducing perceived consumers' risk about their purchase, a factor which becomes more significant, especially in the case of online shopping. This research provides an understanding of the ability of review valence and review volume to reduce perceived risk.

Recommendations

Digital marketers and policymakers find this research helpful. If businesses understand what makes reviews important to consumers, they can create better strategies to handle their online reputation. They add to marketing knowledge by adapting Ajzen's (1991) Theory of Reasoned Action for use in digital spaces and focusing on what affects online consumer behavior through social pressure and worry about risks. In addition, the study explains how digital marketing principles work within developing economies and offers recommendations useful to businesses in the region.

Limitations

The main restriction is that the data does not represent a large enough sample to make general claims. Targeted purposive sampling reduces the variety of people we can interview. The study does not look at how eWOM is interpreted differently for various products or by highly involved consumers. Future studies would benefit from using a greater variety of people and including product type and consumer experience as possible factors.

Significance

Policymakers and marketers working in digital commerce will find this research useful. Businesses can create more successful online reputation management plans by determining how review attributes affect customer decision-making. By applying the Theory of Reasoned Action (Ajzen, 1991) to the digital sphere and highlighting the part that social influence and risk perception play in online customer behavior, the findings advance marketing theory. Additionally, the study offers insights for local digital marketing strategies and a contextual understanding pertinent to developing economies.

References

Abedi, E., Ghorbanzadeh, D., & Rahehagh, A. (2020). Influence of eWOM information on consumers' behavioral intentions in mobile social networks: Evidence from Iran. *Journal of Advances in Management Research, 17*(1), 84-109.

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Process, 50*(2), 179–211.

Alzate, M., Arce-Urriza, M., & Cebollada, J. (2021). Online reviews and product sales: The role of review visibility. *Journal of Theoretical and Applied Electronic Commerce Research, 16*(4), 638–669.

Anderson, E. (2003). The Formation of Market-Level Expectations and Its Covariates. *Journal of Consumer Research, 30*, 115–124.

Burton, J., & Khammash, M. (2010). Why do people read reviews posted on consumer-opinion portals? *Journal of Marketing Management, 26*(3), 230–255.

Chen, J., & Kou, G. (2016). How online review valence affects consumer opinion evaluation? *Procedia Computer Science, 91*, 635–641.

Chen, P.-Y., Shin-Yi, W., & Jungsun, Y. (2004). The Impact of Online Recommendations and Consumer Feedback on Sales. In *International Conference on Information Systems ICIS* (pp. 711-724). Seattle: Association of Information Systems.

Chevalier, J., & Mayzlin, D. (2006). The Effect of Word of Mouth on Sales: Online Book Reviews. *Journal of Marketing Research*, 345-354.

Dellarocas, C. (2003). The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms. *Management Science, 49*(10), 1401-1424.

Dellarocas, C., Zhang, X. M., & Awad, N. F. (2007). Exploring the value of online product reviews in forecasting sales: The case of motion pictures. *Journal of Interactive Marketing, 21*(4), 23–45. https://doi.org/10.1002/dir.20087

Dewi, C. K., Mohaidin, Z., & Murshid, M. A. (2020). Determinants of online purchase intention: A PLS-SEM approach: Evidence from Indonesia. *Journal of Asia Business Studies, 14*(3), 281–306.

Duan, W., Gu, B., & Whinston, A. (2008). Do online reviews matter? Decision Support Systems: An empirical investigation of panel data, 1007–1016.

Duen-Ren, L., W.-H., C., & Po-Huan, C. (2013). Recommending Quality Book Reviews from Heterogeneous Websites. *Internet Research*, 27-46.

Fang, Y.-H. (2014). Beyond the Credibility of Electronic Word of Mouth: Exploring eWOM Adoption on Social Networking Sites from Affective and Curiosity Perspectives. *International Journal of Electronic Commerce, 67*–102.

Featherman, M. S., & Wells, J. D. (2010). The Intangibility of e-Services: Effects on Perceived Risk and Acceptance. *SIGMIS Database*, 110–131.

Forman, C., Ghose, A., & Wiesenfeld, B. (2008). Examining the Relationship Between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets. *Information Systems Research, 19*(3).

Forsythe, S. M., & Shi, B. (2003). Consumer patronage and risk perceptions in Internet shopping. *Journal of Business Research, 56*(11), 867–875.

Godes, D., & Mayzlin, D. (2004). Using Online Conversations to Study Word-of-Mouth Communication. *Marketing Science, 23*, 545–560.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*.

Hale, J. L., Householder, B. J., & Greene, K. L. (2002). The Theory of Reasoned Action. In J. P. Dillard & M. Pfau, *The Persuasion Handbook: Developments in Theory and Practice*. SAGE Publications Inc.

Hameed, I., & Khan, K. (2020). An extension of the goal-framing theory to predict consumers' sustainable behavior for home appliances. *Energy Efficiency, 13*(7), 1441-1455.

Hawkins, D. I., Best, R. J., & Coney, K. A. (2004). *Consumer Behavior: Building Marketing Strategy (9th Edition)*. McGraw-Hill/Irwin.

Hennig-Thurau, T., & Walsh, G. (2003). Electronic Word-of-Mouth: Motives for and Consequences of Reading Customer Articulations on the Internet. *International Journal of Electronic Commerce, 8*(2), 51-74.

Hilverda, F., Kuttschreuter, M., & Giebels, E. (2018). The Effect of Online Social Proof Regarding Organic Food: Comments and Likes on Facebook. *Frontiers Communication, 3*(30).

Hu, N., Koh, N. S., & Liu, L. (2012). Manipulation of Online Reviews: An Analysis of Ratings, Readability, and Sentiments. *Decision Support Systems, 53*, 674-684.

Huang, P., Lurie, N. H., & Mitra, S. (2009). Searching for Experience on the Web: An Empirical Examination of Consumer Behavior for Search and Experience Goods. *Journal of Marketing, 73*(2), 55–69.

Jiang, Z., & Benbasat, I. (2007). Research Note: Investigating the Influence of the Functional Mechanisms of Online Product Presentations. *Information Systems Research, 18*(4), 454-470.

Kaiser, F. G., & Gutscher, H. (2003). The Proposition of a General Version of the Theory of Planned Behavior: Predicting Ecological Behavior. *Journal of Applied Social Psychology, 33*(3).

Kamalul Ariffin, S., Mohan, T., & Goh, Y.-N. (2018). Influence of consumers' perceived risk on consumers' online purchase intention. *Journal of Research in Interactive Marketing, 12*(3), 309–327.

Khan, K., Hameed, I., & Hussainy, S. K. (2021). Antecedents and consequences of brand citizenship behavior in private higher education institutions. *Journal of Marketing for Higher Education*, 1–22.

Khan, K., Hameed, I., Akram, U., & Hussainy, S. K. (2022). Do normative triggers and motivations influence the intention to purchase organic food? An application of the goal-framing theory. *British Food Journal, (ahead-of-print)*.

Kirby, C. (2000, January). Everyone is a Critic: Websites Hope Online Reviews of Products Lead to Online Buying. *San Francisco Chronicle, 22*.

Klein, L. R., & Ford, G. T. (2003). Consumer Search for Information in the Digital Age: An Empirical Study of Pre-Purchase Search for Automobiles. *Journal of Interactive Marketing, 17*(3), 29-49.

Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (ijec), 11*(4), 1–10.

Lee, K.-T., & Koo, D.-M. (2012). Effects of attribute and valence of e-WOM on message adoption: Moderating roles of subjective knowledge and regulatory focus. *Computers in Human Behavior, 28*(5), 1974-1984.

Lim, W. M. (2018). An equity theory perspective of online group buying. *Journal of Retailing and Consumer Services, 54*, 13–24.

Liu, Y. (2006, July). Word of Mouth for Movies: Its Dynamics and Impact on Box Office Revenue. *Journal of Marketing, 70*, 74–89.

McGuire, W. J. (2013). Classic Input-Output Framework for Constructing Persuasive Messages. In R. E. Rice & C. K. Atkin, *Public Communication Campaigns*. SAGE Publications.

Miao, Q., Li, Q., & Zeng, D. (2010). Fine-grained opinion mining by integrating multiple review sources. *Journal of the American Society for Information Science and Technology, 61*(11), 2288–2299.

Mishra, U. (2021). The Effect of Online Review on Online Purchase Intention. *Researcher, 5*(1).

Mo, Z., Li, Y.-F., & Fan, P. (2015). Effect of Online Reviews on Consumer Purchase Behavior. *Journal of Service Science and Management, 8*, 419-424.

Murray, K. B. (1991). A Test of Services Marketing Theory: Consumer Information Acquisition Activities. *Journal of Marketing, 55*(1), 10–25.

Park, D.-H., Lee, J., & Han, I. (2007). The Effect of Online Consumer Reviews on Consumer Purchasing Intention: The Moderating Role of Involvement. *International Journal of Electronic Commerce, 11*(4), 125-148.

Yang, F., Sarathy, R., & Walsh, G. (2016). Role of online review valence and volume in predicting product sales: The moderating role of brand reputation. *Journal of Marketing Analytics, 4*(2), 73–86.

Zhang, L., & Yu, C. (2020). Online product reviews: The effects of review characteristics on consumer attitudes and purchase intention. *International Journal of Retail & Distribution Management, 48*(3), 300–318.

Zhu, F., & Zhang, X. (Michael). (2010). Impact of online consumer reviews on sales: The moderating role of product and consumer characteristics. *Journal of Marketing, 74*(2), 133–148.