

An Empirical Study on The Impact Of E-WOM On Purchase Intention of Green Products

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Abstract

Proliferation and economic expansion has brought extensive shifts in technology revolution, production and consumption practices due to increased usage of social media among consumers. Social media has brought a new perspective in purchase intention of consumers. Also with the evolution of vigorous settings for development, environment has been deteriorating and human beings have their focus on consumption activities. Therefore, marketers are trying to push consumers towards the consumption of green products. Studies have also resulted in that there is a substantial persuasion of electronic word of mouth (E-WOM) on the consumer's purchase intention. Therefore, a conceptual model was developed to clarify and factually verify the factors forming green purchase intentions. Three factors E-wom, Information Quality and Source Credibility have been taken as exogenous variables. The model was tested and validated statistically with the help of SEM. Data has been collected from 500 respondents. All hypotheses were found to be statistically important. The impact of all the factors was found to be most influential on purchase intention. The findings of the study will aid marketers to better understand how E-wom plays a significant role in shaping consumers' purchase intentions.

Keywords: E-wom, Information Quality, Source credibility, Purchase intention.

Introduction

Environmental degradation is big news lately. There is lot of news articles and documentaries that depicts us the damaging effects our dispose of culture is having on the environment. According to the World Bank data, economic losses across the globe caused by various environmental pollutions reached 2.8% of gross national income in 2018 (UNEP, 2011), leading to a growing call for a green economy as an ideal way for advancing the economy. Featured by low carbon, high resource

efficiency, and inclusive development, the green economy is aimed to achieve green growth (Li et al., 2018, 2019a), which could be difficult to realize if without environment-friendly technologies and products (Li et al., 2020; Mealy and Teytelboym, 2020), notably green brand. Also globalisation and economic growth has led to substantive changes in consumption behaviour, strategies of production and technology revolution with the wide spread of internet usage and its acceptance among consumers acceptance(Shao, 2009; Shang, Chen and Liao, 2006;

Schlosser, 2005). Social media has now become one of the most efficient and effective consume marketing mechanism. Social media has arisen as an electronic communication platform in this scenario by sharing information, ideas and content created by users through networking and blogging (S. Krishnamurthy and W. Dou, 2008). More than 70% of consumers use social media platforms with several accounts on various sites and smartphones apps.

The past decade has witnessed unprecedented advancement in the usage of social media across all nations with the emergence of the technological-affinity consumer segment. However the impact of economic growth, technological advancement may not solely be considered bliss due to its resultant environmental consequences (K. S. Bawa, L. P. Koh, 2010). Use of Social Networking platforms is on the rise. This increased use has increased the social networking platforms user growth. At the same time, the growing number of social networking sites users has resulted in increased electronic word-of-mouth (eWOM). The eWom can be used by consumers to share their opinions and experiences related to various products/services with their friends or other consumers that share similar interests. Companies can also access this eWom information without any limitations (Gupta & Harris, 2010; Hajli, 2018; Seifert & Kwon, 2019). According to current studies, consumers increasingly prefer social network platforms to gain detailed information about the products, which are new to them (Schivinski & Dabrowski, 2016). Thus, social media platforms are considered as the very significant source of eWOM information. According to Teng et al. (2014), consumer can change their preferences and purchase behavior provided the eWom is persuasive. Looking at the importance of social media, it is important to understand how social media as a platform shapes young consumers' perception and influence their purchase intention towards green products. This study aims to examine the factors influencing consumer green purchase intention. The findings of the study would help marketers to frame strategies to motivate consumers towards green products.

Theoretical Background and Hypothesis Development Ewom and Purchase intention of Green Products

Social media has pioneered how companies and people connect between green and non-green goods, encouraging consumers to buy more engaging and competitive products (Singh et al. (2012)). Organizations are searching for expanded visibility through various social platforms to reach customers across digital networks. The Internet has enabled new forms of communication platforms that further empower both providers and consumers, allowing a vehicle for the sharing of information and opinions both from Business to Consumer, and from Consumer to Consumer. Electronic word-of mouth (eWOM) communication refers to any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet. Wang et al., (2012) said that interactions between social media influence purchasing decisions both directly (by urging buyers to respond to peers) and implicit (by the amount of time spent contemplating and studying a product). Furthermore, social media experiences are linked positively to brand faith and product attitude (Wang et al., 2012, Hajli, 2014). Because of its anonymous nature and wide range of contents, the power of eWOM is expanding. There are several critical antecedents of eWOM effects (Doh, 2009). Customers would eventually build a trust in a green product by regular, supportive interactions delivered across social media platforms (Kang & Hur, 2012). The above literature has helped us to figure out that Ewom usage affects purchase intentions and propose the hypothesis that:

H1: E-wom is positively related to purchase intention of green products.

Information Quality and Purchase intention of Green Products

[Bhattacharjee and Sanford \(2006\)](#) defined information quality as “the persuasive strength of arguments embedded in an informational message.” Information quality has been the

generally used antecedent of the central route, as it is referred to as the persuasive strength of a message (Cheung and Thadani, 2012). The present study explain information quality as the influential strength of E-wom. More specifically, prior literature has reported that the quality information positively affects purchase intention (Lee and Shin, 2014; Park *et al.*, 2007). Sussman and Siegal (2003) and Cheung and Lee (2012) predicted that within the online platform, information usefulness or perceived usefulness is also an individual perception by using new ideas and opinions which enhance the performance articulation about product or services. It is a user adoption's predictor for system usage with strong associations. People think that if the comments, online reviews, and opinions posted by opinions leaders or experienced persons within online platforms are useful that can influence grater for information adoption. The above literature has helped us to figure out that Ewom usage affects purchase intentions and propose the hypothesis that:

H2: Information Quality is positively related to purchase intention of green products.

Source Credibility and Purchase intention of Green Products

Source credibility is considered a crucial driver of the peripheral routes due to the fact that it is the message receivers' perception on the credibility of a message (Cheung and Thadani, 2012). Information source credibility belongs to peripheral cues of information recipients as a credible source with the degree to communicator's assertion. As source credibility, the degree of positive characteristics of information provider influence on recipients' confidence, believe, trustworthiness, and competent, which lead to acceptance of a message (Cheong and Morrison, 2008). When consumers adjudge information to be credible, they are more willing to engage in any form of communication. In online settings, users have unlimited freedom to express their feelings without personal meetings, so typical clues of information credibility do not apply (Reichelt *et al.*, 2014). For instance, a study found that

information credibility is the main determinant in consumers' decision-making (Awad and Ragowsky, 2008). Additionally, studies also revealed the effect of information credibility on consumers' purchase intention (Prendergast *et al.*, 2010). Consequently, we posit that:

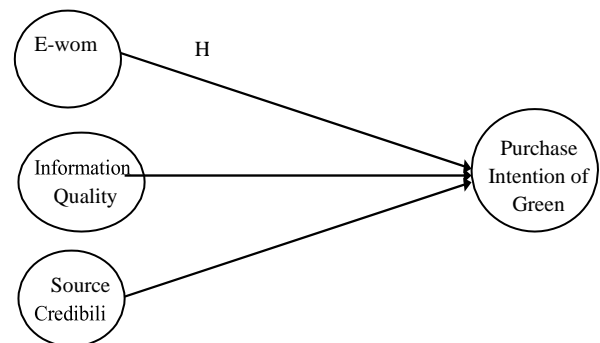
H3. The Source Credibility is positively related to purchase intention of green products.

Conceptual Framework

This paper has developed a conceptual model to understand the green purchase intention of consumers. The variables were identified on the basis of literature and are significant in predicting green purchase intentions. The variables selected for the framework are: E-wom, Information Quality and Source Credibility:

METHODOLOGY

To achieved the objectives of the study present study has undertaken the self-administered



questionnaire. Items of the questionnaire is based on the existing literature. The questionnaire was framed in such a way that it meets the objectives of the study. Then pre testing of the questionnaire was done and was modified as per the suggestions received by the experts. Questionnaire consisted of five parts. It includes E-WOM, Source Credibility, Information Quality, Purchase Intention and Demographics. The existing scale has been used for the measurement of items. In the E-WOM section respondent was asked five items, for credibility four items and Information quality 4 items as well. Measurement of items were done by using 5point Likert Scale ranging 1 (strongly disagree).

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Table 1 Demographic Variables

| Variables | Characteristics | Frequency | Percentage |
|-----------|-----------------|-----------|------------|
| Gender | Male | 240 | 48 |
| | Female | 260 | 52 |
| Age | 20-30 | 265 | 53 |
| | 30-40 | 130 | 26 |
| | 40-50 | 76 | 15.2 |
| | 50-60 | 29 | 5.8 |
| Education | High school | 85 | 17 |
| | Graduate | 213 | 42.6 |
| | Post graduate | 169 | 33.8 |
| | Others | 33 | 6.6 |
| | | | |

| | | | |
|----------------|-------------|-----|------|
| Monthly Income | Under 10000 | 5 | 1 |
| | 10000-20000 | 83 | 16.6 |
| | 20000-30000 | 230 | 46 |
| | 30000-40000 | 147 | 29.4 |
| | Above 40000 | 35 | 7 |

Table 2: Measures

| Construct | Items | Cronbach Alpha |
|--------------------------|---|----------------|
| Electronic Word of Mouth | e-WOM1 I often read other consumers' online product reviews to know which products make good impressions on others e-WOM2 I often read other consumers' online product reviews to make sure I buy the right product e-WOM3 I often consult other consumers' online product reviews to help choose the right product e-WOM4 I frequently gather information from online consumers' product reviews before I buy a certain product/brand e-WOM5 If I don't read consumers' online product reviews when I buy a product/brand, I worry about my decision | 0.810 |
| Information Quality | IQ1 I think information related to green products on social media is understandable. IQ2 I think information related to green products on social media is clear. IQ3 I think I can easily understand information on social media related to green products IQ4 In general, I think quality of information related to green products on social media is high | 0.790 |
| Information Credibility | IC1 I think they are convincing. IC2 I think they are strong. IC3 I think they are credible. IC4 I think they are accurate | 0.752 |
| Purchase Intention | PI1 After reading consumers reviews on social media It is very likely that I will buy any of those green products. PI2- I will buy any of those green products the next time I need the same product category. PI3- I will recommend green products to my friends in the same way | 0.766 |

To collect the data simple random sampling has been used. Data was collected by sending

questionnaire on social media to consumers who prefer buying green products or have purchase

green products in the past. In total 550 questionnaire were distributed on social media platform, out of which 500 valid responses were considered for the study.

Data Analysis and Results

From the total sample of 500 respondents 48% is male and 52% represents female. Majority of the population of collected sample lies in the age group of 20-30 followed by 30-40. Wherein from the collected sample respondents in majority are graduated and post graduated. Also, per month income of the sample population in mainstream lies between 30000-40000 slab. Descriptive analysis is shown in Table1

Measurement Model

For the proposed model confirmatory factory analysis has been done. For SEM, a model should have high reliability and validity. Convergent Validity, Discriminant Validity, and Reliability have been tested for the proposed model as shown in the table-2 to check the

internal consistency Cronbach alpha has been used through SPSS. All the items are in good terms of reliability testing. E-WOM, Credibility, Quality, and Purchase Intention were in the acceptance range from

0.75 to 0.810 by crossing the range of 0.6. In total 16 items were used to measure four constructs of the model. The propose model has used the items mentioned in table 2.

To test the similar variance among the items of the constructs convergent validity is being done. This is assessed by standardized factor loading which confirms the worth of latent and indicator variables. Factor loading of all the observed factor lies between 0.731 to 0.938. In other words, it confirms the relation of variable with its constructs and therefore, confirm the convergent validity Next step is to calculate discriminant validity. By drawing the comparison between Average Variance Extracted (AVE) of each variable with Squared Correlation between the variables discriminant validity is being checked.

Table 3: Average Variance Extracted

| | CR | AVE | MSV | ASV | EWOM | IQ | IC | PI |
|-------------|-----------|------------|------------|------------|-------------|-----------|-----------|-----------|
| EWOM | 0.911 | 0.721 | 0.284 | 0.191 | 0.849 | | | |
| IQ | 0.862 | 0.611 | 0.284 | 0.184 | 0.533 | 0.782 | | |
| IC | 0.817 | 0.527 | 0.189 | 0.124 | 0.312 | 0.409 | 0.726 | |
| PI | 0.919 | 0.739 | 0.189 | 0.104 | 0.240 | 0.402 | 0.435 | 0.861 |

Table4: Summary of goodness of fit indices

| Model Fit Indices | DF | CFI | GFI | NFI | TLI | RMSEA |
|-------------------|------|------|------|------|-------|-------|
| Measurement Model | 1.91 | 0.92 | 0.92 | 0.94 | 0.943 | 0.035 |
| Structural Model | 1.92 | 0.94 | 0.91 | 0.95 | 0.964 | 0.043 |

Table 5: Summary of testing of hypotheses

| Paths | Coefficient | t-value | p-value | Relationship |
|------------|-------------|---------|---------|--------------|
| PI <- EWOM | 0.13 | 0.237 | 0.03 | Confirmed |
| PI <- IQ | 0.22 | 1.75 | 0.02 | Confirmed |
| PI <- IC | 0.87 | 3.43 | 0.00 | Confirmed |

The goodness of fitness indices was tested with CFI, GFI, TLI, NFI, AND RMSEA. For obtaining satisfactory results, value of goodness of fit indices should be less than 3, in addition to that values of CFI, NFI, GFI, and TLI should be more than 0.9. and the value that of RMSEA should not be more than 0.08. Table 4 indicates the analysis for goodness of fit for measurement model. Accordingly values for df, CFI, GFI, NFI and TLI and RMSEA are 1.91, 0.92, 0.92, 0.94, 0.943 and 0.035 respectively. As all the values of the fitness indices are in accepted range, this confirms the validity of the structural model indicates further to test research hypothesis of research model. Table 5 represents the summary of hypotheses being tested. The value of beta clarifies the influence of independent variables towards dependent variables. All the hypotheses have been tested positive. Factors like Electronic Word of Mouth, Information Quality, Information Credibility and Purchase Intention have different p values and found to have signification relation.

CONCLUSION

The proposed model has analysed the influence of E-WoM on green Purchase Intention of consumers. The study proposes to know the factors that may have an influence on the people intending to purchase green products, in order to contribute to the environment. In the previous studies conducted effect of electronic word of mouth on purchase intention of various other categories of goods have been studied. Accordingly, the influence of E-WOM have been found positive on the purchase intention of the goods. Similarly, in this study too the effect of e-WoM is found to have a significant relation with the purchase intention of green products where the p value is less than 0.05. Similarly, the other factors like Information Quality also

found to have significant relation with the buying of green products with p-value < 0.05. Information credibility tends to have significant influence while consumer makes the intention to purchase the green products. Therefore, model confirms the influence of consumer reviews on buying of green products As more and more consumers use the green products, the become aware of how they are contributing to save the environment, and as a result they share their reviews on different platforms and influence other consumers to buy the eco-friendly products. Therefore, it can be drawn on the basis of the results of the study that consumer reviews are getting more attention than other advertisements these days. Therefore, managers should strategize in such a way that their existing consumers create awareness by spreading the word of mouth for green products.

LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

This study is also not free from the drawbacks. In this study only few factors of E-WOM were taken into consideration. In future researchers by going through literature can use other factors too contributing to E-WOM (homophily, information quantity, usage of social networking sites) which may influence the purchase intention of green products. Secondly negative Electronic word of mouth can be other aspect taken for the study in the future. Finally researchers in the future can conduct this study on large scale by drawing large sample size.

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