Determining the Impact of Ewom on Brand Image and Purchase Intention through Adoption of Online Opinions

Naimatullah Charo, Pershant Sharma, Saadullah Shaikh, Abdul Haseeb,
and Muhammad Zohaib Sufya

Abstract—Lately with advent of sophisticated technological platforms and increasing usage of internet has changed the global scenario of marketing and branding. This is complemented by increasing popularity of social media sites, which has provided almost every individual with platform to share experiences, exchange information with numerous people at a single time. This extensive technological transformation has produced a more ubiquitous form of word of mouth; known as Electronic word of mouth (eWOM. This study investigates entire process eWOM, from adoption of online information; to how it impacts purchase intention of recipient of information. With the multiple and linear regression the 244 participants considered that timeliness is the major factor to perceive information useful which later results in information adoption. Study further found that eWOM has significant and positive impact on brand image and purchase intentions of the online information seekers. Recommendations, limitations, and benefits of this study are also suggested.

Keywords—*Electronic word of mouth (eWOM), Digital Media, Online word of mouth, Social Media Marketing.*

I. INTRODUCTION

WORD of Mouth (WOM) communication is defined as non-commercial voluntary form of face to face exchange of information, which is usually based on consumers' direct experience with a product/service, opted. WOM is considered as potential mean of shaping consumer attitudes and perception about a brand and it has greater influence on product adoption as compared to any other form of traditional marketing, because it comparatively provides more accurate and reliable information which is based on first-hand experience of product/service. From time to time there have been numerous researches on what factors lay behind efficacy of WOM marketing.

Naimatullah Charo, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST) Karachi, Pakistan. Phone: +92-3323005373. E-mail: nscharo@gmail.com.

Pershant Sharma, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST) Karachi, Pakistan. Phone: +92-3363290177. E-mail: s.pershant@gmail.com.

Saadullah Shaikh, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST) Karachi, Pakistan. Phone: +92-3062105566. E-mail: saadullah.shaikh00@gmail.com.

Abdul Haseeb, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST) Karachi, Pakistan. Phone: +92-3332637456. E-mail: abdulhaseeb08@hotmail.com.

Recent increased usage and popularity of social network sites (SNS) like Facebook, Twitter etc. has entirely changed the picture of WOM, it is now not necessary for two persons to share their experiences face to face, however they can do so by sharing on more transparent and ubiquitous platforms of social networks. With the advent of information technology, the reach and prospectus of WOM has been increased exponentially. This form of exchange of knowledge on online and public platforms is known as Electronic Word of Mouth (eWOM).

The increasing usage of social networks due to rise in sophisticated technologies like 3g and affordable smartphones, access to internet and social networks particularly has become like one of the necessities for consumers now a days and it is now ridiculously common for buyers to look for online reviews of a product/service prior to purchase and consumption. A recent survey found out that most consumers perceive online to be as trustworthy as brand websites [1]. McKinsey and Company published a report about eWOM and it states that the scope of eWOM in developing markets is relatively higher than traditional advertising. And the opinion acquired by eWOM plays a pivotal role throughout three stages of consumer decision making process.

Considering the scenario in Pakistan, where out of approximate population of 196.174 million [2], around 15% of people are internet users, which is about 25 million people and out of that, percentage of population present on Social media is around 4%. The social media statistics of Pakistan presents an attractive scenario for brands to leverage on this competitive advantage. Around 60% of internet users in country interact with brands online and 53% out of total population on social media is present on Facebook, the number has been growing significantly every quarter and every 1 out of 5 Facebook user in country makes decisions that are influenced by Facebook

These statistics portray the fact that the increasing usage of social media and consumer awareness of brands has expanded the ways in which eWOM can shape the consumer buying behavior. This dynamic increase in consumer's choice for online feedback and reviews has alerted brands to focus on enhancing their digital presence. There are numerous social media groups and communities that provide a centralized digital space for specifically sharing and discussing relevant experiences by customers. That's why today eWOM has

become a stable element for online marketing mix for several brands and companies.

II. LITERATURE REVIEW

Advent of communication technologies and increase in usage of internet globally has transformed the arena of marketing and brand communication; it has also entirely changed the metamorphosis of information sharing mechanism. Due to increasing ease of internet access consumers are now no longer imprisoned by limited geographical accessibility or physical space, internet has facilitated consumers with ubiquity and global reach. All of this dramatic change in horizons of mainstream and electronic media has originated over the past decade [3] .

This electronic revolution has provided businesses with one more competitive edge to leverage upon, because digital media provides brands with a centralized e-space to interact with their target customers and market their respective offering along with creating brand awareness at a very minimal cost. Such interaction has been deemed as substantially potential contributor towards financial health of brands and businesses.
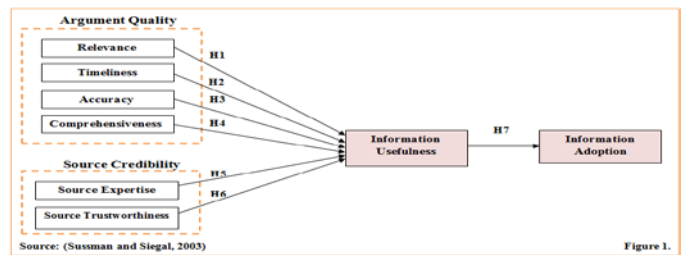
Prior to this technological development, brands relied more on traditional form of communication mediums for marketing and branding activities, besides Word of mouth communication was regarded as more potential driver behind consumer's attitudes and purchase intentions towards any brand and this stance has been validated by numerous studies and researches.

With the progress of internet network which gives choices of information regarding a product allowing a form of word-of-mouth communication that not only become a person-to-person form of communication about a product or service [4], but also capable to turn into many forms of word-of-mouth communication that spread globally. This form of communication is generally called Electronic Word of Mouth. The purpose of this literature review is to focus on the e-WOM, its impact and the potential benefits it has for businesses. This review will contain information gathered and analyzed from different peer reviewed articles and studies to support the credibility of this paper.

A. Research Framework and Hypothesis

This study has been divided into two stages, which are described along with involved variables below:
*Stage 1-*The figure below represents the information adoption model suggested by [5]. It contains the two main areas one is the argument quality and the other one is source credibility. Argument quality refers to the quality of information being shared; source credibility is linked reliability and authentication of information source. This stage will investigate the process of adoption of online opinion by the opinion seekers.

Figure 1.

Following variables are part of stage 1

1) Argument quality/information quality

It is the convincing force of opinions shared which are entrenched in an informational communication [6]. It is the assessment of results which is systematically shaped according to the user perception [7].

2) Relevance

Consumers most of the time prefer information that is of their specific purpose, if the information doesn't fulfill their need or purpose they generally go through the information without going into details or reading whole pages. Users want to find the information that they want quickly and with little effort [8].

Therefore we suggest that:

H1: Message will be more useful if the information perceived is more relevant

3) Timeliness

It is when the online reviews are up to date and provide most recent information about any product/service. If the Information available online is current and up to date, it will be more useful [9].

H2: Higher the perceived timeliness of message, the more useful message perceived will be.

4) Accuracy

It defines that how reliable a certain message is. Accuracy also denotes the thinking of opinion seekers that the information shared is true [10].

H3: higher the perceived accuracy of the message, more useful the message will be perceived to be

5) Comprehensiveness

It refers to the extent to which certain information shared is complete as per the requirement of the opinion seekers [11].
H4: the higher the perceived comprehensiveness of the message more will useful it will be perceived.

6) Source Credibility

It denotes to the message credibility perceived by the recipient about the person or source from which information is coming, it has no relation with the message information itself [12]. It is the degree to which an opinion seeker considers the information encoder as reliable, trustworthy, authentic and knowledgeable [13]. Source credibility contains source expertise and source trustworthiness.

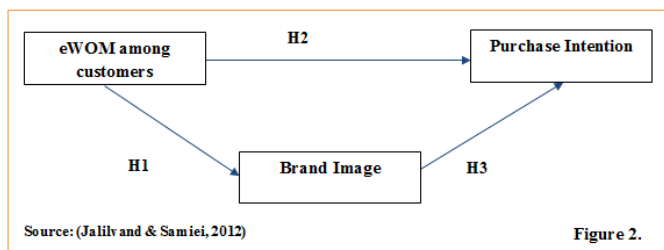H5: The message is perceived more useful, if the perceived expertise is high.

H6: If the trustworthiness of message source is higher, the message usefulness will be perceived higher.

7) Adoption and usefulness of information

Adoption of information is the practice in which people intentionally with a certain motive get engaged in utilizing that information existing online. This is one of the behaviors which are practiced by the online consumers existing in the online forums [14]. Whereas Information usefulness is the perception of and individuals seeking information online that with the use of new source or technology will add up in the better performance. This is the key factor that results in the information adoption with both present and future self-reported utilization of the framework [15], [16].

H7: Information adoption is more in case of high perceived information usefulness than that of low perceived information usefulness

Stage 2-In the second stage as shown in figure 2.0, this study aims to find that once the information is adopted in the first stage, how will it impact the brand image and purchase intention of the online opinion seekers. This model is adopted from [17].

Source: (Jalilv and & Samiei, 2012)   Figure 2.

Electronic word of mouth on social media networks has strong impact on brand image and which ultimately affects the purchase intention of consumers [17]. According to a study conducted in past "brand image can influence the profits earned by any company, by impacting its cash flows; an impressive brand image can also make consumer pay premium price." [18]. The importance of this study in purchase of services is derived by fact that brand image is formed on basis of consumption of any that service or past experiences of such consumption and intangible factors as after sales service can't be availed before any consumption, thus this whole process involves risk of purchasing service and experiencing it. That's why consumers now a days are more leaned towards influences from e-WOM, to gain an insight of experience shared by other consumers of same service on social media groups. [19], [20]. It has been interpreted from studies in past that this form of marketing communication impact consumers impressively and serve as a hard axis for making purchase decision. As one of study believes that eWOM has the direct impact on a company's sales [21]. Research studies also suggest that eWOM has widely hit the purchasing behaviors of consumers and online opinion seekers via internet. [22], [23]. The written communication such as online posts, recommendations, reviews, texts, instant messages etc. has more impact than the oral communication which result coming up new and interesting information about the products and brands to discuss about in particular [24].

Therefore we suggest that:

H1. Brand image is significantly impacted by the eWOM

H2. Purchase intention of the consumers is significantly impacted by the eWOM.

H3. Purchase intention of the consumers are significantly impacted by the brand image of a product or service

III. METHOD

A. Sampling design, Study Sample and Procedures

The study population includes all members on Facebook group of "*Karachi Food Diary*"; which is around 12,238 members. A convenience sampling method was used to select the sample for this study. An online survey questionnaire was used to conduct this study and the questionnaire was posted on Facebook group of Karachi Food Diary and it was also messaged to profiles of the group members. Total 383 questionnaires were filled and after filtering out only 244 responses were usable for further analysis, representing a response rate of 64%.

B.Measures

This study incorporates two models that have been adopted from 2 different past studies. In first model adopted from this study uses following two measures to understand the process of adoption of online reviews by consumers on Facebook

Information usefulness- It is the degree to which an online review/information about any product/service is perceived as useful by the individual seeking such information. This is the key factor that results in the information adoption. As provided by [5]. This study also analyzes six variables that determine information usefulness on social media. These six constructs were Relevance, Timeliness, Accuracy, Comprehensiveness, Source Expertise and Source Trustworthiness. Each of the adapted variable derived responses on based on questions that asked how strongly respondents agreed or disagreed with the impact of that variable on information usefulness, on 5 point Likert scale whereby, 1 = strongly disagree and 5 = strongly agree.

Information adoption – It is a tendency of people to intentionally get engaged in utilizing the information existing online. This is one of behavior which is practiced by the online consumers existing in the online forum [14]. As described in model the information adoption is dependent on information usefulness. Thus this study investigates relationship between them.

In second model, which has been adopted from [17], analyzes that once an online review is adopted by consumer; what is its impact on purchase intention and brand image in mind of the recipient of information.

C. Method of Analysis

In this study hypotheses were tested using Cross tab Analysis, Linear and multiple regression. Prior to testing for regression, data and survey tool were tested for reliability, validity and correlation.

IV. RESULTS

A. Profile of Respondents

Out of 244 respondents, 63% were males. 69% lied in age

bracket of 18 to 24 and 55% were enrolled in undergraduate education. 66% of respondents were students by profession followed by 20% in their professional career, 7% were self-employed and 3% worked in service sector. Additionally overall 47% of respondents visited Facebook page of *Karachi Food Diary* occasionally, followed by 30% respondents who visited it frequently.

B. Cross tab analyses

Cross tab analyses were conducted in *Stage 2* of this study to comparatively determine the impact of eWOM on Brand Image and Impact of Brand Image on Purchase Intention. Initially one cross tab was conducted between Impact of eWOM on Brand Image and Level of that Impact. Table I shows the results of this analysis. It is noted that out of 244 respondents, 93% believe that eWOM has impact on Brand Image of any product/service and 47.5% respondents said that level of such impact is Moderate, followed by 23% of respondents who said that impact level was Major; this supports H1 of Stage 2. Another cross tab analysis was conducted between impact of Brand Image on Purchase Intention and level of impact Brand Image has over Purchase Intention of recipient. Table II show the results of this analysis. It is noted that 93% of respondents believe that Brand Image has impact on Purchase Intention and 47.5% of these respondents believe that level of such Impact of Brand Image on Purchase Intention is moderate, followed by 20.5% respondents who believe that level of impact is Major. This supports H3 of stage 2.

TABLE I
CROSS TAB ANALYSIS

		Impact of eWOM on Brand Image
		Yes
Level of impact of Brand Image on Purchase Intention	No Impact	4%
	Minor Impact	10.2%
	Neutral	14.8%
	Moderate Impact	47.1%
	Major Impact	20.5%

TABLE II
CROSS TAB ANALYSIS

		Impact of Brand Image on Purchase Intention
		Yes
Level of impact of eWOM on Brand Image	No Impact	8%
	Minor Impact	11.1%
	Neutral	10.7%
	Moderate Impact	47.5%
	Major Impact	23.0%

C. REGRESSION ANALYSES

Linear and multiple regressions were conducted to test hypotheses of model I (Figure 1.) and model II (Figure 2.). Specifically for model I. Initially for Stage 1, Information usefulness was regressed to six independent predictors namely Relevance, Timeliness, Accuracy, Comprehensiveness, Source Expertise and Source Credibility using multiple regression in SPSS. Afterwards Information Adoption was regressed against Information Usefulness as independent predictor using linear regression tool. Table I and II present the results of this analysis respectively. It is noted that 14.7% of variance in Information Usefulness has been

significantly explained by all of the six predictors however out of all these six predictors only Timeliness was found to have statistically significant impact on Information Usefulness (β= .172, p<.05); thus H2 of stage 1 was supported; whereas in other part of same stage 15.1% of variance in Information Adoption is significantly explained by Information usefulness. Information Usefulness was found to have statistically significant impact of Information Adoption (β=.393, p<.01), thus H7 was supported.

In stage 2, linear regression was conducted to find the direct impact of eWOM on Purchase Intention of recipient of such eWOM. Table III presents the results of this analysis. It is noted that 30.5% of variance in Purchase intention has been significantly explained by eWOM. In the model, eWOM was found to have statistically significant impact on Purchase Intentions (β=.522, p<.01). H2 was supported

TABLE I
REGRESSION RESULTS

Independent Variables	Dependent Variables (Information Usefulness)
Relevance	.084
Timeliness	.172[*]
Accuracy	.170
Comprehensiveness	-.017
Source Expertise	.096
Source Trustworthiness	-.061
R^2	.142
Adj. R^2	.120
F. Value	6.544

**Note: *** p<.05

TABLE II
REGRESSION ANALYSIS

Independent Variable	Dependent Variable (Information Adoption)
Information Usefulness	.393[**]
R^2	.154
Adj. R^2	.151
F. Value	44.111

**Note: **** p<.01

TABLE III
REGRESSION ANALYSIS

Independent Variable	Dependent Variable (Purchase Intention)
eWOM	.522[**]
R^2	.305
Adj. R^2	.302
F. Value	106.198

**Note: **** p<.01

V. DISCUSSION

The aim of this study was to examine the entire process of electronic word of mouth on Facebook; starting from identifying variables that motivate a consumer to adopt an online review then to determine the impact of these online reviews on Brand Image and Purchase Intention of consumer after adoption of such reviews. In this study we found out that Timeliness of Online reviews is an important predictor of Information Usefulness and Information Adoption. One possible explanation for this result can be that since majority of our respondents were undergraduate students with age brackets of 18 to 24; which can be called as Youth in one word and over here in Karachi, Pakistan, Youth is more influenced by timeliness of an online review, for instance

reviews which may include up to date information on offers and deals being offered by product/service. Youth is often less bothered about other variables like Relevance and comprehensiveness on Facebook and other variables of Accuracy, Source Expertise and Source Trustworthiness can't be verified on an online social network, where anybody can make an account and post about any product/service, which can't be cross checked for verification. Thus these variables don't impact the consumers to perceive an online review useful; which in turn has significant and potential impact on adoption of that online review.

The study also found out that electronic word of mouth has significant, potential and both direct and indirect impact on purchase intentions of recipient of such electronic word of mouth. And the impact is of eWOM on Brand Image is also potential and can influence the recipients' perception about that product/service. Additionally the Brand Image was found to have significant relationship with purchase intentions as well.

A. Research Implication:

The findings from this study have numerous implications for theory as well as practice. From a theoretical perspective, this research has added value to past researches on same topic of electronic word of mouth as in past no such empirical study has been conducted that investigates the entire process of electronic word on mouth of Facebook. In terms of practical implications, the findings of this study hold significant importance for Brand managers and e-marketers of companies involved in business of food. As the research demonstrated that online reviews that are more up to date, have higher influence on information adoption, thus brand managers of different eateries in Karachi can join such customer communities and create the buzz about their product/service by providing most up to details on latest offerings, deals and discounts. In this way potential target audience of that brand will adopt the provided information and that in turn will increase the recipient's purchase intention and generate positive brand image for that brand. Secondly this philosophy can also be incorporated in Social Media Marketing strategy of e-Marketers to engage with potential consumers by keeping the discussion on brand alive and up to date.

B. Limitations and directions for future research

There are few limitations in this study which must be considered before extrapolating the findings of this study to establish a generalized output. Firstly, since the research has been conducted online on Facebook and respondents were completely strangers, thus the quality of responses can't be maintained and is subject to possible bias or dishonest responses. Second the data was collected from one particular type of eWOM dedicated consumer community on Facebook, thus findings can't be generalized to other eWOM platforms like websites, blogs etc. Also the study is limited with number of variables tested. Thus there is need to extend future research on topic by adopting more comprehensive research framework, that should include other significant variables and the research can also be conducted on other online platforms of eWOM like Websites, blogs etc. in order to understand the impact of eWOM on other digital platforms. Finally this study is conducted on a relatively smaller sample size, which can introduce asymmetry and wide differences in responses, thus for future research, a larger sample size should be studied to find more solid and meaningful output.

VI. CONCLUSION

The aim of this study was to investigate factors that may influence and determine the adoption of online reviews on Facebook groups related to Food discussion and after that impact of this adopted information on Brand Image and Purchase Intention was also analyzed. The findings of this research demonstrate that timeliness of online reviews has potential and significant role in adoption of that review and the impact of electronic word of mouth on brand image and purchase intention is also significant.

VII. BIBLIOGRAPHY

[1]. **ACNielson.** *Trust in Advertising: A Global Nielsen Consumer Report.* 2007.
[2]. **Central Intelligence Agency (CIA).** The World Factbook. *Central Intelligence Agency (CIA).* [Online] July 1, 2014. https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html.
[3]. *Social media: the new hybrid element of the promotion.* **Mangold and Faulds.** 2009, Business Horizons, pp. 357-65.
[4]. *Branded Product Information search on the Web: The role of brand trust and credibility of online information sources.* **Lee, C, Kim, J and Chan, Olmsted S.** 5, 2011, Journal of Marketing Communication, Vol. 17, pp. 355-374.
[5]. *Informational influence in organizations: an integrated approach to knowledge adoption.* **Sussman, S.W and Siegal, W.S.** Iss: 1, 2003, Informational Systems Research, Vol. Vol. 14, pp. pp. 47-65.
[6]. *Influence processes for information technology acceptance: An elaboration likelihood model.* **Bhattacherjee, Anol and Sanford, Clive.** 4, 2006, MIS QUARTERLY, Vol. 30, pp. 805-25.
[7]. *Quality and effectiveness in Web-based customer support systems.* **Negash , Solomon, Ryan , Terry and Igbaria, Magid.** 8, 2002, Information & Management, Vol. 40, pp. 757-68.
[8]. *HCI research issues in e-commerce.* **Nah , F.F.-H. and Davis, S.** Iss: 3, 2002, Journal of Electronic Commerce Research, Vol. Vol. 3 , pp. pp. 98-113.
[9]. *Dimensions of e-quality.* **Madu , C.N. and Madu, A.A.** Iss: 3, 2002, International Journal of Quality and Reliability Management, Vol. Vol. 19 , pp. pp. 246-58.
[10]. *A theoretical integration of user satisfaction and technology Acceptance.* **Wixom , B.H. and Todd, P.A.** Iss: 1, 2005, Information Systems Research, Vol. Vol. 16 , pp. pp. 85-102.
[11]. *Marketing the web in other media.* **Sullivan, C. .** 9, 1999, Editor & Publisher, Vol. 132, p. 30.
[12]. *Heuristic versus systematic information processing and the use of source versus message cues in persuasion.* **Chaiken, Shelly.** 5, 1980, Journal of Personality and Social Psychology, Vol. 39, pp. 752-66.
[13]. **Petty, Richard E. and Cacioppo, John T.** *Communication and Persuasion: Central and Peripheral Routes to Attitude Change.* New York, NY : Springer-Verlag, 1986.
[14]. *Online consumer communities and their value to new product developer.* **Pitta, D.A. and Fowler, D.** 2005, Journal of Product & Brand Management, pp. 283-91.
[15]. *Perceived usefulness, perceived ease of use, and user acceptance of information technology.* **Davis, F.D.** 1989, MIS Quarterly, pp. 319-40.
[16]. *User acceptance of information technology: system characteristics, user perceptions, and behavioral impacts.* **Davis, F.D.** 1993, International Journal of Man-Machine Studies, pp. 475-487.
[17]. *The effect of electronic word of mouth on brand image and purchase intention: An empirical study in the automobile industry in Iran.* **Jalilvand, Mohammad Reza and Samiei, Neda.** 4, 2012, Marketing Intelligence and Planning, Vol. 30, pp. 460-476.

[18]. *Developing and validating a multidimensional consumer-based brand equity scale.* **Yoo, B and Donthu, N.** 1, 2001, Journal of business research, Vol. 52, pp. 1-14.

[19]. **Lewis, Robert C and Chambers, Richard E.** *Marketing Leadership in Hospitality. Foundations and Practices.* Newyork : Wiley, 2000. Vol. III.

[20]. *Electronic word-of-mouth in hospitality and tourism management.* **Litvin, S.W, Goldsmith, R.E and Pan, B.** 2008, Tourism Management, Vol. 29, pp. 458-468.

[21]. *Examining the Relationship Between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets.* **Forman, Chris, Ghose, Anindya and Wiesenfeld, Batia .** Iss: 3, 2008, Information Systems Research, Vol. Vol. 19, pp. pp. 219-313.

[22]. *Internet forums as influential sources of consumer Information.* **Bickart, B and Schindler, R.M.** 3, 2001, Journal of interactive marketing, Vol. 15, pp. 31-40.

[23]. *Word of mouth: the role of cognitive personalization in online consumer reviews.* **Xia, L and Bechwati, Nada Nasr.** 1, 2008, Journal of interactive advertising, Vol. 9, pp. 108-128.

[24]. *Communication Channels and Word of Mouth: How the Medium Shapes the Message.* **Berger , Jonah and Iyengar, Raghuram.** Iss. 3, 2013, Journal of Consumer Research, Inc., Vol. Vol. 40, pp. pp. 567-579.

[25]. *The measurement and determinants of brand equity: a financial approach.* **Simon, C.J and Sullivan, M.W.** 1993, Marketing Science, pp. 28-52.

[26]. *An examination of selected marketing mix elements and brand equity.* **Yoo, B., Donthu, N and Lee, S.** 2000, Journal of the Academy of Marketing Science, pp. 195-211.