

# **EVALUATING FACTORS INFLUENCING ELECTRONIC WORD-OF-MOUTH (EWOM) ADOPTION FOR MOBILE PHONE PURCHASES**

**By**

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**23062**

A thesis presented to the Department of Management Sciences, Bahria University  
Karachi Campus, in partial fulfillment of the requirements  
of the MBA degree



**SPRING, 2016**

**Bahria University Karachi Campus**

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## MBA THESIS

### 2st Half-Semester Progress Report

Name of Student	Hira Haider
Registration No.	23062
Thesis Title	Evaluating factors influencing electronic word-of-mouth (eWOM) adoption for mobile phone purchase

#### Supervisor-Student Meeting Record

No.	Date	Place of Meeting	Topic Discussed	Signature of Student
1.	2 <sup>nd</sup> May 2016	Cubical, BUKC	Data collection	
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I, hereby, declare that no portion of the work referred to in this thesis has been submitted in support of any application for another degree or qualification of this university or any other institution of learning.

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**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

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## **List of Abbreviations**

Acronym	Definition
eWOM	Electronic Word-of-Mouth
UGC	User Generated Content

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First of all I would like to thank and dedicate this thesis to my family, especially my parents who had to put up with my upset routine. Their tireless support and encouragement enabled me to complete my thesis.

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## **Abstract**

**Purpose-** Internet has become one of the most important communications medium affecting consumer decision making; now it's usage is not only for entertainment purposes, but also the phenomenon such as online purchases and online information sharing has been seeing impressive increasing trend, even in Pakistan. The purpose of this paper is to examine the extent to which Pakistani opinion seekers are willing to adopt online consumer reviews and what factors encourage this adoption.

**Methodology/Sample-** Using past researches a conceptual model for this research was developed including 3 factors proposed as having influence over eWOM adoption (Perceived risk, Source credibility and Information Quality). The proposed hypothesis were tested using a sample of Karachi internet users, who were required to fill an online questionnaire regarding eWOM adoption in mobile phone choice.

**Findings-** The paper found significant relationship between the all 3 proposed variable with eWOM adoption with Perceived Risk being proved as being the highest influencing factor among all three.

**Practical Implications-** The paper provides substantial proof for eWOM developing into a more effective marketing force than traditional advertisement. This provides means via which businesses in Pakistan can seek to promote their business in a manner useful to the members of their online communities, using eWOM.

**Keywords:** electronic word-of-mouth, product reviews, online reviews, eWOM adoption, virtual community, Internet

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## CHAPTER 1:

### INTRODUCTION

#### **Problem background and aim of the study:**

Consumers all around the world have incorporated technologies and internet in their lives. Consumers often use the Internet to look up ‘people-like-me’s’ product evaluation, recommendation and related experiences, as a more trustworthy and interpersonal recommendation during their purchase decision-making process.

Adoption of internet in purchase decision process has been on the rise mainly due to certain very core reasons: Firstly, access to internet, especially to broadband and 3G/4G mobile internet has increased greatly all around the world in the recent years; not just in the developed nations, but also in developing nations like Pakistan.

Secondly, people find utilizing internet and other technology highly convenient and accessible with great ease.

It makes it easier and speedier for consumers to share product related information with each other, irrespective of distance or boundaries or even strong/weak ties. Internet acts as a bridge to communicate and share personal opinions and experiences of products/services with family and strangers alike; and this relatively new trend in information sharing is referred as e-WOM.

e-WOM is defined as “product related information exchange among a large mass of people over the internet, which serves as a link between actual or formal users of the product and the potential customers” (Hennig-Thurau et al. 2004). Drawing on this definition, we can put eWOM as statements (positive or negative) made about product, service, brand, company, or even famous media persons that are made broadly obtainable over the Internet.

Cheng & Zhou (2010) suggests eWOM transfers mostly include mediums like electronic-mail, written or videos blogs, forums, instant messages, news update groups, social network

sites, and review sites. In its true nature, eWOM is really just the traditional Word of Mouth, except it is done through technology. Thus, being the word 'electronic'.

Modern studies have demonstrated that eWOM is every so often more effectual than marketer-developed communication; which here doesn't relate to the traditional advertisement or electronic advertisements rather involves online presence of the companies and their informational/promotional activities over avenues such like corporate websites and social networking corporate pages.

For instance, Bickhart and Schindler (2001) in his twelve-week experimental study illustrated that people who collected product based reviews and ratings from eWOM, expressed an elevated product interest than individuals who collected product information from conventional, marketer-generated forms such as corporate websites. The researches here reasoned that the exercise of collecting product related information through online forums did positively influenced consumer's interest and suggests as means of searching deeper and more about the product or product types.

While Traditional WOM enumerates to the basic face-to-face discussion about a product/service related know-how (based on it usage) between people and their family or friends or even neighbors, eWOM communication eliminates the need of any interpersonal meet up prerequisite; it surpasses distances, place, need of direct conversations and even strong ties. Similarly, Cheng & Zhou (2010) who endorsed a similar idea: the effect of eWOM such as on social networks, blogs, forums, and review sites outdoes the need and effect of normal face-to-face WOM communication on buyers' purchase decisions.

The main purpose of the study is to examine the extent to which Pakistani consumers are ready to adopt eWOM information before making their purchase decisions. For this the best method realized is to examine the standards which consumers employ to evaluate the eWOM's verity and attractiveness. In other words review it to be persuasively worthy of adoption and judge the extent of certain factors influence over eWOM adoption.

This paper identifies the relationship between 3 important judging constructs/factors and eWOM respectively, which were drawn from previous researches namely: source credibility,

information quality and overall risk with eWOM adoptability. Together these constructs are considered as the variables affecting eWOM adoption in the study.

Some may argue that, even though general public's access to internet has increased in Pakistan greatly in recent years but the internet technology may not be at the point of basing such a type of study presented here. However provided and backed with the statistical details regarding internet usage and mobilephone subscription we have reasons to believe such a study is necessary to remove the evident gap that exists within the eWOM studies conducted specifically for the Pakistan's (a developing nation's) economy.

### **Traditional Word Of Mouth (WOM):**

It is essential to concisely review and research into interactive communication and the traditional WOM to account for the advent of eWOM in its right historic setting.

WOM, the term was first coined over 50 years ago. Word-of-mouth has described by Arndt (1967) as the verbal, interpersonal communication between a receiver and a communicator (someone the receiver sees unrelated to the product itself in any commercial way) as regards to a product/service or even a brand.

Using Hennig-Thurau& Walsh (2004) study, WOM can be broadly defined as all informal transfer of knowledge about the possession, usage, or any such features of particular product or services, even the seller provided for the reading and aid of other consumers.

All the above mentioned definitions highlight one core feature when defining WOM and that is: WOM is an activity of passing information through verbal means in a casual social setting.

Sen and Lerman, (2007) and Xia and Bechwati, (2008) both have recognized WOM as important factor when it comes to considerably influencing and developing consumer behavior and intentions. Many researches have proven person-to-person information exchange, or word of mouth (WOM), as a particularly influential factor over the consumer decision making, and has received considerable attention in marketing- A McKinsey & Company study stated personal information sources as the founding base for the 67% of consumer goods sales (Taylor, 2003).



Researches has normally revealed that WOM is one of the most significantly impacting elements of the marketing mix. Consumers seemingly hold user-based personal reviews and recommendations as being more truthful in comparison to company based advertising. (Huang, Chou, & Lan, 2007). It is logical only that the influence of user-generated reviews on other consumers' purchase decisions is being set as the main area of study for many of the researches.

Katz and Lazarsfeld found out that the influence of WOM was double imperative in nature as direct selling and seven times more so in comparison to print advertising. Bickart & Schindler (2001) and other such previous research argues that, WOM credibility is rated higher in association to marketer-produced info.

Commercial advertisements tend to be, according to Dellarocas (2003), overly focused on accentuating the positive characteristics of the product and conceal the negatives, i.e. shows the product in white light. Consumers on the other hand regards WOM as much more realistic and even trustworthy accounts of opinions as it has cleared the assessment of "people like me", i.e. consumers, who share their own personal views, issues and opinions about the products (Allsop et al., 2007).

A normal individual, who won't benefit personally from the product's success (in a commercial sense) tends to appraise the products more honorably and subjectively, considering all the "goods" and "bads" of the product, which relate across to the minds of other alike-consumers. The need of sharing these opinions is driven from a person's want for assisting other people rather than earning monetary benefits. Due to this non-commercial factor that WOM carries, it is considered more reliable, and thus WOM behavior is very frequent among consumers.

Brown et al. (2005), maintains that WOM communications can be positive, negative or both. However Ying and Chung (2007) distinguished that more positive WOM compared to negative WOM leads to have greater effect over purchase intension and is likely to lead to a more favorable attitude towards a product of consideration.

**eWOM's edge:**

Many of the researches points out the fact that eWOM has greater advantages over the traditional WOM. Varadarajan and Yadav (2002) for instance, identified 4 significant changes that have occurred within the buying-spectrum, since the appearance of eWOM including:

1. Providing access to the form and volume of information (price and non-price both) related to the attributes of competitive product offerings
2. Improving the quality of information that is available online
3. Facilitate the consumers in using and in making comparisons and evaluations via Information structuring and organization

As a combined result of these changes, following advantages are possibly witnessed:

1. Search costs, which are one of the most important determinants of buyers' decision-making process, tend to decline drastically.
2. Unequal information interchange between buyers and sellers declines as eWOM increases consumers' ability to evaluate a product prior to purchase, and in result increases price pressure on sellers.
3. Given eWOM's unparalleled ability to connect individuals over time and distance, buyers can be more in command over the communication they receive, create and share; and abandon their long-established role as mere recipients of corporate-generated information e.g. commercials.

**eWOM and adoptability:**

Litvin et al., (2008) and Xiang & Gretzel, (2010) both have highlighted the fact that many researches have substantiated the relationship exists between consumers' buying process and eWOM in form of its influence. Marketing literature suggests that eWOM makes impression within the both stages of the purchase process: pre-purchase and post-purchase stages; and the five stages model of consumer decision process has been applied various times to

illustrate consumer behavior in relation to WOM and eWOM both (Sirakaya&Woodsideb, 2005).

In today's highly advanced, technological era eWOM is considered as a critical marketing force within consumer decision making process: problem recognition, information search, alternative evaluation, purchase decision, and post-purchase evaluation. Increased public access to internet and an explosion in the variety of mediums through which they utilize (e.g. Smartphones, tablets, laptops, etc), portability, speed and ease of accessing information online has increased rapidly.

Therefore it is witnessed general public's trend of following online reviews has increased greatly in the past few years. Further Stephen and Galak (2010), concluded that given this increase, the number of online review sites, forums, and community pages has amplified too, with e-WOM being created in larger volumes in comparison to its traditional rival: company-produced advertising.

The reason behind this increasing trend, ACNielsen (2007) suggests can be the fact that a great group of consumers take online opinions to be as truthful and reliable, while Ghose and Ipeirotis, (2007) found eWOM as being more helpful, given people are able to find richer and more varied information, that can be easily relatable to them, after all it is posted by people just like them i.e. it is User-generated.

The reluctance to buy, possible issues and perceived risks are seen to be all mutually shared. Thus concluding, these recommendations and opinions provided by people similar to the consumer are considered as a more an effective force in influencing the overall purchase intention.

It is also able to do this more effectively, as many previous studies have proven that e-WOM has more impact than advertising (Trusov et al., 2009). It has been witnessed, consumers might consider themselves to be overwhelmed by too many advertising messages, so they actively avoid them, eventually advertisement's effectiveness decreases (Hann et al., 2008). In addition, some authors, likes of Stephen and Galak (2010) argue that eWOM is able to disseminate information more continuously than advertising is able to.

As a result of finding eWOM more reliable, consumers begin to anticipate receiving (at least) the same product. And these raised positive prospects of receiving a product, increases their chances of actually buying it. In simple terms, if the review gives 5-stars to a product, that has been outlined by the consumers an option for buying, the review will help him/her finalize their decision to eventually buy it or their willingness to buy it will increase.

On the other hand, if the consumers receive negative information about their product of choice, their expectations with the product or service will fall, and so will their willingness of purchasing it.

This improved purchased intension have also been found as a contributing factor towards people's willingness to eventually share their opinion/experience about the product with other potential buyers online, following their purchase and usage.

Following the purchase, while the information-recipient/seeker experiences the product themselves, they might draw comparisons –without any conscious effort- between the info they had received in form of eWOM and their own perception of the product (based on its usage). And if so, both of them match, the information seeker is likely to develop a stronger relationship with the information providers, and with this they become more willing towards sharing their own opinions and accounts of the product.

Ultimately, like a circle being completed, the roles change and these information “recipients” become the information “providers” who part their useful knowledge with other new seekers online.

### **eWOM and mobile industry:**

Quite frequently, when intending to buy durables people often look up professional reviews or general user's comments on online platforms such as social networking sites, product-specific forums, blogs - especially when on the market for cell phone. Nowadays, when prospective consumers are looking to buy a new phone, any search they do in regard to their upcoming purchase, they have developed the tendency to seek support over the Internet more than ever before.

General trend suggests, the extent of cell phone related information sought by consumers online depends on various factors including type, brand preferences, price, purpose of their purchase, etc. In case of high-end Smartphones, customers research their options more thoroughly compared to the lower-to-moderately priced cellphones: feature phones; as in feature phone's case, the purchase is not often preference oriented, rather is more purposeful.

While keeping mobile phones, as the product category this study will be directed towards finding the extent to which consumers are willing to adopt e-WOM, early in their shopping process and what factors make the available online information persuasive and reliable. In short, its influence on consumer purchasing decisions.

Great extent of literature targeting the efficiency of eWOM over purchase choices has been materializing in the past recent years, however, the scope of these published studies is rather broad and is mainly dedicated towards discussing eWOM in relation to market and firms level effects (Davis and Khazanchi, 2008), whereas this, study centers more on the individual level analysis of how these user-generated reviews (eWOM) affect individual's purchase decisions and on what criteria they are judged as persuasive i.e. which message components individuals utilize to judge eWOM and adopt it.

### **Internet and eWOM in Pakistan:**

Since the late 1990s, the internet has become one of the most important communications and in so doing, its influence over consumer decision making has grown almost too imperative to ignore.

According to Dellarocas (2003) it has brought about a word-of-mouth revolution. The internet based eWOM has become increasingly popular all around the world and the rapid spread of the internet has enabled consumers to use online communications like social media sites including Twitter, Facebook and Instagram, email lists, website bulletin boards, User net newsgroups, chat and blogs, among others to extend their post-purchase experience.

Individual networks of internet-based interpersonal influence have expanded rapidly. Millions of individuals engage in a large exchange of information concerning their

experiences, recommendations and opinions regarding almost every kind of product and services, every day.

Just like other countries, Pakistan has also been exposed to the phenomenon of online purchases and online information sharing in past couple of years. And the trend of using internet in purchases decisions has been rapidly increasing among Pakistani consumers.

According to Pakistan Internet Usage Survey 2013, there are over 20 million Pakistanis with access to internet now and it is a number which is still growing rapidly. Pakistan's growth rate of internet users is second highest in SAARC countries in accordance with its population, standing at 16.8%. Moreover, according World Bank statistics for the seventh month of year 2012, Pakistan internet users showed double-digit growth from last 5 years: Increased from 10% in 2007, to 16% in 2013. While for the current year 2016, Internet Live Stats accounts Internet penetration rate at a total of 17.8%, with a growth rate of 9.7% since the last year's, and with approx. 34,342,400 Internet users.

The internet users' growth rate is on the increase through the services of broadband internet and mobile phone services (including 3G and 4G). Also addition of economically priced Smartphones has been enormously helpful towards an increase trend of both, buying online and seeking product related information online.

Pakistan is home to one of the largest mobile subscriber foundation in the developing world – if not globally. To quote support: Pakistan Telecommunications Authority (PTA) have published that there are more than 97.3 million mobile subscribers in Pakistan – a figure that translates to more than 59% of the total population, and over 100% of all qualified potential subscribers.

**Research Questions:**

1. What are the characteristics define the consumers who use eWOM as source of gathering product related information?

Personal factors such as age and gender, of the respondents of the study

2. What percentage of people are familiar with the online review forums and sites (or channels)?

This question is added to view what extent of consumers have an experience or have a knack for searching information online before buying their mobilephone in the past.

3. What are the general information sources utilized by consumers to search more about products and services?

This question is added to shed light on to what are the main sources of informational support that is sought by consumer in case of making purchases.

4. For what purposes individuals generally seek eWOM?

What knowledge aspect is most important to them or what are the basic motivations behind seeking user-generated online product reviews and recommendations on various avenues, including review sites, Facebook, Instagram, Twitter, Youtube, etc.

5. What sources influenced the choice for current mobile?

This question presented 6 options to the respondents with a Likert scale measurement. The options were a) In-person conversations with family, friends, peers, or other, b) Online reviews/comments in general (e.g. Facebook, groups/pages), c) Online reviews posted to Mobile-specific review websites or Tech-Review channels on Youtube, d) Online reviews posted on Official Corporate websites (e.g. apple.com, etc) and e) Sellers and dealers at the mobile shop.

**Area of study**

The study falls under the discipline of product/brand related user-generated content and electronic word of mouth.

**Thesis Time Horizon**

Like a characteristic master's degree thesis work, this research work was time constrained and, accordingly, I had to resort to short-term study instead of adopting a longitudinal approach.

**Thesis Time Scale**

From February till March first 3 chapters were done comprehensively. At the end of April 4th chapter was completed. In May data collection commenced. Till end of May discussion was completed.

**Limitation of study**

The limitations of the study are as follows

- The study only focused on one product category, a technological product: mobile phones, thus the results are limited to that.
- Only Karachi internet users were chosen as the population, thus generalizations can be made for the whole of Pakistan.
- Under the reliability tests, we witnessed that Information Quality had received a seemingly weaker individual reliability score.

**Prospects of further research**

There is a lot of scope for research in this topic as this phenomena of eWOM usage is still relatively new in this region and there is a large gap when it comes to its usage in commercial section in Pakistan.



**Ethical considerations**

As the proposed research includes involvement of participants, ethics approval was obligatory. According to Veal (2005) some of the probable ethical issues that can occur in this research contains the following mentioned points:

Ethical concerns in selection: Participant's proof of identity and selection, such as how many participants are going to be involved, who are the participants, how will the researcher identify and choose the potential participants. How long will it take for the participant to be involved in this project, would participant identity stay anonymous etc.

Ethical issues in Data collection: How will the data be collected, what methods are used whether the data collection is done by legit methods or the data is not genuine or tampered with.

Ethical issues in participant risk and safety: Example is there any risk associated with the participant safety etc.

## **CHAPTER 2:**

### **LITRATURE REVIEW**

The first section of this chapter will define in light of the reviewed research papers: the nature of WOM, electronic word-of-mouth (eWOM) communication, and discuss the factors that have been identified, in previous researches, as being influential in case of eWOM and its adoptability.

These constructs which are defined as the “Variables” are related to all 3 elements of eWOM communication: message, receiver and sender; and adapted to measure eWOM adoptability along with its influence over consumers’ purchase intentions. Factors mentioned include source credibility, information quality, overall risk, consumer motivation/attitude and the positive/negative valence of reviews.

This section is then followed by present brief accounts of all the researches that have been conducted, based on eWOM. The researchers are divided between Market level analysis and Individual level analysis.

Word-of-mouth has been defined by Arndt, (1967) as the verbal, interpersonal discussion concerning a brand, product or service, between party “A” that is the receiver and party “B” who is the communicator. The communicator is identified as non-commercial by the receiver.

Overtime though, with the advent of the internet, this process of sharing opinions and recommendations have evolved into having an online existence that the researchers now denote as Electronic WOM (e-WOM). Hennig-Thurau (2004) describes eWOM communication simply as “to any positive or negative statement in regard of the product, service or brand, made by actual, former or potential customers over the Internet”.

Through the Internet and related technological modernization, people are able to interact with each other and share their opinions about products without restrictions on an increasing number of online sharing platforms that are now available, such as Facebook's Product and Shopping centered Groups and Pages, and consumer review sites and blogs, etc which makes sharing personal opinions and experiences more far-reaching and significant. Resultantly, leaving the Internet indeed as a prolific ground for the development of electronic word-of-mouth (eWOM) communication.

As per Fong and Burton (2008), Internet allows individuals to provide product related information and feedback to many others by means of using any of the various online methods, to provide "written" form of eWOM which has greater credibility compared to firm created promotional or informational material online.

Chatterjee (2001) claimed that consumers are able to pass on information faster through the internet and reach further than just the local community as compared to traditional means like WOM, which lacks the same level accessibility and high reach. Similar to this, Dellarocas (2003) corroborated that as eWOM messages come about from plentiful old or current users, who are able to evoke richness and truthfulness in their account of provided product related information (that too without any kind of commercial partiality) making them more reliable when it comes to making important purchases, whether digitally or physically.

eWOM generally comprise of product reviews, recommendations and ratings. A typical site may present at least these 3 diverse sources of information and influence. First, comprises of user-generated reviews which discuss experiences and opinions related to products, etc.

Otterbacher, (2009) mentions the second source as ratings which come into being after the review itself is evaluated by possible readers; which are compiled and displayed as aggregate ratings for yet other individuals, who find it as an additional helpful feature.

Third, online review sites or forum generally include section that presents comments made by former users, says Willemsen et al., (2011). These users who already having read the review and utilized the product that the review is about, are able to make verbal statements based on their own experiences that may indicate their agreement (or disagreement) or satisfaction (or dissatisfaction) with the presented original review.

Recent years have seen a great extent of emerging literature that have a rather broad scope and is mainly focused towards evaluating eWOM and its uses from the market and firm's viewpoint. Such Market-level analysis studies the impact of the eWOM phenomenon on commercial product parameters such as the product sales and eWOM effect on revenues, etc. (Davis and Khazanchi, 2008).

Park et al. (2007) research proved that online reviews resulted in an increased purchase intention within customers. Duan, Gu, and Whinston, (2008) substantiated the positive correlation between number of online reviews (that are written) for a given product and its sales. And Clemons et al. (2006) pointed out that online consumer reviews act as source of unique ideas that in result give rise to new products innovation and diffusion.

Stauss (2000) conferred over the probable troubles and potential for a business that have come into being via customers vocalized evaluations online. ACNielsen, (2007) study survey identified online opinions to be seen as more trustworthy as any of the other provided brand or formal corporate web sites. Rowley (2001) also proposed that it will be more beneficial for the commercial enterprises to try organizing consumer communities over the net, rather than just to focus on advertising.

Longart (2010) concluded that eWOM carries the abilities to play out either way for the firm: help gain additional advantages or cause repercussions for the firm. Reynolds, (2010) supports the widely supported view of eWOM's easier and faster transferability of knowledge, and further adds that when positive conversations on online forums reach people swiftly, they result in a form of almost free advertising for the firm, increasing brand recognition, and augmented sales, etc. On the same front, McCarthy (2010) proposed that negative eWOM, on the other hand, can set in motion a pricey or even lasting damage to firm, either in profits or reputation wise.

Jan Kietzmann and Ana Canhoto (2013) analyzed how a certain type of user-generated content (for e.g. on Social Media sites) when shared with the firms themselves or about their products, can be particularly important to them in issues especially pertaining to marketing/brand management.

Lesser but rich anyway, exploratory, descriptive and experimental researches have been conducted to study the factors that make eWOM helpful and be adopted, from an individual/consumer's viewpoint. Cheung, Lee and Thadani (2009) conclude that this individual-level analysis, mainly focuses on studying eWOM as a process of information exchange between a sender and a receiver can alter receiver's attitude and the eventual purchasing decision.

Such consumer-to-consumer based studies analyses the a) motives behind engaging in the act of sharing and reading product ratings and recommendations available online and b) consumers' responses to these eWOM messages (Park and Kim, 2008).

Hennig-Thurau and Walsh (2004) conducted a revolutionary exploratory study that observed and outlined motivations that causes in people a desire to engage with consumer-generated product reviews and recommendations online forums. The study mapped 4 key reasons: (1) In quest of help, for commercial motives or personal want; (2) thinking for others and looking for social advancement; (3) altruism, wanting to only aid others and (4) multiple reasons relating to self-expression.

eWOM is responsible for important influences over consumer's buying choices- i.e within the whole decision-making process. First, pre-purchase stage may be targeted towards information search, option evaluation and risk reduction. Whereas, post-purchase stage may include information search related to the product usage or under post-purchase 'evaluation' stage; both the content or unhappy usage experiences may inspire consumers to vocal their thoughts and experiences online. Table.1 outlines various motivations that can influence consumers to take part on eWOM.

Similarly, the effect of eWOM adoption on loyalty and value associated with a given product, were explored by Gruenet al. (2006). Their concluded findings recognized a significant relationship among overall perceived value of the products and its related information exchange online; however their work does not support the repurchase intention i.e. loyalty among consumers.

<b>MOTIVATIONS</b>	<b>Pre-Purchase</b>	<b>Post Purchase</b>
Inclined towards diminishing risk associated in online shopping	✓	
Curiosity associated with new, novelty products and to know about what the opinion leaders think of them	✓	
Diminution of the time spent to search or to find the desired product to purchase	✓	
Increasing knowledge about the new offerings in the market	✓	
To determine the brand status of the products in the society	✓	✓
Find directions to use products	✓	✓

Source: Hennig-Thurau and Walsh (2004)

### **Variables/ Constructs**

eWOM's effectiveness have been discussed and proved by a large section of past literature; it has been seen as to successfully diminish the risk associated with the purchase, help consumers by providing non-commercial product pros and cons, provide real life product experiences of former users and all this through an easily assessable source: The Internet.

But one needs to consider what are the factors that may enable readers/seekers to be persuaded enough to read/watch a eWOM information piece online, utilize its benefits and implement it over their own purchase decisions. This aspect depends on certain key factors and parameters that relate eWOM itself: message (review), receiver (consumer) and sender (author) together.

The considered factors and parameters that make a message influential includes: Chevalier and Mayslin (2006) have put forward the positive (vs. negative) user-generated descriptions of products. Whereas, Liu (2006) proposes the sheer volume of product reviews as an attributing factor. Research conducted by Forman, Ghose, and Wiesenfeld (2006) also shows that author's characteristics or those associated with the source of the review shape consumers' perceptions of products.

Willemsen et al. (2011) in a research based on eWOM message features, outlined factors including argument density, its ability to affect (valence ) and the reviewer's expertise as essential message aspects that affect eWOM adoption while, Steffes and Burgee (2009) regarded Homophily as an important factor for eWOM adoption associated with the author/sender. Homophily is described as the degree of similarity that exists between pairs of people which may exist in their age, education, gender or social status.

Lin et al. (2011) discussed that information quality and consumer opinion, (attitude and perception towards the purchase and eWOM and awareness of the product) together shape consumers' perceptions of products.

Much recently, Yang Shuang( 2013) analyzed the people's stance towards eWOM adoption by studying the psychological process of selecting, absorbing and applying eWOM information, while keeping information quality and source credibility as the two precursors of online information implementation.

Considering the above listed researches and various others proposing the factors, certain most-often discussed constructs/factors can be distinguished.

### **Source credibility:**

Literature has shown that strong ties in communication are more influential than weak ones (Brown and Reingen, 1987). However Chatterjee (2001) established that under the non-traditional WOM, eWOM, as the info exchange occurs between strangers online, weak ties prevail far more usually compared to strong ones. Further, O'Reilly and Marx (2011) declared people are more likely to adopt and adhere to eWOM shared by impersonal sources online, as searching online is almost close to being effortless now, far easier than offline.

While, consumers are generally inclined towards to adopt information from an unknown source online, sources credibility impacts their decisions significantly. Source credibility is described by Petty and Cacioppo (1986) as the degree to which the readers views (and rates) the sender/source of the information as believable, capable and honest.

Zhang and Watts (2008) suggested in their works that credibility in eWOM situations can be conveyed to the consumer by offering background information about the author of the review. This can be for instance done by presenting a sort of a credibility profile.

A large number of researches outline that previous reader's evaluations impact a new readers' attitude towards adopting the review greatly; these evaluations displayed as ratings show how the source is seen by the overall reader community and thus help decide a new info seeker to assess the competence for himself (Eysenbach, et al, 2000; Price, &Hersh, 1999).

This virtual respect and credibility of individuals or the sites itself, says Ba and Pavlou's (2002) have been proved to have substantial influence on attitude towards eWOM and its eventual implementation.

Hovland and Weiss (1951) via their research established that higher the credibility of the source is, higher are the chances of the receiver of finding the message persuasive and subsequently adopt it. According to the conclusion presented in his study Chaiken (1980) said, message adoptability largely depends on its source credentials and given the source characteristics are positive and convey trust, individuals are more likely to adopt the message.

Cheung; Lou ;Sia; and Chen (2007) emphatically studied and substantiated the effects of normative and informational elements (including ratings, review consistency and argument strength) on the overall perceived competence of the reviewer.

Source credibility depends most importantly on what the readers believes as the source's perceived intent/intension for providing the review. Schiffman et al. (2008) found out that message sources are more likely to be perceived as credible when they are less likely to benefit or gain commercially from communicating the message. Similarly, Phelps et al. (2004) stated a message with a perceived negative intension is most likely to have lower source credibility.



Li and Du (2011) emphasizes that a reviewer's popularity makes them more respected and influential; this fame status of the source basically thus influences its credibility. These reviewers are considered to have richer understanding and seen as innovative.

In short, source credibility makes consumers have familiarity and confidence on the reviewer and his/her provided review, which increases its influencing ability.

### **Information Quality:**

According to Rieh (2002) quality enumerates to the measure of truth and excellence of the provided information. eWOM with high-quality represents information that is clear, extensive and dependable, and the enough to aid consumers in their product evaluations properly.

Mudambi and Schuff (2010) outlined review detail and depth as in important, positively related factor for eWOM adoption. In a given situation where a consumer may have strong inclination towards buying a product, but still lacks proper product evaluation decision, here a well-detailed review will immensely aid the consumer by providing the required pros and cons and in making the eventual purchase decision.

Pan and Zhang (2011) suggested review depth and length is also a considerable factor for evaluating reviews. Lengthier reviews are considered more convincing and persuasive, compared to shorter ones and thus are said to have higher quality. Such good quality product recommendations and reviews basically present product features and functions in detail; the author may also include his personal experience in the review which improves its quality further, and facilitate consumer in deciding their purchase.

### **Overall perceived risk:**

Perceived risk enumerates to the uncertainty potential buyers have in regard of a possible unpleasant consequence that may have to be borne by them in case of a product purchase. As risk aversion is one of most common the human instincts eWOM is often sought in order to assist them to successfully curtail down this risk and uncertainty at pre-purchase stage.

Mitchell, (1992) discussed a similar facet in his study: consumer's purchase decisions are significantly affected at every stage, by the extent of risk felt by them. Higher the number of purchase options, higher the uncertainty levels, which then these people try to reduce before the final choice is made.

Cunningham (1967) argues that high risk perceivers have a higher tendency to seek. Additionally, such consumers predominantly seek more negative comments about the product.

Cunningham (1967) further suggests perceived risk has two main defining components which are namely: that uncertainty and consequences and these two factors represent five probable losses: physical loss, performance loss, financial loss, psychosocial loss and time loss.

Many of the researches have also divided the associated risk with the purchases between the inherent risk and handled risk. Inherent risk represents natural risk that consumer perceives in relation to a product itself. It attributes to being more of a serious kind of risk that can be avoided by being cautious while making a decision. Inherent risk is developed through the extent of importance a particular purchase decision holds in the consumer's mind or even with any apparent dissimilarity of that exists within product price or functions.

For example, consumers who are more price sensitive are more cautious towards making their final choice when buying an expensive mobile phone. Such kind of purchase decision comes with the risk in form of loss of money and performance. The inherent risk of associated with buying an Apple iPhone will be way lesser than buying a Lexus car mainly due to the difference that exists between the life of each of the respective purchases and the amount of money involved.

Whereas, the handled risk enumerates to that inevitable risk that comes with all kinds of purchases. It also depends mainly on consumer's perception of the purchase. Handled risk may differ among various kinds of consumers. For instance such a risk will be much lower when the consumer has had past experience with the product or brand itself. Gupta and Harris (2010) stated that when the consumers have previous experience as a key evaluation point, they are more likely to use eWOM, all done in order to reduce the risk of purchase.

Past experience, familiarity and even loyalty can reduce handled risk associated with the product and it can further be reduced through information search.

The third type of risk classification is done on the bases of differencing between a good and a service. In comparison to buying product, buying services purchase surrounds higher uncertainty (Mitchell and Grottel, 1993). This is proposed mainly due to its 4 main characteristics of services: Services are inseparable, they are intangible in nature, they are perishable, and they encompass heterogeneity.

To quote an example here, Jalilvand and Samiei (2012) have discussed that the impact of eWOM is especially strong in the tourist industry. This is mainly due to the intangible nature of tourism services which cannot be appraised before availing the service itself. For this it offers higher risk and leads to consumers to seek and adopt eWOM more before deciding on their touring destination, causing an overall increase eWOM influence.

Park et al.,( 2007) suggest for prospective tourists an online travel review can help them provide not only the needed information it also offers recommendation to them, this way tourists may learn more about it and lessen the associated uncertainty.

Recent research's scope for perceived risk is basically studying its influence on the act of buying on the Internet. Given the non-existence physical touch or seeing the product, eWOM acts as a natural cushion to fall down onto. People use eWOM as a source of support and comfort which naturally increases the level of confidence in the purchase.

As per Hu and Liu (2004) most commonly reviewed product categories are mobile phones and mobile phone providers or other technology items. Others include airline companies, restaurants, wines and travel resorts.

In the current study, the product of the choice is mobile phones which are generally expensive commodity to purchase, and thus carries higher risk (Gupta & Harris, 2010). This will help support the hypothesized scenarios of this study, considering that being an expensive product category, the willingness to adopt the review message will be higher due to the exposed nature of these purchases to financial loss risk, performance loss risk, etc.

In traditional WOM, it is often challenging for consumers to evaluate how credible the person and the information that he/she share is, in eWOM however, source can easily be traced back. Considering this it is therefore inferred source credibility, information quality (eg. Reviewer expertise and length) seem to play significant roles for consumers when determining whether they will adopt a eWOM or not. Furthermore, perceived risk toward a product is also considered a significant element of eWOM adoption.

**Hypothesis:**

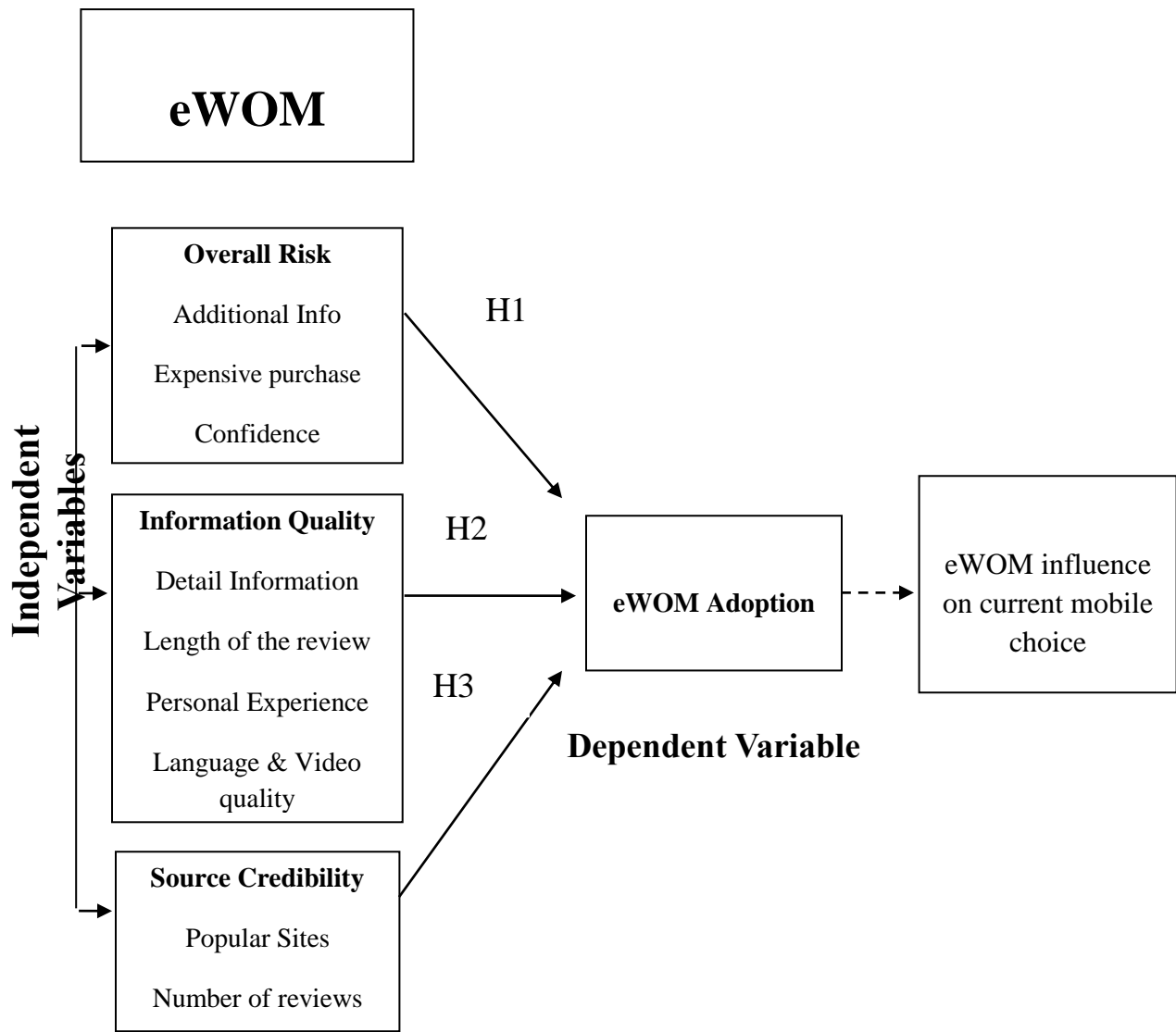
From the above discussed researches we can develop the following hypothesis:

**H1:** eWOM has a noteworthy effect on decisions pertaining to high risk perceived purchases.

**H2:** High information quality facilitates consumer to have a positive inclination toward adopting eWOM.

**H3:** Information from a more reliable and high credible source results in positive eWOM adoption.

**Conceptual Model of current study:**



**Figure 1** Conceptual Framework

## **CHAPTER 3:**

### **RESEARCH METHODOLOGY**

#### **Overview:**

The main purpose of this study is to form the bases of a reasonable view on how eWOM, a new technological communication medium is viewed as being adoptable in Pakistan, a developing nation.

While keeping the general phenomenon that consumer are more likely to adopt eWOM or form their purchase intensions based onto it, only when they consider the eWOM message as persuasive as the traditional WOM or advertisements. They can either find it attractive and enticing if they find it likeable, truthful, and relatable on a personal level.

Thus, in order to study the extent of eWOM effects efficiently, the current research design was kept as correlational, explanatory research in order to the underline factors on the basis of which consumers generally evaluate eWOM, using primary data (type) collected via survey method.

#### **Research design:**

This study focuses on developing a realistic view of the relationship between the aforementioned variables and eWOM adoption.

A prominent sum of modern studies have used secondary data gathered from various sources and databases on the internet to study the current topic. This secondary data is then used to make deductions from the actual observations gathered through methods such as panels and surveys. For instance, Clemons et al. (2006) through studying the secondary data found that the strength of the most positive of reviews and its variance of ratings have substantiated impact over the increasing trend of eWOM adoption.

Whereas Walther et al. (2010) suggests approaching the challenge of eWOM adoption by categorizing sources based on their relationship to the consumer and then applying traditional theories collected via secondary data with explaining the possible impact. One of such theory that he states is the Congruity theory that deals with how a consumer's (who is basically the receiver of the eWOM) attitude varies based on how good he/she considers the source of that eWOM.

This study however adopts a correlational design, specifically an explanatory research to establish the existence and direction of the relation between the selected variables and eWOM adoption. This will be undertaken in the only form of a survey- a primary data- type- which will then be analyzed quantitatively, using SPSS.

### **Population and sampling size:**

Given population of study chosen at the start was the Pakistan, all consumers within it cannot be randomized due to the population dispersion all around. Hence, this study adopted Convenience Sampling Technique as the most appropriate and feasible sampling technique. We drew a convenience-sample out of the population, also because of the ease of data collection and sample selection that it brings (Diffley, et al., 2009), and also due to the limited time frame we had to work with.

As a result, the target population of individuals between the ages of 18-41 based in Karachi was decided on; this sample was selected while keeping the prerequisite of: individual's experience with different online consumer discussion sites and mediums in relation to mobile

The reason of targeting this age group is the increasing trend of internet access and usage and a high online community and networking involvement among them, either for pleasure or academic reasons. Thus given the trends, we were inclined to believe such individuals are exposed to eWOM and have some sort of understanding of it.

In addition to that, as the study is objective towards studying the eWOM impact on cellphone buying, individuals who own cellphones and have had experiences with making their choices after a certain extent of prior research was also an important criteria while defining the target population. These conditions were adopted in order to ensure that respondents were able to understand and answer the asked questions easily and efficiently.

purchases, in order to maintain realistic grounds for obtaining real field information.

A sample size of 300 and above respondents was derived, while keeping the users of Internet in Karachi as the population.

### **Research instrument:**

According to Vermeulen and Seegers,(2009) there have existed heavy literature based on the power of eWOM, and most of it falls under the category of Survey based researches, under which respondents were inquired to provide information regarding the impact that the online reviews have on their purchase decisions.

A Survey method with structured data collection was applied under this study, for obtaining information through questioning respondents. To reach the correct sample a survey was conducted online over a span of 2 weeks, which only commenced after a 3-day long (time constraint) Pre-testing of the questionnaire itself online.

Pre-testing allowed us to refine our questionnaire and as result certain items under Source credibility and Information quality were combined or removed. This was done for the questions that brought forward incomplete responses (which shows lack of coherent meaning in minds of the respondents). After the changes, the questionnaire was disseminated largely using social networking site, features like “Facebook Group” especially developed for sharing reviews, opinions and online buying were heavily utilized.

Groups included were: *Sheeops*, *Question Updates*, and other *Technological SWOT groups*. Prerequisites of filling the questionnaire were mentioned at the start e.g. “*Respondent has to be aged 18-41 and should be a citizen of Karachi*” in order to prevent respondents outside the sample. In addition to Facebook, circle of family and friends were contacted using WhatsApp and Facebook. Further data collection was also carried out physically via a self-administered questionnaire in Bahria University Karachi campus.

The questionnaire’s items themselves were derived using two of the recent eWOM adoption based studies: Wu, Mei-Hsin (2014) and Lehmann, Whitney S. (2015).The questionnaires were adopted together and implemented for the current study which focuses on mobile phone



purchases. The items were designed with a five-point rating scale (from 1 strongly disagree to 5 strongly agree) to measure the 4 variable of the study, with additional descriptive information questions e.g. *“What are the main purposes for browsing online review sites?”*.

Each variable construct (e.g. overall risk, source credibility, and information quality and eWOM adoptability) was measured using multiple items.

### **Questionnaire design:**

The survey questionnaire was divided into five separate sections. Section one was designed to gather Demographics, their current mobile phone price, their general sources of product information; and to identify whether the respondent has had experience with Mobile based eWOM in the past or not, a “Google Form Filter” was added to ensure people marking a “No” were taken directly to the end of the questionnaire, and were not asked to fill the form further.

The following section was designed to gain insights into the reason people use the online review sites, people were asked to choose all those apply among the six provided options (with a limit of 3 options). This section also included question asked to gather what forces impacted their current mobile purchase.

The next three sections of the questionnaire were designed to gather information related to the variable of the study; to gather data to test the recognized hypothesis of this study.

Statements like *‘I tend to read what other users of product has to say about the product before I purchase it.’* and *‘I believe online reviews are helpful in reducing riskiness of making an expensive purchase’*, etc. were included for each of the 4 constructs which were to be rated on a 5-point Likert scale.

### **Data Collection technique:**

To collect the data, we used both face-to-face and online mediums. Both methods were carried out simultaneously. For face-to-face, a ‘pick-up fieldwork’ technique was adopted. Under this the respondents were handed the questionnaire- provided with all the necessary instructions, respondents were asked to fill it.

Later, the completed questionnaires were collected after 10 minutes. The time frame was enough considering the length of the questionnaire. It was clarified that anonymity of the respondents will be maintained considering name wasn't required, that there were no right or wrong answers, and that they should answer the questions as honestly as possible.

For the online data collection, a web based questionnaire was designed on GoogleDrive and was posted on Social Networking sites.

In all 266 filled questionnaires were received out of which 6 incomplete responses were removed as part of data cleaning to prevent poor quality data impacting the results (Low, Lee, and Ling, 2001) and thus a total of 260 responses were generated and utilized in Data analysis.

## **CHAPTER 4:**

### **DATA INTEGRATION**

#### **Overview:**

Once the data was collected, it was summarized on Microsoft Excel 2007. For the analysis SPSS Version 20 was utilized to test the hypothesis and research questions. The analysis is divided into two parts.

In the first part, the descriptive analyses were conducted to statistically review the research questions: identify respondents' demographic profile; their current mobile phone price range, the general sources that they refer to in case of searching about products, and the general purposes for which they usually refer online review sites.

The following part deals with the testing of the hypothesis. Starting with the reliability tests which were carried out to check internal consistency of the items, and later regression was applied to test individual hypothesis.

#### **Descriptive Statistics**

To collect the data, both face-to-face and online mediums were adopted simultaneously. Out of the total sample, 266 respondents filled the questionnaire out of which 6 incomplete responses were weeded out.

This part first deals with creating the demographic profile. Next, it outlines the percentage of respondents who have had experiences with popular eWOM review sites in Pakistan.

Following that it discusses the factors that are considered by these respondents when buying a mobilephone. This is considered as the type of need or the factor looked into provides a framework for the type of research done online. Finally, the browsing purposes of the respondents are examined.

**Demographic and familiarity patterns:****Table 4.1: Demographic Profile**

		<b>N</b>	<b>%</b>
<b>Gender</b>	Female	155	59.6
	Male	105	40.4
<b>Age</b>	18 - 21	65	25.0
	22 - 25	112	43.1
	26-29	40	15.4
	34 - 37	26	10.0
	38 - 41	10	3.8
<b>Mobile Range</b>	10-20 k	46	17.7
	20-30k	46	17.7
	30-40k	45	17.3
	40-50k	37	14.2
	50-60k	3	1.2
	60-70k	27	10.4
	70-80k	22	8.5
	Above 80	4	1.5
	Above 80k	13	5.0
	Less than 10k	17	6.5
<b>Have used eWOM in Past</b>	No	35	13.5
	Yes	225	86.5

**RQ 1 : Demographic Profile:**

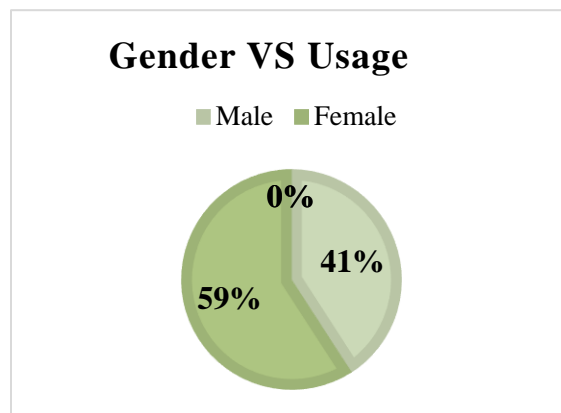
From the above table we can see out of the 260 responses, 59.6% are female and 40.4 % are male. The highest number response 43.1% of the respondents were between 22 - 25 years old, while the least percentage of sample representation is for the age group of 38 – 41.

In addition to confirm the respondents were mobile users, the question for current mobile price range was added, against which the highest number of mobile phones were seen as being in the ranges of 10-20k and 20-30k (17.7%), followed by 17.3% of 30-40k.

**RQ 2: Familiarity and past experience:**

The questionnaire that was asked to fill also included question focused on getting a percentage of respondents who were past users of eWOM, with that also to gage the extent of how many of them were familiar with famous review sites working in Pakistan. Most of the respondents i.e. 86.5% of them answered “Yes”. Yes, that they have used eWOM in past and they have used the reviews listed there as assistance in making their past mobile purchases, whereas, 35 of the respondents (13.5%) were not used to it.

The experience as per gender distribution was witnessed more within the females than males, with 59% (133 out of total 225) of female respondents having said to have past use of eWOM for mobile purchases.



**RQ 3: General sources of information used:**

This question was kept to be filled by all the participants, to evaluate what are the means through which they generally seek information before making their purchases. Bar chart were developed to portray the results for this “Tick-all-that-apply” question (with a limit set for 3 max options).

Conversations with friends was chosen most by the respondents, accounting with a 194 times being chosen, while online review sites came close with the total of 162 selections. The charts shows that the east sourced medium among our sample respondents was Televisions (64). Figure 4.1 represents the summarized results:

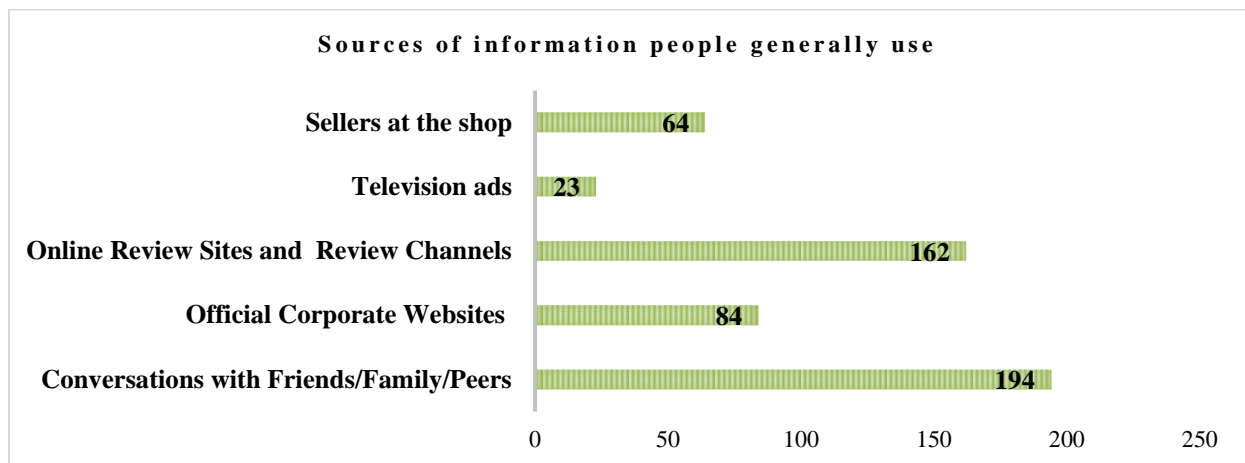


Figure 4.1

Sources of information

**RQ 4: Main purpose:**

Once respondents were asked about their past experiences with the mobile review sites in the previous question, they were followed with a question targeted toward figuring the reason or the purpose behind it.

Out of the 5 different purposes provided 58% of the respondents suggested that their main purpose of visiting sites were to ensure a perfect purchase choice. Close to this number was 57% of the option to obtain information that would result in “reduction in risk while buying high-end products e.g. mobile phones.”

It was noticed many people i.e. 45.7% believed eWOM or information provided online as being easy and more feasible option to refer to. Chart in Figure 4.2 provides summarized results for all 6 options:

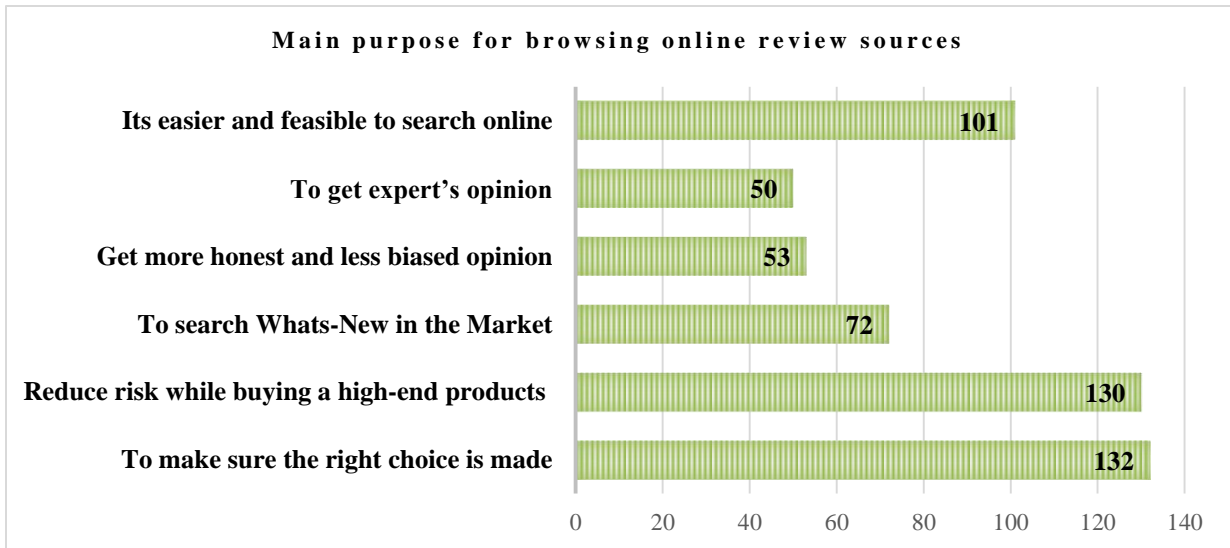
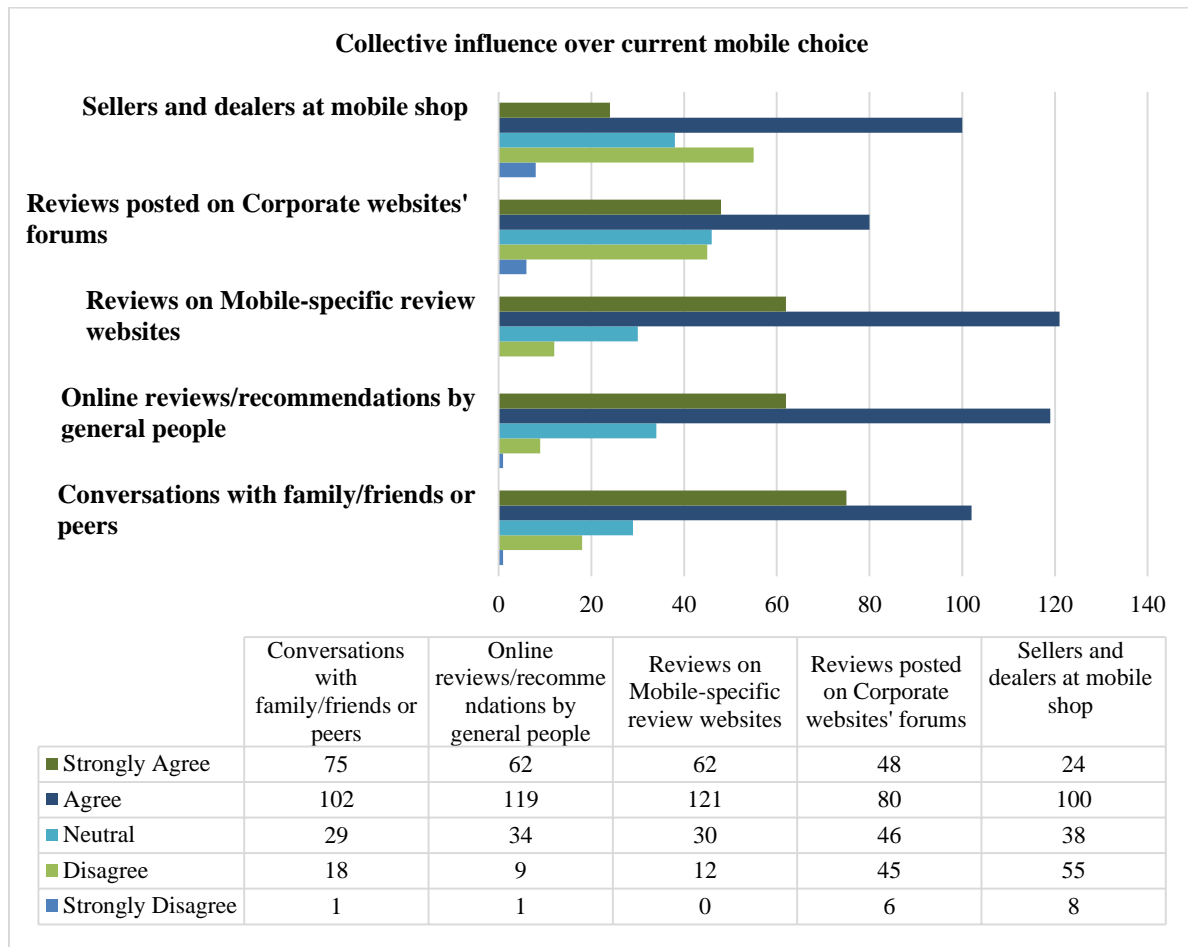


Figure 4.2

Main purpose of browsing sites

**RQ: 5 Current mobile choice**



**Figure 4.3 Influences over Current mobile choice**

The above figure depicts that eWOM comprising of general people opinions and experts' recommendations, both have had the highest impact over the choice of this study's samples, with a highest number of "Agree" received by both these options (119 and 121).

However, Conversations with family and friends have proven to be a strong influence simultaneously on the choice (Strongly agree= 75). So, the above table suggests importance of both eWOM and traditional WOM over mobile choice.



**Variables**

This study adopted and modified 3 different variables from other previous studies to fit the purpose of the current one i.e. measure eWOM adoptability and impact.

Each of the variables, namely Overall risk, Source credibility and Information quality was then measured through specifically formulized questions- “the items” in the designed questionnaire.

Other than these variables, another variable was kept named eWOM, which was assigned as the dependent variable in the study, measured through the extent to which respondents were to adopt eWOM considering the prior mentioned constructs/variables (Overall risk, Source credibility and Information quality)

**Dependent Variable:**

There was one dependent variable in this study: eWOM adoption which was used in all the subsequent analysis. For this 3 separate questions were designed and asked for each of the 3 considered variables hypothetically affecting the overall eWOM adoption.

The analysis below authorizes the statements that eWOM adoption depends upon people’s considerations to the riskiness of the purchase, quality of the review information and the credibility of the review writer. Descriptive analysis for eWOM adoption gained the statistical total of: Mean equaling 27.8933 and Standard deviation of 4.16375.

**Independent Variables:**

Considering the main framework of this study which is to analyze the extent of eWOM effect on purchase decisions and to that we take an approach to first consider the factors on which consumers generally evaluate eWOM which lead them into adoption of it and ultimately affects their purchase decisions.

There were 3 variables in this study that were considered as the evaluating factors that impact the overall eWOM adoption in the customers cognition.

In order to study the effect of each variable together with each of its dimension of eWOM adoption, 'Compute Variable' was used at SPSS to combine each dimension of each variable together to make 3 basic independent variables for the study, with each being measured on a Likert scale.

The table below contains the statistical frequency calculations for each of these independent variables, which shows all the variables are statistically above the population normal of 3.0.

**Table 4.2 Independent Variables Descriptives**

	N	Minimum	Maximum	Mean	Std. Deviation
Quality_Total	225	10.00	25.00	16.7956	3.20476
Risk_Total	225	4.00	15.00	12.1956	2.39735
Source_Total	225	2.00	10.00	6.8978	1.71215

- The statistical figures ( $16.7956 \pm 3.2407$ ) authorize that the people participating in research highly agree with the importance eWOM plays in risky purchases
- The statistical analysis (Mean, and Standard deviation) of data ( $16.7956 \pm 3.20476$ ) authorizes strongly the proposed stance of source credibility on eWOM adoptability.
- The statistical analysis (Mean, and Standard deviation) of data ( $6.8978 \pm 1.71215$ ) authorizes strongly the proposed stance of source credibility on eWOM adoptability.

#### **Reliability: Combined and individual:**

As each of the three variable source credibility, information quality and overall risk was measured with an inventory of 3, 2, 5 dimensions respectively, which themselves were appointed on a scale ranging from -5 to +5 (likert scale), we first made certain that each of the construct had at least the minimally required internal consistency reliability. Cronbach's alpha test of reliability was applied on SPSS.

According to the provided definition of Cronbach's alpha by LaredStatistic, Cronbach alpha is the most common measure of internal consistency or in other words, the reliability of the scale used in the study. It is most commonly adopted when you have multiple Likert questions in a questionnaire that form a scale.

Further, according to George and Mallery (2003), internal consistency over 0.6 is leaves the designed construct study acceptable for the study, while  $>0.8$  are considered excellent consistency. Cronbach's alpha of the current study was ( $\alpha = 0.822$ ) which indicated an excellent level of internal consistency reliability for each variable and proves the adopted questionnaire appropriate.

Reliability of all the measures were tested individually all but Information Quality, were much above the minimum threshold level of 0.6 (Nunnaly, 1978) and thus proved consistent (eWOM Adoption: 0.788; Risk: 0.845; Source Credibility: 0.608). Information Quality which got an initial Cronbach alpha of 0.578.

While there is relatively a low score for Information Quality, we would still consider it for 3 main reasons: it doesn't have major implications on the overall study seeing the aggregate alpha of the study is beyond 0.8 ( $\alpha = 0.822$ ); also the fact the items pertaining to Information Quality have theoretical importance in our study; lastly, many researchers claim eWOM to still be a developing area of research (especially Pakistan based eWOM is still under-researched) and as per Nunnaly & Bernstein (1994) even a lower Cronbach's alpha is acceptable in earlier researches.

**Table 4.3** Descriptive and Internal Consistency of variables

Variable Items	No. of items	Mean	Cronbach's alpha
eWOM Adoption	7	3.985	0.788
Perceived Risk	3	4.065	0.845
Information Quality	5	3.359	0.578
Source Credibility	2	3.449	0.608

### Hypothesis Testing: Correlation

Correlation measures and indicates the strength and direction of the relationship. Bivariate Correlation is conducted to determine whether the dependent and independent variable are linearly related to each other.

As each the dimension was combined to make one main variable, correlation was utilized one by one at SPSS to study relation between information quality, source credibility and overall risk, on eWOM adoption.

**Table 4.4** Correlations

	Info Quality	eWOM	Source Cred.	Risk
Info Quality	1	.536**	.492**	.545**
		.000	.000	.000
eWOM Adoption	.536**	1	.623**	.815**
	.000		.000	.000
Source Credibility	.492**	.623**	1	.630**
	.000	.000		.000
Perceived Risk	.545**	.815**	.630**	1
	.000	.000	.000	

- $r$  = sample correlation coefficient
- Strong: if  $r > 0.70$  or  $< -0.70$
- Moderate: if  $r$  is between  $0.30$  and  $0.70$  or  $-0.30$  and  $-0.70$
- Weak: if  $r$  is between  $0$  and  $0.30$  or  $0$  and  $-0.30$

For the correlation between the independent and dependent variables of the study, with  $p$  value  $0.000$  and thus all signify. Information Quality and eWOM Adoption are powerfully and positively correlated with (i.e.  $r=0.536$ ). Source Credibility and eWOM Adoption are positively correlated at  $r=0.623$ . Perceived Risk is very strongly correlated with eWOM Adoption at the level of  $r=0.815$ .

As for the correlation existing within all the study variables themselves, the above table shows that the significance levels are still  $0.000$  and thus substantiates. Information quality has a moderate correlation with Source credibility ( $r=.492$ ) while a strong positive relation with Risk ( $r=.545$ ).

In short, it is safe to say that when one of the independent variable increases (Info Quality eWOM Adoption, Source Credibility and Perceived Risk) eWOM Adoption witnesses an increase too.

### Multiple Regression

The table below represents the research model of this study i.e. if and in what direction the selected independent variables have a substantial linear relation with eWOM adoption.

**Table 4.5** Regression Analysis

Dependent Variable	Independent Variable	B	Beta	t	Sig.	F	Model Sig.	R	R2	Adj. R2
eWOM Adoption	Constant	9.091		9.757	.000	163.961	.000 <sup>b</sup>	.831	.690	.686
	Perceived Risk	1.150	.157	12.874	.000					
	Info Quality	.127	.098	2.135	.034					
	Source Credibility	.382	.662	3.171	.000					

Multiple regression have been performed above using SPSS and the model is established useful to predict eWOM adoption via all 3 independent variables, with the F stat=163.961 significant at p-value<0.05 and R Square= 0.690. Meaning approximately 69% of the variability of eWOM adoption is explained by the variables in the model- a relatively strong explanatory power.

The coefficients of each of the Independent variables (Column B): Perceived risk, Information Quality and Source credibility are all positive in relation with eWOM adoption and with respective t-stat of 12.874, 2.135 and 3.171 significant at p- value< 0.05.

In terms of unit of measurement i.e. is the B value, 1 unit increase in qualitative factors of product reviews and recommendations would increase predicted eWOM adoption by B=0.127. 1 unit increase in Perceived credibility of a review site or a person reviewing may increase the eWOM implementation by B=0.382 and lastly, 1 unit increase in the overall risk felt by a buyer in a purchase may increase predictive seeking and using eWOM tendencies by B=1.150.

**Table 4.6** ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2679.541	3	893.180	163.961	.000 <sup>b</sup>
	Residual	1203.899	221	5.448		
	Total	3883.440	224			
a. Dependent Variable: eWOM_Total						
b. Predictors: (Constant), Source_Total, Quality_Total, Risk_Total						

The above is the SPSS ANOVA table that proves the regression as valid with  $F(3, 1203.899) = 163961$  with p-value of 0.000 thus substantiating the influence intensity of the model with all 3 independent variables together over the expected values of eWOM adoption.

### Linear Regression: Highest Impacting Independent Variable

**Table 4.7** Coefficients and Regression Summary

Variables	B	Std. Er.	Beta	t	Sig (p)	R	R2	Adj. R2	F	Sig. (p)
Perceived Risk	1.415	.067	.815	20.982	.000	.815	.664	.662	440.249	.000
Info Quality	.697	.073	.536	9.489	.000	.536	.288	.284	90.047	.000
Source Credibility	1.515	.127	.623	11.887	.000	.623	.388	.385	141.309	.000

In order to test hypotheses separately, linear regression analyses were performed (one at a time). Table 4.8 presents the ANOVA for each of the independent variable in relation to eWOM adoption, under simple linear regression. Each variable's F stat: Perceived risk ( $F = 1, 440.249$ ), Quality ( $F = 1, 90.047$ ) and source credibility ( $F = 1, 141.309$ ) are significant at p-value  $< 0.05$ . Thus here as well each independent variable helps predict eWOM adoption.

Table 4.7 represents that coefficients of all variables are also significant with t-stat Perceived risk= 20.982, Information Quality= 9.489 and Source credibility=11.887 at p-value <0.05.

Comparisons within the independent variables were made to see which variable has relatively the strongest relationship with eWOM (comparing the strength of coefficient of all variables with each other). To make these comparisons column Standardised coefficient Beta is checked in Table 4.7.

As Perceived risk has the highest Beta= 0.815 among all 3, it is seen as causing the highest effect over eWOM adoption: 1 standard deviation increase in perceived risk would yield a 0.815 standard deviation increase in eWOM adoption, with other variables being held constant.

Perceived risk also has the highest R square of 0.664 (66.4 %.), meaning 66.4 % of variability of eWOM adoption is explained by Perceived Risk.

On the other hand, Information quality has the lowest Beta=0.697 among all with the lowest R square of 0.284.

*(Full SPSS results for linear regression are provided in Appendixes pg. 57)*

The table below represents a summary of hypothesis result.

**Table 4.8 Hypothesis Result Summary**

Hypothesis	Results
<b>H1:</b> eWOM has a significant effect on decisions pertaining to risky purchases.	Supported
<b>H2:</b> High information quality facilitates consumer to have a positive inclination toward adopting eWOM	Supported
<b>H3:</b> Information from a more reliable and high credible source results in positive eWOM adoption.	Supported

## **CHAPTER 5:**

### **CRITICAL DEBATE**

Studies conducted in this area has mostly been conducted in the West or Far-East side of the world. Considering this existing gap, this study was focused on studying the eWOM phenomenon in the local settings of Pakistan, still a developing nation. This study investigates the extent to which Pakistani Internet Users embrace eWOM and the scope of its influence over their purchase intensions.

This research has examined the relationship between eWOM adoption and 3 constructs that were selected after an empirical study of past literature, with a view of first examining the criteria eWOM is judged by the young Pakistani consumers, aged between 18 and 41.

For the conceptual framework of this study and the testing of hypothesis, data was collected from 266 respondents through an online designed questionnaire. The collected data was assembled at Excel 2007 and was analyzed at SPSS 20.

The descriptive statistics summary of the study represented that most of the respondents were female 58.3% and 42.1% of the respondents were 20 - 25. As for the hypothesis testing both correlation and regression analysis were conducted for the 4 hypotheses.

Regarding to eWOM involvement, findings indicate that overall risk associated with the purchase is a substantially healthy factor for eWOM evaluation and a good predictor of eWOM adoption. The two considered factor source credibility and information quality are significant evaluators of eWOM adoption as well; Higher the source credibility and information quality, more the chances of eWOM adoption. To conclude, H1, H2 and H3 are all supported.

The findings of this current study both fully and partially support that eWOM helps form consumer purchase intensions however the extent to which it is used or adopted depends



upon the evaluating criteria employed by consumers. Conclusion about each of the hypothesis is discussed below.

**Hypothesis 1: Supported.** The first hypothesis suggested that among Pakistani consumer, overall perceived risk is considered as significant evaluating factor of eWOM.

Many studies have empirically revealed that perceived risk plays a critical role in consumers' decision making processes and influence their behavior. Since Bauer (1960) first launched the concept of perceived risk, many studies have used it in different concepts to examine its relationships with customer behavior. O'Connor (2008) believes information search is a common strategy adopted by consumers in order to reduce the risk associated with a purchase decision.

In order to effectively measure the credibility of this variable as an evaluating factor of eWOM, exemplary responses acted as the dimensions of Risk and included 3 of the following: 1) I believe online reviews are a critical source of Additional information in risky purchases; Reading online review helps to reduce the uncertainty surrounding the purchase decision; 2) and 3) Reading online reviews is likely to increase my confidence in my purchase.

The statistical figures ( $16.7956 \pm 3.2407$ ) authorized that the people participating in research highly agree with the importance eWOM plays in risky purchases.

**Hypothesis 2: Supported.** The second hypothesized statement was related to the significant importance of course credibility in regard to eWOM evaluation. The results were like those of many previous studies who acknowledge source credibility and its significance on eWOM. For instance, Chaiken (1980), who concluded that people are basically more likely to implement an eWOM message even when they can only feel the source as being honest, all rest unconsidered.

Hovland and Weiss (1951) concluded that a source with higher credibility is more likely to be found as persuasive and subsequently adopted by the receiver. Existing literature

identifies source expertise and source trustworthiness as two major determinants to measure the credibility of information (Appelbaum and Anatol, 1972).

In addition to that Li and Du (2011) drew the conclusion that the popularity of an author or the site itself also plays an important role in making up its credibility in eyes of the readers of the review, whereas Shiffman (2008) recognized impersonal source to be perceived more creditable than a personal source of information.

The statistical analysis (Mean, and Standard deviation) of data ( $6.8978 \pm 1.71215$ ) authorized strongly the proposed stance of source credibility on eWOM adoptability.

**Hypothesis 3: Supported.** The third hypothesis evaluated information quality as an evaluating factor of eWOM. The data analysis supported the hypothesized significance of quality as an evaluating factor.

Consumers are most likely to consider quality of the information, including its length, its detailing and also the quality aspects of the language used/video graphics, while eWOM adoption is under consideration.

When online communication mediums are considered, the quality of the information will be a determinant factor of the decision to purchase a product or service. (Cheung et al., 2008).

Mudambi and Schuff (2010) believed that review depth could increase information adoption. A review that clearly mentions all the pros and cons, attributes, and features of the product may incline the reader toward the product purchase.

Pan and Zhang (2011) believed that review length might also matter in review evaluation. Longer reviews are considered more convincing and persuasive, compared to shorter ones.

To examine whether the quality of the information presented in an online review impacts the eventual adoption of eWOM and the purchase intention, 5 dimensions were used in the present study. Out of which 2 of them were adopted from the above mentioned researches namely Detail and length of the review. Whereas, the type (written or video) of review and

its quality level, and whether the extent of personal experience of the reviewer impacts the overall adoptability and purchase intention compared to were considered under this variable in this study.

The statistical analysis (Mean, and Standard deviation) of data ( $16.7956 \pm 3.20476$ ) authorized strongly the proposed stance of source credibility on eWOM adoptability.

### **Research Qs: Current mobile choice:**

Other than the hypothesis testing, one important aspect this study included was to gauge what made this research's respondents buy their current mobile phone. The Table 4.2 (pg. 43) proves seeing both sources of online reviews had made the highest impact, more than seller's opinion at mobile shops and way more than TV advertisements.

Thus, like Trusov et al., (2009) we too suggest that Electronic word-of-mouth (eWOM) has developed into an efficient advertisement type, which individuals use a) to post their standpoints, b) search for product related information online and c) promote their products which all ultimately influences the purchases intentions of consumer. Even those consumers are likely to be influenced by the online posts who do not take an active part themselves by posting comments on it but rather just prefers reading it.

## CHAPTER 6:

### CONCLUSION AND RECOMMENDATION

This study highlights the fact that most of the respondents aged between 18 and 41 have been associated with eWOM sites and has various purposes for their browsing. In addition to that, considering this study specifically dealt with the mobilephone category of product, the study also identified the sources that generally impact mobile phone choice.

Our study, through the help of previous researches, has illustrated that readers, which are basically consumers looking for information, evaluate eWOM on 3 basic factors: that there is significant relationship between eWOM adoption and source credibility and information quality and overall risk and eWOM adoption.

This study shed light on the effects of eWOM on the buying mechanisms and decisions for mobile purchase within Karachi; yet it is to be regarded that this paper has several limitations that pave the way for future researches.

Given the sample participants were selected primarily within one area of the whole population i.e. Internet Users in Karachi; as a result, generalizing the result to independent mobilephone buyers' behavior all over Pakistan may not be appropriate.

Additionally, under the reliability tests, we witnessed that Information Quality had received a seemingly weaker individual reliability score, so in future more items for new quality dimensions can be developed and utilized. Same goes for Source Credibility, more dimensions can be researched and added as items to the questionnaire (even though the reliability score was good i.e.  $>0.6$ )

However the existence of limitations, this study paves the way for many future researches. More diversified sample pool and sampling method for data collection can reduce the extent of such biasness.

An immediate next step could be to a) identify additional factors effecting eWOM adoption and b) identify the impact of eWOM adoption directly in relation with actual purchases made. Or it can also be possible to study actual effectiveness of eWOM: a Pre-purchase and Post-purchase Scenario in Pakistan (Experimental study)

Future research can also aim to analyse how eWOM is being utilized by many of the advertising agencies appointed by major MNCS early in the product diffusion process of their new product offerings in the market. Study comparing both the tradition method of advertising and eWOM would be interesting, considering both are doing thoroughly well in Pakistan, especially with the advent of amazing social media sites including Facebook, Instagram, Twitter and even Snapchat.

Although eWOM may be a new form of advertisement and adoption may not be as high as the developed nations, rising rate of internet, eWOM usage can be utilized by companies as a strong, low priced marketing tool.

Additionally, this study only focused on one product category, a technological product: mobile phones, thus the results are limited to that extent plus it would be interesting to replicate the study using a different product categories, or even comparing between different types of products such as search and experience products (Utilizing new eWOM forums like Facebook SWOT Groups or Reddit: Product Reviews, etc)or a rural-urban are wise study could represent the distribution of internet and eWOM usage all over Pakistan.

**REFERENCES**

Anderson, N.H. 1971. Integration theory and attitude change. *Psychological Review*, Vol. 78 No. 3, pp. 171-206.

Arndt, J. 1967. Role of product-related conversations in the diffusion of a new product. *Journal of Marketing Research*, Vol. 4 No. 3, pp. 291-295.

Bickart, B. and Schindler, R. M., 2001. Internet forums as influential sources of consumer information. *J. Interactive Mark.*, p15: 31–40.

Bronner, F. and De Hoog, R. 2011. Vacationers and eWOM: Who posts, and why, where, and what?. *Journal of Travel Research*, 50 (1), pp. 15-26.

Chatterjee, P. 2001. Online reviews: do consumers use them?. *Advances in Consumer Research*, Vol. 28 No. 1, pp. 129-133.

Cheung, C.M.K., Lee, M.K.O. and Rabjohn, N., 2008. The impact of electronic word-of-mouth. *Internet Research*, 18(3), pp.229-47.

Cheung, C. and Thadani, D. 2010. The effectiveness of electronic word-of-mouth communication: a literature analysis. *23rd Bled eConference*, Bled, Slovenia.

Dellarocas, C., 2003. The digitization of word of mouth: Promise and challenges of online feedback mechanisms. *Management Science*, Vol. 49, No. 10, 2003, pp. 1407-1424.

Gupta, P. and Harris, J. 2010. How e-WOM recommendations influence product consideration and quality of choice: a motivation to process information perspective. *Journal of Business Research*, 63 (9), pp. 1041-1049.

Hennig-Thurau, T., Gwiner, K. P., Walsh, G., & Gremler, D. D. 2004. Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the internet? *Journal of Interactive Marketing*, 18, pp. 38-52.

J A Chevalier, D Mayzlin. 2006. The effect of word of mouth on sales: Online book reviews. *Journal of Marketing Research*, 43(3): 345-354.

Jalilv and Samiei, N. 2012. The impact of electronic word of mouth on a tourism destination choice: Testing the theory of planned behavior (TPB). *Internet Research*, 22 (5), pp. 591-612.

- J D H Park, J Lee, I Han. 2007. The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International Journal of Electronic Commerce*, 11(4), pp.125-148.
- Lee, S., Noh, S. and Kim, H. 2013. A mixed methods approach to electronic word-of-mouth in the open-market context. *International Journal of Information Management*.
- Lehmann, Whitney S., 2015. The Influence of Electronic Word-of-Mouth (eWOM) on College Search and Choice. *Open Access Dissertations*. p1378.
- L'Opez, M. and Sicilia, M. 2013. How WOM marketing contributes to new product adoption: testing competitive communication strategies. *European Journal of Marketing*, 47 (7), pp. 5-5.
- Nunnally, J. 1978. Psychometric theory. New York: McGraw-Hill.
- O'Reilly, K. & Marx, S., 2011. How young, technical consumers assess online WOM credibility. *Qualitative Market Research: An International Journal*, 14(4), pp.330-59
- Otterbacher, Jahna, 2009. 'Helpfulness' in online communities: a measure of message quality. *Proceedings of CHI*, p. 955-964.
- Park, D. H., & Kim, S. 2009. The effects of consumer knowledge on message processing of electronic word-of-mouth via online consumer reviews. *Electronic Commerce Research and Applications*, 7(4), 399-410.
- Park, D. H., Lee, J., & Han, I. 2007. The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International Journal of Electronic Commerce*, 11(4), 125-148.
- Paul C.S. Wu, Yun-Chen Wang 2011. The influences of electronic word-of-mouth message appeal and message source credibility on brand attitude. *Asia Pacific Journal of Marketing and Logistics*, Vol. 23 Iss: 4, pp.448 – 472.
- Schiffman, L.G., Kanuk, L.L. & Hansen, H., 2008. Consumer Behavior - An European Outlook. *Pearson Education Limited*.
- Sharif, Ahmad and Ahmad, 2016. Electronic word of mouth: investigating the influence of electronic message source credibility, message appeal and brand equity on consumer purchase intention. *City University Research*, Journal Volume 6 (1) pp. 151-165.



Themba, G. and Mulala, M. 2013. Brand-Related eWOM and Its Effects on Purchase Decisions: An Empirical Study of University of Botswana Students. *International Journal of Business and Management*, 8 (8), p. 31.

Wang, C.C. & Lee, H.Y. 2005. The effects of source credibility, affection, and involvement in reducing the belief of internet rumors. *Journal of Management*, 22 (3),391-413.

Wu, Mei-Hsin, 2014. Relationships among Source Credibility of Electronic Word of Mouth, Perceived Risk, and Consumer Behavior on Consumer Generated Media. *University of Massachusetts Scholar Works*. Masters Theses 1896, Paper 984

Wu, P. C., & Wang, Y. C. 2011. The influences of electronic word-of-mouth message appeal and message source credibility on brand attitude. *Asia Pacific Journal of Marketing and Logistics*, 23(4), 448-472.

Xiaofen, J. and Yiling, Z. 2009. The impacts of online word-of-mouth on consumer's buying intention on apparel: An empirical study. pp. 024-028.

Y. Shuang. 2013. Effects of information quality and source credibility on EWOM adoption in context of virtual community. *Management Science and Engineering (ICMSE), 2013 International Conference on*, Harbin, pp. 194-200

**APPENDIXES (A-X)**

**Appendix 1: Questionnaire****Factors used for evaluating Online Product reviews and recommendation:  
Electronic Word-of-Mouth (eWOM)****PART I: Demographics**

1. Please specify your gender.

- Male
- Female

2. Please specify your age.

- 18 – 21
- 22 - 25
- 26 - 29
- 30 – 33
- 34 – 37
- 38 - 41

3. What range does your current mobile phone falls in? ( K=Thousands )

- Less than 10k
- 10-20 k
- 20-30k
- 30-40k
- 40-50k
- 60-70k
- 70-80k
- Above 80k

4. Which sources of information do you generally use when researching more about a product, before buying it? (Please choose all that apply)

- Conversations with Friends/Family/Peers
- Official Corporate Websites (e.g., www.apple.com)
- Online Review Sites and Tech Review Channels (e.g., youtube.com, gsmarena.com)
- Television ads
- Sellers at the shop

5. Have you ever read or watched product reviews online before making a mobile purchase, on sites including Facebook, YouTube, and Google?

- Yes
- No

6. What would be your main purpose of browsing online review sites? (More than one can be selected)
- To make sure the right choice is made
  - Reduce risk while buying a high-end products (e.g., mobile phones)
  - To search *Whats-New* in the Market
  - Get more honest and less biased opinion
  - To get expert’s opinion
  - Easier and feasible to search online

**PART II: The following sources of information have influenced your final decision to buy your current phone.....?**

**1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree**

	1	2	3	4	5
In-person conversations with family, friends, peers, or other, have influenced....					
Online reviews/comments in general (e.g. Facebook, groups/pages)					
Online reviews posted to Mobile-specific review websites or Tech-Review channels on Youtube (e.g., Gsmarena.com)					
Online reviews posted on Official Corporate websites (e.g. apple.com, etc)					
Sellers and dealers at the mobile shop					

	1	2	3	4	5
I tend to read reviews written by experts of the field before I decide which mobile to buy. (E.g., Professional Reviewers)					
I see online what common users of product has to say about the product before I purchase it.					
I believe online reviews and recommendations are a reliable information source.					
I believe online reviews are an importantsource of Additional information for expensive purchases.					

If online reviews of a mobile phone are negative, I might <u>AVOID</u> buying it.					
Online reviews help me compare two or more choices and assist in making the final decision.					
I believe online reviews are helpful in reducing riskiness of making an expensive purchase.					
Reading online reviews is likely to increase my confidence in my purchase.					

	1	2	3	4	5
I believe personal experience discussed by the reviewer makes the review/ratings more honest and impactful.					
I believe review pages that have more Likes/following (or more views on YouTube) are more reliable.					
I believe lengthy reviews means a good review.					
I believe review presenting the product attributes & functions clearly, are more helpful and effective.					
I like written reviews better than video-based for mobile phones					
I believe poor use of language or low video quality in a review makes it LESS reliable.					

**Appendix 2: SPSS Linear Regression results:****Perceived Risk:**

<b>Model Summary</b>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.815 <sup>a</sup>	.664	.662	2.41975	.664	440.249	1	223	.000

a. Predictors: (Constant), Risk\_Total

<b>Coefficients</b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.636	.838		12.691	.000
	Risk_Total	1.415	.067	.815	20.982	.000

a. Dependent Variable: eWOM\_Total

<b>ANOVA</b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2577.737	1	2577.737	440.249	.000 <sup>b</sup>
	Residual	1305.703	223	5.855		
	Total	3883.440	224			

b. Predictors: (Constant), Risk\_Total

**Information Quality:**

<b>Model Summary</b>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.536 <sup>a</sup>	.288	.284	3.52211	.288	90.047	1	223	.000
a. Predictors: (Constant), Quality_Total									
<b>Coefficients</b>									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
		B	Std. Error	Beta					
1	(Constant)	16.190	1.255		12.895	.000			
	Quality_Total	.697	.073	.536	9.489	.000			
a. Dependent Variable: eWOM_Total									

<b>ANOVA</b>						
1	Regression	1117.062	1	1117.062	90.047	.000 <sup>b</sup>
	Residual	2766.378	223	12.405		
	Total	3883.440	224			
b. Predictors: (Constant), Quality_Total						

**Source Credibility:**

<b>Model Summary</b>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.623 <sup>a</sup>	.388	.385	3.26492	.388	141.309	1	223	.000

a. Predictors: (Constant), Source\_Total

<b>Coefficients</b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17.446	.905		19.269	.000
	Source_Total	1.515	.127	.623	11.887	.000

a. Dependent Variable: eWOM\_Total

<b>ANOVA</b>						
		Sum of Squares	df	Mean Square	F	Sig.
	Residual	2377.120	223	10.660	141.309	.000
	Total	3883.440	224			

b. Predictors: (Constant), Source\_Total