## A STUDY ON

## VALUE CREATION THROUGH CONSUMER ENGAGEMENT WITH SOCIAL NETWORKING SITES

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> BY RAHUL SHARMA

GUIDE DR. RAJESH VERMA

Faculty of Business and Arts Lovely Professional University Punjab

July, 2015

## CERTIFICATE

I certify that Rahul Sharma has prepared his thesis entitled "A STUDY ON VALUE CREATION THROUGH CONSUMER ENGAGEMENT WITH SOCIAL NETWORKING SITES", for the award of PhD degree of the Lovely Professional University, under my guidance. He has carried out the work at the Department of Management, Lovely Professional University.

Dr. Rajesh Verma Management Lovely Professional University Jalandhar-Delhi, G.T. Road (NH-1) Phagwara, Punjab (INDIA) 144411

Date:

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#### ABSTRACT

In a short period of time, online social networking has developed into a sensation, through which a large number of people using internet are linked. For example Facebook which is a widely used online social network in the world has a user base of more than 1.44 billion users. Another online social network Twitter boasts of 302 million active monthly users worldwide. Underlying this popularity of online social networks is the fact that as a media it encourages each member for response. Online social network activities involve user contribution to content creation, which can include simple posting comments or complex activity of recommending content to others. Online social networking websites (OSNS) acts as tools for co-operative communication, enabling information sharing between users. Online social networks provide a platform to construct social relations and linkages among people who share similar backgrounds, interests, activities and real-life acquaintances or even with total strangers. India, with 232 million internet users, is world's 3rd largest internet market and has been reporting a double digit year over year addition to its user base. Moreover, on Facebook, in 2015 India is the world's second largest user base of 101.5 million users. In India, 60% of the active internet users use it mainly for the purpose of social networking out of which majority of the traffic comes from non-metro cities. This highlights that internet is used more for online social networking and online network sites are the places to find majority of virtual users. At a certain point of time, penetration of mobile internet was one of the highest in Punjab (a state of India) i.e.11% as compared to 8.5% of Indian average. Otherwise also in 2014, Punjab was one of the major customer base of internet users with more than 5.4% of the population using internet.

Borrowing from past literature, it was summarized that over the years the usage rate of social media has been increasing both for consumers as well as marketers. A significant number of studies on online social network usage pattern have been carried out in the developed nations but relatively few studies have been completed in India and no published literature was found on studies focused specially upon Punjab. Social network website users demonstrate behavioural differences in usage of such sites due to varying acceptance of social networking services across geographies, so user pattern in terms of frequency, site preferences, time of use, kind and number of contacts, access devices, topics discussed and activities performed etc. was required to be studied for marketers to create tailored options for users of online social network sites and to become more efficient in their targeting activities across different

geographies. On similar lines one cannot ignore the superseding effect of cultural on motivations to use online social network sites. When an effort was made to trace out the user motivations to indulge in online social networking, no supporting literature was found from India especially from the region of Punjab. Given the notion that there are diverse reasons behind online network usage, a gap was identified to study the underlying motives of social networkers in the state of Punjab to use online social network websites. With large of marketers shifting to online social networking sites for promotion of their products, it is of dire importance to understand perceived personality of social network sites from perspective of consumers. No research was traced when it comes to finding the personality of social networking sites in India from perspective of users. Businesses understanding the huge potential of social networking sites have started to make investments in this medium to connect with customers directly and to promote their products/services. A question arising out of this is, does these investments help in creating or sustaining brand advocacies and loyalties, highlighting a need to study momentum effect in relation to advocacy and loyalty towards the brands in social networking sites. Word of mouth in online networks is deemed to depend upon different kinds of social relationships existing between community members. On the same lines considering the population of Punjab, a need is found to reconfirm the association between social relationships and eWOM (electronic word of mouth) in Social Networking Sites. Different types of social network advertisements also call out for the need to clarify whether audience or users of social networks responds to all advertisement types in the same way or user level of liking towards advertisement types differ. Keeping these gaps in mind, six objectives were finalized with an intention to add to the body of knowledge in management education.

First objective was to study the usage pattern of social networking sites among the social networkers across cross-sections of the population. Second objective was about what motivates people to use or become member of online social networks. Third objective of this research was to identify brand personality of social networking sites as perceived by users. In fourth objective the idea was to study whether the momentum effect on social networking sites leads to loyalty and advocacy for brands or not. Fifth objective was to check whether social relationships play a part in virtual or online social networks or not. Sixth and last objective was to study what type of advertisements are preferred by users of online social networks to judge their engagement in term of liking towards the advertisement types.

The present study was a two phased study that started with exploratory qualitative research using focus group to find out what motivated social networking usage and it was followed by extensive quantitative study. For the quantitative study descriptive research design was selected and a total of 1000 social networkers from Punjab were the respondents. For the identification of sample from population under study snowball sampling was used, which is a non-probabilistic sampling technique. Primary data in the form of the response of the social networking site users, which was of immense importance and backbone of the study, was obtained from respondents with the help of widely used and well known method of survey, utilizing fully structured questionnaire.

Findings of this study revealed that consumer engagement is happening over online social network websites. Consumer engagement in virtual world can be observed through the most basic measurement of engagement i.e. user involvement, which in case of virtual networks is highlighted with regular visits by large number of social networkers. Consumer's make repeat visits to online sites because of value derived from different activities that they are performing on these sites. This motivation to use online social network sites has been found to be influenced by need for information exchange, need for entertainment fit, need for expression, need for networking and need for social acceptance. When consumers or users of online social network websites create content or get engaged in any type of content creation activities, a potential value is created for such consumers. Users were found to share information or opinions received from a friend/contact related to a brand with others on online social networks. Value is also co-created when different consumers or users over online social network websites illustrate a pass-along behavior to share content created by other users in the network. When this content created or co-created is related to any of the brands, consumer brand engagement is materialized. Customers co-create brand related communication by discussing attributes of a brand, recommending brand/brands and sharing concerns for one or multiple attributes for any brand. This leads to brand advocacy and brand loyalty, which is a sign for consumer engagement with brands over social networks.

Users in online social networks use brands as reference points in their online conversations (i.e. eWOM) creating brand advocacy and brand loyalty, which are signs of consumer engagement with brands over social networks and value creation for the brands. Electronic word of mouth (eWOM) on social networking sites is associated with different social relationships like tie strength, social capital, homophily and interpersonal influence. Trust as

a social relationship among the social network users do not make significant influence on likelihood of electronic word of mouth happening in social networking sites.

Opinion giving behavior on social networking sites is influenced by the social capital, homophily and interpersonal influence among the social network users and opinion seeking behavior is influenced by the social capital, social tie strength and interpersonal influence.

Informational interpersonal influence leads to increased likelihood of eWOM in social networking sites indicating the desire of social networkers to make an informed decision. People of Punjab are more likely to seek advice from others and to indulge in more of information pass along behaviour because of strong association of bridging social capital with electronic word of mouth in social networking sites. Social networkers have been found more susceptible towards reading of posts done by brands on their social network pages.

People on social networks tend to give suggestions to others even for those brands which they have not used personally, so brands can target non users segment to create advocacy and loyalty using momentum effect. This is possible by sharing useful and interesting information about brands. In order to increase consumer engagement, distribution of sales promotion coupons through social networking sites can be one of the good option.

Brand engagement in the form of large number of people following the brand on social networking sites, leads to an impression of quality brand. Social relationship of Trust do not influence the likelihood for happening of electronic word of mouth in social networking sites. This means that people are ready to accept information from any type of contacts. A brand which is new to the market (especially) or any established one can use social networking sites to do promotions and if a brand is able to get a large number of consumer to associate with it in form of followers, then it is easy for such brands to skim the market by carefully tailoring its market communication.

After analysis of all the six objectives under study, it can be concluded that value is created for brands over online social network websites through consumer engagement. Value is created for the brand as loyalty and advocacy is happening over social networks due to momentum effect. Consumer engagement aims to generate value for both customer and companies by extending brand experience throughout all phases of relationship from loyalty to advocacy.

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## **Chapter 1**

## **INTRODUCTION**

"For the last hundred years media has been pushed out to people, but now marketers are going to be a part of the conversation."

#### Mark Zuckerberg, Founder- Facebook

Till a couple of years ago, the Internet was a one way communication platform facilitating limited interactions through emails. However, with the advent of social media, there has been a sea change in the scenario. The social web is creating a space that enables every person with even the most limited understanding of basic computer functions to become a publisher. Waves of new social networking tools are made available to interested users who can now stay connected to share as much or as little as they want without accessing their emails.

Social media is the sought after destination for marketers today, owing to the fact that internet has become a household phenomenon globally and has penetrated into each and every nook and corner of modern consumers life. This has led to the increased reliance of marketers on Internet as a customer service and marketing tool. To be more specific social media is ruling the roost in terms of its applicability to marketing success. The reason behind this can be attributed to the fact that, this is where more and more people can be found spending their time today, and this is where a lot of conversations are doing the rounds. Every latest update is up there on the social web even before it spreads on the traditional media and therefore, it is practically impossible to think of a comprehensive marketing strategy in the absence of social media and social networking. In fact, social media has already found a place in every marketers promotion mix today. Growth of social media and network websites has been rapid and changing the functionality of the Internet (Vogt & Knapman, 2008).

#### 1.1 Social Media

Social media incorporates all those technologies of web 2.0 or enhanced versions which support or help people to collaborate with others. If we break this word social media in two half's, there are two words social and media. Media comprises of mechanism of communication and social is the relationship individuals have among each other so social media is a social mechanism of communication. Social media comprises of different kinds of services like blogging, social networking, podcast services, social gaming, social bookmarking, photo or video sharing services and wiki's etc. Blogs are journals which are written by a single person or a group of people to assist others in understanding such knowledge. There are websites like bloggers.com and wordpress.com which offer blogging services. Twitter which is categorized under social networking sites is actually a microblogging service only. On Twitter a person creates an account and people who are interest in the work of that person, follow him/her. Online social networking websites are services in which people connect among each other to share their personal or professional lives. Facebook, LinkedIn, Google +, Twitter and Hi5 etc. are few of the examples of online social networking websites. There are social networking sites which offer location based services and one of the location based social networking sites is Foursquare. There are smartphone application available for Foursquare and whenever users visit a location, they receive tips about that location using this service (if the location is listed in Foursquare). Social gaming are the kind of gaming services in which gamers can play digital games online and game content like scores achieved by playing the game can be shared among people. In some cases using the internet, multiplayer gaming is also offered to play games collaboratively. Winster.com is an example of social gaming services. Video and photo sharing sites allow users to share their content which is in the form of videos or photos with everybody or limited number of people as per their liking. YouTube and Vimeo are two very famous video sharing site and Flickr which is the services offered by Yahoo is a perfect example of photo sharing site. Wiki's are online documents which can be publically edited and updated. These services offer chance to people from different fields to share their knowledge which is assessable to masses. Wikipedia is the name given to such encyclopedia online. There are services online which allow users to share and tag bookmarks online for web documents. Social bookmarking services provide link to such document. There is a very famous service of social book marking called Delicious.com. Using this service people can book mark web documents, tag them so they are easily identifiable and can share these book marks with certain specific people or groups or with the complete world openly.

Social media offers benefits not only to consumers but also to marketers. Marketers are using social media services to create new touch points for their brands and to come in contact with a wider number of audience. The cost associated with use of social media is less as compared to traditional media, which is luring more marketers to use this mode of communication.

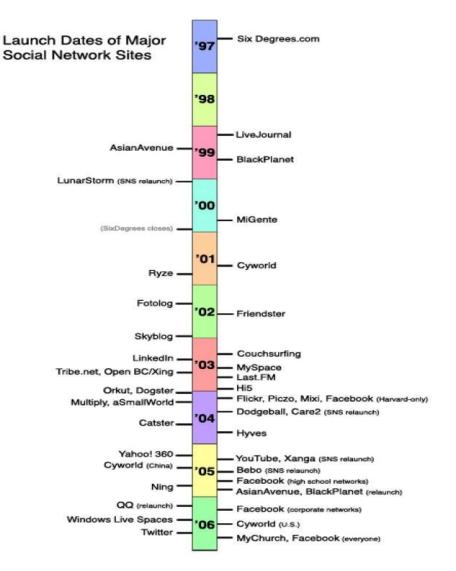
Moreover, number of people using social media is increasing year on year leading to enhanced need among marketers to use social media marketing.

#### 1.2 Social Networking Sites (SNS)

Social media is commonly associated with social networks, which can be described as a kind of online network encouraging every member for feedback and contribution. It is a social instrument of two way communication facilitating the sharing of information between users within a defined network via web 2.0 (O'Reilly, 2005). It involves online activities in which the user contributes to content creation and encourages user involvement which can be as simple as posting comments or giving votes or as complex as recommending content to other user on the basis of preferences of people with similar interests and lifestyle. Thus social media is a broader term and social networking sites are part of social media. On social networking sites people create content and also share it within their network.

Social networking and communication has changed significantly since the introduction of online social network websites such as Facebook and Myspace etc. (Lee & Conroy, 2005). Evolution of social networking has been portrayed in Figure 1.1 in the form of timeline (Boyd & Ellison, 2007). The clutter of websites toward the end of 2007 portrays the increasing popularity of the online social network concept among general population and at the same time potential was identified in the field by many business houses and entrepreneurs. It all started in 1997 with sixdegrees.com named after six degrees of separation concept and was based on model of web of contacts. Six degrees of separation concept is based on the assumption that every person is away from other person on this earth by approximately six steps and a person can connect to any other person over six degrees through this site. Sixdegrees.com users were able to send messages up to six degrees over the site. This was the first demonstration of today's popular social networking concept and was followed by Live Journal and Asian Avenue social network sites in 1999 and by LinkedIn and Myspace in 2003. The year 2005 was the year that saw the birth of today's most popular social network site Facebook which commercialized from high school network for everyone in 2006. Today, Facebook is having more than 500 million active users, out of which 250 million login at least once every day. On an average each person has 130 friends on this site and people spend over 700 billion minutes per month on Facebook and on an average every user is connected to 80 community pages, groups and events. Facebook users share more than 30 billion pieces of content in form of web links, news stories, blog posts,

notes and photo albums etc. each month (Facebook, 2011). As per the published statistics on E-consultancy blog, Twitter has 175m user accounts and LinkedIn has 100m. By the start of 2011, average number of tweets per hour were over 4 million (Hird, 2011).



**Figure 1.1: Evolution of social network** 

With so much to offer to users today, social networking sites have become a sensation and users take pride in joining social network sites. Social network sites such as Facebook, Twitter, Google+ and LinkedIn are taking the lead in social networking space making social networks the next big bet for marketers. In nutshell, social network is one place where all the people are hooked thereby creating opportunities for building social networks. Social network utilizes social media technology to connect with people and build relationships both personally and professionally. Social network websites allow individuals to construct their profile within a bounded system, share with other users and view & traverse their list of connections and those made by others within the system (Boyd & Ellison, 2007).

Online social network websites function like a virtual community of web users. Users of social network sites can share common interests like content related to hobbies or politics. Anyone including teens and young adults, women, moms, affluent consumers, and older individuals can join a social network site. Once registered the person can begin to socialize and create his/her own network of friends with common interests or goals. All said and done, social networking is all about "making it easy for people to talk to each other by creating connections" (Dennisoneil.com, 2009).

#### 1.3 Social networking and India

Social networking is now ingrained in the way tech-savvy Indians live their lives. The popularity of social network websites is increasing day by day and so is its usage. A collaborated study on Social Media usage was conducted by two companies the Nielson and Absolut, which collected data through an online survey of 2000 respondents from sample population spread across top five metros and tier-1 cities in India. Results revealed that use of social media is on boom in India with not only about 30 million Indians becoming members of social networking sites but also that these people are spending more and more time on these sites daily than on personal email. 20 per cent Indians were found spending 1 hour to 3 hours on social network sites as compared to only 8 percent spending the same time on personal email. People in India are moving away from the traditional method of old oneto-one communication (email) to one-to-much communication i.e. social network sites (Nielsen, 2011). Participants in the virtual democracy i.e. social network are able to share experiences with their online community and satisfy their social needs. India is experiencing a boom in telecommunication sector. There has been an increase in number of mobile communication devices and it has been estimated that almost 45000 Indians will intend to join social network sites each day. The statistics related to India are very promising. This level of engagement on social network sites is a boon to marketers because it has led to an increase in the awareness level of people toward brands being promoted through this medium. This shows the intent of Indians to communicate with brands over social network sites indicating that social media has the capacity to alter the traditional dynamics between brands and consumers, who are time hungry and may find traditional forms of advertising obtrusive and unattractive. Social network sites have therefore become one of the multiple touch points for marketers to reach consumer to assist in information dissemination of product or service (Kannan, 2011).

Facebook has become the largely used social networking site in history. Facebook as a social networking sites has maximum number of users till date. Facebook is a social network that facilitates connections (Haydon, 2013) and allow users to connect with other users called friends, communicate with friends, sharing thoughts and pictures with friends, and promote groups, social cause and businesses. Facebook has consistent design offering for users and users are expected to differentiate their profiles using unique content. Facebook has been a big attraction for brand promotions because of large number of users and its high rate of usage (Abram & Pearlman, 2012).

Twitter is a messaging service which allows users to send or receive messages up to 140 character long. Users on twitter decide whom to share updates with and whom to follow (Fitton, 2012). On Twitter, followers become aware about what their contacts are doing without need of responding to contacts which leads to ambient awareness i.e. light weight meaningful connection. Twitter has become a hub of information dissemination for businesses as well as civic conversations (O'Reilly & Milstein, 2012). The idea of twitter is to offer simple and consistent information sharing.

LinkedIn as a social networking tool offers career networking to users. The idea behind LinkedIn is to help users become more effective in their daily work and bring more opportunities using professional relationships (Elad, 2014). LinkedIn users comprise of executives from top 500 fortune companies and even the most powerful person in the world, president Barak Obama of United States (Rutledge, 2012). LinkedIn highlights the professional side of the users and is used by many to increase their attractiveness and visibility for organizations (Waddill & Marquardt, 2011).

Google+ is comparatively a younger social networking site started in 2011. Google+ offers users with complete control over the information shared (i.e. how to share?). Google+ offers unlimited space for sharing of user's content. Google+ acts as an integrator platform across all Google properties like Picasa, Gmail etc. (Rutledge, 2012). Building on its core competency of search, Google has added a built-in search engine in Google+ to assist users in searching for contacts. Google+ acts as the backbone of Google's unified system (Hattersley, 2012).

#### 1.4 Need for a social network strategy

A social network strategy is imperative for every business aiming for success and growth. It is a well-known fact that a successful business is one that has struck the chord with its customers – in terms of making interactions, contacts and connections easier. Social networks addresses the business need by providing ample opportunities for creating these connections, and hence it is important for marketers to tap into area of social networking websites. In fact, social networking sites are places where marketers can find all their customers, thereby making it the sensation of the present era. Hence if social networks are managed successfully it can create a lot of goodwill and buzz for the company. This is the only reason why every company today, is running after the social web and crafting a social network strategy. This would enable marketers to encash from the connections because people are using social networks for two main purposes: to learn about something new and to connect and interact with others.

#### 1.5 Social network advertising

Marketers are busy in creating their presence on the virtual space and directing their efforts towards social network advertising as marketers wish to reap the benefits that social networks has to offer in terms of a large customer base. With consumers moving away from traditional media, the challenge for marketers is to look for a new and better medium to reach their target market. Social network advertising comes as a handy solution to serve the need of marketers. New technologies have changed the way that consumers view advertising (Rappaport, 2007). It is an ever known fact that brand should be present where the consumers are, so marketers are at the right place now. Online social networking sites such as Facebook, Twitter and LinkedIn are goldmines of data with information self-disclosed by users on these sites. These sites contain every information, be it users preferences or details regarding birthdays, engagements and relationship status (Blakely, 2007). All this information offer marketers the opportunity to precisely and unswervingly target their potential consumers through this platform. Social media advertising gives opportunity to companies to get their potential clients to discuss company's products and post comments. Social media can help prospective buyers to learn about the organizations and also aid in their buying decision process.

#### 1.6 Forms of social network advertising

There are basically three kinds of social network advertisements:

- Direct network advertising: This is most commonly used and most effective form
  of social network advertising. This model is based on theory that people make
  decisions to purchase something or do something by getting influenced from their
  peers. An example of the same is Facebook Beacon Project (now discontinued) in
  which advertisements were published right into a user's news feed.
- Direct advertisements: This is also traditional yet effective way of web advertising which is inclusive of banner ads, newsletter subscription ads, corporate profiles with fans and logos, corporate profiles without fans or logos, get widgets, give widgets or sponsored content. A collaborative research done by Psychster Inc. and allrecipies.com suggested that banner ads are the most commonly used tool by advertisers that want to push a product (Psychster Inc., 2010).
- Indirect advertising: This is a relatively new technique of creating advertiser pages or groups on social network sites which users can choose to join. Initially the companies used this idea to increase brand awareness only but now the same has been used for marketing purpose also. For example to market a contest or market a new product etc. (Wikipedia Foundation Inc., 2011).

#### 1.7 Advertising and social networking sites

Social networking is not only about distributing information and but more about companies being able to connect with customers in ways that are both meaningful to those customers and to the goals of the business. In order to effectively advertise on social networking sites, there are certain considerations that needs to keep in view, which are discussed as follows:

**Understand the social networking site:** Advertisers can promote their products to their targeted audience through social networks effectively by understanding who is using which social networking site. Facebook users represent a greater number of females when compared to twitter users who are more males. This can help companies to target gender specific products or services on the appropriate social network like for male products more advertisements on twitter will be beneficial (Ingram, 2010).

**Targeting right user with right message:** Ensuring that the right message reaches the right customer is also an essential prerequisite for advertising. This is possible through content targeting. If any user comments *"I am interested in buying a new netbook"*, in order to get opinion of online friends. A company selling small cars, if can display the advertisements next to the comment, thereby making the right information available to the interested users can influence the person's decision.

**Matching the present:** Companies need to understand the fact that promotions which are done on social network sites should be current and relevant to the present i.e. the content should not be obsolete. The advertisements should match with the current happenings.

**Be on social networking sites:** There is old saying "the early bird gets the worm". The same is true with companies eying for social network advertising. It has become mandatory for the companies to have their social network pages, if they want people to talk about their brand. Today, companies like Nestle, Skittles, Starbucks, and Accenture have their own social network pages. Social network advertisements give better impression to the target users, thereby creating a favorable perception in user's minds. These social network pages provide advantage of back links that drive more traffic to companies' main website. Companies use this social network platforms to add articles, press releases, reviews, new product launch and announcements as the content. One thing of utmost importance for companies in social networking space is the customization of social networking site page to meet the specific image of the company. Social network page should act as the mirror of the personality of the company.

#### 1.8 Word of mouth marketing and social networking websites

Word-of-mouth marketing has a lot of influence on the psyche of a consumer. A thoughtful influence by marketers on consumer-to-consumer communications using social networks is known as social network marketing. According to a research by Knight (2009), marketers had spent more than \$1.54 billion on word-of-mouth marketing initiatives in 2008. A study carried out on diffusion of innovation has suggested that conversations among buyers are more important than marketing communications in influencing adoption (Ryan & Gross, 1943). However, the easy accessibility and reach of internet today has empowered a marketer who is interested in influencing and monitoring word of mouth in a manner that was never

done before. Advertising professionals have come to realize the crucial role of opinion givers and opinion spreaders (opinion leaders, opinion seekers, opinion takers), whose post purchase (or out of interest) word of mouth can exercise a strong influence on information dissemination (Goldenberg et. al. 2011), consumer satisfaction and repurchase intentions (Davidow, 2003), product judgments (Herr et. al. 1991), and customers' lifetime value (Hogan et. al. 2004). Word of mouth is a crucial source of stimulus in the purchase of domestic goods, and advice from peer consumers about a product or service wields a superior impact than any other type of marketer-generated information (Alreck & Settle, 1995). The importance of word of mouth also known as word of mouse or electronic word of mouth (eWOM) in the online world has increased many folds than before to marketers, due to the emergence of online social network websites. Electronic word of mouth offers explicit information, interactivity and empathetic listening, but the "distance" between the source of communication and the receiver is much lower than distance in marketer induced communications. With such a big advantage being offered by social networking sites, marketers have become quick to incorporate social networks in their media mix. India is no exception to this trend and has also been quick in embarking social networking and recognizing its value addition capability. India being a developing country with improving economy and telecom infrastructure is bound to have more internet users in coming years, making future social network investments by marketers very attractive.

#### 1.9 Social networking sites and personification

"You now have to decide what 'image' you want for your brand. Image means personality. Products, like people, have personalities, and they can make or break them in the market place."

#### David Ogilvy

Every brand carries a personality. The kind of personality for a brand is decided by the owner of the brand i.e. what kind of personality of brand will be portrayed to the customers in the market. Brand personality comprises of metaphor thinking. This personality about the brand is created by the communication forwarded by the brand to the customers. The brand communication and consumers interaction with the brand (in the form of usage) leads to creation of perception about the brand. Perceived personality notions leads to formation of personality of a brand in the mind of customers. Brand personality indicates the relationship between brand users and brand. In order to understand the perception of brand personality with customers/consumers tool of brand personification is used. Brand personification is used by marketers to recast the brand in an image of a person. Brand personification is similar to anthropomorphism, which is accrediting human features to something that is not human (Schiffman et. al. 2014). In brand personification marketers tend to assign a human being kind of personality characteristics to a brand based on the perception of the target market or metaphorical thinking. Branding metaphors aim at rendering abstract concepts and using it, a marketer can predict the personality characteristics of a brand by assimilating it to features held by a real person (Rossolatos, 2013). The strategic purpose in creating brand personality is to create a bond between consumer and the brand. Brand personification help marketers in repositioning the brand if the brand personality don't meet the kind of focus what marketers intend to achieve with their brand or in cases where fit is not present in between brand personality intended by the marketers and perception of brand by the consumers. Sengupta (2007) personified the brand of Nescafe and found it to be young man from upper middle class who is professionally qualified and ambitious. By doing the brand personification activity, company or brand owner can judge whether there is a deviation in how brand owner want customers to perceive the brand and what brand personality customers actually associate with the brand. This technique can help marketers to position the brand personality as exactly what is intended and take a corrective action where ever required. Based on the above given description we can say that brand personality is the output of perception and personality process (Franzen & Moriarty, 2009). The brand personality is all about appealing to the imagination of humans and brand personification is a fun way to understand the personality perception of a brand.

#### 1.10 Social networking and momentum effect

Social networks have been used for doing brand promotions by numerous companies after discovering the underlying potential to reach a wider audience. The increasing dependence on technology for basic communication highlights the importance of analyzing how these networking sites are affecting daily processes. Social networking sites act as an amazing platform to create an online presence for a brand and marketers, creating a direct interface for getting in touch with their customers to create effective communication. In the virtual world, social networking sites provides brand follower an opportunity to connect and talk to their favorite brands apart from maintaining friendships and moving towards more meaningful conversations. In the present times, consumers desire for in-depth information about products and services before initiating the purchase decision. Social network provides an easy opportunity for people to consult peers, share opinion with peers and pass on information related to brands among peers. This basic idea of sharing information by consumers among consumers leads to the formation of momentum effect.

Brands tends to make the use of momentum effect in creating touch points using online social networks. Momentum effect occurs when brands encourage their fans or followers on social network sites to use the brand name in doing conversations or promote brand in any form on social networks within their network. If brand friends or social networkers who like or love some brand (or dislike some brand) use brand logo or image or use brand as a reference point in their conversations, to portray something good or bad about the brand, momentum effect occurs.

The idea of creating momentum effect for marketers is based on influencing customers/consumers in a way that they start to talk positive about the brand on social networks. Marketers try to engage with consumers through brand pages (a page dedicated to one particular brand or multiple by same company) or tweet about brands using microblogging services of social networks like Twitter. The intention is to keep social network followers or friend updated with the brand content or news and continuously feed them with one thing or the other to continue or initiate talk related to the brand. The situation when social networkers initiate a chain of positive word of mouth for any brand, the brand can hit eureka in term of sales potential. People who talk to their group (in social networks) about brands can influence others in their purchase decisions. Friends have a special place in minds and influences in a different manner than marketers. Friends in social networks acts as a social proof and social proof works when other in the chain of friends tends to imitate the behavior shown by one, may be related to purchase (or behavior) of a brand or some item. Momentum effect basically is depended upon the viral power of the social networks (Tutent, 2008) or on electronic word of mouth. Without the electronic word of mouth it cannot happen or sustain. So marketers provide or share information with people related to brand or products/services, offering customers with content to talk about something.

This is one major reason due to which social network based marketing could act a double edged weapon. If people are happy with some brand, they like/love the brand, company is responsive to the customers and customer problem are tackled very seriously and every effort

is made to solve them, basically company is maintaining good relationship with customers, then customers (people) will keep on talking positive things about the brand/company. But if the company fails to solve some problem, may be genuine or otherwise, company will have to face the wrath of the customer and still momentum effect will play its part. Momentum effect leads to a chain reaction with positive or negative influence on the brand.

#### 1.11 Consumer motivation for online social networking

Motivation is an internal drive which reflect reasons for a behaviour. This inner drive can be an experience to satisfy any psychological need through use of some service or product. Inner drive is initiated when any consumer recognizes a need in form of a gap between actual and desired state. Need plays a very important role in consumer involvement. When a consumer feels that any product or service is personally relevant, then a motivational state of involvement is initiated. Consumer involvement with different products or services are important for marketers. Marketers always intend for consumers to be highly involved with their brands because positive word of mouth is directly proportional to strength of consumer involvement with the brand. This means that if a consumer is highly involved with any brand then there are robust chances of such consumer to spread positive word of mouth for the same brand. Today, as large number of people are using online social networks, so the use of such networks for spread of eWOM related to brands cannot be negated by marketers. It has become important for marketers to explore consumer motivations to interact on social networking sites in order to develop efficient marketing strategies for amplifying their brand experience.

#### **1.12** Consumer engagement and value creation

Consumer engagement revolves around the concept of value which is the underlying motivational force behind any action of an individual. Based on regulatory engagement theory of Higgins (2006), value is an experiential motivational force which is correspondingly reflected from the perspective of intensity i.e. value derived from an experience can be weak or strong. Hedonic motivations of an individual contribute primarily to value creation and also affects value intensity. Need satisfaction of an individuals or attainment of a shared belief or some desired target can create value for an individual.

Engagement is the state of sustained attention or being completely involved and engrossed in performing something. A person highly involved in something would experience a strong motivational force leading to superior value attainment. A person who uses any social network site with anticipation that he/she will be able to link with old friends through such service will find more positive value as compared to registering for online social network without any anticipation. Value creation in this context can thus be taken as a state where a person becomes better off in some respect. Customer value can be created by offering a solution to a customer problem (Sawhney et. al. 2006), satisfying any need/needs of a consumer (Tuli et. al. 2007) or by offering more than something what is expected by the consumer. In online social networks based on the value accumulation derivation of (Gronroos, 2008), value can be created over a period of time through experiences gained during usage. When consumers or users of online social network websites create content or become engaged in any type of content creation activities, a potential value is created for such consumers. Value is also co-created when different consumers or users over online social network websites illustrate a pass-along behavior to share content created by other users in the network. When this content created or co-created is related to any of the brands, consumer brand engagement is materialized. For brands in online social network site value is not only created when users of such services visit brand pages but value is also created when users share brand related content with others in their network which could be a picture or a like on Facebook or a re-tweet about the brand related content. Consumer brand engagement is reflected through consumers' participation in brand discussion and value cocreation among participants of online network communities. Engaged consumer are more satisfied, greatly loyal and carry an emotional connection with the brand (Brodie et. al. 2013). Consumers engaged with brands over online social networks tend to share their brand related experience or use brand as a reference point in conversations within their online community. Consumer engagement in online social networks have been taken from different perspectives.

Different perspectives as per which user/consumer engagement happens with brands in online social networks are:

- Engagement for brands over social networks happen if users engage in collaborative activities of sharing thoughts, ideas and concerns related to brands and becomes a brand advocate (Evans, 2010).
- Brand loyalty signifies consumer engagement (Haven, 2007).

User/consumer engagement in virtual world can be observed through involvement, interaction, intimacy and influence (Haven, 2007). Involvement is signified by regular social site visits and time spend by users. Interaction is highlighted with user generated content for brands, which could be as simple as a like on Facebook. Intimacy with a brand goes beyond the measures of involvement and interaction. Intimacy talks in terms of consumer sentiments towards a brand and influence happens over social network sites with content forwarding.

Social networking and communication has changed significantly since the introduction of online social network websites like Facebook. Social networking is now ingrained in the way tech-savvy Indians live their lives, making its use imperative for every business aiming for success and growth in India. Social networking sites act as an amazing platform to create an online presence for a brand and marketers, creating a direct interface for getting in touch with their customers to create effective communication. Through social networking websites, companies are able to distribute information and connect with customers in ways that are both meaningful to those customers and to the goals of the business. Advertising professionals have come to realize the crucial role of opinion givers and opinion spreaders (opinion leaders, opinion seekers, opinion takers), whose post purchase word of mouth can exercise a strong influence on information dissemination. With such a big advantage being offered by social networking sites, marketers have become quick to incorporate social networks in their media mix. Brand communication and consumers usage interaction with the brand leads to creation of perception about the brand. Perceived personality notions leads to formation of personality of a brand in the mind of customers. Brands tends to make the use of momentum effect in creating touch points using online social networks. Momentum effect occurs when brands encourage their fans or followers on social network sites to use the brand name in doing conversations or promote brand in any form on social networks within their own network. The idea of creating momentum effect for marketers is based on influencing customers in a way that they start to talk positive about the brand on social networks, thus creating value for their brands. Consumer engagement revolves around the concept of value which is the underlying motivational force behind any action of an individual.

#### **Chapter 2**

### **REVIEW OF LITERATURE**

In order to get a complete understanding of consumer engagement with social networks, a review of literature was undertaken. To uphold the need of this study the gap in the previous studies were identified through the review of literature which is divided into following six sections.

#### 2.1 Usage pattern of online social network sites

Online social network websites like Facebook or Twitter are fast emergent tools, which facilitate their users to develop informative profiles, allow sharing of multimedia content, send messages and connect with friends and family (Boyd & Ellison, 2007). Online social networks are acting as crucial components to maintain existing social connection (Ellison et. al. 2007) and to create new ones. Social networks being the part of social media are available to masses at free or almost negligible financial costs. This property in online social network websites act as a big catalyst in its wide spread usage and popularity. The phenomenal growth of online social network sites across the digital world spear headed by services like Google+ and Facebook etc. have brought major changes for business to business, business to consumer and consumer to consumer marketers of all sorts. Numerous researches had been conducted regarding usage pattern of social networking sites worldwide including India, but particularly in Punjab, there has been negligible research on social networks provides a base to go ahead in the pursuit of understanding usage pattern of social networking sites by social networkers of Punjab.

Out of all the Internet users, approximately one third of them use online social networking websites worldwide all the Internet users, approximately 1/3<sup>rd</sup> use social networking sites (Nielsen Company, 2009) and combined daily use of online social networks has been increasing comparatively than previous years (Nielsen Company, 2010). Due to differences in contextual characteristics, social network website users demonstrate individual differences in usage of such services (Rubin, 2002). Demographic profile of users like gender and age have been found as important variables to comprehend differences in usage of social networking sites. People in varying age categories and different genders in online social

network sites use such sites differently (Dumrongsiri & Pornsakulvanich, 2010). Differences are identified even in the intensity to make new friends across males and females in social sites (Raacke & Bonds-Raacke, 2008; Pfeil et. al. 2008). Across all age groups, teenagers have been found to use social networking websites at least once a day and teens also try to keep an attractive and updated profile (Lenhart, 2007).

Facebook is amongst the most popular online network service with four out of five students using it (Hargittai, 2008). College students spend approximately half an hour on Facebook in their daily schedule in order to connect with offline friends in the online world (Pempek et. al. 2009). To trace out the insights into the usability of online social networks among institutional students this study involving 92 undergraduate students. Information related to time spent and activities performed on social networking sites was collected along with the demographic profile of the users. Institutional students were using online networks to maintain connections with old and current friends. The study also registered activities like reading other persons profile, surfing through photos and reading friends news feed were most common activities performed by college students as users of social networking sites. Extracting the information of other social networkers has been found as a more keenly done activity by users than just any other activity like doing browsing over social network sites (Wise et. al. 2010). An Australia study related to the usage of online networking by young people found that messaging or chatting and sharing of user generated content was the most common activity performed by young people over social network site usage (Australian Communication and Media Authority, 2008). One of the similar studies related to Australian populations social networking site usage accessed the frequency of usage of social networking sites based on age, gender and location for four social network sites namely Facebook, LinkedIn, Twitter, Myspace. This study also collected information related to time spend spent by users, number of friends/contacts or followers of users, devices used to access social network sites, types of products or services researched by users, brand followed by users and posting of online content by users over online networks (Sensis, 2011). Khan (2009) traced out that sixty five percent of users of Facebook (an online social network) access their SNS account on daily basis & also log into their profile multiple times a single day with the intention to read new feed. The volume of time spent on online social networks like Facebook mottled from few minutes to as long as many hours on each login. Observations also claimed that 30 hours per week was the average usage time spent of teens on their social networks online.

Haq & Chand (2012) collected information for 384 students and found majority of respondents to have an account on Facebook (online social network) without any variation based on gender. Respondents from both genders spend equal time on internet on an average. Relative to males female spend a bit more time and male had a larger friend network in online social networks than females. Supporting literature of female devoting more time to online networks as compared to males was also found in the work of Tham & Ahmed (2011). Both genders in case of institutional students have been found to carry an inverse relationship between age and online network usage i.e. time devoted to online social networks decreases as the age of user increases. Positive correlations have been reported in online network site usage and persons interacting with peers and friends/family members. A negative correlation exists between a person's alertness of others and improved search largely for purpose of dating and age via online networking site.

To understand the activities performed by the users on social networking site Shambare et. al. (2012) undertook a study in which activities like chat/messaging, meeting new friends, downloading or sharing music/videos, playing games, doing homework, viewing other people profiles have been studied. Data collection was done using a self-administered questionnaire among 256 South African students. This study found that faster internet access, cost effective third generation technology and smartphone telephony are factors which are positively influencing the adoption of social networking sites by internet users. Isa et. al. (2012) inspected the patterns for social network site usage among 327 students of business education stream in which 89 male students and 238 female students participated. This study collected information related to access methods used by students like note book computer or public computer, computer skills with the users and time spent. The study revealed that 172 students out of the total sample were spending one to three hours per day in using social networking sites. 93 students were spending three to five hours and 47 students more than 5 hours daily respectively on online social networks. Only 15 students were using their social networking site for less than one hour a day. When it came to the time of the day associated with social networking site usage 235 students out of the total sample were using it during 5pm to 12 am slot of the day i.e. during evening and late night. 43 students were using their social networking site between 8 am to 5 pm and 49 students were using the same between 12 am to 8 am. Information related to favorite social networking site of the students, longevity of students using their favorite social networking site, log in frequency per day to their favorite social networking site and activities performed by users over the same was also collected. Activities such as photo sharing/tagging, video/link sharing, status updates, checking on friends, chatting, applications, messaging, business activity and event invitation were performed by users/students. On the similar lines findings of a study among 131 psychology students specified that seventy eight percent used social networking sites and fifty seven percent students used their social networking site on daily basis. Students have been found performing activities like reading and responding to comments, posting pictures and links on social networking sites (Subrahmanyam et. al. 2008).

Ophus & Abbit (2009) in a study with the intention to trace usage patterns for online networks among education institute participants selected 110 undergraduates, among whom 107 females and 3 male were selected. Out of the total 110 social networking site users, approximately 96 percent of users logged into their online network profile at least once a day. Majority of users were using their social networking site as a tool to communicate with existing known people. In one of the other studies gender, age, ethnicity, income, edification level and terrestrial location have been studied in order to identify the usage habits of people about social networking sites (Madden & Zickuhr, 2011).

In order to get insights into the activities performed by the social networking users over social networks, Cohen (2012) studied user participation in different politically motivated activities. The results depicted that topics related to society are among the major discussion topics in online networks. 35 % users encourage friends to vote using social networking sites. Users were also found posting links to political stories, liking or follow elected officials and encouraging friends to talk related to political issues.

To maintain a social profile on a social network site is part of daily life for continuously growing number of Internet users, social networking sites explicitly aim at supporting people in maintaining existing and establish new relationships. Contacts on the social networking profiles have been seen to consist of both work and personal contacts which many times do overlap with the contacts in the real-world. Social networking site users do add unknown contact as friends and for most of these the relationship never develops further (Schaefer, 2008).

Based on the above reviews, one can gain an understanding that there are different types of usage habits, user preferences, topics and activities of user interest, which are associated with online social networking websites. This user engagement in terms of usage pattern calls for insights about the underlying motivational intentions of online social network users to indulge in such a behavior.

#### 2.2 Motivations to use online social networking sites

Online social network are having crores of active users and for whom collaborative activities over online networks have become a regular activity in life. Literature revealed studies that have been carried in social sciences to trace different factors which motivate people to use online social networks to gratify their needs. An assortment of possible reasons which motivate young people to use online social networks have been identified by Krasnova et. al. (2011). The study concluded that use of online social networks satisfy needs related to personal relationships, fantasy, togetherness, and belongingness. Online social networks plays a role in improvement of user's self-concept and for most of the users, self-concept improvement can be a motivator for indulging in online social networks. Pressure from peer group to use social networks also motivate young individuals to use such services. Considering the work by Allen (2008), one can identify factors motivating South African people to use online network sites. Age and gender of the online network users, along with access to internet technology were identified as the factors of motivation. Study highlighted that business related activities motivate males to use online networks whereas famine side were motivated due to the intention for socialization i.e. to be in touch with others. There are always certain kind of costs which either inhibit people or motivates them to switch between different social networks (Hsieh et. al. 2011). Extrinsic and intrinsic motivations were identified as the reasons to motivate and inhibit bloggers switching in between online network sites. Extrinsic motivation emphasize goal oriented motives of committing to an action and intrinsic motivators in form of self-gratification leads to performance of various activities over online networks. Three motivations of expression effectiveness, usefulness and playfulness were identified as extrinsic and intrinsic motives. One more important aspect of motivation has been researched by Chen & Pang (2012) which explains about the relationship between leisure activities and motivations of the users. It explained how leisure relates to intrinsic motivations, constraints, negotiations and culture of the users. It reveals that emotions, cognitions and motivation are affected by person's self-construal. It also reveals that the need of leisure activities of an individual is not only depended on their culture but also on individual's need, personality and experience which again gives an insight about the thought process of an individual to use any SNS. Among the Malaysian population a

study was carried out to find online network use motivation (Leng et. al. 2011). The study considered two models, first being technology acceptance model indicating the susceptibility towards technology acceptance and second was planned behavior model to study behavior of users. Ease of use of an online network along with perceived value of useful of such service enhances the intrinsic motivations value leading to acceptance of online network site. People with high intrinsic motivation were found to devote more time & energy over online network sites supplementing the proposed model. Observing the model of self traits, one can identify online network usage motivators like that of self-identity & self-construct. These factors can help to find motivators of online network usage across cultures. Other than these two motivations, information seeking along with personal entertainment, socialization, expression of self, time pass and keeping track of new trends also motivated people in using online social networks (Kim et. al. 2010). Kim et. al. (2011) identified utilitarian and hedonic motives enhancing user motivations to consume online network sites. It is either of the two types of motives that forces an individual to indulge into networking activity online. Personal networking, information collection and stress busting are the key motivators to participate among users in online social networks. Although the study brought out emotions related with intrinsic as well as extrinsic motivators but it could have been more descriptive to bring out more motivations from the users accessing SNS. (Yu Lin & Lu, 2011) highlighted importance of SNS in an individual's life and found intentions of social network users through a research model in which two factors of 'usefulness' and 'enjoyment' were identified. As suggested in this study, online social networks need to offer means by which users of such sites are able to arouse their inner feeling of pleasure acting as a motivator to enhance online networking site usage over time. Schaefer (2010) revealed that the personal goals of an individual coupled with need for individual media use to achieve stated objectives makes an impact on social network usage. The study investigated the purpose and manner in which online social networks are used which in turn affects the nature of information developed in social networks. Major motivations reflected in the research were keeping in contact with others, to re-initiate long lost contacts but along with managing existing ones. Considering the work of Doruer et. al. (2011) for a particular SNS that is Facebook, one can understand motivations which push users to use Facebook. Other than need to maintain contact with old and existing friends or use it to reunite with their older friends, users admitted that Facebook helped them to pass their time and help them to fulfil their needs and desire of entertainment. Barker (2009) focusing on older adolescents describes that communication among peer groups over online network sites is linked to the level of selfesteem. If the latter is high, there are strong chances of increase in the former. Time pass, peer communication, enjoyment along with learning from others acts as motivators for adolescents to use online social networks. This study also highlighted that females tend to use online networks for building and nurturing relationships and men are more interested to search for and make new contacts or friends. One of the important aspects of using SNS is to use the 'social capital' which is a collective set of benefits that is derived from mutual cooperation between the different users over the different SNS. Improved understanding of technology with larger reach of internet is one the prime motivators in making people use online social networks (Foster et. al. 2010). Based on the study of Best & Krueger (2006) which uses social capital as the basis to study user motivation, the researcher found membership of a community, peer connections, need for information, network participation confidence and concerns as the motivations influencing participation in online social networks. Based on the same research one can use social capital as multi-layered concept to understand its effect on the motivations to use online network sites. Further the research carried out by Wise et. al. (2010) explains about the difference between the concept of passive social browsing and extractive social searching. The researchers in their research have given contrasting differences and examples so as to differentiate the two activities of social browsing and social searching which are followed and done by the users over 'Facebook'. However we can use this research because it helps us to know the seven motivational factors that encourage users to access Facebook. Making and keeping contacts, self-expression, sharing of content like pictures and applications use act as a major motivational factors. Also, other motivations include social connection and social investigation. If we move further and look upon the work done by Stefanone et. al. (2011) then it was found that the research emphasized on investigating and finding out the primary variables or the motivational factors which instigates the users to visit different SNS's along with their behavior when individuals are online. The outcome of the study determined the two main types of behavior of the individuals which were public and private. Different factors were being associated with both the behavior, such as desire of approval from others, other people's approval or how an individual want to get perceived by others and how each individual depict his or her own relationship with his peers or his family to other individuals over different SNS's. Also the crucial finding of the research was that both behavior of the individuals were closely related with their actual and online behavior. Pagani et. al. (2011) Undertook two simultaneous studies to trace factors that influence people in the manner they access different online social networks. First study was carried out with principal objective

to understand the impact of individual's innovativeness and expressiveness on both users active as well as passive usage of online networks. The outcome of first study depicted a direct relationship between pattern of use for online networks and level of user innovativeness. In the second research an attempt was made to study self-identity expressiveness influence along with social-identity expressiveness influence on online network sites users in order to understand active and passive use of online networks. Results depicted that both kind of influence were happening with the active users of online network sites indicating multiple reasons for social networkers to join any online social network. Moving to negative part of the human nature, researchers have also tried to find out those motivations which motivates the users to use SNS in negative sense, work by Cravens (2010) throws light on various factors like cost effectiveness in accessing online social networks and suitability of use coupled with privacy features acts as motivators due to which people access SNS and engage themselves in certain infidelity behavior. Research also shed light on emotions and feelings like boredom, sadness and depression making users to visit SNS. Kim et. al. (2011) identified two personal and two environmental factors motivating users to share their information and content creation over online social networks. Personal factors were information self-efficacy and expectations related with socialization, and environmental factors were social tie strength and network size in terms of the number of associated people.

J. Kuss & D. Griffiths (2011) investigated the negativities associated with social network use in form of compulsive use disorder due to prolonged use of online network sites leading to addiction with social networkers. People with self-absorbed tendencies with relatively less actual life connections in real world with peers/friends tends to take sanctuary of online social networking to fulfil their innate desires. Also many of the users fulfil their social enhancement concept by using SNS as they perceive playfulness and trust in the website as a major source of motivation for themselves. Gangadharbatla (2007) found young individuals join and participate in any of the online SNS to fulfill need for self-efficacy over the virtual network along with needs of cognition, belonging and self-esteem fulfillment. If any online social network marketer can appeal to individual's self-esteem and if the individual's likability towards features of the SNS could be established then surely that online network site can expect more number of active users online. Marketers would be benefitted, if a match can be established between consumer personality perceptions of social networking sites and brands promoted through them. Understanding the consumer perception of an online site personality can help marketers target consumer more precisely. This calls for a need to understand online social networking website personalities from the perspective of users.

#### 2.3 Online social networking website personification

Brand differentiation is an important tactic used by marketers. Brand differentiation can be achieved by differentiating the personality of brand. Brand personification i.e. humanizing brand attempts to re-form consumer's perception of the aspects of a product or service into a human like character (Schiffman & Kanuk, 2009). Brand personification is a projective technique to describe the brand from customer's perspective i.e. what the brand is? But not what the brand should be? Personality of any brand acts as the major differentiator for it as compared to other competitors. The research conducted in the field of marketing has given a significant sum of attention to shed light on brand personality as a concept to understand consumer behavior. Brand personality carries humanoid features related to a brand (Aaker, 1997). Personality of the brand is an enabler for consumers to satisfy their self (Belk, 1988). Brand personality study is based on giving human like characteristics to things, as we usually find people doing so in their normal propensity.

A study conducted by Delbaere et. al. (2011) found that personification can encourage consumers to humanize brands using visuals in print advertising. Brand personality effect customers emotional response to the brand. Success of any brand in the market depends upon brand personality as professed by its consumers (Pandey, 2009).

In order to discover the applicability of brand personification concept Tan & Wee (2004) examined the likelihood of applying human personality approach to the construct of brands. The idea was also to find that whether brand personality is stable over time or not. Results proved that brand personality operated almost in the same manner as the human personality. This leads to the justification of having a definite personality for brands, as brands do have a uniform need for identity i.e. need to assign meaning by people to a brand.

The research done in the field of assigning personality to social networking brands is very limited. In an attempt to determine the personality of online brands, variables like excitement, affection, popularity, sophistication and competence were determined (Okazaki,

2006). These five variables determined in the study defined the personality of online brands appropriately. If one closely go through the work done by various researchers in the field of determining brand personality, the work of Aaker (1997) can be seen as a milestone. Aaker (1997) treated brand personality as unidimentional construct and established that brand personality can be segmented. In the ground breaking research done by Aaker (1997) in identification of brand personality elements, five elements had been identified. These elements for personality of brands are ruggedness, sincerity, existent, sophistication & competence. The dimension for sincerity is having traits like honest, genuine, cheerful and domestic. The dimension of exiting personality is having daring, spirited, up-to-date and imaginative traits. Competent dimension is having the traits like reliable, efficient, responsible and dependable. Sophisticated personality dimension is explained using the traits of glamorous, charming, romantic and pretentious personality and lastly rugged personality is associated with traits like tough, strong and outdoorsy. Applicability of Aaker's model has been studied by Supphellen & Gronhaug (2003) over a sample of 200 respondents to trace the effect of personality on two brands. Considering brand personality measures like excitement, sophistication, successful, sincerity and ruggedness, the study found that brand personalities influences consumers attitude towards brands.

A comparative study of respondents from two countries United States and Korea conducted by (Sung & Tinkham, 2005) to test the influence of culture and values on the brand personality over 400 respondents identified eight dimensions of brand personality. Out of the eight dimensions, six dimensions of competence, traditionalism, likeableness, trendiness, sophistication and ruggedness were found common for both the United States and Korean culture. In case of Korea, passive likableness and in United States androgyny were traced out as culture specific factors.

In an attempt to understand brand personality of KFC, food restaurant (Sophonsiri & Polyorat, 2009) in Thailand revealed that dimension of competence influences brand association and brand attractiveness more as compared to any other dimension of the brand personality (Thomas & Sekar, 2008). Brand personality acts as a source of continued advantage as it is difficult to imitate by the competitors in the market. In a similar kind of effort to apply Aaker's brand personality framework to identify differences between brands within and across classes of restaurant, a study was conducted among 247 students of Cornell University. The respondents were selected from the age category in between 18 to 42 years.

Out of the total sample selected for research 60 percent of the respondents were female and rest were males. In order to analyze the results multivariate analysis of variance was applied on the data collected with gender kept as a covariate that nullify the effect of different perception between females and males. Result based on different dimensions of sincerity, existent, competence, sophistication and ruggedness found that McDonald's is more competent as per the perception of the respondents in comparison to the other fast food restaurants like Wendy's (Judy & Anna, 1999).

Azoulay & Kapferer (2003) argued in contradiction to Aaker (1997) scale and raised that it is not measuring construct but just integrating a number of proportions of brand identity, of which personality is just a part, leading to conceptual confusion. In the scales developed to identifying brand personality, one of the potential limitations identified till date are, the presence of negative personality characteristics. Every time when the human like personality characteristics are assigned to a brand, there could be some negative personality traits that can be associated with the brand but no brand personality identification inventory is still catering to this need.

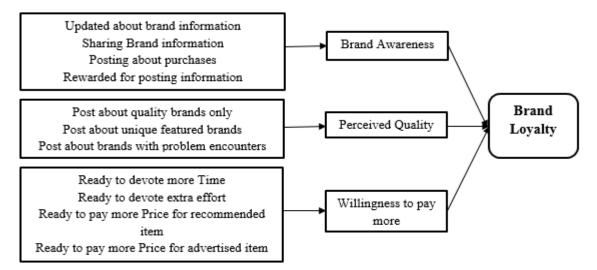
Most of the researches on personality of brands focused mainly on brands like cameras, beer etc. i.e. within the symbolic categories only but the brand personality scale of Aaker (1997) is a general brand personality identification scale enabling researches to understand representative brand use from perspective of multi-attribute models. Aaker's scale is based on factor analytical approach which is having five dimensions to it. This scale is used across many years by researches to identify the brand personality across various product categories and variations through brand personalities. This scale also covers 42 attributes associated with personality. For the purpose of studying the role of Brand Personification in building perception about the social networking sites, framework of five dimensions given by Aaker (1997) has been considered. Studies have also proved that brand personification help in changing attitude of people towards the brand and also in motivating consumers to purchase or use the product or service (Hassanein & Head, 2004). A seriously narrow and limited research documentation is available when it comes to finding the personality of social networking sites. Based on the above reviews, an identification of personality of social networking sites will help marketers in many aspects of better product positioning and consumer targeting ultimately leading to a better value offering to consumers.

#### 2.4 Value creation for brands through consumer engagement

Value is the satisfaction derived by the person from using a product or a service. Value is the amount of benefit that is derived from a service or product relative to its cost. If customer don't perceive value in the product or service then it is not valuable. Value is important for both potential as well as existing customer, who continually searches for it. Whenever any transaction is commenced in commercial world, along arises the perception of value which plays a very heavy role in customer delight (Gitomer, 2007). Observing the need of changing times marketers have moved from traditional marketing models to contemporary marketing models online in the virtual world, leading to a dire need of identifying how value is created or augmented in these new online marketing models i.e. social network sites. Value has been defined for a brand as increase in sales due to awareness, positive perceptions, intent of purchase, loyalty and advocacy for a brand. As per the old model, value was created in the business to consumer relationship on the basis of cost per impression. More the impression created at low cost, more value is created. In traditional marketing model marketing information in form of advertising is forwarded towards potential audience. Among these potential audiences a certain number of audiences become aware and in certain way for these audiences who are touched by advertisements, value is created. But if we think from the social network perspective, i.e. where consumers interact with consumers i.e. (C2C) then each interaction is an impression. Value in the new model is created due to the pass along behavior which is shown by the users in online social networks. In this new era of social network marketing, advertisement message don't stop with marketer just communicating the message to customers but the message still keeps in moving among customer. In any consumer to consumer network, there are two kind of people, one who are influenced to visit the community and other who are not interested to visit but are positively influenced. Among both kind of people there are some who will pass along the information to others and keep the chain alive, which creates value. The same is also true for online social networks like Twitter or Facebook, where value is created due to the pass along behavior of the users (TNS, TRU & Marketing evolution, 2007).

Brand equity acts as an important parameter in increasing the pass along behavior of the content among online network users. Enhancing brand equity has become the focus point of most of the marketing activities because customers switching cost is decreasing and for companies customer acquisition cost is increasing. One of the positive influencer of brand

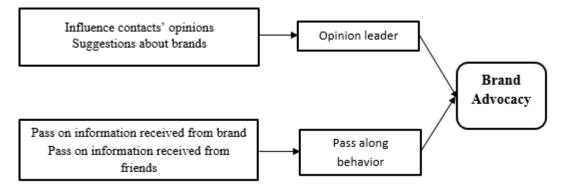
equity is increasing brand loyalty. Loyalty for a particular brand leads to continuous purchase of the same brand by the customer (Aaker, 1996). When brand loyalty is thought in terms of virtual world, we are more concerned with electronic loyalty which means how positive is the attitude of the people to repurchase items in electronic business settings (Anderson & Srinivasan, 2003). Electronic loyalty or website loyalty increases if good quality support service is offered to customers, along with quick product delivery and value for money pricing including shipping. Value enhances further if products are showcased properly online with multiple views and business is having clearly defined easy to understand policies (Lim & Dubinsky, 2005). So this leads to a conclusion that awareness about brand affects brand loyalty. Trust in the service of a website along with quality of service and perceived value leads to perception of loyalty (Ramanathan, 2010) which is percolated to perceived quality of service leading to perception of loyalty among customers. As per the study by (Yoo et. al. 2000) perceived quality as well as brand awareness leads to brand loyalty. Riding along the same lines (Khan & Mahmood, 2012) added one more dimension to brand loyalty i.e. willingness to pay more, making brand loyalty as a resultant of perceived quality of product or service, brand awareness and willingness to pay more by the customers and proved this research model doing a study over two mineral water brands i.e. Aquafina and Nestle.



#### **Figure 2.1: Variables of brand loyalty**

Once the stage of loyalty is surpassed, any consumer would enter the advocacy stage over a period of satisfied relationship with the company or brand. Brand advocates speak positive about their brands and spread a favorable word of mouth about the brand (Aaker, 1996). But this advocacy is only about one or more particular brands only. Even the spending of a consumer who is advocate of a particular brand would be high for which the person is an advocate. Brand advocates have been observed by marketers to recommend brands to others

along with trying to seek more knowledge and keeping themselves updated with favorite brand knowledge (Deloitte, 2010). Brand advocates leads to amplification of word of mouth leading to boost in product/brand ratings and enhancing credibility in the market (Fuggetta, 2012). Brand advocates acts as the customers who have reduced their consideration set to the minimum and are extremely in favor of a particular brand (Lowenstein, 2012). Brand advocates do not need any kind of provocation to recommend a brand. Brand advocates over social platforms act as a voice of the brand showcasing their authentic and genuine feelings toward the brand. When trust is the key to crack the market, brand advocates act as the prominent allies to marketers. This can lead to inference that opinion leadership and pass along behavior of the users over social networks act as advocacy activities which leads to recommending of brand to others along with trying to seek more knowledge and keeping oneself updated with favorite brand information. Considering the interactions in social networking sites, opinion leaders can create positive impression of the brand by suggesting a brand to opinion seekers. On the other hand advocates can pass on information or their opinion on brands to contacts in their "friends" list of the social networking site whenever they find it fit to share (eMarketer, 2012).





When we think of value creation in social networking sites and keep in mind the brand loyalty and brand advocacy, it seems different from value creation in traditional advertising channels. In case of advertising over social networking sites, value is not only created due to impression created in business to consumer transections, because the transections never stop here. Over social networking sites impressions are also created due the consumer to consumer interactions and their transections. So if any messages is floated through social network and if it does not stop just after business to consumer transections but also travels through consumer interactions, then 'momentum effect' takes place. Momentum effect basically occurs when any user over social networks would use a brand as a point of reference in his/her conversations, users it on his/her profile or make recommendations about the same to contacts (Gbadeyan, 2010). The idea behind this effect is motivated by enhancing the list with friends on social networking sites who are enthusiastic about any brand. These people add brands as friends or use the images or logo or anything associated with a brand in order to showcase or improve their profile. Momentum effect occurs when the pass along of the brand related information starts' to occur over the network by the follower to few or to all of person contacts. This could be in the form of mentions, likes to brand related information etc. Take an example of a person who over Facebook is using picture of brand X as his profile picture or users name of brand X in order to showcase his purchase and other put a like on the same, this content would be highlighted to his/her friend list also and if this chain reactions occurs, momentum effect has happened (Lai, 2010). This could be considered other way around when a consumer visits any of the brand communities and download or perform some activity in that community in order to show his liking or association for brand in some way to friends. People are doing these kind of activities and information is flowing from consumers to consumers due to their pass along behavior. This creates value for the brand through momentum effect (TNS, TRU & Marketing evolution, 2007). Social networking sites have gained prominence in the marketer's handbook, owing to the fact that it has so much to offer in terms of a large pool of users, platforms for communication, content sharing and a lot more. As per the literature identified and highlighted in the previous paragraphs, value is created through momentum effect in social networks, this has initiated a need among marketers to understand the nitty-gritties of online user engagement, their patterns and the reasons behind such engagements, thereby making social network consumer engagement a vital area of study. Social media tools are taken by Telstra- a telecommunication company as one of the primary tool for business engagement. Employees at Telstra are encouraged to use and access social media services to share information and views with peers in order to reach out to new connections. Telstra appreciates value in using social media tools for customer's and other stakeholder's engagement. Engagement is basically studied in literature in two different ways. On one side engagement is identified as the frequency of using the social networking sites (Sharma & Verma, 2012), meaning that if people tend to incline towards activities like visiting brand pages or participating in brand communities etc. on social networking sites then, it is be regarded as consumer engagement. This viewpoint is common among practitioners. Second side represents consumer engagement as co-creation of brand content in virtual communities to interact and involve with other users leading to feeling of advocacy towards brands. Nielsen (2012) identified brand engagement activities on social networking sites to be as reading reviews about brands, discussion on brands,

watching brand related videos, following the brand, and sharing one's own views about brand in form of reviews. Haven (2007) defined engagement in form of influence level, interaction level, involvement level and intimacy level that a person carries with brand over a period of time. Engagement acts an indicator to measure inner feelings of a person associated with the brand and it not just restricted to reach and frequency. Involvement and interaction of a customer deepens with any brand with regular use and continued purchase leading to increase in intimacy (affinity) & influence (championing). These four engagement parts collectively frame holistic picture of consumer engagement in online social networks. Engagement of consumer in social media stands on two pillars: social strategy and technology. The aim of consumer engagement is to generate value for both customer and company by extending brand/product experience throughout all phases of relationship: from need to loyalty to advocacy (Digital ingredients, 2009). With almost a similar focus, engagement can be considered to materialize for brands in social networking sites, if present or potential customers tend to be co-creators for brand related communication. Co-creators discuss about the positive attributes of a brand, recommend brand/brands, share concerns for one or multiple attributes for any brand i.e. share their brand related feeling with others on social network. If users are inclining towards such collaborative activities of sharing thoughts and concerns etc. about brands amongst each other and if these collaborative activities leads to brand advocacy, consumer engagement with brands will happens over social networks (Evans & Bratton, 2010). In order to study the engagement of Japanese youth over online networks Takahashi (2010) carried a study over Myspace and Mixi - two social networks in Japan. Activities related to information seeking, maintaining and creating connections, and participation were identified to be the primary dimension of user engagement over online social networks. Results shed light on the fact that in order to engage in online networks youth of Japan are creating or recreating themselves on regular basis. Epsilon (2010) conducted a study in pharmaceutical sector to trace the customer engagement through social media in pharmaceutical Industry. The study indicated that there exists two kinds of patient's. There are patients who are highly engaged with self-health management and take active role in it. On the other hand there is other extreme of patients lacking in confidence and who don't play any active role in self-health management. The results suggested opportunities that lies with identification of varied groups of different types in online networks to facilitate tailored conversations as per group needs.

For the purpose of studying the value creation process for brands through social networking sites w.r.t momentum effect leading to increase in advocacy and loyalty, the constructs detailed above for brand loyalty and brand advocacy have been considered. Value would be considered to be created for the brand if loyalty and advocacy is happening over social networks due to momentum effect. In order to understand the concept of value creation better, one needs to learn about the association between eWOM and components of social relationships because as the occurrence of eWOM will increase, so do the chances of momentum effect.

#### 2.5 Social relationships and eWOM

Social media is different from traditional media because of its model of consumer to consumer networking. Online consumer to consumer communication channels through social network sites allow messages to be spread in word of mouth fashion i.e. quickly from one person to another. Consumer to consumer marketing over the period of last few years has gained much attention from practitioners and academicians. The new interactive technologies like social networking sites (a tool of social media) offer powerful platform for spread of word of mouth electronically. To any user there is a known group of people linked on a social network, who can interact with others in their network related to purchase related or other kind of decisions (Lis & Neßler, 2014). Majority of people who use social networking sites voted that their social networking links acts as a source of information during buying decision process (Knappe & Kracklauer, 2007). This has benefitted businesses a lot. Word of mouth through online social networks have hyper boosted degrees with which people talk amongst groups. eWOM in online networks has been characterized with consumer sharing information in certain ways. The three behavioral dimensions which are prominently highlighted in past literature about eWOM were information pass along behavior, opinion giving and opinion seeking behavior (Feick & Price, 1987). In opinion giving behavior people act as opinion leaders and try to influence the behavior of their followers. Opinion giving behavior can be characterized by content pass along behavior of people through their social networking sites and opinion seeking behavior is about people asking for opinion of others on their social networking sites about products or some kind of opinion. Electronic word of mouth in online networks was described to comprise of opinion leadership activities along with behavior of opinion seeking and information or content pass along (Sun et. al. 2006). Based on this literature, a need to study association between eWOM in online networks and three variables of opinion giving, seeking and pass along is identified.

With increasing number of marketers using internet for marketing their products and services has led to communication clutter in the online world. Social network sites provide the ability to marketers to move away from the clutter by electronic word of mouth marketing. In virtual democracy i.e. in online social world consumers create virtual communities to communicate with like-minded people (Goldenberg, Barak, & Muller, 2001) and social similarity performs an important role in online social network. A connection or a person is considered as a node and similar nodes tends to connect more as compared to dissimilar nodes, i.e. people with similar characteristics tend to be more inclined to associate with people who share these characteristics. Keeping the same in mind homophily has been considered as one of the factors in order to study social relationships on social networking sites (Aggarwal, 2011). On a social network when similar beings become friends, this will be denoted as the effect of homophily (Zafarani et. al. 2014). This could be denoted with age old saying that birds of a feather flock together (McPherson et. al. 2001). At an individual level, homophily can be segregated into three types. The very first one is status based homophily which comprises of people similar in age, gender, social class, religion etc. The second type of homophily is characterized by acquired homophily denoted by marital status, financial situation, occupation and education acquired etc. and lastly there is third type of homophily called value based homophily that can be denoted by the common interests within persons (Lazarsfeld & Merton, 1954). Considering these three differential type of homophily, in the instrument nine statements comprising of status homophily, acquired homophily and value homophily have been asked with an intention to understand that whether there is any one kind of homophily at the individual level which leads to increase in social relationship or all three have equal contribution to building social relationships. Considering the work done by Choi et. al. (2008) and Chu (2009) strength of social ties, social capital, homophily, trust and interpersonal influence act as the root cause of social relationships in social networking sites.

A recurring theme in electronic word of mouth is group cohesion - strong versus weak ties (Goldenberg, Barak, & Muller, 2001). When the tie strength is weak then network structures (design elements, navigability) are essential to build trust and consumer interaction with websites. Communications in a social network sites augments a user's susceptibility to the opinions of fellow members (Kozinets, 1999). Group cohesion (strong/weak ties), relational

motivations (trust, social norms) and network structures (design elements, navigability) provide means of generating active eWOM. Information dispersed using eWOM has a far reaching quality and variety which can't be provided through any commercial message. User via electronic word of mouth discuss a product or service on the basis of their multiple experiences from multiple perspectives including price, features or any kind of potential benefits or problems. When we talk about social networking sites, basically we can divide the contacts into two type's i.e. personal contacts and professional contacts (Ferri et. al. 2012). The tie strengths for personal as well as professional contacts for a single person can vary over a social networking site. One of the famous social networking sites in India, i.e. Google+ provides the facility of circles. In Google+ circles users can organize their contacts as per friends, family or work colleagues. Similar kind of options are available on Facebook and other social network sites to organize user contacts. This kind of features allow users to make group of their contacts based on their strength of relationship with user (Pappalardo et. al. 2012). Tie strength in social networking sites can be judged on the basis of centrality and power relationship within the nodes. Degree, closeness and betweenness care used to understand the tie strength relationship (Hanneman, 2005). Degree can be associated with frequency of communication with contacts, Closeness can be associated with closeness with the contact and betweenness can be associated with importance of contacts. Chu (2009) considered tie strength as tracing the feel of closeness with the contact (Wu et. al. 2010), importance of contacts to user and frequency of communication with contacts on social networking sites.

After further drilling down in the literature of social relationship, reference group influence has been identified as an important variable. Interpersonal influence is important for the study of social relationship because it acts as a major factors in decision making by consumers (Gatignon & Thomas, 1985). To understand the reference group influence, one needs to understand three type of influence i.e. value expressive, utilitarian & informational influence (Yang et.al 2007). When people try to get themselves associated with a group in order to portray a particular kind of image to other, it leads to value expressiveness. There are advertisements of Tata Nano in which youngsters are showcased using this car, implying that people who use this car are young. Value expressive function implies that the reflection of the product on the consumer is the main reason for a consumer to use this product. Consumer is under value expressive function when the product usage intention depicts his/her social identity (Dean, 2010). Simply it means that people use a product or service to

portray their belonging to a group. Informational influence occurs when any individual who is lacking in knowledge about something, asks about informational support from members in the reference group, whom he is considering as credible source of information. This can be also taken as a person who is asking someone for information about a product or service in order to support a purchase decision i.e. referrer is considered as an expert or more knowledgeable. A desire to make knowledgeable choice characterizes informational influence. Suppose, X is interested to buy a new motorcycle but not having enough knowledge about this product. X posted in his online community about which bike to purchase in a certain sum of money and also listed his other requirements. Now the people in his reference group gave their opinion to him about which bike to purchase and X made the final decision based on the information received from reference group experts (as per him). This will be regarded as informational influence (Hoffmann & Broekhuizen, 2009). Informational influence can occurs both voluntarily and involuntarily in social networking sites. Lastly in case of interpersonal influence normative or utilitarian influence plays a part. When users show a complaint behaviour in order to get praise from reference group or avoid punishment from the group, normative or utilitarian influence occurs (Kelman, 1961). Informational interpersonal behavior highlights acceptance behavior but normative or utilitarian interpersonal influence highlights compliance behavior.

Social capital is an important concept that helps in building of virtual communities i.e. networks on social networking sites. Social capital is signified into two forms of bonding and bridging capital (Putnam, 1993). Based over cohesiveness, bridging social capital would emerge when the people in the group are heterogeneous and bonding social capital would emerge when the people in the group are homogenous. It signifies inclusive nature of bridging and exclusive nature of bonding capital. Social relationship with inclusive nature will lead to information assemblage from peripheral sources outside the community. So bridging capital leads to creation of social ties between groups of people. Bonding social capital also called exclusive capital is the linking between people who are similar (Putnam & Robert, 2002) and strong bonding social capital leads to better emotional support to an individual. One major thing about bonding social capital is that ties of this capital constitutes small part of a person's total social network (Putnam, 2000). Considering the work done by (Chu, 2009) bonding social capital in social networking sites are considered as ties based on the curiousty to learn new things.

As the social networking sites which are web based platforms are becoming very common among people to discuss their thoughts and share opinions among community of selected people, trust plays an important role. On any of the social networking sites, there are nodes connected to other nodes depicting a relationship in-between nodes. Relationship signifies mutual understanding (Schurr, 2007) which is dependent on trust factor in the relationship. If trust would have been missing in this community, then information disseminated would reap no results as every other person will treat the information shared to be useless. It is trust of the people in their online communities that makes social networking sites a success. Trust is an enduring characteristic in the attitude of a person that gives a signal of reliability to other person or group of people (Carroll et. al. 2007). It is feeling of trust that makes eWOM credible on online social networks. Information shared with a node which is considered as highly trustworthy by the other nodes would be treated as most credible source of information of social networking sites.

Relying on literature review, to learn the association amid social relationships & eWOM in online networks five different social relationships have been identified i.e. social ties, social capital, homophily, trust and interpersonal influence. This study of Social ties, social capital, homophily, trust and interpersonal influence with electronic word of mouth will help us identify the strength of relationship between variables of these relationships and variables of electronic word of mouth. This will also lead to understand association of social relationship variables with variables of electronic word of mouth across varying demographics. This will help to identify about which variables are impacting the most in flow of eWOM in online social networks and identification of most influential variables will help marketers to focus on nurturing such relationships in social networking sites to improve their efforts.

#### 2.6 Advertisements on social network website

As large number of people are using social networking sites, this has attracted marketers towards social networking sites to use this medium for the purpose of advertising their brands/products/services. Services model of social network sites is based on providing completely free service to users and income for social network sites is generated by selling advertisements to precisely targeted individual and also selling users profile data (Barnes, 2006). Richards & Curran (2002) expressed advertising to be "a paid, mediated form of communication from an identifiable source, designed to persuade the receiver to take some action, now or in the future which is conveyed to audience through print, electronics or any

method other than direct person-to-person contact". In marketing mix, promotions are very critical part and advertising is based on the simple sender-receiver communication model, resembling push marketing model in which incentives to purchase are sent to consumers. If we consider integrated marketing communication model, advertising is crucial element belonging to customer focused marketing strategy with provision for customer feedback in a two-way communication process (Schultz, 2007). Internet marketing has come a long way and new advents in the online social media marketing have taken it many steps further (Cory, 2010). The web 2.0 is all about two way interactions with the customer rather than one way communication i.e. just informing your customers. Social networking sites fuse promotion mix elements to enables organizations to directly talk to their customers and also allows for the direct interaction of the marketing organization with other organizations (Mangold & Faulds, 2009). Social networking sites have been identified as the one of the top three most suitable digital media for marketing to benefit management professionals. If email and the web have benefited ones business, then with social media is step towards next generation. For marketers social media is a tool which reaches to wider audience quickly with greater transparency, also leading to deeper relationships with existing customer and helps in expanding prospects network.

Social network based advertisements differ from traditional medium of advertisements in both element and way of message delivery. Advertisements over social networking sites can be pushed to the audience like sponsored/display advertisements and users can also pull the marketing content by following someone on micro blogging sites like twitter (Taylor et. al. 2011).

Advertising on social networking sites is done in many different forms ranging from sponsored advertisements which are like of display advertisements or putting brand/products in the games that people play through social networking sites, a form which is known as gamification. In a reports by Boundless (2014) different type of advertisements on internet have been discussed in which social network advertisements have been highlighted. As per this report there are different ways of advertising on social networks, ranging from direct display advertisements to advertisements using a social network application. Business houses are advertising on social networking sites either by doing advertising in the form of display advertisements on the different pages or by creating their own business pages/fan sites (Lusted, 2011).

As per the study conducted by Psychster.com in collaboration with allrecepies.com for comparing user engagement across social media, seven types of advertisements have been identified (Psychster Inc., 2010). Different types of social media advertisements identified for the study were as follows:

- Sponsored Content Advertisements
- Newsletter
- Banner
- Corporate Profiles with and without Fans and Logos
- Appvertisements or Widgets

In the new wave of social network site advertising, games are playing a major part. There are brands like discovery network or ESPN which are using social networking site games for promoting their products or services. These kind of games are called as branded games and technically these games are called widgets. Discovery network has created a game named Deadliest Catch which is weaved around its television show with the same name. The idea is to promote the interest of the audience in the television series while creating new experiences for the user base (Vidyarthi, 2010). The social branded games can be put into three kinds i.e. games with low level brand integration, mid-range brand integration and games with high level brand integration. In case of low level integration brands are not directly involved with the game but are associated like on giving the right answer about a movie question on Facebook, winners were getting some Farmville currency as reward. On the other hand, high level integrated brands are like the Deadliest Catch game of discovery network, where the complete game is designed by the marketer around a product or service. When any brand is integrated in the story of the game, like if a person is required to collect 20 crowns of a cold drink brand in the game to complete the level, the cold drink brand has put itself at the mid-level of integration (Aaron, 2012). Brand based gaming on social networking sites have become a major advertising strategy by companies.

Sponsored content advertising which is a common form of display promotions has been a regular happening over online social networks. It consists of a picture of the brand or product or company or logo of the company with some text to induce people to click on it. Sponsored advertisements are clearly tagged as advertisements on social networking sites and are hyperlinked generally to some parent site of the brand or the product. A major difference in between brand based games and sponsored advertising is that sponsored advertisements are

clearly indicated as advertisements whereas brand based gaming merges in between the game and become a part of it. These advertisements are mainly based on the pay per click model for the advertisers (Zimmerman, 2011).

Brand page is the profile of the brand on the social networking site like that of a person. As when someone creates a profile on Facebook, people who are interested to be friends with the same person, joins that person as friend, on the other hand when some brand profile is created on Facebook, people who want to be linked to the brand are called as fans. So people have friends and brand have fans on Facebook. Creation of brand pages or brand profiles by companies on social networking is a common activity these days. Brand pages help and support companies to give an added option to people to talk to the brand. People who join or follow these brand pages get updated news about the company and there are companies like Starbucks which are using the platform of social sites to collect suggestions and idea of new products and services from the customers (Gembarski, 2014). Starbucks using this channel is able to reach more audience in less of time and is able to talk to its followers/fans on daily basis, thus creating an engaging brand.

Once people become fans of any brand they will also start getting the posts made by brands. These posts intends to keeps followers or fans informed about happenings or exposing audience to marketing efforts of the brand or company. These posts lead to organic reach. The more the number of fans or followers, the more organic reach would be there. Brand posts appear within the regular posts of the users and appear as posts from friends only. There are marketing messages in these posts which appear along with regular posts and are difficult to ignore. The golden rule of engaging well with audience and on social networks is to be responsive to the queries of people on social networks. The company also needs to be consistent in posting and sharing content with the audience (Facebook, 2014).

Brands on social networking sites in order to inform audience or to induce the audience keep on adding marketing videos. The idea could be to engage audience or to reach a wider number of people at a low cost. Whenever brands share these kind of videos, the same would appear in the feed of people following these brands also. Now it is at the discretion of the people to share the content with others or not. Sharing videos by brands on social networking sites have become a common activity and even advertisements which are run on television are also shared by companies on social networks to gain deeper reach. If videos created by brands are interesting then audience makes such videos a viral, leading to a then effort less activity for the marketer (Cooper, 2013).

Social polling is the new phenomenon which is emerging as a major form of social network advertising. It has been found that brands are understanding that the primary purpose of people for using social networks is not buying brands, so brands are now using this medium to remind people or take their opinion about different parameters of a brand. Companies can associate their brands with current events and ask intriguing questions to audience. During these polling events, companies do create touch points for their brands. These kind of polling by brands help brand to increase their visibility among the audience in the market (Waxman, 2012).

Grounded on literature review to study users engagement towards the different social media advertising types, display advertising or banner advertising, brand based gaming, polling activities by brands and brand posts will be considered as the form of advertising to understand the level of liking for each of these advertising types. This liking can portray the felling of engagement, audience have towards the different form of mass communication on social networking pushed by an identified sponsor and can be used to compare the user engagement across social network advertisement types.

Borrowing from past literature, it is summarized that the usage rate of social media is increasing both for consumers as well as marketers. In a short period of time, online social networking has developed into a sensation, through which a massive number of people using internet are linked. A significant number of studies on online social network usage pattern have been carried out in the United States (Lin & Bhattacherjee, 2010) but relatively few studies have been completed in India and no published literature was found on studies focused specially upon Punjab. Social network website users demonstrate behavioral differences in usage of such sites due to varying acceptance in different regions of the world (Rubin, 2002; Harden & Beayeyz, 2012). A culture is recognized as being more individualistic in behavior, so user pattern in terms of frequency, site preferences, time of use, kind and number of contacts, access devices, topics discussed and activities performed etc. needs to be studied by marketers to create tailored options for users of online social network sites and to become more efficient in their targeting activities across different geographies. On similar lines one cannot ignore the superseding effect of cultural norms and sanctions on motivations to use online social network sites across different parts of the world

(Recabarren, Nussbaum, & Leiva, 2008). Cultural differences makes it important to understand underlying motivations for people to join a social networking site for both marketers as well as for online social site service providers across geographies. When an effort was made to trace out the user motivations to indulge in online social networking, no supporting literature was found from India especially from the region of Punjab highlighting the motivations of people to join social networks. Given the notion that there are diverse reasons behind online network usage, a gap has been identified to assess the underlying motives of social networkers in the state of Punjab to use online social network websites.

Brand personification helps in changing attitude of people toward brands and also in motivating consumers to purchase or use the product or service (Hassanein & Head, 2004). With large of marketers shifting to online social networking sites for promotion of their products, it is of dire importance to understand perceived personality of social network sites from perspective of consumers. No research was traced when it comes to finding the personality of social networking sites in India from perspective of users. To address the existing gap in literature, there is need to explore the brand personality perception among audience for different social networking sites.

Businesses understanding the huge potential of social networking sites have started to make investments in this medium to connect with customers directly to promote products/services. A question arising out of this is that do these investments help in creating or sustaining brand advocacy and loyalty. There is a requirement to study the momentum effect in relation to advocacy and loyalty towards the brands in social networking sites. Value creation through momentum effect in social networks, highlight the need to understand nitty-gritties of online user engagement and reasons behind such engagements. This makes social network consumer engagement a vital area of study. For this purpose there is need to study value creation process for brands in social networking sites w.r.t to momentum effect. Value would be considered to be created for the brand if loyalty and advocacy is happening over social networks due to momentum effect, because consumer engagement aims to generate value for both customer and company by extending brand experience throughout all phases of relationship i.e. from need to loyalty to advocacy (Digital ingredients, 2009).

Word of mouth through online social networks have hyper boosted degrees with which people talk amongst groups. WOM in online networks is deemed to depend upon different kinds of social relationships existing between community members. On the same lines considering the population of Punjab, a need is found to reconfirm the association between social relationships and eWOM (electronic word of mouth) in Social Networking Sites. This study on social ties, social capital, homophily, trust and interpersonal influence with electronic word of mouth will help in identifying the strength of social relationships with variables of electronic word of mouth. Results will assist marketers in understanding association of social relationship variables with variables of electronic word of mouth across demographics of Punjab. Identification of variables which influence eWOM flow in online social networks will also support marketers to focus on nurturing social relationships in social networking sites which may result in improving marketing ROI.

Growth in online social network usage and cooperative advertising technology have led to opening up of new avenues for advertisers. Online social network service providers have realized that people do look for products/services on their sites. Based on the massive amounts of user's data, online sites are helping businesses in marketing to right persons. Different types of social network advertisements call out for the need to clarify whether audience or users of social networks responds to all advertisement types in the same way or user level of liking towards advertisement types differ. Varying advertisement liking by users can portray the felling of engagement that audience have towards different form of mass communication on social networks, pushed by any identified sponsor. Results can be used to compare user engagement (in form of liking) across social network advertisement types of display advertising or banner advertising, brand based gaming, polling activities by brands and brand posts.

Keeping this gap in mind the present study had intended to add to the body of knowledge in management education considering the perspective from India and particularly Punjab. The results of this study will provide a first step toward the understanding of social networking sites usage pattern, usage motivations, personality perceptions and influence on brands considering the population of Punjab. Finding of the study will be of the interest to all firms which plan to or are already using online social networks to reach potential and existing consumers.

## **Chapter 3**

### **RESEARCH METHODOLOGY**

This chapter presents details of research methods used in the present study. The first section describes the need and scope of study. Second and third section details the objectives and major hypothesis of the study. Methodological aspects of the study including type of data, sampling method, data collection, instrument development and administration etc. have been explained in the later sections of this chapter.

#### **3.1 Need and scope of the study**

Internet usage in India is increasing at a rapid pace. In 2010 India had 1.1 billion population with 88 million active users of Internet, making 8.5 per cent penetration rate. 97 per cent of these active users have been regular users of internet and 85 per cent among internet users belong to 19-45 age group. By 2014 India had the third largest internet user base in the world (The Hindu, 2014) and is expected to become the second largest in the world by 2015 with nearly 370mn internet users (Gnanasambandam et. al. 2012). 60 per cent of the active internet users use internet mainly for the purpose of social networking out of which 60 per cent of the traffic comes from non-metro cities (Mankani, 2010). This highlights that internet is used more for online social networking and social networking sites are the places to find majority of online users. Till 2010, penetration of mobile internet was one of the highest in Punjab i.e.11 per cent as compared to 8.5% of Indian average (Khanna, 2010) and in 2014, Punjab was having one of the major customer base of internet users with more than 5.4 per cent of the population using internet. India at country level is having internet penetration rate of 15.1 per cent (Internet society, 2014). Punjab being among the Indian states with major ecommerce potential growls the need to understand the profile of social networkers (Aggarwal, 2013) and their usage habits.

Borrowing from past literature, no supporting evidences were found from India especially from the region of Punjab highlighting the usage patterns for online social networkers and motivations of people to join social networks. A need has been found to reconfirm the association between social relationships and eWOM (Electronic word of mouth) in social networking sites and also to study the momentum effect in relation to advocacy and loyalty towards brands in social networking sites from cultural perspective of Punjab. To address the existing gap in literature, there is need to explore brand personality perception and engagement of users in form of their liking towards advertisements among audience for different social networking sites. Keeping this gap in mind the present study had intended to add to existing the body of knowledge in management education considering the perspective of India and particularly state of Punjab.

To summarize, given the relevance of the topic of value creation through consumer engagement in OSNS, the beneficiaries of this study will be management, social network research practioners and academicians who are interested in the consequences of increasing social networking site culture in developing countries.

### 3.2 Objectives of the study

The study is aimed at exploring in detail the following objectives in context to online social networking websites:

- a) To study the usage pattern of social networking sites among the social networkers across cross-sections of the population.
- b) To identify the factors that motivates usage of social networking sites.
- c) To study the role of brand personification in building perception about the social networking sites.
- d) To study the value creation process for brands through social networking sites w.r.t momentum effect leading to increase in advocacy and loyalty.
- e) To study the association between social relationships and eWOM (Electronic word of mouth) in social networking sites.
- f) To compare user engagement across social network advertisement types.

First objective was to study the usage pattern of social networking sites among the social networkers across cross-sections of the population. Second objective was about what motivates people to use or become member of online social networks? Third objective of this research was to identify brand personality of social networking sites as perceived by users. In fourth objective the idea was to study whether the momentum effect on social networking sites leads to loyalty and advocacy for brands or not. Fifth objective was to check whether social relationships play a part in virtual or online social networks or not. Sixth and last objective was to study what type of advertisement types are preferred by users of online social networks to judge their engagement in term of liking towards the advertisement types.

### 3.3 Major hypothesis

In the present times online social networking sites offers marketers with a great opportunity to connect with their potential customers, therefore it was hypothesized that:

**Hypothesis**  $H_0^1$ : There is no significant difference in usage pattern of social media among the social networkers across cross section of the population.

For first objective, data has been collected on the usage pattern of social networking sites users. Data related to longevity of use, frequency of use, time spent, activities performed, topics discussed etc. on social networking sites from different demographics has been collected. This hypothesis will help understand the differences if any in social networking usage pattern across the different demographics.

Hypothesis  $H_0^{2.1}$ : There is no significant relationship between momentum effect and advocacy.

When users on social networking sites use brands as reference point in their conversations with others, and other users also commit the same thing, an effect is created which is called as momentum effect. Data has been collected related to the opinion giving and information pass along behavior of the users over social networking sites which will be used to analyze the relationship between momentum effect and brand advocacy i.e. can momentum effect leads to increase in brand advocacy among users.

Hypothesis  $H_0^{2.2}$ : There is no significant association between momentum effect and loyalty.

Continuing from the previous hypothesis, the next link in the chain is to study the relationship between momentum effect and brand loyalty i.e. can momentum effect leads to increase in brand loyalty of the users.

**Hypothesis**  $H_0^3$ : There is no significant association between social relationships and eWOM.

There are different types of social relations that play the part in initiating word of mouth communication like homophily, trust, social tie strength, interpersonal influence like identification and internalization, compliance and acceptance, and social capital. The objective is to understand, do these social relationships play a part in online communication over social networks and among the population of Punjab under study.

#### 3.4 Research design and methodology

Research design is the guiding plan laying down the methods and measures for gathering & examining the needed information (Malhotra & Dash, 2014). The research design has been defined as a blue print of the research work that indicates the draft for the methodology for data collection, the instrument of the research, the method of sampling and analysis etc. (Malhotra & Dash, 2014).

The present study is a two phased study that started with exploratory qualitative research using focus group to find what motivates social networking usage and was followed by extensive quantitative study. For the quantitative study descriptive research design was selected. Descriptive research design describes characteristics of population under study without any thoughtful manipulation of the variables. Research design used for the present study involved following steps:

**3.4.1 Survey of secondary sources:** In order to get a complete understanding of the value creation for brands using social networking sites; the secondary data is essential. Therefore the first step in the research involved collection of secondary data from all possible sources that directly or indirectly focused on theme of study. Accordingly a literature scanning was undertaken. Efforts were made to prepare list of relevant material and procure them so that conceptual clarity could be achieved. Secondary data was collected from journals, magazines, books, statistical reports etc.

Secondary data helped in identification of all relevant dimensions of social network site usage patterns, momentum effect, online brand loyalty, online brand advocacy and social relationships in electronic world during the design of the instrument, which was administered on the sample respondents to collect relevant primary data for the research.

**3.4.2 The study population:** The aim of the study was to carry out six objective related with online social networking in Punjab. For the purpose of this study, top four social networking sites of India were considered i.e. Facebook, Twitter, LinkedIn and Google+ (Alexa, 2014). As explained in the need of the study, Punjab (state) from India being one of the most promising population with present and future internet usage has been considered for present research. The scope of this research was narrowed to Punjab state of India, so that the objectives under study comes into sharp focus. The population of the study consist of all internet users having an account with social networking site.

**3.4.3 Sample size and selection:** Sample survey was conducted for the purpose of present study to collect first hand data from respondents. The very large size of universe and quantitative character of data were two important considerations in favor of sample survey method. A total of 1000 social networkers from Punjab were the respondents for the study. This sample size was calculated considering the study population of 14, 95, 800 internet users i.e. 5.4% of total population of 2.77 crore (Government of Punjab, 2014) of Punjab at 97% confidence interval. For the identification of sample from population under study snowball sampling was used, which is a non-probabilistic sampling technique. The sample unit in the study was an individual having an account with social networking site. Apart from this there was no limitation as to who can take the survey.

**3.4.4 The research instrument:** Primary data in the form of the response of the social networking site users, which was of immense importance and backbone of the study, was obtained from respondents with the help of widely used and well known method of sample survey, utilizing structured questionnaire.

**3.4.5 Development of the instrument:** The instrument used for this study was prepared after a thorough review of literature. The first step was to develop a clear understanding of what exactly falls within the construct domain and what does not. To draw the boundaries of what is to be included and what is to be omitted, a review of all major conceptual literature on value creation in social networking sites, brand advocacy and loyalty in online networks, and different types of social relationships were undertaken.

In order to get qualitative inputs for the purpose of framing questionnaire on what motivates social networking usage, an exploratory qualitative research using focus group was used. Using the Krueger (1994) framework, three focus groups were conducted in three cities in Punjab (a state of India) i.e. Mohali, Amritsar and Jalandhar.

Based on the results of focus groups and literature review, research instrument was developed. The research instrument was divided into seven parts as follows:

 General use of social networking sites: Questions included in this section related to longevity of online social network usage, frequency of online social network usage, time spend by individuals on social networks, number of contacts, kind of contacts, frequency of communication with contacts, importance of contacts, closeness with contacts on social networks, devices used for accessing social networks, activities performed and topics discussed by users over social networks. The items for this part of the instrument were adapted from the Sensis (2011) and Chu (2009).

- Motivations to use social networking sites: This part consisted of variables related to motives that drive individuals to use online social network websites. On the basis of preliminary inputs received from focus groups and then through literature review, twenty five variables were identified. The variables for this part were adapted from the study of Kim et. al. (2011) and Cheung et.al. (2011).
- Brand Personification: In order to understand the personality of online social network websites, this part consisted of question describing user perception of personality of different online social networks. The items for this part were adapted from the (Aaker, 1997).
- Momentum effect leading to engagement: This part consisted of questions related to momentum effect, brand advocacy brand loyalty, opinion giving, seeking and pass along behavior among users of online social network websites. The items for this part of the scale were adapted from the Kwak & Kang (2009); Conroy & Narula (2010) and Khan & Mahmood (2012).
- Social relationships: This part comprised of variables to find the association between social relationships and electronic word of mouth over online social networking websites. Items related to five types of social relations namely social tie strength, social capital, homophily, trust and interpersonal influence were added in this part. The items for this part of the scale were adapted from the Hampton (2011); Kelman (1961), Yuan & Gay (2006) and Chu (2009).
- Advertisement preference: This part was related to user engagement and preference for different type of advertisements on social networking sites.
- General information: This part consisted items related to demographic information about respondents under study. Items related to age, gender, income, qualification, marital status and occupation were added in this part of questionnaire.

At this stage in order to establish face validity of the construct these items were presented to academicians in field of management so that one can be sure of that what we are measuring is what we think we are measuring. On suggestions of academicians some items, which scored lower in value in terms of consistency, were deleted while some additional items were added.

After finalizing the items, these items were scaled in order to signify magnitudes of attributes (Malhotra & Dash, 2014). Likert scale was employed to the items used in questionnaire utilized for the study. The next step was pre-testing of preliminary questionnaire. For clarity and ease of response a pilot study was conducted in which the instrument was administered on the 10% of the respondents Bajpai (2011) and Connelly (2008). Respondents were asked to complete the questionnaire so that potential difficulties and ambiguities, still remaining could be eliminated. On receiving their suggestions, the draft was further improved in light of presentation of matter, and the appropriateness of the language of questions. This is how the final Instrument was developed for the use in study.

**3.4.6 Validity and reliability of the instrument:** One study quoted that marketing researchers seldom assess the reliability and much less the validity of their measures (Heeler, R. M & Michael, 1972). As researcher must routinely measure the accuracy so as to produce accurate and consistent results, in the present study validity and reliability of the scale was measured.

Validity of an instrument is done to confirm that instrument reflects the true difference on the characteristic that is being measured. There are many facets and dimensions of the concept of the validity (Cronchback, 1971).

Face Validity also known as apparent validity of the instrument indicates that the instrument appears to be valid to the reader. Since the validity of the instrument goes much beyond the appearance so content validity of instrument was also undertaken. Content validity also called as logical validity which implies that the items in the instrument measures all the facets of social constructs for which opinion are being sought (Lacity & Jansen, 1994).

In the present study multiple items for the questionnaire were developed that characterized the six objective under study. The face and content validity was first done by extensive review of the relevant literature. Subsequently these items were submitted to five academicians for evaluation. They rated each item for its consistency with respective opinion being sought and also recommended additional items for the inclusion. After necessary corrections the questionnaire was again submitted to same members. The items after second review were considered to have a high consistency with topics under study and were finally included in the instrument.

Reliability is when a researcher performs multiple measurements on the data and consistent results reoccur every time (Malhotra & Dash, 2014). The reliability of the questionnaire was measured using statistical package for social sciences based on the responses collected from 10 percent of the sample understudy. For all the items under study, objective wise reliability score were calculated and reliability was found to me more than 0.86 for all the items.

The questionnaire was found to be both valid and reliable and was subsequently administered to the respondents.

**3.4.7 Administration of the instrument:** After accessing the reliability and validity, the final instrument was administered using a combination of personal, e-mail and online method. The questionnaire was administered online using services of surveymonkey.com. Initially link of the survey was shared on social networking sites using the accounts of researcher and network of friends/followers or people in the circle of researchers social networking sites. People in researcher's social network were requested to share the survey link from their profiles and after every two days this survey link sharing activity was repeated. Individual messages of the survey link were also sent to contacts using social networking sites and e-mail services to administer the questionnaire. However, in spite of necessary follow-ups, the response rate was very low and only 347 usable questionnaires could be collected over a period of more than three months. Later along with the online data collection, questionnaire was also administered offline.

**3.4.8 Sample description:** The details to demographics of respondents under study are:

Demographic Variable	Levels	Number of respondents	
Gender	Male	660	
Gender	Female	340	
Age	18 or Less	78	
	19-25	675	
	26-30	154	

#### Table 3.1: Sample description

	31-35	58
	36-40	24
	41-45	5
	More than 45	6
	10th/Matriculation	8
	10+2	55
Qualification	Under Graduate	319
Qualification	Post Graduate	588
	PhD/Doctorate	27
	Others	3
	Married	182
Marital Status	Unmarried	807
	Divorced	11
	Student	647
O	Self-Employed	85
Occupation	Service	266
	Other (Housewife)	2

The filled in questionnaire were then checked for completeness and were analysed. The analysis of data and interpretation of results are presented in the next chapter.

## **Chapter 4**

# **USAGE PATTERN IN ONLINE SOCIAL NETWORK WEBSITES**

In order to understand the usage pattern of social networking sites by the users, a questionnaire with series of items was administered to the respondents. In the following sections the analysis of the responses received from the social networkers have been compiled.

In order to trace the longevity of use of social networking sites by the respondents, a question was asked in the questionnaire for how long respondents have been using the social networking sites and the analysis has been presented in table 4.1.

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 1 year	23	2.3	2.3	2.3
1 to 2 years	74	7.4	7.4	9.7
2 to 3 years	119	11.9	11.9	21.6
3 to 4 years	203	20.3	20.3	41.9
More than 4 years	581	58.1	58.1	100.0
Total	1000	100.0	100.0	

 Table 4.1: Longevity of social networking sites usage

Out of the total sample size of 1000 respondents, 581 or nearly 58 percent of the respondents had been using social networking sites for more than 4 years. Approximately 20 percent of the respondents were using social networking sites for more than 3 years but less than 4 years. Nearly 12 percent of the respondents had been using social networking sites for less than three years but more than two years. Overall nearly 10 percent of the respondents had less than two years of experience of using the social networking sites. This figure of ninety percent respondents having more than two years of experience with use of social networking sites gave a lot of confidence in further analysis of the study.

The next question in the line intended to understand the frequency of use of social networking sites by the users. The responses are depicted in table 4.2.

	Frequency	Percent	Valid Percent	Cumulative Percent
Several times a day	472	47.2	47.2	47.2
Once a day	337	33.7	33.7	80.9
Once a week	16	1.6	1.6	82.5
Few times a week	109	10.9	10.9	93.4
Once a month	16	1.6	1.6	95.0
Few times a month	26	2.6	2.6	97.6
Rarely	24	2.4	2.4	100.0
Total	1000	100.0	100.0	

 Table 4.2: Frequency of visit

Nearly 81 percent of the respondents of social networking sites were using the services of these sites at least once a day with 47.2 percent of the users out of which were returning to these sites more than once or several times a day. On the other hand 10.9 percent of the respondents were using the social networking sites few times a week i.e. more than once in a week but there were 1.6 percent of those respondents who used the online social networking once in a week. A small percentage of 2.6 percent respondents were using the social networking sites few times and the networking sites few times in a month and 2.4 percent respondents used them rarely. This highlighted a large portion of sample to be frequent user of social networking sites.

When social networkers were asked about their time spent on social networking sites, it was found that 44.5 percent of them spend less than an hour on their social networking activities and 31.3 percent spend less than two hours but more than one hour on such activities. 11 percent respondents used social networking for more than 2 hours but less than 3 hours a day. There was a very small number of respondents i.e. 9.4 percent among the sample who could be called as addicted to social networking in a way that they performed social networking activities for more than 4 hours in a day. Results are depicted in table 4.3.

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 1 hour	445	44.5	44.5	44.5
1 to 2 hours	313	31.3	31.3	75.8

Table 4.3: Time spent on social networking sites in a day

2 to 3 hours	110	11.0	11.0	86.8
3 to 4 hours	38	3.8	3.8	90.6
More than 4 hours	94	9.4	9.4	100.0
Total	1000	100.0	100.0	

In order to get a more clearer picture of the frequency of use of social networking sites and time spent in online social networking, a cross tabulation was performed (refer to table 4.4). It has been observed that for most people who visit social networking sites several times a day, use or do social networking activities less than two hours in a day. Only 90 respondents out of 472 who visited social networking sites many times a day were found to use social networking for more than 4 hours a day. The trend of using social networking sites for more than 4 hours in a day was majorly among the high frequency users.

networking sites in a day							
		Time s <sub>l</sub>	Time spent on social networking sites in a day				
		Less than 1 hour	1 to 2 hours	2 to 3 hours	3 to 4 hours	More than 4 hours	Total
	Several times a day	113	162	78	29	90	472
	Once a day	182	118	25	9	3	337
Frequency of visit	Once a week	12	4	0	0	0	16
	Few times a week	76	27	5	0	1	109
	Once a month	14	1	1	0	0	16
	Few times a month	24	1	1	0	0	26
	Rarely	24	0	0	0	0	24
Total		445	313	110	38	94	1000

 Table 4.4: Cross tabulation between frequency of visit & time spent on social networking sites in a day

People who used social networking sites few times a week have been found spending not more than three hours in a day on social networking activity. A similar trend has been observed with the people who uses online social networks once in month or few times a month. People who use social networking sites rarely have been found not spending more than one hour in single day whenever they would be logging into their accounts for social networking activities.

As highlighted in the research methodology, in the present study only the top four social networking sites of India have been considered. Respondents of Punjab in the study were asked to share their frequency of usage related information about the four social networking sites under study. It was found that Facebook is the most frequently used social networking site with the people of Punjab as nearly 99 percent of the respondents make use of this site in varying frequencies. After Facebook the next most commonly used site by people of Punjab is Google+. Next to Google+ in the chain is LinkedIn and least used among all is found to be Twitter (Refer table 4.5). The usage frequencies of LinkedIn and Twitter are not found to be significantly different.

	Facebook	Twitter	LinkedIn	Google+
Never	13	473	429	290
Rarely	32	252	268	272
Sometimes	153	161	186	169
Often	235	88	81	118
Frequently	567	26	36	151

Table 4.5: Frequency of usage of social networking sites

In order to understand the linkage between how many contacts people have on their social networking sites profiles and how many out them they actually know in the real world, a cross tabulation was conducted between the two (table 4.6). It is observed that people largely

have on an average 300 contacts in their friend list of their mostly used social networking site.

		Contacts in real world					
		1 to 20 percent	21 to 40 percent	41 to 60 percent	61-80 percent	81- 100 percent	Total
Than         300         301 tr         301 tr         600         301 tr         600         601 tr         900         online         contacts         901 tr         1200         1201 tr         1500         More         than	Less Than 300	58	33	88	104	307	590
	301 to 600	18	12	52	76	110	268
	601 to 900	13	4	16	28	26	87
	901 to 1200	5	2	2	4	5	18
	1201 to 1500	8	5	10	6	7	36
	More than 1501	0	0	0	0	1	1
Total		102	56	168	218	456	1000

Table 4.6: Cross tabulation of number of online contacts & contacts in real world

Few number of social networking site users have more than 1200 contacts in their contacts list. Largely respondents have been observed to have contacts less than 600. It has also been observed that if the people have less number of contacts in their social networking sites, they tend to know a larger number of them in the real world also.

In order to understand whether the contacts on social networking sites are more personal or professional, respondents were asked to classify their online contacts. It has been found that

most of the people use social networking sites to link or continue their ties with the personal contacts i.e. friends/family or anybody out of their professional network (table 4.7).

	Frequency	Percent	Valid Percent	Cumulative Percent
Personal contacts	829	82.9	82.9	82.9
Professional contacts	171	17.1	17.1	100.0
Total	1000	100.0	100.0	

 Table 4.7: Type of contacts on social networking sites

Out of 1000 respondents nearly 83 percent of the respondents had been using social networking sites to connect with personal contacts and only 17 percent of them used online social network sites for professional networking.

As more of the contacts of social networkers comprise of personal contacts, it was thought to find out the frequency of communication with personal as well as professional contacts. 26 percent of social networkers frequently communicate with their personal contacts through social networking sites as compared to only 10.6 percent in case of professional contacts.

	Personal Contacts	Professional Contacts
Very Rarely	4.6	18.9
Rarely	12.1	21.9
Occasionally	31.4	33.7
Never	25.9	14.9
Frequently	26.0	10.6
Total	100.0	100.0

 Table 4.8: Frequency of communication with contacts

It has been observed that with nearly 26 percent of personal contacts and 15 percent of professional contacts people never interact. They have linked with contacts or have added

these contacts in their social networking profiles but have never interacted with these people online.

While capturing the information about the time of the day when people use social networking sites, it has been seen that most people use social networking sites in the evening, followed by maximum number of users during late night (table 4.9).

	Percent	Valid Percent	Cumulative Percent
In the morning	3.2	3.2	3.2
During noon	4.8	4.8	8.0
In the afternoon	6.4	6.4	14.4
In the evening	52.4	52.4	66.8
Late night	33.2	33.2	100.0
Total	100.0	100.0	

Table 4.9: Preferred time for social networking in a day

Few number of people which in this case comprises of 3.3 percent of the total population under study use or do online social networking activities in the morning time i.e. between 5 am to 11 am. 52.4 per cent of respondents had been found to use social networking sites in the evening time i.e. 6 pm to 8 pm and 33.2 percent respondents use such sites during late night i.e. 9 pm to 2 am.

It has been seen that laptop computer is the most used or most preferred device by the users for online social networking activities. After laptop computer it is mobile phones which are mostly used for social networking (table 4.10).

	Frequency	Percent	Valid Percent	Cumulative Percent
Desktop computer	35	3.5	3.5	3.5
Laptop computer	538	53.8	53.8	57.3
Mobile Phone	399	39.9	39.9	97.2

 Table 4.10: Primary devices used for social networking

Tablet	27	2.7	2.7	99.9
Other devices	1	.1	.1	100.0
Total	1000	100.0	100.0	

Desktops and tablets are used by only 3.5 percent and 2.7 percent respondents respectively. Among all the people under study, only one person was found to use a play station portable from Sony for accessing the social networking sites.

There are many options or variety of activities that people perform on social networking sites. These activities include updating profile information, chatting or searching for brand related information. Information in table 4.11 and table 4.12 summarizes the activities performed by people of Punjab on social networking sites.

Activities performed	Mean	Std. Deviation
Update textual profile information (e.g., status, personal information)	3.0390	1.06142
Update visual profile information (e.g., photos, visual background)	3.0750	1.04808
Play Games	2.1060	1.24672
Read news feeds or comments	3.7000	1.11501
Post comments	3.2560	1.03805
Search existing friends	2.7910	1.01407
Make new friends	2.5590	1.01565
Send inbox messages	3.1900	1.08216
Chat	3.4900	1.10595
Participate in brand communities	2.5860	1.15062
Visit page of brands	2.9680	1.16891

 Table 4.11: Activities performed on social networking sites

Activities performed	Never	Rarely	Sometimes	Often	Frequently
Update textual profile information (e.g., status, personal information)	48	302	311	241	98
Update visual profile information (e.g., photos, visual background)	65	235	344	272	84
Play Games	445	230	157	110	58
Read news feeds or comments	48	92	252	328	280
Post comments	49	187	332	323	109
Search existing friends	84	338	331	197	50
Make new friends	133	394	294	139	40
Send inbox messages	52	228	322	274	124
Chat	38	167	267	323	205
Participate in brand communities	189	321	271	153	66
Visit page of brands	118	234	321	216	111

#### Table 4.12: Frequency of activities performed on social networking sites

It has been observed that reading news feeds or comments is most performed activity by people on the social networking sites. Nearly 62 percent of the people using social networking sites regularly read news feeds or comments posted by others. This activity is followed by chatting and posting comments in order of preference respectively. Approximately 55 percent of the people do chatting with others frequently or often using their social networks followed by nearly 45 percent people of the people who regularly post comments on these sites for others to read or communicate with others as a group.

Update textual profile information (e.g., status, personal information) and update visual profile information (e.g., photos, visual background) is a activity performed by a large number of people but relatively less as compared to reading news feeds or comments. Most of the people (near to 45%) belongs to the category which do not like to play games in social networking sites. This segment of approximately 45 percent of respondents has never been

involved with online social network gaming. After this activity of playing games, the next least preferred activity by people of Punjab is participating in brand communities. Out of 1000 respondents under study, 189 respondents had never participated in any of the brand communities and 321 respondents had rarely participated in any types of brand communities. Other than participating in any brand community, social networkers also visit brand pages may be in search for some kind of information. For the activity of visiting brand pages a mixed opinion has been seen. Nearly half of the sample under study visit different brand pages to search information or to learn about the brands.

A large number of people shirk away from making new friends over social networking sites. These people tend to communicate only with real world contacts on the social network sites. 113 social networkers out of 1000 under study had never tried to search for new friends online and 394 respondents have rarely tried to make new friends online.

Activity of sending inbox messages, which are kind of individualized messages, meant only for the person to whom they are sent is performed by 40 % of people on regular basis.

	Mean	Std. Deviation
Music	2.8310	1.21899
Fashion	2.7150	1.22527
Gossip	2.9830	1.22320
News	3.1430	1.14973
Brands	2.9400	1.21403
Political issues	2.6950	1.22943
Personal Issues	3.1840	1.20980
Professional Issues	3.0260	1.15960
School/college stuff	3.5760	1.12761
Social events like parties	3.0690	1.20735
Home décor	2.1650	1.07281
Computer games	2.2930	1.21681
Sports	2.7150	1.28508
Social Issues	2.8770	1.27181

 Table 4.13: Topics discussed on social networking sites

	Never	Rarely	Sometimes	Often	Frequently
Music	175	216	312	197	100
Fashion	186	276	274	165	99
Gossip	145	214	261	273	107
News	81	219	313	250	137
Brands	147	222	280	246	105
Political issues	195	279	252	184	90
Personal Issues	111	185	251	315	138
Professional Issues	120	204	301	280	95
School/College Stuff	61	106	253	356	224
Social events	130	184	295	269	122
Home Decor	332	317	233	90	28
Computer Games	340	270	200	137	53
Sports	222	241	238	198	101
Social Issues	177	227	257	220	119

Table 4.14: Frequency of topics discussed on social networking sites

Users of social networking sites most frequently discuss about their college or school stuff. Nearly 60 percent of the users of social networking discuss college related issues with others using social networking platforms. After topics related to college/school stuff next most commonly topic is of personal issues on social networking sites. It has been observed that out of 1000 respondents approximately 45 percent of the social networkers most frequently discuss about personal issues on social networking sites. These personal issues includes from state of emotional being to visit to places to personal achievements. In the order of descending frequency the next topics discussed on social networking sites include news and social events like parties. 38 percent of social networkers discuss news related topics where as just a bit less percent of nearly 37.5 share about social events like parties. After these comes the professional issues and brand related topics. The least discussed topic on social networking sites by users is related to home décor which is followed by computer games. Approximately 12 percent of the social networkers frequently discussed about home décor related things and 19 percent of the people discuss about computer games related issues. So basically it can be said that two most discussed topics over social networking sites by social

networkers are school/college stuff and personal issues. On the other hand least discussed topics is home décor.

## 4.1 Social networking sites usage pattern across genders

Interesting point noted in case of males and females is that females spent more time on social networking sites in comparison to males. To further understand the gender differences across activities performed and topics discussed in social networking sites following analysis has been undertaken.

 $H_0^{1.1}$  – There is no significant difference between activities performed by online social networkers across genders.

In order to study the usage pattern across cross sections of population under study independent sample t test has been applied on the data of activities performed by online social networkers across genders.

		Levene's Test for		t tost	t-test for Equality of	
		Equali	Means			
		Varia	nces	wieans		
		F	Sig.	t	df	Sig. (2-
		1	Sig.	ι	ui	tailed)
	Equal					
Update textual profile	variances	2.167	.141	1.906	998	.057
information (e.g., status,	assumed					
personal information)	Equal					
	variances not			1.862	642.82	.063
	assumed					
	Equal					
Update visual profile	variances	.007	.934	.860	998	.390
information (e.g.,	assumed					
photos, visual	Equal					
background)	variances not			.850	664.41	.395
	assumed					

Table 4.15: Two samples t-test on SNS activities across genders

	Equal					
	variances	.144	.704	212	998	.832
Play Games	assumed					
	Equal					
	variances not			212	683.13	.832
	assumed					
	Equal					
Read news feeds or	variances	4.841	.028	1.378	998	.169
	assumed					
comments	Equal					
	variances not			1.340	634.52	.181
	assumed					
	Equal					
	variances	4.516	.034	.067	998	.947
Post comments	assumed					
r ost comments	Equal					
	variances not			.065	637.52	.948
	assumed					
	Equal					
	variances	1.480	.224	1.115	998	.265
Search existing friends	assumed					
	Equal					
	variances not			1.094	649.09	.275
	assumed					
	Equal					
	variances	1.071	.301	4.517	998	.000
Make new friends	assumed					
What he will find the	Equal					
	variances not			4.565	704.97	.000
	assumed					

	Equal					
	variances	.346	.557	148	998	.882
Send inbox messages	assumed					
Send moox messages	Equal					
	variances not			148	686.58	.882
	assumed					
	Equal					
	variances	6.165	.013	2.092	998	.037
Chat	assumed					
Chat	Equal					
	variances not			2.031	632.18	.043
	assumed					
	Equal					
	variances	1.942	.164	392	998	.695
Participate in brand	assumed					
communities	Equal					
	variances not			384	648.17	.701
	assumed					
	Equal					
	variances	1.282	.258	-2.052	998	.040
Visit page of brands	assumed					
, int puge of brunds	Equal					
	variances not			-2.011	647.81	.045
	assumed					

A significant difference is observed across the performance of three activities namely making new friends, chat and visiting brand pages across males and females. For all other activities, there exists no significant difference across genders. Male users tends to be more inclined towards making new friends and doing chat in online social networks as compared to females. Visit to brand pages are done more by females as compared to male users.

 $H_0^{1.2}$  – There is no significant difference between males and females across different topics discussed on online social networks.

	Levene's Test for						
		Equali	ty of	t-test fo	t-test for Equality of Means		
		Variances					
		F	Sig.	t	df	Sig. (2- tailed)	
	Equal						
	variances	5.779	.016	-2.000	998	.046	
Music	assumed						
Music	Equal						
	variances not			-2.038	721.412	.042	
	assumed						
	Equal						
	variances	.855	.355	-6.153	998	.000	
Fashion	assumed						
Pasmon	Equal						
	variances not			-6.127	676.855	.000	
	assumed						
	Equal						
	variances	.133	.715	-2.065	998	.039	
Gossip	assumed						
Gossip	Equal						
	variances not			-2.084	701.895	.038	
	assumed						
	Equal						
	variances	.202	.653	1.372	998	.170	
Nous	assumed						
News	Equal						
	variances not			1.356	663.559	.175	
	assumed						

# Table 4.16: Two samples t-test on topics discussed on SNS across genders

	Equal					
	variances	.005	.944	847	998	.397
Brands	assumed					
	Equal			0.41		100
	variances not			841	672.960	.400
	assumed					
	Equal	105	510			000
	variances	.135	.713	3.622	998	.000
Political issues	assumed					
	Equal					
	variances not			3.624	685.887	.000
	assumed					
	Equal					
Personal Issues	variances	3.617	.057	.638	998	.524
	assumed					
	Equal					
	variances not			.648	714.451	.517
	assumed					
	Equal					
	variances	.548	.459	-1.218	998	.223
Professional	assumed					
Issues	Equal					
	variances not			-1.224	693.126	.221
	assumed					
	Equal					
	variances	.213	.644	365	998	.716
School/college	assumed					
stuff	Equal					
	variances not			366	690.534	.715
	assumed					
Social events like	Equal					
	variances	.374	.541	.523	998	.601
parties	assumed					

	Equal					
	variances not			.517	664.236	.605
	assumed					
	Equal					
	variances	2.008	.157	-3.625	998	.000
Home décor	assumed					
	Equal					
	variances not			-3.610	677.383	.000
	assumed					
	Equal					
	variances	6.693	.010	3.510	998	.000
Computer games	assumed					
	Equal					
	variances not			3.563	713.485	.000
	assumed					
	Equal					
	variances	.140	.708	8.501	998	.000
Sports	assumed					
Sports	Equal					
	variances not			8.617	710.764	.000
	assumed					
	Equal					
	variances	1.851	.174	2.907	998	.004
Social Issues	assumed					
500101 155005	Equal					
	variances not			2.888	672.356	.004
	assumed					
				1		

No significant difference between males and females has been observed in discussion of topics related to news, brands, personal and professional issues and social events like parties on online social networks. But there exists a significant difference in case of topics related to music, fashion, gossip, political issues, home décor, computer games, sports and social issues. Females have been observed to be more inclined to discuss more of music, fashion,

and home décor related items and tend to do more gossip also in online social networks. On the other hand males have been observed to be more interested in talking about political issues, computer games, sports and social issues like corruption.

#### 4.2 Social networking sites usage pattern across age categories

 $H_0^{1.3}$  – There is no significant difference between activities performed by online social networkers across age categories.

In order to study the usage pattern across cross sections of population under study, independent sample t test has been applied on the data of activities performed by online social networkers across two age groups.

Results in table 4.17 indicate that in case of activities like updating textual profile information, reading feed/comment and posting comments, there is no significant difference of usage between people of age less than or equal to 25 and of more than 25 years.

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	Df	Sig. (2- tailed)
Update textual profile information (e.g.,	Equal variances assumed	5.371	.021	1.080	998	.280
status, personal information)	Equal variances not assumed			1.112	440.777	.267

 Table 4.17: Independent samples test on SNS activities across

Update visual profile information (e.g., photos, visual	Equal variances assumed Equal	1.845	.175	2.633	998	.009
background)	variances not assumed			2.549	397.529	.011
Play Games	Equal variances assumed	5.290	.022	2.903	998	.004
	Equal variances not assumed			3.014	447.505	.003
Read news feeds or	Equal variances assumed	2.288	.131	.717	998	.474
comments	Equal variances not assumed			.687	391.857	.492
Post comments	Equal variances assumed	.853	.356	1.359	998	.174
	Equal variances not assumed			1.311	395.494	.191
Search existing friends	Equal variances assumed	.038	.845	2.492	998	.013

	Equal					
	variances not			2.567	441.330	.011
				2.307	441.330	.011
	assumed					
	Equal					
	variances	3.948	.047	5.198	998	.000
	assumed					
Make new friends						
	Equal					
	variances not			5.364	442.783	.000
	assumed					
	Equal					
Sand inhan managan	variances	2.422	.120	4.930	998	.000
	assumed					
Send inbox messages	Equal					
	variances not			5.009	430.612	.000
				5.009	430.012	.000
	assumed					
	Equal					
	variances	.143	.705	6.567	998	.000
	assumed					
Chat						
	Equal					
	variances not			6.560	418.322	.000
	assumed					
	Equal					
	Equal	1 501	101	4 404	000	000
	variances	1.791	.181	4.421	998	.000
Participate in brand	assumed					
communities	Equal					
	variances not			4.293	399.483	.000
				7.275	577.705	.000
	assumed					
L			I	L	I	

	Equal					
	variances	28.900	.000	6.403	998	.000
	assumed					
Visit page of brands						
	Equal					
	variances not			5.869	366.862	.000
	assumed					

There is a significant difference in performance of activities related to updating of visual profile information, playing games, searching and making new friends, sending inbox messages and doing chat, participation in brand communities and visiting pages of brands across people of age less than or equal to 25 and of more than 25 years. In all the activities, users under the age group of 25 tend to perform such activities more as compared to users of more than 25 year in age.

 $H_0^{1.4}$  – There is no significant difference between topics discussed on online social networks sites across age categories.

		Levene's Test for Equality of Variance		t-test for Equality of Means		ality of
		Equality of			Wealls	
		F	Sig.	t	df	Sig. (2- tailed)
Music	Equal variances assumed	1.166	.281	5.132	998	.000
	Equal variances not assumed			5.185	426.484	.000

Table 4.18: Two samples t-test on topics discussed on SNS across age categories

	Equal					
	variances	1.095	.296	4.817	998	.000
Fashion	assumed					
	Equal					
	variances not			4.774	412.957	.000
	assumed					
	Equal					
	variances	.035	.852	5.148	998	.000
Gossip	assumed					
I	Equal					
	variances not			5.288	439.114	.000
	assumed					
	Equal					
	variances	1.517	.218	1.296	998	.195
News	assumed					
	Equal					
	variances not			1.249	394.807	.212
	assumed					
	Equal					
	variances	12.754	.000	5.212	998	.000
Brands	assumed					
Dianas	Equal					
	variances not			4.954	386.600	.000
	assumed					
Political issues	Equal					
	variances	1.339	.247	2.011	998	.045
	assumed					

	Equal					
	variances not			1.972	405.712	.049
	assumed					
	Equal					
	variances	3.065	.080	4.682	998	.000
	assumed					
Personal Issues	Equal					
	variances not			4.503	393.650	.000
	assumed			4.505	393.030	.000
	assumed					
	Equal					
	variances	4.875	.027	2.563	998	.011
Professional	assumed					
Issues	Equal					
	variances not			2.468	394.356	.014
	assumed			2.400	374.330	.014
	assumed					
	Equal					
	variances	35.294	.000	6.591	998	.000
School/college	assumed					
stuff	Equal					
	variances not			5.854	351.840	.000
	assumed			5.051	551.010	.000
	ussumed					
	Equal					
	variances	11.715	.001	3.669	998	.000
Social events like parties	assumed					
	Equal					
	variances not			3.444	379.406	.001
	assumed					-

	Equal variances	1.288	.257	3.697	998	.000
Home décor	assumed	1.200	.237	3.097	998	.000
	Equal					
	variances not assumed			3.712	421.904	.000
	Equal					
	variances	9.886	.002	4.712	998	.000
Computer games	assumed					
	Equal					
	variances not			4.919	452.181	.000
	assumed					
	Equal					
	variances	1.971	.161	4.588	998	.000
Sports	assumed					
Sports	Equal					
	variances not			4.757	446.516	.000
	assumed					
	Equal					
	variances	2.061	.151	1.362	998	.173
Social Issues	assumed					
	Equal					
	variances not			1.344	409.588	.180
	assumed					
	l			1		

There is no significant difference across two age groups of less than 25 and more than 25 years, when it comes discussion on news and social issues. For all other topics under consideration there is a significant difference across two age categories and social networkers of age less than 25 years indulge in discussing these topics more than their counterparts.

# 4.3 Social networking sites usage pattern across marital status categories

 $H_0^{1.5}$  – There is no significant difference between topics discussed on online social networks across people of different marital status.

	wo samples t-test	Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2- tailed)
Music	Equal variances assumed	6.325	.012	-4.275	988	.000
	Equal variances not assumed			-4.109	259.720	.000
Fashion	Equal variances assumed	9.714	.002	-3.307	988	.001
	Equal variances not assumed			-3.094	253.038	.002
Gossip	Equal variances assumed	.981	.322	-3.315	988	.001
	Equal variances not assumed			-3.305	269.844	.001
News	Equal variances assumed	2.684	.102	-3.225	988	.001
	Equal variances not assumed			-3.021	253.274	.003

Table 4.19: Two samples t-test on topics discussed on SNS across marital status

Brands	Equal variances assumed	32.039	.000	-4.264	988	.000
	Equal variances not assumed			-3.796	242.063	.000
Political issues	Equal variances assumed	.227	.634	-2.167	988	.030
	Equal variances not assumed			-2.170	271.203	.031
Personal Issues	Equal variances assumed	9.035	.003	-4.889	988	.000
	Equal variances not assumed			-4.551	251.823	.000
Professional	Equal variances assumed	3.429	.064	-2.798	988	.005
Issues	Equal variances not assumed			-2.722	262.851	.007
School/college	Equal variances assumed	22.109	.000	-5.789	988	.000
stuff	Equal variances not assumed			-5.122	240.845	.000
Social events like	Equal variances assumed	7.853	.005	-3.507	988	.000
parties	Equal variances not assumed			-3.251	250.836	.001

Home décor	Equal variances assumed	.117	.733	-2.483	988	.013
	Equal variances not assumed			-2.417	263.105	.016
Computer games	Equal variances assumed	8.410	.004	-3.719	988	.000
F S	Equal variances not assumed			-3.796	277.144	.000
Sports	Equal variances assumed	4.247	.040	-6.234	988	.000
	Equal variances not assumed			-6.619	290.625	.000
Social Issues	Equal variances assumed	.327	.568	-2.669	988	.008
	Equal variances not assumed			-2.709	275.331	.007

There is a significant difference between topics discussed on online social networks across people of different marital status. In all the stated social network discussion topics, users who are unmarried tends to participate more as compared to user who are married.

 $H_0^{1.6}$  – There is no significant difference between activities performed by married and unmarried users in online social networks.

Table 4.20- Two sam	ples t-test on activities	performed on SNS	across marital status
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Levene's Test for Equality of Variances	t-test for Equality of Means
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		F	Sig.	t	df	Sig. (2- tailed)
Update textual profile information (e.g.,	Equal variances assumed	3.231	.073	-1.309	988	.191
status, personal information)	Equal variances not assumed			-1.342	278.501	.181
Update visual profile information (e.g.,	Equal variances assumed	.312	.577	-1.347	988	.178
photos, visual background)	Equal variances not assumed			-1.336	268.533	.183
Play Games	Equal variances assumed	1.982	.160	-1.796	988	.073
	Equal variances not assumed			-1.802	271.802	.073
Read news feeds or	Equal variances assumed	1.909	.167	231	988	.818
comments	Equal variances not assumed			215	252.297	.830
Post comments	Equal variances assumed	1.888	.170	.118	988	.906
	Equal variances not assumed			.112	256.922	.911

Search existing friends	Equal variances assumed	.150	.699	-2.286	988	.022
	Equal variances not assumed			-2.380	283.626	.018
Make new friends	Equal variances assumed	1.263	.261	-5.451	988	.000
	Equal variances not assumed			-5.524	274.772	.000
Send inbox messages	Equal variances assumed	.218	.641	-4.243	988	.000
Solid moon messages	Equal variances not assumed			-4.261	272.030	.000
Chat	Equal variances assumed	.014	.905	-5.303	988	.000
	Equal variances not assumed			-5.147	262.305	.000
Participate in brand	Equal variances assumed	.854	.356	-4.404	988	.000
communities	Equal variances not assumed			-4.379	269.111	.000
Visit page of brands	Equal variances assumed	21.613	.000	-4.688	988	.000

In case of activities like updating textual profile information, updating visual profile information, playing games, reading feed/comments and posting comments no significant difference has been observed between married and unmarried users in online social networks. But there is a significant difference across married and unmarried social networkers across activities like visiting brand pages and participation in brand communities, chatting, sending inbox messages and searching and making new friends. Unmarried indulge more in all of these activities compared to married social networkers.

### 4.4. Likelihood towards social network advertising

Analysis was undertaken to understand the engagement in the form of likelihood of population under study towards different types of social network advertisements. Six types of social network advertisement were considered namely display advertising or banner advertising, brand based gaming, polling activities by brands and brand posts as the form of advertising to understand the level of liking for each of these advertising types. This liking portrays the felling of engagement, audience have towards the different form of mass communication on social networking pushed by an identified sponsor.

	Mean	Std.
		Deviation
To see banner advertisement ( like ads in sponsored content over Facebook, or on any side of page over LinkedIn)	2.9330	1.15319
To go through brand pages or brand profiles	3.0150	1.09360
To see videos of brands	3.0100	1.12301
In-game placements of products	2.7000	1.16763
To participate in online polling by brands	2.8020	1.13934

Table 4.21: Likelihood towards social network advertising

To read posts done by brands on my page	3.0690	1.14348
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Overall impression of the mean value for different type of social network advertisement types displayed a weak liking of the users towards these advertisements types. But out the six advertisements discussed here considering the mean and standard deviation, the population under study was found to be more receptive towards the reading of posts done by brands on their social network pages. After this the second most liked advertisement type was to watch videos of the brands and next in line was to go through the brand pages or brand profiles. In the order of preference next came the liking for banner advertisements i.e. ads in sponsored content over Facebook, or on any side of page over LinkedIn. Audience tends to be less likely to participate in online polling by brands and see brands in form of in-game placements as compared to other types. In-game placements of products was the least liked advertisement type among the population of study.

Based on the demographic variables under study, following hypothesis have been tested.

 $H_0^{1.7}$ : There is no significant difference in liking of Males and females towards banner advertisements.

In order to check this hypothesis, independent sample t test was applied. The significance value of 0.635 in case of Levene's Test for Equality of Variances makes us assume equal variances across the two samples.

		Levene's Test for Equality of Variances		t-test fo	r Equality	of Means
		F	Sig.	t	Df	Sig. (2- tailed)
Liking to see banner advertisement	Equal variances assumed	.226	.635	-3.008	998	.003

Table 4.22: Liking towards banner advertisement and gender

Equal				
variances not		-2.997	675.077	.003
assumed				

In table 4.22, value of significance for t is found to be 0.003 in case of two tailed test with equal variance assumed. As the calculated value is less than the table value of 0.05, null hypothesis i.e.  $H_0^{9.1}$ : There is no significant difference in liking of males and females towards banner advertisements was not accepted and a significant difference between the liking of males and females towards banner advertisements in online social network websites was found. Based on the mean value of two, we can comment that females tend to like banner advertisements more on online social networks as compared to male respondents.

 $H_0^{1.8}$ : There is no significant difference in liking of males and females towards brand pages or brand profiles on social networking sites.

Considering table 4.23, one cannot assume equal variance across two samples as the significance value of F was 0.041. Considering the t value of -2.997 for the same, one could see the p (significance value) of 0.005, which did not accept the null hypothesis of males and females having similar liking towards brand pages or brand profiles on online social network websites. This proves that there was a significant difference across the two gender when it comes to liking towards brand pages or brand profiles on online social network websites and females like to go through brand pages more as compared to males.

		Levene's Test for Equality of Variances		t-test fo	r Equality	of Means
		F	Sig.	t	df	Sig. (2- tailed)
To go through brand pages or brand profiles	Equal variances assumed	4.169	.041	-2.876	998	.004

 Table 4.23: Liking towards brand pages and gender

Equal				
variances not		-2.808	638.554	.005
assumed				

 $H_0^{1.9}$ : There is no significant difference in liking of males and females for watching brand videos on online social network websites.

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2- tailed)
To see videos of brands	Equal variances assumed	1.102	.294	2.169	998	.030
	Equal variances not assumed			2.170	682.737	.030

Table 4.24: Liking towards brand videos and gender

As the significance value of Levene's test for equality of variances was 0.294, equal variance was assumed across two sample and value of t-test for Equality of Means was 2.169 with significance of 0.30. As the calculated value was less than table value of 0.05, so null hypothesis was not accepted. There was a significant difference across males and females liking towards watching brand videos and males were found to be more receptive to watching brand videos on social networking sites than females.

 $H_0^{1.10}$ : There is no significant difference in liking of males and females towards in-game placements of products on online social network websites.

Levene's test for equality of variances was 0.825 and this leads to the equal variance assumption across two sample. Based on the same in table 4.25, the value of t was derived to be -0.440. Based on the p value of t-test for equality of means, which was 0.660 i.e. more than table value of 0.05, null hypothesis was not rejected and no significant difference was found across males and females liking towards in-game placements of products on online

social network websites. This leads to the result of indifferent liking towards in-game placements by both genders.

		Levene's Test for Equality of Variances		t-test for Equality of Means		
			Sig.	t	df	Sig. (2- tailed)
In-game placements of	Equal variances assumed	.049	.825	440	998	.660
products	Equal variances not assumed			437	669.425	.662

Table 4.25: In-game placements and gender

H<sub>0</sub><sup>1.11</sup>: There is no significant difference in liking of males and females towards participation in online polling by brands on online social network websites.

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t df		Sig. (2- tailed)
To participate in online polling by brands	Equal variances assumed	.000	.991	1.460	998	.145

 Table 4.26: Participating in online brand polling and gender

Equal				
variances not		1.445	662.825	.149
assumed				

Considering the value of Levene's Test i.e. F significance, we had to assume equal variance across samples and value of significance of t-test for equality of means in this case was found to be 0.145. This lead to a failure to rejection null hypothesis. The results portray that there was no significant difference across males and females preference towards participation in online polling by brands on online social network websites.

 $H_0^{1.12}$ : There is no significant difference in liking of males and females towards reading brand posts on online social network websites.

		Equal	vene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2- tailed)	
Ec To read posts done by brands on my	Equal variances assumed	.059	.808	.081	998	.935	
page	Equal variances not assumed			.080	661.629	.936	

 Table 4.27: Brand post and gender

Assuming equal variance across the two samples, the p value in case of t-test for equality of means was found out to be 0.935. This lead to acceptance of null hypothesis, portraying no significant differences across males and females preferences towards reading brand posts on social networking sites.

After gender, next demographic variables was age of social networkers to see the influence of same on liking towards social network advertising types. More than 80% of respondents in the current study belong to age group of 19-30. Two age categories of 19-25 and 26-30 have been considered for analysis.

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2- tailed)
To read posts done by brands on my page	Equal variances assumed	.482	.488	.648	827	.517
	Equal variances not assumed			.628	220.403	.531
To see banner advertisement	Equal variances assumed	.000	.998	1.329	827	.184
	Equal variances not assumed			1.323	226.990	.187
To go through brand pages or brand profiles	Equal variances assumed	.149	.700	2.978	827	.003
	Equal variances not assumed			2.873	219.539	.004

Table 4.28: Age and social network advertisement liking

To see videos of brands	Equal variances assumed	3.860	.050	3.068	827	.002
	Equal variances not assumed			2.916	216.305	.004
In-game placements of products	Equal variances assumed	4.916	.027	3.161	827	.002
	Equal variances not assumed			2.975	214.261	.003
To participate in online polling by brands	Equal variances assumed	.434	.510	2.399	827	.017
	Equal variances not assumed			2.427	231.085	.016

Considering the age categories of 19-25 and 26-30 years, independent sample t test analysis was applied on the data. Results indicated in table 4.28 depicted that for likability towards reading posts done by brands depending on the F significance value, equal variance was assumed across two sample of different age groups. The significance value of t-test for equality of means was 0.517 i.e. failure to reject the null hypothesis  $H_0^{1.12}$ : people across two age categories have similar preference towards reading brand posts on social networking sites.

When we consider the liking towards banner advertisements, significance value of t-test for equality of means was 0.184. This leads to non-rejection of null hypothesis of  $H_0^{1.13}$ : people across two age categories have similar preference towards banner advertisements on social networking sites. In case of liking towards brand pages, brand videos, in-game product

placement and online polling by brands on social networking sites, based on the respective significance values of t-test for equality of means, all null hypothesis have been rejected. This concludes that people across two age categories have different preference towards brand page advertisements on social networking sites, people across two age categories have different preference towards brand video advertisements on social networking sites, people across two age categories have different preference towards brand video advertisements on social networking sites, people across two age categories have different preference towards in-game product placement on online social network websites and people across two age categories have different preference towards online brand polling on online social network websites.

In marital status wise consideration, two categories of married and unmarried status have been considered.

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2- tailed)
To read posts done by brands on my page	Equal variances assumed	21.183	.000	-3.718	987	.000
	Equal variances not assumed			-3.344	242.553	.001
To see banner advertisement	Equal variances assumed	14.076	.000	-3.900	987	.000
	Equal variances not assumed			-3.663	252.149	.000

Table 4.29: Marital status and social network advertisement liking

To go through brand pages or brand profiles	Equal variances assumed	5.406	.020	-6.161	987	.000
	Equal variances not assumed			-5.910	257.388	.000
To see videos of brands	Equal variances assumed	10.368	.001	-5.062	987	.000
	Equal variances not assumed			-4.768	252.882	.000
In-game placements	Equal variances assumed	15.763	.000	-3.516	987	.000
of products	Equal variances not assumed			-3.168	242.910	.002
To participate in online polling by brands	Equal variances assumed	10.699	.001	-2.415	987	.016
	Equal variances not assumed			-2.242	249.459	.026

For all the six types of social network advertising types, the significance value for t-test for equality of means was found out to be less than the table value of 0.05. This lead to rejection of the assumption of equality of mean of the two samples under study. The result indicates that there was a significant difference between married and unmarried people towards likability across social network advertising types.

In case of social network advertisement preference, among the respondents based on the occupation, two kind of categories were considered namely students and service class. These two categories comprise of more than 80 percent of the population under study.

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2- tailed)
To read posts done by brands on my page	Equal variances assumed	7.497	.006	4.849	911	.000
	Equal variances not assumed			4.643	450.742	.000
To see banner	Equal variances assumed	1.654	.199	4.209	911	.000
advertisement	Equal variances not assumed			4.203	492.144	.000
To go through brand pages or brand profiles	Equal variances assumed	8.294	.004	5.875	911	.000
	Equal variances not assumed			5.622	450.221	.000

Table 4.30: Occupation and social network advertisement liking

To see videos of brands	Equal variances assumed	13.467	.000	5.422	911	.000
	Equal variances not assumed			5.164	446.084	.000
In-game placements of products	Equal variances assumed	3.098	.079	6.124	911	.000
	Equal variances not assumed			5.943	463.264	.000
To participate in online polling by brands	Equal variances assumed	.708	.400	4.178	911	.000
	Equal variances not assumed			4.178	493.450	.000

Based on the significance value for t-test for equality of means, it has been observed that for all six type of types of social network advertising types were having calculated value less than the table value of 0.05. The result indicates that there was a significant difference between students and service class respondents towards likability across all social network advertising types under study. Across all the six advertisement types, category of students tends to showcase more likability towards all social network advertisements than respondents from the service class.

In case of social network advertisement preference, among the respondents based on their qualification, two kind of categories have been considered namely under graduates and graduates. These two categories comprise of a major chunk of respondents of the study.

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2- tailed)
To read posts done by brands on my	Equal variances assumed	.481	.488	.597	905	.551
page	Equal variances not assumed			.592	636.990	.554
To see banner advertisement	Equal variances assumed	.528	.468	024	905	.981
	Equal variances not assumed			024	639.508	.981
To go through brand pages or brand profiles	Equal variances assumed	.380	.538	2.528	905	.012
	Equal variances not assumed			2.544	664.995	.011
To see videos of brands	Equal variances assumed	2.908	.088	1.819	905	.069
	Equal variances not assumed			1.808	641.201	.071
In-game placements of products	Equal variances assumed	2.518	.113	3.088	905	.002

Table 4.31: Qualification and social network advertisement liking

	Equal variances not assumed			3.107	664.498	.002
To participate in online polling by	Equal variances assumed	.013	.909	1.531	905	.126
brands	Equal variances not assumed			1.523	642.424	.128

Based on the significance value for t-test for equality of means, there was no significant difference across the likability of under graduates and graduates towards reading posts by brands, online polling by brands, to watch brand videos and to see banner advertisements. On the basis of calculated value of t, in cases where it was less than table value of 0.05, a significant difference was observed in likability of under graduates and graduates towards in-game placements and visiting brand pages or profiles. Under graduates liked to see more in-game placements and visit brand pages or profiles more as compared to graduates.

User/consumer engagement in virtual world can be observed firstly through the most basic measurement of engagement i.e. user involvement, which in case of online social networks is highlighted with large number of regular social site visits by population under study. A large number of respondents were found to spend their time daily on respective favorite social networking sites. Second measure of engagement is user interaction which is highlighted with user generated content for brands, which could be as simple as a like on Facebook. Facebook is the most frequently used social networking sites with the people of Punjab and Twitter is the least used social networking site. Google+ which is a relatively new service among the four social networking sites under study is quickly finding its place with the people of Punjab as it is the second most preferred platform for online social networking activities by the users. Linked is relatively less popular site among Punjabis as more number of people in Punjab are using social networking sites for linking with personal contacts and LinkedIn is positioned a social networking site primarily for professional networking. As the frequency of use of online social networking tends to increase so do the amount of time spend on social networking site in a single day increases. It has been found that when people have less number of contacts in their social networking sites, they tend to know a larger number of people out of their virtual contacts/friends in the real world or vice versa. Laptop computer and mobile phones are mostly used to access social networking websites by people of Punjab highlighting the importance of convenience and portability in devices used for social networking. There are different types of activities performed by social networkers in online social networking sites. But these activities are performed in varying intensities. Reading news feeds or comments is mostly performed activity by people on the social networking sites and playing games is the least preferred one, highlighting a large segment of approximately 45 percent of respondents in the survey who have never been involved with online social network gaming. A good number of people/social networkers visit brand pages to search information or to learn about the brands. This is good sign for the companies to use social networking sites as an information sharing tool with their existing and potential customers. In discussion social networkers rarely discuss about home décor related things. Maybe social networking site users do not feel such topics interesting. Home décor companies/brands need to excite users to start talking about such topics. This can happen by doing paid advertisements on social networking sites. In India for home décor mostly mothers are responsible in families and may be most of such category of people are not using social networking sites. Mostly discussed topics over social networking sites by social networkers are school/college stuff and personal issues.

Social networkers have shown positive attitude towards reading of posts done by brands on their social network pages. Social networkers are less likely to participate in online polling by brands and see brands in form of in game placements. There is a significant difference across males and females when it comes to liking towards different social networking sites advertisements as females like to go through brand pages and banner advertisements more as compared to males. But in liking towards watching brand videos males are found to be more receptive than females. Across all the six advertisement types, students tends to display more likability towards all social network advertisements than any other category of respondents.

## Chapter 5

# MOTIVATION TO USE ONLINE SOCIAL NETWORK WEBSITES

Online social network have become an integral part with most of Internet users. Improving internet connectivity coupled with enhanced smartphone usage is leading to increase in use of social media spearheaded by online social network websites. Today for marketers, an online social network based strategy is one of the prime parameters in deciding an inclusive marketing strategy. But depending on geographic region or nation, there exists immense variances in why individuals use online social network sites. So, for a global marketers it is important to understand why people engage with online social networks at a micro level. The purpose of this chapter was to identify the user motivation for using online social network sites. Quantitative as well as qualitative analysis was performed to identify underlying user motivations.

#### 5.1 Motivation to use online social network websites

Exploratory factor analysis (EFA) was applied considering its primary objective of curtailing large set of items into relatively small number of factors. Variables identified after application of exploratory factor analysis were lesser in number compared to original variable set, but had been found proficient of accounting to a large portion of variability in the items. Based on these variables different factors were identified and the identity of each factor was determined considering the items correlation with that factor. Factor identification was based on the fact that items having highest correlation with a factor would define the conceptual meaning of that factor. Identified factors were named based on the portfolio of items that correlate the highest with them respectively. Different items were found to have internal structure evidence showing a validity evidence suggesting that items line up in a predictable manner i.e. when similar items were added, the factors cap clearly predict one's overall motivation to use online social networking web sites.

Table 5.1 depicts the descriptive statistics of items related to motivations for using social networks. In table the mean values were higher than the respective standard deviations and none of the value for standard deviation stood out as unusually larger than other items.

I use social networking sites:NMeanto meet new people10003.2310to find other people like me10002.9890to talk to people with same interests10003.1840to establish long lost contacts10003.5790to let out my emotions to others who will understand10002.7320to express my anger to others who will sympathize10002.4150to talk out my problems and seek advice10002.9350to support social causes10003.2610to let other know I care about their feelings10003.7690to do research10003.3530to learn about useful things10003.8230to share new ideas and my achievements10003.7400	Deviation
to find other people like me10002.9890to talk to people with same interests10003.1840to establish long lost contacts10003.5790to let out my emotions to others who will understand10002.7320to express my anger to others who will sympathize10002.4150to talk out my problems and seek advice10002.9350to support social causes10003.2610to let other know I care about their feelings10003.1360to learn about unknown things10003.3530to learn about useful things10003.8230to share new ideas and my achievements10003.6460	
to talk to people with same interests10003.1840to establish long lost contacts10003.5790to let out my emotions to others who will understand10002.7320to express my anger to others who will sympathize10002.4150to talk out my problems and seek advice10002.9350to support social causes10003.2610to let other know I care about their feelings10003.1360to do research10003.3530to learn about useful things10003.8230to share new ideas and my achievements10003.6460	1.18703
to establish long lost contacts10003.5790to let out my emotions to others who will understand10002.7320to express my anger to others who will sympathize10002.4150to talk out my problems and seek advice10002.9350to support social causes10003.2610to let other know I care about their feelings10003.1360to learn about unknown things10003.7690to do research10003.8230to share new ideas and my achievements10003.6460	1.19260
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to express my anger to others who will sympathize10002.4150to talk out my problems and seek advice10002.9350to support social causes10003.2610to let other know I care about their feelings10003.1360to learn about unknown things10003.7690to do research10003.3530to learn about useful things10003.8230to share new ideas and my achievements10003.6460	1.14764
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to support social causes10003.2610to let other know I care about their feelings10003.1360to learn about unknown things10003.7690to do research10003.3530to learn about useful things10003.8230to share new ideas and my achievements10003.6460	1.17309
to let other know I care about their feelings10003.1360to learn about unknown things10003.7690to do research10003.3530to learn about useful things10003.8230to share new ideas and my achievements10003.6460	1.22649
to learn about unknown things10003.7690to do research10003.3530to learn about useful things10003.8230to share new ideas and my achievements10003.6460	1.15768
to do research10003.3530to learn about useful things10003.8230to share new ideas and my achievements10003.6460	1.22188
to learn about useful things10003.8230to share new ideas and my achievements10003.6460	1.09948
to share new ideas and my achievements 1000 3.6460	1.25218
	1.05583
to get new ideas 1000 3.7400	1.09995
	1.06843
to relax by releasing work or other pressure 1000 3.5970	1.12688
to feel excited 1000 3.2130	1.17772
to pass time 1000 3.7350	1.12073
because I can use it anytime and anywhere 1000 3.5060	1.22125
because it is free 1000 3.3710	1.25735
because I can use it easily 1000 3.6030	1.13960
because I can find information related to jobs easily 1000 3.1450	1.22371
because people who are important to me think that I 1000 3.0960	1.20093
should use social networking sites	1.20095
because people who influence my behavior think that 1000 2.9640	1.20339
I should use social networking sites	1.20337
to create my social identity 1000 3.3460	1.17459
because of the feeling of social warmth on social 1000 3.1780	1.18816
networking sites	1.10010

# Table 5.1: Descriptive statistics

In table 5.2, the KMO value was found to be 0.883 satisfying the requirement for sample adequacy, which supported the objective of reducing several variables into fewer factors by showing measures of appropriateness of factor analysis. Hypothesis of correlation matrix being an identity matrix was not accepted considering test of sphericity (Bartlett's). Significance value lead to rejection of null hypothesis and concluded that correlations were appropriate for EFA in the data set.

Kaiser-Meyer-Olkin Measure	.883	
Bartlett's Test of Sphericity	Approx. Chi-Square	7662.464
	Df	300
	Significance	.000

 Table 5.2: Adequacy of sample

As the data collected for identifying the motivation for using online social network websites was on a five opinion likert scale where 1 represented disagreement & 5 represented agreement, so principal axis factoring procedure was used to extract factors from the list of variable. The data being collected on likert scale was discrete so principal component analysis procedure was best suited considering no distributional assumptions.

Using these rules, six factors were mined (table 5.3). Together these factors explained approximately 57% of all the item variances. Approximately 57% of the total variance explained can be deemed as satisfactory because appropriate number of factors were extracted (Hair et.al. 2009). A plot of the eigenvalues has been presented in figure 5.1 for reference.

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	percentage of Variance	Cumulative percentage	Total	percentage of Variance	Cumulative percentage
1	6.558	26.234	26.234	6.558	26.234	26.234
2	2.189	8.758	34.992	2.189	8.758	34.992
3	1.777	7.106	42.098	1.777	7.106	42.098
4	1.392	5.566	47.664	1.392	5.566	47.664

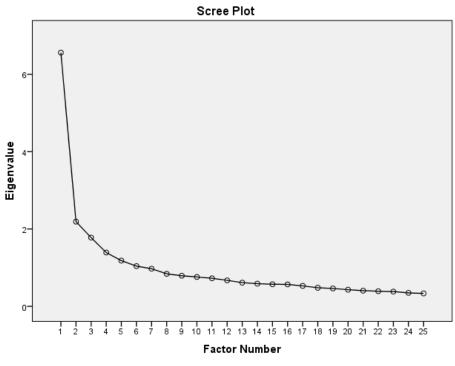
Table 5.3: Total variance explained

						1
5	1.182	4.728	52.392	1.182	4.728	52.392
6	1.039	4.157	56.549	1.039	4.157	56.549
7	.972	3.889	60.439			
8	.841	3.365	63.803			
9	.791	3.164	66.967			
10	.759	3.037	70.004			
11	.726	2.903	72.907			
12	.672	2.688	75.594			
13	.612	2.449	78.044			
14	.586	2.344	80.388			
15	.571	2.284	82.672			
16	.568	2.271	84.943			
17	.529	2.114	87.057			
18	.481	1.923	88.980			
19	.462	1.849	90.829			
20	.431	1.724	92.553			
21	.405	1.622	94.174			
22	.392	1.567	95.741			
23	.381	1.526	97.267			
24	.348	1.394	98.661			
25	.335	1.339	100.000			

Extraction Method: Principal Component Analysis.

A review of preliminary loading of factors advocated that appropriate explanation was achievable via principal component analysis, as it was capable of converging in six iterations.

Investigation of Figure 5.1 did not warn that the results were non-positive definite, so one important condition for proceeding with the interpretation was met.



**Figure 5.1: Scree plot of user motivation loadings** 

Communalities which are interpreted like Multiple  $R^2s$  in multiple regression indicate the degree to which the factors explain the variance of the variables. Two sets of communalities were provided in table 5.4, the initial set and the extracted set. The communalities were fine and providing further evidence that the results were appropriate for interpretation.

I use social networking sites:	Initial	Extraction
to meet new people	1.000	.647
to find other people like me	1.000	.735
to talk to people with same interests	1.000	.653
to establish long lost contacts	1.000	.412
to let out my emotions to others who will understand	1.000	.572
to express my anger to others who will sympathize	1.000	.618
to talk out my problems and seek advice	1.000	.619
to support social causes	1.000	.298
to let other know I care about their feelings	1.000	.434

1.000	.534
1.000	.551
1.000	.605
1.000	.492
1.000	.498
1.000	.554
1.000	.399
1.000	.572
1.000	.601
1.000	.676
1.000	.634
1.000	.458
1.000	.664
1.000	.654
1.000	.644
1.000	.613
	1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000

Extraction Method: Principal Component Analysis.

Having superior assurance about the suitability for principal component analysis, explanation of results were approved. Varimax rotation which is orthogonal in nature was applied to maximize the variance of squared loadings of a factor on all items in factor matrix. In this rotation each original item inclines towards one of the factors, and every factor signifies a small number of items leading to simplification of interpretation of results. Review of the rotated component matrix suggested that six factors club the 25 different items in a theoretically understandable manner (Table 5.5).

		Component							
	1	2	3	4	5	6			
to learn about useful things	.755								
to learn about unknown things	.696								

to do research	.691					
to get new ideas	.622					
to share new ideas and my achievements	.595					
because it is free		.800				
because I can use it easily		.759				
because I can use it anytime and		722				
anywhere		.733				
to pass time		.569				
to express my anger to others who will			.756			
sympathize			.730			
to talk out my problems and seek advice			.756			
to let out my emotions to others who will			.712			
understand			./12			
to let other know I care about their			.526			
feelings			.320			
to find other people like me				.824		
to meet new people				.773		
to talk to people with same interests				.755		
'because people who are important to me						
think that I should use social networking					.749	
sites'						
'because people who influence my						
behavior think that I should use social					.717	
networking sites'						
because of the feeling of social warmth on					620	
social networking sites					.620	
to create my social identity					.580	
to establish long lost contacts						.632
to relax by releasing work or other						.584
pressure						.304
Extraction Method: Principal Component Analysis		1	1	I	1	
Rotation Method: Varimax with Kaiser Normalizatio	n					
a. Rotation converged in 6 iterations						

From six identified factors, sixth factor was dropped as it comprised of two items with moderate communalities. Such kind of factors are treated as poorly defined factors and should be eliminated (Brown, 2015).

All the five factors having salient loadings and with high factor determinacy were deemed to be considered as factors explaining the usage motivation of online social networking websites.

- First factor that comprises of the items related to usage of social networking sites to learn about useful things, to do research, to learn about unknown things, to get new ideas and to share new ideas and my achievements can be named as need for information exchange. It comprises of both information seeking and sharing part.
- Second factor comprises of items related to use of social networking sites by users because it is free, ease of anytime and anywhere use and help in passing time. These items can be clubbed under the factor heading of need for entertainment fit.
- Third factor is collection of items related to use of online social networks for expressing anger to others who will sympathize, to talk about problems and seeking advice and to let out my emotions to others. All these factors provided the explanation of need for expression.
- Fourth factor comprises of items like to find likeminded people, to meet new people and to dialogue with people of similar interests. These items can be clubbed under head of need for networking.
- Fifth factor considered that user of online social networks were motivated to use such sites in order to create their social acceptance. Individuals use social networking sites because people important to them think that they should use online social networks, because people influencing their behaviour think that they should use online social network, because of the feeling of social warmth on social networking sites and to create ones social identity. All these can be clubbed under heading of need for social acceptance.

So the data set for identifying the social networking sites usage motivation by the people of which comprised of twenty five items with data collected from one thousand respondents has been reduced into five factors. The five factors identified are given as under:-

- A. Need for information exchange
- B. Need for entertainment fit
- C. Need for expression
- D. Need for networking
- E. Need for social acceptance

These five factors explain the motivations of people in Punjab to use social networking sites.

to learn about useful things	
to learn about unknown things	Need for
to do research	information
to get new ideas	exchange
to share new ideas and my achievements	-
because it is free	Needfer
because I can use it easily	Need for
because I can use it anytime and anywhere	entertainment fit
to pass time	11
to express my anger to others who will sympathize	
to talk out my problems and seek advice	Need for
to let out my emotions to others who will understand	expression
to let other know I care about their feelings	-
to find other people like me	Need for
to meet new people	
to talk to people with same interests	networking
'because people who are important to me think that I should use social	
networking sites'	
'because people who influence my behavior think that I should use	Need for social
social networking sites'	acceptance
because of the feeling of social warmth on social networking sites	-
to create my social identity	-

Table 5.6: Motivators for using social networking sites

After identification of five factors that motivate people of Punjab to use online social network websites, in order to find whether any difference exists between motives of males and

females to use such sites, one-way MANOVA was applied. Significance value of wilk's lambda was found to be 0.009, verifying that one-way MANOVA was statistically significant. Test of between - subject effects (table 5.7) depicted that gender had a significant effect on motive of need for networking only. For all remaining four motives gender was not found to make any significant difference. Motive of need for networking to use online social network websites is found to be relatively stronger in males than females.

	Dependent Variable	Type III Sum	df	Mean	F	Sig.
		of Squares		Square		
	Need for information exchange	.114	1	.114	.157	.692
	Need for entertainment fit	1.121	1	1.121	1.295	.255
Gender	Need for expression	1.715	1	1.715	1.911	.167
	Need for networking	11.555	1	11.555	11.702	.001
	Need for social acceptance	1.633	1	1.633	1.839	.175

 Table 5.7: Test of between - subject effects

# 5.2 Correlation wheel analysis of user motivation

In order to analyze results of the data collected from the three focus groups, statistics of cooccurrence were used. For this purpose correlation wheel was developed as depicted in figure 5.2:

Correlation wheel made it easier to view prominent relationships within text which were inter related. This text analytics helped in understanding many prominent concepts related to motivations of people to indulge in online social network websites.

As from the correlation wheel following results were drawn:

- People use online social network websites when they were bored and wanted to read or watch interesting or enjoyable items/things/stuff as per them. It signifies that for entertainment, people indulge in online social networks.
- Online networks offered a convenient platform to keep in touch and talk to friends, even to those who live abroad.
- Online networks were used by people to connect with others to create their identity, what could be called as motivation to create social identity.

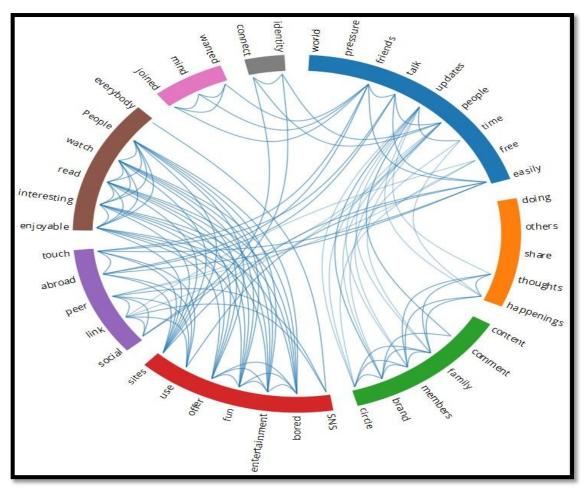


Figure 5.2: Correlation wheel analysis of user motivation

- People were motivated to use online social networks to discuss thoughts and life updates with family members.
- Social networking is found to be highly correlated with peers and link i.e. to link with peers or peer group act a motivator to use social networking sites.
- Inner motivation to be friends with like-minded people were found be co-occur in the wheel. This relation points out to the inner motivation of social networkers of Punjab to use such social networking sites to find and be friends with likeminded people.
- People who participated in online social networks were also found to use such services because of peer group influence i.e. people were using online social networks because others in their friend or family circle wanted them to do so.
- Convenience to link with others, coupled with low cost of communication motivated many to indulge in social network websites.

The results from this analysis shed light on different factors that motivate people of Punjab to indulge in online social networking websites. People in Punjab have been found to use online network websites due to the motives of need for information exchange, need for entertainment fit, need for expression, need for networking and need for social acceptance. Results indicate that social networkers join or use any online social network website due to one or more of the identified motives. Motive of need for social acceptance matches with the factor of peer pressure as identified in the previous research by (Krasnova, Hildebrand, & Gunther, 2011) across other geographies. Variables under factors of need for information exchange, need for entertainment fit and need for expression matches with SNS usage motivations of American population and need for networking matches with SNS usage motivations of Koreans as identified by the results drawn in a comparative social network usage motivation study by Kim, Sohn, & Choi (2011). All the five identified factors do not exactly matches with results of any previous studies undertaken during literature review but have some similarity with the finding of Kim, Sohn, & Choi (2011) and (Krasnova, Hildebrand, & Gunther, 2011). This confirms that set of motivating factors across geographies differ and culture may impact user motivations differently. Marketers needs to base their tactics for promoting products over online networks considering motives of social networkers to join such sites after considering different geographies. Moreover, outcomes of both qualitative as well as quantitative analysis supported each other conforming the identified motivating factors.

# **Chapter 6**

#### SOCIAL NETWORKING SITES BRAND PERSONIFICATION

Brand communication and consumers interaction with brand in form of its usage leads to creation of certain perception about the brand. Perceived personality notions leads to formation of personality of a brand in the mind of customers, indicating a relationship between brand users and brand.

#### 6.1 Perceptual mapping

In order to study the role of brand personification in building perception about the online social network websites, discriminant analysis has been used to identify the brand personality that user's associate with four online social networks under study. Online social network websites users were asked to reveal their preferences on a scale of 1 to 5 where 1 was strongly disagree and 5 was strongly agree. Discriminant analysis generated result of four groups as four social networking sites were under study. The discriminant analysis output gave Eigen values of each function and amount of variance explained from the original data. With the help of this data principal component analysis was performed in preference mapping where a two dimensional scatter plot was created with different points in it representing the four social networking sites. The coding of different social networking sites are shown in table 6.1.

Coding	Name of online social network
1	Facebook
2	Twitter
3	Linked In
4	Google+

Table 6.1: Social networking sites coding

#### Table 6.2: Group statistics

SNS		Mean	Std. Deviation
Facebook	Sincere	3.3800	1.18870

	Exciting	3.7620	1.02782
	Competent	3.3510	1.14766
	Sophisticated	3.4110	1.15992
	Rugged	2.8060	1.23851
	Sincere	2.9820	1.28114
	Exciting	2.9520	1.24227
Twitter	Competent	2.9940	1.22534
	Sophisticated	2.8770	1.25117
	Rugged	3.1360	1.32486
	Sincere	3.1650	1.30824
	Exciting	2.9390	1.23158
LinkedIn	Competent	3.2530	1.22984
	Sophisticated	2.8720	1.21865
	Rugged	2.7210	1.22338
	Sincere	3.1680	1.29439
	Exciting	3.0900	1.29289
Google+	Competent	3.1070	1.30125
	Sophisticated	2.8760	1.22316
	Rugged	2.9600	1.33573
	Sincere	3.1738	1.27631
	Exciting	3.1858	1.24905
Total	Competent	3.1763	1.23433
	Sophisticated	3.0090	1.23523
	Rugged	2.9058	1.29085

Discriminant analysis was used with the help of SPSS and results are presented in tables 6.4 & 6.5. Dependent variables in this study were four online social network websites i.e. Facebook, Twitter, LinkedIn and Google+ and the data for dependent variables was collected on nominal scale. The five elements competence, sincerity, excitement, sophistication and ruggedness of brand personality were the Independent variables. The Data for these independent variables was collected on interval scale. Thus the condition of preference mapping was met and analysis was conducted.

Wilk's' lambda indicated highly significant discriminant function (p < .000) (table 6.3). It also offered 10.3% as amount of total unexplained variability which was the square of canonical correlation.

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 3	.870	557.293	15	.000
2 through 3	.969	124.246	8	.000
3	.998	8.695	3	.034

Table 6.3: Wilk's' Lambda

Four social networking sites had their unique position on the map. Using the standardized coefficients of personality elements on function 1 and 2, plot of different social networking sites has been plotted in figure 6.1 using canonical discriminant functions (Table 6.4) and functions of group centroids (Table 6.5). These functions were evaluated through group means being the unstandardized canonical discriminant functions.

	Function			
	1 2 3			
SINCERE	124	328	.810	
EXCITING	.905	.452	.388	
COMPETENT	151	757	363	
SOPHISTICATED	.452	.100	816	
RUGGED	485	.819	.067	

 Table 6.4: Canonical discriminant function coefficients

SNS	Function			
	1	2	3	
Facebook	.579	.025	010	
Twitter	271	.210	043	
LinkedIn	175	267	025	
Google+	133	.032	.078	

**Table 6.5: Functions at Group Centroids** 

As only bi-dimensional map could be drawn using this technique, only function 1 and 2 of Canonical Discriminant Function Coefficients and unstandardized canonical discriminant functions were taken into consideration which were evaluated at group means. Data was put into Microsoft Excel and a scatter plot was constructed keeping X-axis as function one and Y-axis as function two.

#### 6.2 Social Networking Sites and brand personality elements associations

The position of different brands of social networking sites were plotted with respect to different brand personality attributes as represented in figure 6.1.

- Online social networking site Google+ and Twitter are perceived as brands carrying rugged personality. But Twitter is valued more on this personality trait as compared to Google +.
- Users associate Facebook strongly with sophistication. In the perceptual map the brand Facebook is positioned near to personality element of sophistication. Facebook is also perceived as having exciting personality by users but with lower degree of association. So Facebook is perceived to have both sophisticated and exciting personality but brand personality element sophistication is having high degree of association as compared to other one.

Unstandardized canonical discriminant functions evaluated at group means

 LinkedIn is perceived by users as having elements of competence and sincerity. Brand personality characteristic of sincerity is perceived more strongly as compared to competence.

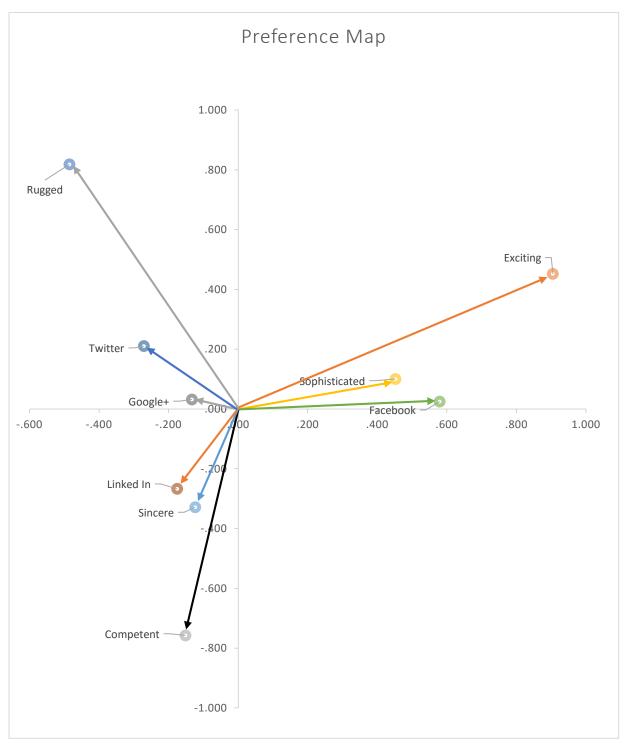


Figure 6.1: Perceptual Map of social networking sites and brand personality elements

Based on the visual information in perceptual map (Figure 6.1), the brands under study if personified, LinkedIn as a person is perceived to be sincere and competent. LinkedIn is

endorsed as a professional network for managing professional individuality and to form & participate in professional network. LinkedIn has mission statement, "connect the world's professionals to make them more productive and successful" (LinkedIn, 2014) so considering this focus of company, the sincere and competent personality of brand is adequately positioned in the mind of people. Traits associated with sincerity dimension of personality are down to earth, family orientation, honest and original etc. whereas the traits associated with competence are hardworking, reliable, intelligent and confident etc.

Google+ compiles user information across various other properties like YouTube, Google Drive etc. Google+ is being positioned as a service underlying many other services of Google Inc. Google+ is being described by Google Inc. as the "second layer" which is used to enhance its online assets (Lewix, 2014). Social networkers perceive Google+ to have personality of a rugged person. Perception of Google+ being a rugged person is a good sign for the company as it supports many of its other properties but at the same time it should also have been positioned as having competent (reliable) personality.

Mission statement of Twitter is "to instantly connect people everywhere to what is most meaningful to them". Social networkers follow other people on Twitter and Twitter in India is marked by presence of many influential personalities from politics to cricket and business world (Stever & Lawson, 2013) (IBN live, 2014). People follow their favorite personalities on Twitter. Brand image of Twitter being a rugged person definitely meets the idea of successful people joining Twitter to connect with their fans.

Facebook is the most used online social network brand and has mission "to give people the power to share and make the world more open and connected". Crores of individuals use Facebook daily to link with friends, upload photos, share videos or links, and learn about others (Facebook, 2014). Facebook help users to represent themselves online and share content with real world friend using online mode. Basically it offers people a platform to represent themselves and their real life associations (Abram & Pearlman, 2012). The number of people who are using Facebook would remain linked to this brand if they treat Facebook as a person having exciting personality. As per the results, people perceive that Facebook is having exciting personality but this representation is not very strong. Brand personality element of sophistication (traits like upper class and glamorous) is strongly associated with Facebook. This is good brand personality positioning for Facebook which would help it to retain its existing customers and gain new customers. As more and more people are becoming

status oriented (Gopal & Srinivasan, 2006) (Kamineni, 2005), brand positioning of being a sophisticated brand will help future growth.

Social Networking Site	User perceived positioning
Facebook	Sophistication
T decoook	Existing
Twitter	Rugged
LinkedIn	Sincere
	Competent
Google+	Rugged

So based on the results we can sum the results as given below:

Table 6.6: Online social networks brand personality

Facebook based on the results is enjoying a very unique positioning in the mind of the people of being a sophisticated person. This personality perception is carried by no other online social network at the current time. This is great opportunity for Facebook to sustain this position and work more on other dimensions of personality. Increasing the strength for exciting personality perception and adding competent personality perception can make Facebook remain the market leader for a very long time in future.

Social networking sites having two personality attributes with them are Facebook and LinkedIn. On the other hand Twitter and Google+ are not seen so different by the users of online social networks.

Consumers today want to be more informed about products before they make the purchase. Most importantly, social networks are extremely capable of informing and influencing purchase decisions, as many users now trust their peer opinions more than the marketing strategists. The increasing conduciveness of people to social networking has led to fast adoption of the medium by companies for brand promotions. Brands are setting up profile on these sites, accepting SNS users as "friends", to reach out to consumers (Sharma & Verma, 2012). Brands like Adidas, BMW and Coco-Cola have created circles of "friends" that have become brand building hubs (McKinsey, 2007). Brand managers needs to be very cautious regarding fit between brand personality of the brand being promoted via social networking site and personality of social networking site used for brand promotion. An example could be, if a brand carries an exciting personality element then it should not be promoted using LinkedIn as the medium. On the other hand managers of social networking sites need to understand the personality perception of these sites with people and attempts should be made to match the perceived brand personality elements with the focus of company. To grow, social networking companies need to continuously work upon strengthening their personality elements and to get themselves associated with more than one personality element to appeal to larger number of audience and brands. The ultimate aim with any social networking site is to match social networker's self-concept or brand identity with the consumer perception of brand image. Facebook being positioned as a brand having sophisticated and exciting personality is enjoying marketer leader's position. Google+ is being positioned as a service underlying many other services of Google Inc. and perception of Google+ being a rugged person is a good sign for the company. On the other hand, Twitter being a rugged person definitely meets the idea of successful people joining Twitter to connect with their fans but it needs to add a perspective of sophistication to its brand to compete against the likes of Facebook. Considering the focus of company, the personality of LinkedIn brand in the mind of people is adequately positioned to be of a sincere and competent person.

# Chapter 7

# MOMENTUM EFFECT, BRAND ADVOCACY AND BRAND LOYALTY

Momentum effect occurs when any user over social network websites use a brand as a point of reference in conversations or uses brand related content on profile or make recommendations about some brand to contacts (Gbadeyan, 2010). In order to find the relationship between momentum effect, brand loyalty and brand advocacy, structural equational modelling has been applied. Through structural equational modelling an attempt has been made to express the value creation process for brands on social networking sites. The value creation is in terms of relationship between constructs of brand advocacy, brand loyalty, and measured variable of momentum effect.

For the purpose of structural equational modelling first of all construct validity for the constructs of brand advocacy and brand loyalty have been undertaken.

# 7.1 Brand advocacy

The contsruct of brand advocacy comprised of 5 variables. In order to check the convergent validity of brand advocay construct, below given model has been prepared using AMOS.

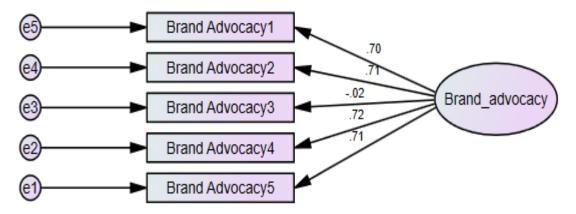


Figure 7.1: Brand advocacy validity

Code	Statement	Factor
Assigned		Loadings
Brand	My contacts on the social networking sites pick their	0.70
Advocacy1	products based on what I have told them.	0.70

Table 7.1: Factor loadings for construct of brand advocacy

Brand Advocacy2	I often influence my contacts' opinions about products through social networking sites.	0.71
Brand Advocacy3	I give suggestions about brands which I have only used personally	-0.02
Brand Advocacy4	I tend to pass on information or opinion about the products/brands to the contacts on my "friends" list on the social networking site when I find it useful.	0.72
Brand Advocacy5	When I receive product related information or opinion from a friend, I will pass it along to my other contacts on the social networking site.	0.71

Table 7.2: Standardized regression weights

	Estimate
Brand Advocacy5	.708
Brand Advocacy4	.718
Brand Advocacy3	016
Brand Advocacy2	.713
Brand Advocacy1	.695

For one of the variable brand advocacy3, factor loading is relatively low as compared to other four. In strandard regression weight table 7.2 brand advocacy3 variable was found to have low value of -0.016. Due to this low value, the variable is excluded from the construct barnd advocacy for the puppose of construction of model.

After the exclusion of one variable, the rest four variables were considered as the sub construct of brand advocacy in the model.

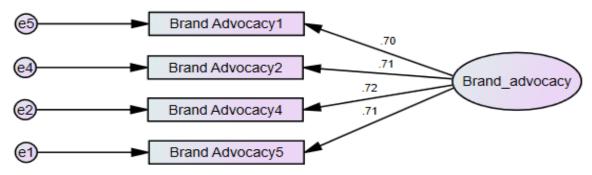


Figure 7.2: Brand advocacy variable loadings validity after removing variable with low standardized regression weights

Relaibility value of 0.780 has been recorded in the construct. As any value beyond 0.7 is treated as good (Gaskin, 2015), so the contrust of brand advocacy is found to have good relaibility (Hair et.al. 2009).

Convergent validity of brand advocacy was found to be 0.543. For calculating the convergent validityn following fomulla of (Anderson & Gerbing, 1988) was used:

Sum of squared factor loadings/sum of squared factor loadings + sum of indicator measurement error

The value for average variance explained which is also termed as convergent validity is found to be well within limits as it is more than 0.5 (Hair et.al. 2009). Value of 0.543 was calculated in case of convergent validity, confirming that items in the parent factor were correlating well with each other. Thus propounding that observed variables had properly explained the comprising manifested factor.

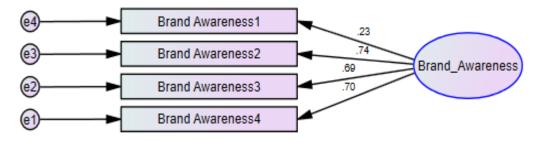
In construct of brand advocacy, divergent validity was also found to be well in limits (Hair et.al. 2009).

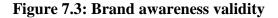
- Maximum Shared Squared Variance (MSV) = 0.099
- Average Shared Square Variance (ASV) = 0.080

It means there was little variation in variables external to respective parent factor as compared to variables confined to parent factor. It suggested that observed variables of the latent factor explained the construct well (Hair et.al. 2009).

#### 7.2 Brand awareness

The contsruct of brand awareness comprised of 4 variables. In order to check the convergent validity of brand awareness construct, below given model has been prepared using AMOS





Code Assigned	Statement	Factor Loadings
Brand Awareness 1	I keep my self-updated with information about brands by following them over social networking sites or by regularly visiting company/brand profile pages.	0.23
Brand Awareness 2	I discuss or publish content about my favorite brand over social networking sites to create awareness about it. / make other informed about it	0.74
Brand Awareness 3	Whenever I buy something, I do make a post of the same product or service on by social networking sites to tell others.	0.69
Brand Awareness 4	I share information of products/brands on the social networking site because I am rewarded for doing so like getting free gift coupons or some free software use (economic benefit).	0.70

## Table 7. 3: Factor loadings for construct of brand awareness

Table 7.4: Standardized regression weights

	Estimate
Brand Awareness4	.700
Brand Awareness3	.687
Brand Awareness2	.740
Brand Awareness1	.227

For one of the variable brand awareness1, factor loading is relatively low as compared to other three. In strandard regression weight table 7.4 brand awareness1 variable was found to have low value of 0.227. Due to low value, the variable is excluded from the construct of brand awareness for the puppose of construction of model.

After the exclusion of one variable, the rest of three variables were considered in the sub construct of brand awareness in the model.

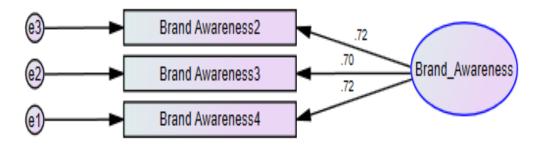


Figure 7.4: Brand Awareness variable loadings validity after removing variable with low standardized regression weights

Relaibility value of 0.802 has been recorded in the construct. As any value beyond 0.7 is treated as good (Gaskin, 2015), so the contrust of brand awareness is found to have good relaibility (Hair et.al. 2009).

Convergent validity of brand awareness was found to be 0.508. For calculating the convergent validityn following fomulla of (Anderson & Gerbing, 1988) was used:

Sum of squared factor loadings/sum of squared factor loadings + sum of indicator measurement error

The value for average variance explained which is also termed as convergent validity is found to be well within limits as it is more than 0.5 (Hair et.al. 2009). Value of 0.508 was calculated in case of convergent validity, confirming that items in the parent factor were correlating well with each other. Thus propounding that observed variables had properly explained the comprising manifested factor.

In construct of brand awareness, divergent validity was also found to be well in limits (Hair et.al. 2009).

- Maximum Shared Squared Variance (MSV) = 0.056
- Average Shared Square Variance (ASV) = 0.035

It means there was little variation in variables external to respective parent factor as compared to variables confined to parent factor. It suggested that observed variables of the latent factor explained the construct well (Hair et.al. 2009).

# 7.3 Perceived quality

The contsruct of perceived quality comprised of 3 variables. In order to check the convergent validity of brand awareness construct, below given model has been prepared using AMOS software.



**Figure 7.5- Perceived quality validity** 

Code Assigned	Statement	Factor Loadings
Perceived Quality 1	I only discuss about those brands over social networking sites in which I find more quality.	0.72
Perceived Quality 2	I only discuss about those brands over social networking sites which are having unique features.	0.80
Perceived Quality 3	I only discuss about those brands over social networking sites with which I have encountered problem	0.68

Ta	ble	7.5:	Factor	loadings f	for	construct	of	perceived	quality

**Table 7.6: Standardized regression weights** 

	Estimate
Perceived Quality3	.682
Perceived Quality2	.805
Perceived Quality1	.719

As the standardized regression weights are high for all the three variables of perceived quality factor, so all three variables were considered in the construct.

Relaibility value of 0. 753 has been recorded in the construct. As any value beyond 0.7 is treated as good (Gaskin, 2015), so the contrust of perceived quality is found to have good relaibility (Hair et.al. 2009).

Convergent validity of perceived quality was found to be 0. 540. For calculating the convergent validityn following fomulla of (Anderson & Gerbing, 1988) was used:

Sum of squared factor loadings/sum of squared factor loadings + sum of indicator measurement error

The value for average variance explained which is also termed as convergent validity is found to be well within limits as it is more than 0.5 (Hair et.al. 2009). Value of 0. 540was calculated in case of convergent validity, confirming that items in the parent factor were correlating well with each other. Thus propounding that observed variables had properly explained the comprising manifested factor.

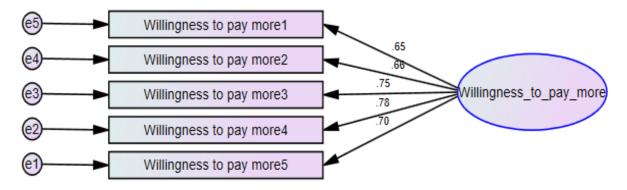
In construct of perceived quality, divergent validity was also found to be well in limits (Hair et.al. 2009).

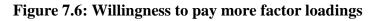
- Maximum Shared Squared Variance (MSV) = 0.099
- Average Shared Square Variance (ASV) = 0.063

It means there was little variation in variables external to respective parent factor as compared to variables confined to parent factor. It suggested that observed variables of the latent factor explained the construct well (Hair et.al. 2009).

# 7.4 Willingness to pay more

The contsruct of perceived quality comprised of 5 variables. In order to check the convergent validity of brand awareness construct, below given model has been prepared using AMOS software.





Code Assigned	Statement	Factor	
Code Assigned	Statement	Loadings	
Willingness to	I am ready to spend more time as compared to my	0.65	
pay more 1	usual hours to discuss about my favorite brand.	0.05	
Willingness to	Whenever there is any contest related to my favorite	0.66	
pay more 2	brand, I do participate in it.	0.00	
Willingness to	I am willing to pay more price for buying brands	0.75	
pay more 3	recommended to me by contacts.	0.75	
Willingness to	I am willing to pay more price for buying brands	0.78	
pay more 4	advertised through social networking sites.	0.76	
Willingness to	I am willing to pay more price for buying brands	0.70	
pay more 5	liked/followed by large number of people.	0.70	

### Table 7.7: Factor loadings for construct of willingness to pay more

**Table 7.8: Standardized regression weights** 

	Estimate
Willingness to pay more5	.702
Willingness to pay more4	.776
Willingness to pay more3	.746
Willingness to pay more2	.663
Willingness to pay more1	.651

As the standardized regression weights are high for all the five variables of willingness to pay more factor, so all five variables were considered in the construct.

Relaibility value of 0. 835 has been recorded in the construct. As any value beyond 0.7 is treated as good (Gaskin, 2015), so the contrust of willingness to pay more is found to have good relaibility (Hair et.al. 2009).

Convergent validity of willingness to pay more was found to be 0. 503. For calculating the convergent validityn following fomulla of (Anderson & Gerbing, 1988) was used:

Sum of squared factor loadings/sum of squared factor loadings + sum of indicator measurement error The value for average variance explained which is also termed as convergent validity is found to be well within limits as it is more than 0.5 (Hair et.al. 2009). Value of 0. 503 was calculated in case of convergent validity, confirming that items in the parent factor were correlating well with each other. Thus propounding that observed variables had properly explained the comprising manifested factor.

In construct of willingness to pay more, divergent validity was also found to be well in limits (Hair et.al. 2009).

- Maximum Shared Squared Variance (MSV) = 0.085
- Average Shared Square Variance (ASV) = 0.051

It means there was little variation in variables external to respective parent factor as compared to variables confined to parent factor. It suggested that observed variables of the latent factor explained the construct well (Hair et.al. 2009).

So for the two constructs of Brand advocacy and Brand loyalty having sub sonstructs of Brand awareness, Perceived quality and Willingness to pay more convergent and divergent validity has been found.

	Composite relaibility	Average Variance Explained	Maximum Shared Squared Variance	Average Shared Square Variance
Perceived Quality	0.780	0.543	0.099	0.080
Brand Advocacy	0.802	0.508	0.056	0.035
Brand Awareness	0.753	0.540	0.099	0.063
Willingness to pay more	0.835	0.503	0.085	0.051

Table 7.9: Validity values for brand advocacy and brand loyalty

As all the value in table 7.9 are in line with the threshold limits given below in table 7.10 so the structural model can be applied on the current data in hand.

Reliability	0.7
Convergent Validity	0.5
Discriminant Validity	MSV< AVE
	ASV < AVE

Table 7.10: Validity threshold values table\*

#### \*Book: Hair et.al. (2009)

The structural model depicted in figure 7.7 has been drawn to study the value creation process for brands through social networking sites w.r.t momentum effect leading to increase in advocacy and loyalty.

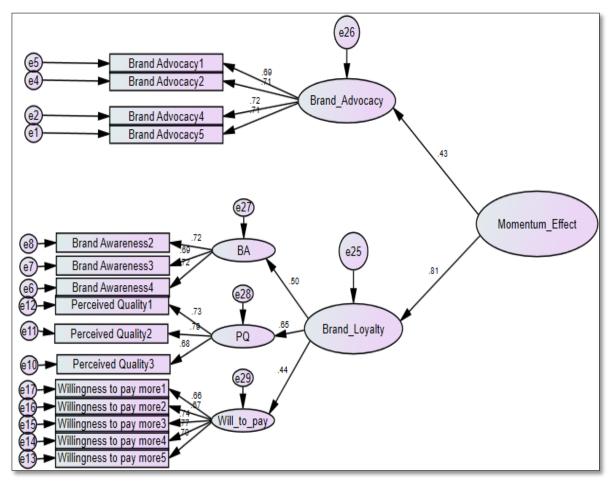


Figure 7.7: Structural model of brand value creation

# 7.5 Model Fit

**Model chi-square** - Chi-square value of 2.694, indicates an appropriate fit amid the proposed model and sample data (Carmines & McIver, 1981). The value of 2.694 indicates

that extent of inconsistency amongst the sample and fitted covariance matrices was acceptable.

**Comparative Fit Index-** Value of Comparative Fit Index, which is a measure based on noncentrality was found to be 0.969. This value is calculated after comparing the model of interest with independence model (An independent model is one in which there is no correlation between its variables). So the value in hand indicates an acceptable limit for difference between the predicted and observed covariance matrices thus representing the extent to which target model is better than the independence model.

**Goodness of fit index**- Value for GFI was 0.968. This index helps in calculating the variations accounted by estimated population covariance. The value of GFI was high to replicate observed covariance matrix.

Adjusted Goodness of fit index- AGFI value was 0.955, well in the acceptable limits. It was calculated by adjusting GFI based upon degree of freedom.

**Root mean square residual-** For baseline comparison, value of root mean square residual was considered which came out to be 0.046, verifying significance of the model. This index signifies the difference between the sample and theorized covariance model.

**Normed-fit index-** Value of NFI was found to be 0.952. This value is well within the limits of the standard threshold. This value signifies that all the measured variables are correlated.

**Root Mean Square Error of Approximation**- RMSEA which is based on chi-square was not found to be highly sensitive to sample size. The calculated value was 0.41, which was well within the threshold limits of 0.05 or less.

**p of Close Fit**- p of Close Fit is a *close-fitting model* for one-sided test of the null hypothesis. As calculated value of 0.98 was more than the threshold value of 0.05, so fit of the model was close.

When consumers or users of online social network websites create content or get engaged in any type of content creation activities, a potential value is created for such consumers. Value is also created when different consumers or users over online social network websites illustrate a pass-along behavior to share content created by other users in the network. When this content created is related to any of the brands, consumer brand engagement is materialized. For brands in online social network site value is not only created when users of such services visit brand pages but value is also created when users share brand related content with others in their network which could be a picture or a like on Facebook or a retweet about the brand related content. Consumer brand engagement is reflected through consumers' participation in brand discussion and value creation among participants of online network communities.

It has been observed that value is created for brands through social networking sites and momentum effect leads to brand advocacy and brand loyalty. Structural model of brand value creation depicts a relationship between brand value creation and momentum effect. Users in online social networks use different brands (as per their liking) as reference points in their online conversations i.e. eWOM. This creates momentum effect and leads to brand advocacy and brand loyalty. Social networkers tends to give suggestions to others for even those brands that they have not used personally and this tendency strengthens brand advocacy. People portrayed low levels of interest in keeping themselves updated with information about brands by following them over social networking sites or in regularly visiting company/brand profile pages but customers co-create brand related communication by discussing positive attributes of a brand, recommend brand/brands and share concerns for one or multiple attributes for any brand. This leads to brand advocacy, which is a sign for consumer engagement with brands over social networks.

Structural model of brand value creation depicts a relationship between brand value creation and momentum effect leading to brand loyalty. So if loyalty for brands is caused in online social network websites due to momentum effect so brand engagement is created Haven (2007). It can be put forward that brand loyalty signifies consumer engagement and engagement is created due to momentum effect. Value of regression weight estimates in the structural model depicts that brand loyalty in comparison to brand advocacy is influenced more by momentum effect.

## **Chapter 8**

#### SOCIAL RELATIONSHIPS AND eWOM

Social relationships signify interaction between two or more individuals. Social relationship variables, in case of online social networking websites are important for understanding electronic word of mouth (eWOM) behaviour among people of Punjab. Electronic word of mouth offers explicit information, interactivity and empathetic listening, but the distance between the source of communication and the receiver is much lower than distance in marketer induced communications. In order to study the association between social relationships and eWOM (Electronic word of mouth) in online social Network websites five types of social relationships were identified i.e. Social tie strength, social capital, homophily, trust and interpersonal influence.

Types of Social Relationships	Mean	Std. Deviation
Tie Strength	3.2780	.74428
Social Capital	3.5795	.64052
Trust	3.4643	.90394
Interpersonal Influence	2.9331	.82360
Homophily	2.9171	.75075

 Table 8.1: Descriptive statistics of eWOM with social relationships

\*N=1000

The table 8.1 signifies that there is no missing value in the data. Trust factor accounts for the highest standard deviation across all the five types of social relationships

# H<sub>0</sub><sup>3</sup>: There is no significant association between social relationships and eWOM in online social network websites.

In order to study the association between social relationships and eWOM, correlation between the two was studied as both dependent and independent variables were on interval scale i.e. continuous scale.

		eWOM	Tie Strength	Social Capital	Trust	Interpers- onal Influence	Homophily
	oWOM	1	0.183	0.347	0.191	0.447	0.265
	eWOM		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	T. G. 1		1	0.186	0.16	0.167	0.058
	Tie Strength	-	1	(0.00)	(0.00)	(0.00)	(0.034)
	Social Capital	-	-	1	0.449	0.365	0.267
Pearson Correlati-				1	(0.00)	(0.00)	(0.00)
on	Trust	_	-		1	0.237	0.306
				-	1	(0.00)	(0.00)
	Interpersonal	-	_				0.384
	Influence			-	-	1	(0.00)
	Homophily	-	-	-	-	-	1

Table 8.2: Correlations matrix of eWOM with social relationships

The ability of social relationships to predict the electronic word of mouth variable in online social network websites is based on the correlation between the two variables. From the correlation matrix (table 8.3), it was observed that there exists a correlation between eWOM and different types of social relationships under study. Correlation was found to be the highest between interpersonal influence and eWOM. Association was positive but weak between social tie strength and eWOM. Three types of interpersonal influence i.e. value expressive influence, utilitarian influence and informational influence individually were studied to find their correlation with eWOM.

		eWOM	Value expressive influence	Utilitarian influence	Informational Influence
	eWOM	1	.330	.370	.431
Pearson Correlati-	Value expressive influence	-	1	.565	.427
on	Utilitarian influence	-	-	1	.588
	Informational Influence	-	-	-	1

 Table 8.3: Correlations matrix of eWOM with interpersonal influence relationships

Informational influence was found to be most correlated with eWOM on online social network websites. Utilitarian influence came next in the line of decreasing correlation with eWOM, followed by value expressive influence being the least correlated. Thus it was found that there exists a correlation between social relationship and eWOM. Out of the five types of social relations, information influence has the highest positive association with eWOM. No significantly high correlation was observed in-between independent variables which signified independent variables were not highly correlated and their combined predictive power was the sum of their individual correlations (table 8.2).

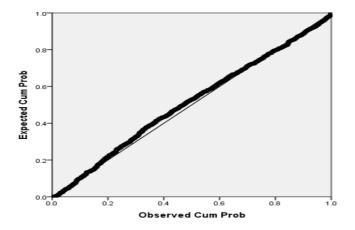


Figure 8.1: Normal P-P Plot of regression standardized residual

As portrayed in the above figure 8.1, dependent variable (eWOM) and independent variable (social relationships) follow a linear relationship which also fulfilled the assumption to move ahead with multiple regression. The data was found to be normally distributed.

Table 8.4: Stepwise variables included in the model<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Interpersonal influence	-	Stepwise (Criteria –
2	Social Capital	-	Probability of F to
3	Tie Strength	-	enter<=.05 and Probability of F to remove >=.1)
4	Homophily	-	

a. Dependent Variable: eWOM

Table 8.4 depicted variables included in the model at each step: "Interpersonal Influence" was the single best predictor (step 1), "Social Capital" was the next best predictor (added the most), and after "Interpersonal Influence" was included in the model (step 2). "Tie Strength" in (step 3) was the third best predictor followed by "Homophily" at the fourth position (step 4). Trust variable of the social relationship was missing from the table signifying that "Trust" didn't predict dependent variable well in the model.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.447 <sup>a</sup>	.200	.199	.56752
2	.489 <sup>b</sup>	.239	.238	.55384
3	.496 <sup>c</sup>	.246	.244	.55152
4	.502 <sup>d</sup>	.252	.249	.54975
a Predict	tors (Co	nstant) Intern	ersonal Influence	

Table 8.5: Model Summary<sup>e</sup>

a. Predictors: (Constant), Interpersonal Influence

b. Predictors: (Constant), Interpersonal Influence, Social Capital

- c. Predictors: (Constant), Interpersonal Influence, Social Capital, Tie Strength
- d. Predictors: (Constant), Interpersonal Influence, Social Capital, Tie Strength , Homophily
- e. Dependent Variable: eWOM

As per the table 8.5 (considering R Square), interpersonal influence alone accounts for 20% of the variance in model 1. In model 2, with two variables, interpersonal influence and social capital 23.9% of the variance was accounted for. Model 3, with interpersonal influence, social capital and tie strength accounts for 24.6 % of the variance and lastly model 4 was able to account for the highest variance i.e. 25.2 percent. This deduced model 4 to be best model for constructing a regression equation. On considering adjusted R Square instead of R Square, still model 4 is the best model to use out of the four models as adjusted R-squared peaks but don't show a decline trends.

	Model Sum of Squares		df	Mean Square	F	Sig.
	Regression	80.452	1	80.452		
1	Residual	321.432	998	.322	249.792	.000 <sup>b</sup>
	Total	401.884	999			
	Regression	96.070	2	48.035		
2	Residual	305.814	997	.307	156.602	.000 <sup>c</sup>
	Total	401.884	999			
	Regression	98.925	3	32.975		
3	Residual	302.959	996	.304	108.408	.000 <sup>d</sup>
	Total	401.884	999			
	Regression	101.174	4	25.294		
4	Residual	300.710	995	.302	83.692	.000 <sup>e</sup>
	Total	401.884	999			

 Table 8.6: ANOVA<sup>a</sup>

a. Dependent Variable: eWOM

b. Predictors: (Constant), Interpersonal Influence

c. Predictors: (Constant), Interpersonal Influence, Social Capital

d. Predictors: (Constant), Interpersonal Influence, Social Capital, Tie Strength

e. Predictors: (Constant), Interpersonal Influence, Social Capital, Tie Strength , Homophily

For model 4 (table 8.6) which is identified as the best model for constructing a regression equation the ratio of the model mean square to the error mean square i.e. F value/ratio = 83.692. The P value for the model was 0.000, which was statistically significant and leads to rejection of null hypothesis.

		Unstandard				
	Model	B Std. Error		Т	Sig.	VIF
	Constant	1.58	0.123	12.819	0	
	Interpersonal Influence	0.256	0.024	10.644	0	1.301
4	Social Capital	0.185	0.03	6.218	0	1.203
	Tie Strength	0.075	0.024	3.147	0.002	1.049
	Homophily	0.069	0.025	2.728	0.006	1.201

Table 8.7: Coefficients<sup>a</sup>

a. Dependent Variable: eWOM

For model 4, unstandardized coefficient Beta values, value of t and significance values are depicted in table 8.7. The value of the variance inflation factor (VIF) for all the independent variables were less than 10 which signifies that there is no problem of Multicollinearity (Kutner & Nachtsheim, 2004) i.e. predictor variables in a multiple regression model were highly correlated, based on which regression equation was constructed.

$eWOM = 1.580 + 0.256 \text{ II}^{1} + 0.185 \text{ SC}^{2} + 0.075 \text{ TS}^{3} + 0.069 \text{ H}^{4}$					
F value/ratio = 83.692	Adjusted R Square= 0.249				
*at 5% level of significance					
1 II= Interpersonal Influence					
2 SC= Social Capital					
3 TS= Tie Strength					
4 H= Homophily					

It was found that there is a relationship between social relationships and eWOM (Electronic word of mouth) in online social network websites. Out of the five types of social relationships

under study except trust all other i.e. Social tie strength, social capital, homophily and interpersonal influence were found to be related with electronic word of mouth in social networking sites.

### 8.1 Association and relationship between opinion giving behavior and social relationships

In order to study association between social relationships and opinion giving behavior, correlation between the two was studied and to study relationship between the two, cause and effect relationship technique of step wise multiple regression was applied. Step wise multiple regression assessed the relationship between single dependent variable (opinion giving) and five independent variables (i.e. social tie strength, social capital, homophily, trust and interpersonal influence). The intention of applying step wise multiple regression was to develop a regression equation i.e. line of best fit between opinion giving (dependent variable) and five independent variables (social relationships) i.e. to understand which of the independent variables would best predict the opinion giving behavior or dependent variable.

Variables	Mean	Std. Deviation
Opinion giving	3.7587	.69540
Tie Strength	3.2780	.74428
Social Capital	3.5795	.64052
Trust	3.4643	.90394
Interpersonal Influence	2.9331	.82360
Homophily	2.9171	.75075

Table 8.8: Descriptive Statistics of opinion giving behavior with social relationships

\*n=1000

Table 8.8 signifies that there was no missing value in the data and trust factor accounts for the highest standard deviation across all the five types of social relationships.

### Table 8.9: Correlations matrix of opinion giving with social relationships

eWOM	Tie Strength	Social Capital	Trust	Interpers- onal Influence	Homoph- ily
------	-----------------	-------------------	-------	---------------------------------	----------------

	Opinion Giving	1.000	.013 (.346)	.132 (.000)	.072 (.011)	.154 (.000)	.157 (.000)
	Tie Strength		1.000	.186 (.000)	.160 (.000)	.167 (.000)	.058 (.034)
Pearson	Social Capital			1.000	.449 (.000)	.365 (.000)	.267 (.000)
Correlation	Trust				1.000	.237 (.000)	.306 (.000)
	Interperso- nal Influence					1.000	.384 (.000)
	Homophil-y						1.000

\*n=1000

From the correlation matrix, it was observed that there exists a correlation between opinion giving behavior and different types of social relationships under study. Correlation was found to be the highest between homophily and eWOM. Association was found to be positive but weak between opinion giving behavior and all types of social relationships.

No significantly high correlation was observed in-between independent variables which signified independent variables were not highly correlated and their combined predictive power was the sum of their individual correlations.

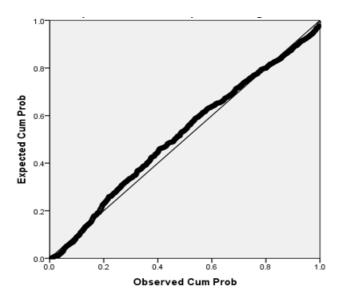


Figure 8.2: Normal P-P Plot of regression standardized residual

As portrayed in the figure 8.2 opinion giving behavior and social relationships follow a linear relationship which also fulfills an assumption to move ahead with multiple regression.

Model	Variables Entered	Variables Removed	Method
1	Homophily	-	Stepwise ( Criteria – Probability of F to
2	Interpersonal Influence	-	enter<=.05 and Probability of F to remove >=.1)
3	Social Capital	-	

Table 8.10: Stepwise variables included in the model<sup>a</sup>

a. Dependent Variable: eWOM

Table 8.10 depicts variables included in the model at each step: "Homophily" was the single best predictor (step 1), "Interpersonal Influence" was the next best predictor (added the most), after "homophily" was included in the model (step 2). Social Capital in (step 3) was the third best predictor. Trust and Social tie strength variable of the social relationship were missing from the table signifying that they didn't predict dependent variable well in the model.

Table 8.11 - Model summary<sup>d</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	.157ª	.025	.024	.68707			
2 .187 <sup>b</sup> .035 .033				.68379			
3 .199° .040 .037				.68255			
a. Predictors: (Constant), Homophily							
b. Predictors: (Constant), Homophily, Interpersonal Influence							
c. Predictors: (Constant), Homophily, Interpersonal Influence, Social Capital							
d. Dependent Variable: Opinion Giving							

As per the table 8.11 (considering R Square), homophily alone in model 1 accounted for 2.5% of the variance. In model 2, with two variables, homophily and interpersonal Influence 3.5% of the variance was accounted for. Model 3 with Homophily, Interpersonal Influence and Social Capital accounted for 4 % of the variance and best model among three models to

constructing a regression equation. If we consider adjusted R Square instead of R Square, still model 3 is the best model to use out of the four models as adjusted R-squared peaks but don't show a decline trends.

	Model	Sum of Squares	Df	Mean Square	F	Sig.		
	Regression 11.975		1	11.975				
1	Residual	471.116	998	.472	25.369	.000 <sup>b</sup>		
	Total	483.092	999					
	Regression	16.932	2	8.466				
2	Residual	466.159	997	.468	18.107	.000 <sup>c</sup>		
	Total 483.092 999							
	Regression         19.087         3         6.362							
3	3 Residual 464.005 996 .466 13.657 .000 <sup>d</sup>							
	Total 483.092 999							
a. Dependent Variable: Opinion Giving								
b. Predictors: (Constant), Homophily								
c. I	c. Predictors: (Constant), Homophily, Interpersonal Influence							
	d. Predictors: (Constant), Homophily, Interpersonal Influence, Social Capital							

Table 8.12: ANOVA<sup>a</sup>

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For model 3 (table 8.12) which was identified as the best model for constructing a regression equation, the ratio of the model mean square to the error mean square i.e. F value/ratio is 13.657. The P value for the model was 0.000 which is statistically significant.

#### Table 8.13: Coefficients<sup>a</sup>

Model		Unstandard	t	Sig.	VIF	
	Widder	В	Std. Error	t	org.	v 11
3	(Constant)	2.978	.135	22.033	.000	

Interpersonal Influence	.097	.032	3.071	.002	1.200
Social Capital	.074	.030	2.483	.013	1.285
Tie Strength	.079	.037	2.151	.032	1.179

a. Dependent Variable: Opinion Giving

For model 3 unstandardized coefficient Beta values, value of t and significance values were depicted in table 8.13. The value of the variance inflation factor (VIF) for all the independent variables is less than 10 which signifies that there is no problem of multicollinearity (Kutner & Nachtsheim, 2004) i.e. predictor variables in a multiple regression model is not highly correlated, based on which regression equation has been constructed.

**Regression equation** 

Opinion Giving = $2.978 + 0.097 \text{ H}^1 + 0.074 \text{ II}^2 + 0.079 \text{ SS}^3$						
F value/ratio = 13.657	Adjusted R Square= 0.037					
*at 5% level of significance	*at 5% level of significance					
1= Homophily						
2= Interpersonal Influence						
3= Social Capital						

Opinion giving behavior in online social network websites was influenced by the social capital, homophily and interpersonal influence, whereas trust and social tie strength among the social network users do not make significant influence on likelihood of opinion giving in online social network websites.

### 8.2 Association and relationship between opinion seeking behavior and social relationships

In order to study association between social relationships and opinion seeking behavior, correlation between the two was studied and to study relationship between the two, cause and effect relationship technique of step wise multiple regression was applied. Step wise multiple regression assessed the relationship between single opinion seeking and five social relationship (i.e. social tie strength, social capital, homophily, trust and interpersonal influence) variables. The intention of applying step wise multiple regression was to develop a regression equation i.e. line of best fit between opinion seeking (dependent variable) and

five independent variables (social relationships) i.e. to understand which of the independent variables would best predict the opinion seeking behavior or dependent variable.

Variables	Mean	Std. Deviation
Opinion Seeking	3.2865	.95660
Tie Strength	3.2780	.74428
Social Capital	3.5795	.64052
Trust	3.4643	.90394
Interpersonal Influence	2.9331	.82360
Homophily	2.9171	.75075

 Table 8.14: Descriptive Statistics of opinion seeking behavior with social

relationships

\*N=1000

Table 8.14 signifies that there was no missing value in the data and trust factor accounts for the highest standard deviation across all the five types of social relationships.

		eWO	Tie	Social	Trust	Interperson	Homophil
		М	Strengt	Capita		al Influence	у
			h	1			
	Opinion Seeking	1.000	.179 (.000)	.323 (.000)	.193 (.000 )	.408 (.000)	.195 (.000)
Pearson	Tie Strength		1.000	.186 (.000)	.160 (.000 )	.167 (.000)	.058 (.034)
Correlatio n	Social Capital			1.000	.449 (.000 )	.365 (.000)	.267 (.000)
	Trust				1.000	.237 (.000)	.306 (.000)
	Interperson al Influence					1.000	.384

 Table 8.15: Correlations matrix of eWOM with opinion seeking

		Homophily						1.000
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\*N=1000

From the correlation matrix, it was observed that there exists a positive correlation between opinion seeking behavior and different types of social relationships under study. Correlation was found to be the highest between interpersonal influence and opinion seeking behavior. Association was found to be positive but weak between opinion seeking behavior and social strength, homophily, trust and social capital.

No significantly high correlation was observed in-between independent variables which signified independent variables were not highly correlated and their combined predictive power was the sum of their individual correlations.

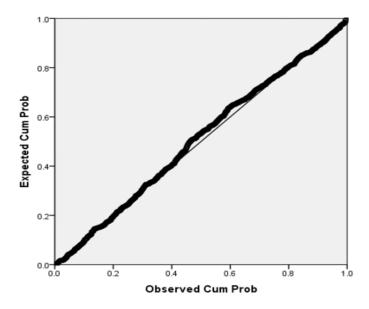


Figure 8.3: Normal P-P Plot of regression standardized residual

As portrayed in figure 8.3 opinion seeking behavior and social relationships follow a linear relationship which also fulfills an assumption to move ahead with multiple regression.

Model	Variables Entered	Variables Removed	Method
1	Interpersonal Influence		Stepwise (Criteria – Probability of F to enter<=.05 and Probability of F to remove
2	Social Capital		>=.1)

Table 8.16: Stepwise variables included in the model<sup>a</sup>

3	Tie Strength		
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Table 8.16 depicts variables included in the model at each step: "Interpersonal Influence" was the single best predictor (step 1), "Social Capital" was the next best predictor (added the most), after "Interpersonal Influence" was included in the model (step 2). Social Tie Strength in (step 3) was the third best predictor. Trust and Homophily variable of the social relationship was missing from the table signifying that they don't predict depended variable well in the model.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	.408 <sup>a</sup>	.167	.166	.87361			
2	.449 <sup>b</sup>	.202	.200	.85559			
3	.458°	.209	.207	.85184			
a. Predictors: (Constant), Interpersonal Influence							
b. Predictors: (Constant), Interpersonal Influence, Social Capital							
c. Predictors: (Constant), Interpersonal Influence, Social Capital, Tie Strength							
d. Dependen	d. Dependent Variable: Opinion Seeking						

Table 8.17: Model summary<sup>d</sup>

In table 8.17 (considering R Square), interpersonal influence alone in model 1 accounts for 16.7% of the variance. In model 2, with two variables, interpersonal influence and social capital 20.2% of the variance was accounted for. Model 3 with interpersonal influence, social capital and social tie strength accounted for 20.9% of the variance and best model among three models to construct a regression equation. On considering adjusted R Square instead of R Square, model 3 was the best model to use out of the three models as adjusted R-squared peaks but didn't show a declining trends.

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	152.505	1	152.505	199.825	.000 <sup>b</sup>
•	Residual	761.663	998	.763	1771020	.000

	Total	914.168	999		7			
	Regression	184.329	2	92.164				
2	Residual	729.839	997	.732	125.902	.000 <sup>c</sup>		
	Total	914.168	999					
	Regression	191.440	3	63.813				
3	Residual	722.727	996	.726	87.942	.000 <sup>d</sup>		
	Total	914.168	999					
a. I	Dependent Vari	able: Opinion Seel	king					
b. Predictors: (Constant), Interpersonal Influence								
c. Predictors: (Constant), Interpersonal Influence, Social Capital								
d. 1	Predictors: (Cor	nstant), Interpersor	al Influe	ence, Social Ca	apital, Tie Str	rength		

For model 3 (table 8.18) which was identified as the best model for constructing a regression equation the ratio of the model mean square to the error mean square i.e. F value/ratio is 87.942. The P value for the model was 0.000 which was statistically significant.

 Table 8.19: Coefficients<sup>a</sup>

Model		Unstanda	t	Sig.	VIF	
	Widder	В	Std. Error	ι	Sig.	V II
	(Constant)	.797	.182	4.381	.000	
3	Interpersonal Influence	.377	.035	10.677	.000	1.167
	Social Capital	.280	.046	6.134	.000	1.175
	Tie Strength	.116	.037	3.131	.002	1.048

a. Dependent Variable: Opinion Seeking

For model 3 unstandardized coefficient Beta values, value of t and significance values were depicted in table 8.19. The value of the variance inflation factor (VIF) for all the independent variables is less than 10 which signifies that there is no problem of multicollinearity (Kutner & Nachtsheim, 2004) i.e. predictor variables in a multiple regression model were not correlated, based on which regression equation has been constructed.

#### **Regression equation**

Opinion Giving = $0.797 + 0.377 \text{ II}^1 + 0.280 \text{ SC}^2 + 0.116 \text{ TS}^3$				
F value/ratio = 87.942	Adjusted R Square= 0.207			

*at 5% level of significance	
1= Interpersonal Influence	
2= Social Capital	
3= Social tie strength	

Opinion seeking behavior in online social network websites was influenced by the social capital, social tie strength and interpersonal influence among the social network users. On the other hand trust and homophily among the social network users did not make significant influence on likelihood of happening of opinion seeking in online social network websites.

# 8.3 Association and relationship between information pass along behavior and social relationships

In order to study association between social relationships and information pass along behavior, correlation between the two was studied and to study relationship between the two, cause and effect relationship technique of step wise multiple regression was applied. Step wise multiple regression assessed the relationship between information pass along behavior and five social relationship (i.e. social tie strength, social capital, homophily, trust and interpersonal influence) variables. The intention of applying step wise multiple regression was to develop a regression equation i.e. line of best fit between information pass along behavior and five social relationships i.e. to understand which of the independent variables would best predict the information pass along behavior.

Variables	Mean	Std. Deviation
Information pass along	3.1305	1.03793
Tie Strength	3.2780	.74428
Social Capital	3.5795	.64052
Trust	3.4643	.90394
Interpersonal Influence	2.9331	.82360
Homophily	2.9171	.75075

\*N=1000

Table 8.20 signifies that there was no missing value in the data and trust factor accounts for the highest standard deviation across all the five types of social relationships.

		eWO	Tie	Social	Trust	Interperson	Homophil
		М	Strengt	Capita		al Influence	у
			h	1			
	Information pass along	1.000	.215 (.000)	.312 (.000)	.157 (.000 )	.426 (.000)	.229 (.000)
	Tie Strength		1.000	.186 (.000)	.160 (.000 )	.167 (.000)	.058 (.000)
Pearson Correlatio	Social Capital			1.000	.449 (.000 )	.365 (.000)	.267 (.000)
n	Trust				1.000	.237 (.000)	.306 (.000)
	Interperson al Influence					1.000	.384 (.000)
	Homophily						1.000

Table 8.21: Correlations matrix of eWOM with social relationships

From the correlation matrix, it was observed that there exists a positive correlation between information pass along behavior and different types of social relationships under study. Correlation was found to be the highest between interpersonal influence and information pass along behavior. Association was found to be positive but weak between information pass along behavior and social strength, homophily, trust and social capital.

No significantly high correlation was observed in-between independent variables which signified independent variables were not highly correlated and their combined predictive power was the sum of their individual correlations.

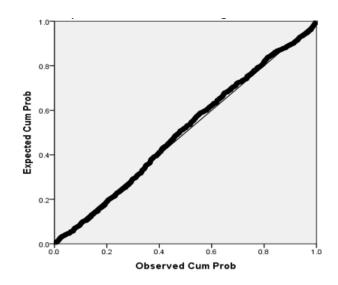


Figure 8.4: Normal P-P Plot of regression standardized residual

As portrayed in figure 8.4 pass along behavior and social relationships follow a linear relationship which also fulfilled an assumption to move ahead with multiple regression.

Model	Variables Entered	Variables Removed	Method
1	Interpersonal Influence		Stepwise (Criteria – Probability of F to enter<=.05 and Probability of F to remove
2	Social Capital		>=.1
3	Tie Strength		

 Table 8.22: Stepwise variables included in the model<sup>a</sup>

a. Dependent Variable: eWOM

Table 8.22 depicted variables included in the model at each step: "Interpersonal Influence" was the single best predictor (step 1), "Social Capital" was the next best predictor (added the most), and after "Interpersonal Influence" was included in the model (step 2). Social Tie Strength in (step 3) was the third best predictor. Trust and Homophily variable of the social relationship was missing from the table signifying that they didn't predict depended variable well in the model.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.426 <sup>a</sup>	.182	.181	.93943
2	.458 <sup>b</sup>	.210	.208	.92363

 Table 8.23: Model summary<sup>e</sup>

3	.474 <sup>c</sup>	.225	.223	.91504				
a. Predictors:	a. Predictors: (Constant), Interpersonal Influence							
b. Predictors:	b. Predictors: (Constant), Interpersonal Influence, Social Capital							
c. Predictors:	c. Predictors: (Constant), Interpersonal Influence, Social Capital, Tie Strength							
d. Dependent	d. Dependent Variable: Information pass along							

As per the table 8.23 (considering R Square), interpersonal influence alone in model 1 accounted for 18.2% of the variance. In model 2, with two variables, interpersonal influence and social capital 21% of the variance is accounted for. Model 3 with interpersonal influence, social capital and social tie strength accounted for 22.5% of the variance and best model among three models to construct a regression equation. On considering adjusted R Square instead of R Square, still model 3 was the best model to use out of the four models as adjusted R-squared peaks but didn't show a decline trends.

	Model	Sum of Squares	Df	Mean Square	F	Sig.		
	Regression	195.448	1	195.448				
1	Residual	880.772	998	.883	221.461	.000 <sup>b</sup>		
	Total	1076.220	999					
	Regression	225.691	2	112.845		.000 <sup>c</sup>		
2	Residual	850.529	997	.853	132.279			
	Total	1076.220	999					
	Regression	242.274	3	80.758				
3	Residual	833.946	996	.837	96.451	.000 <sup>d</sup>		
	Total	1076.220	999					
a. I	a. Dependent Variable: Information pass along							
b. Predictors: (Constant), Interpersonal Influence								
c. F	c. Predictors: (Constant), Interpersonal Influence, Social Capital							
d. I	Predictors: (Cor	nstant), Interpersonal	Influ	ence, Social Capi	tal, Tie Stre	ngth		

Table 8.24: ANOVA<sup>a</sup>

For model 3 (table 8.24) which was identified as the best model for constructing a regression equation the ratio of the model mean square to the error mean square i.e. F value/ratio is 96.451. The P value for the model was 0.000 which was statistically significant and leads to rejection of null hypothesis.

Model		Unstandardized Coefficients		t	Sig.	VIF
		В	Std. Error		0	
	(Constant)	.333	.195	1.703	.089	
3	Interpersonal Influence	.436	.038	11.480	.000	1.167
	Social Capital	.262	.049	5.348	.000	1.175
	Tie Strength	.177	.040	4.450	.000	1.048

 Table 8.25: Coefficients<sup>a</sup>

a. Dependent Variable: Information pass along

For model 3 unstandardized coefficient Beta values, value of t and significance values were depicted in table 8.25. The value of the variance inflation factor (VIF) for all the independent variables is less than 10 which signifies that there was no problem of multicollinearity (Kutner & Nachtsheim, 2004) i.e. predictor variables in a multiple regression model was not highly correlated, based on which regression equation was constructed.

Regression	equation
itegi ession	equation

Information pass along behavior= $0.333 + 0.436 \text{ II}^1 + 0.262 \text{ SC}^2 + 0.177 \text{ TS}^3$		
F value/ratio = 87.942	Adjusted R Square= 0.207	
*at 5% level of significance		
1 II= Interpersonal Influence		
2 SC= Social Capital		
3 TS= Social tie strength		

Information pass along behavior in online social network websites was influenced by the social capital, social tie strength and interpersonal influence among the social network users. On the other hand trust and homophily among the social network users does not make significant influence on likelihood of happening of pass along of information in online social network websites.

 Table 8.26: Relationship between individual eWOM components and social relationships

Electronic word of mouth components		
Opinion	Opinion	Information Pass
Giving	Seeking	Along

	Interpersonal Influence	Yes	Yes	Yes
ships	Social Capital	Yes	Yes	Yes
Social Relationships	Social Tie Strength	No	Yes	Yes
Socia	Homophily	Yes	No	No
	Trust	No	No	No

From table 8.4, it can be inferred that opinion giving activity on social networking sites was influenced by interpersonal relationship, social capital and homophily. On the other hand homophily plays no part in opinion seeking and information pass along behavior but social tie strength along with interpersonal influence and social capital influences makes a difference. Trust as a social relationship has been observed to play no part in happening for likelihood of opinion giving, seeking and information pass along behavior in online social network websites.

### 8.4 Relationship between eWOM and sub components of social tie strength

On online social network websites we can divide contacts into two type's i.e. personal contacts and professional contacts. The tie strengths for personal as well as professional contacts for a single person can vary over a social networking site. In order to understand which out of the two types of personal ties or professional ties affects the eWOM more, regression analysis has been applied.

Model	Variables Entered	Variables Removed	Method
1	Tie Strength Professional	-	

Table 8.27: Tie strength variables entered/removed<sup>a</sup>

	Tie Strength Personal	Tie Street th		Stepwise (Criteria – Probability of F to
2		-	enter<=.05 and Probability of F to remove	
			>=.1)	

Model	R	R Square	Adjusted R Square		
1	.159 <sup>a</sup>	.025	.024		
2	.184 <sup>b</sup>	.034	.032		
a. Predicto	a. Predictors: (Constant), Tie Strength Professional				
b. Predictors: (Constant), Tie Strength Professional, Tie Strength Personal					
c. Dependent Variable: eWOM					

Table 8.28: Model summary<sup>c</sup>

Tables 8.28 clearly indicated that professional tie strength which indicates group cohesions with professional contacts was more important indicator as compared to tie strength with personal contacts which would influence happening of electronic word of mouth in online social network websites. Notable point was, social ties alone do not play a significant role in happening of word of mouth communication. But still out the two type of ties, group cohesion in professional contacts will lead to happening of electronic word of mouth more in online social network websites as compared to cohesion in personal contacts.

### 8.5 Relationship between eWOM and sub components of interpersonal influence

To understand the reference group/interpersonal influence in depth, one needs to study value expressive influence, informational influence and utilitarian influence. Keeping eWOM as dependent variable and three types of interpersonal influence i.e. value expressive influence, informational influence and utilitarian influence as independent variables step wise multiple regression was applied.

Model	Variables Entered	Variables Removed	Method
1	Informational Influence		Stepwise (Criteria: Probability-of-F-to- enter <= .050, Probability-of-F-to-remove >= .100).

Table 8.29: Interpersonal influence variables entered/removed<sup>a</sup>

2	Value expressive influence	Stepwise (Criteria: Probability-of-F-to- enter <= .050, Probability-of-F-to-remove >= .100).
3	Utilitarian influence	Stepwise (Criteria: Probability-of-F-to- enter <= .050, Probability-of-F-to-remove >= .100).

Model	R	R Square	Adjusted R Square	
1	.431 <sup>a</sup>	.185	.185	
2	.460 <sup>b</sup>	.212	.210	
3	.467°	.218	.216	
a. Predictors: (Constant), Informational Influence				
b. Predictors: (Constant), Informational Influence, Value expressive influence				
c. Predictors: (Constant), Informational Influence, Value expressive influence, Utilitarian influence				
d. Dependent Variable: eWOM				

#### Table 8.30: Model summary<sup>d</sup>

Informational Interpersonal Influence was traced out to be the most important interpersonal influence out of the three available types which leads to increased likelihood of eWOM in online social network websites. This indicated that desire of a person to make an informed decision in online social network websites increased eWOM likelihood. After information influence next in order of importance was value expressive influence and third was utilitarian influence.

#### 8.6 Relationship between eWOM and sub components of social capital

Social capital was signified into two forms namely bridging and bonding social capital. Bridging social capital leads to creation of ties between groups of people, on the other hand bonding social capital was considered as linking between similar kinds of people. Keeping eWOM as dependent variable and two types of social capital i.e. bridging and bonding social capital as independent variables, step wise multiple regression was applied.

Model	Variables Entered	Variables Removed	Method
1	Bridging Social Capital	-	Stepwise ( Criteria – Probability of F to enter<=.05 and Probability of F to remove
2	Bonding Social Capital	-	>=.1)

Table 8.31: Social capital variables entered/removed<sup>a</sup>

Table 8.32 - Model summary<sup>c</sup>

Model	R	R Square	Adjusted R Square			
1	.308 <sup>a</sup>	.095	.094			
2	.352 <sup>b</sup>	.124	.122			
a. Predictors: (Constant), Bridging Social Capital						
b. Predictors: (Constant), Bridging Social Capital, Bonding Social Capital						
c. Dependent Variable: eWOM						

Out of the two types of social capital, bridging social capital was more important for electronic word of mouth to happen in online social network websites as compared to bonding social capital. Considering the R square values, the influence of social capital on happening of eWOM in online social network websites was not very strong but out the two on the basis of importance bridging social capital was more important than bonding social capital considering flow of eWOM in online social network websites.

In order to attain a profound understanding about the population under study, relating to the association between social relationship and electronic word of mouth, a demography wise analysis was conducted.

## 8.7 Relationship between social relationships and eWOM in online social network websites across genders

For the purpose of studying the association between social relationships and eWOM in online social network websites across genders, firstly step wise multiple regression was applied on the data collected from male in the study. Below given table 8.8.1 specifies that two of social relationships i.e. homophily and trust have been removed from the regression model, which

signifies the two are not making significant effect on likelihood of eWOM flow in online social network websites for males.

Model	Variables Entered	Method
1	Interpersonal Influence	
2	Social Capital	Stepwise (Criteria – Probability of F to enter<=.05 and Probability of F to remove >=.1)
3	Tie Strength	

Table 8.33: Males, social relationships and eWOM<sup>a</sup>

a. Dependent Variable: eWOM

Table 8.34: Coefficients for males, social relationships and eWOM

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	1.631	.146		11.187	.000
Interpersonal Influence	.338	.029	.421	11.467	.000
Social Capital	.160	.038	.154	4.201	.000
Tie Strength	.065	.030	.074	2.183	.029

For the three types of social relationships which were associated with likelihood of eWOM happening in online social networks i.e. interpersonal influence, social capital and social ties strength were all having significant value of p i.e. less than 0.5.

Table 8.35: F	Females, social	relationships a	and eWOM
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Model	Variables Entered	Method
	T / 1	
1	Interpersonal	Stepwise (Criteria – Probability of F to enter<=.05 and
	Influence	Probability of F to remove $\geq =.1$ )

2	Social Capital
3	Tie Strength
4	Homophily

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	1.674	.205		8.149	.000
Interpersonal Influence	.178	.037	.250	4.786	.000
Social Capital	.207	.048	.229	4.300	.000
Tie Strength	.091	.041	.111	2.236	.026
Homophily	.091	.042	.114	2.142	.033

#### Table 8.36: Coefficients for females, social relationships and eWOM

In case of female respondents (table 8.36) only one social relationship factor of trust was removed from the regression model, which signifies that it was not having significant effect on likelihood of eWOM flow in online social network websites in case of females.

## 8.8 Relationship between social relationships and eWOM in online social networks across different age groups

For identifying whether the relationship between social relationships and electronic word of mouth in online social network websites varies across age categories, respondents were divided into two categories of having age less than or equal to 25 and having age more than 25. Table 8.36 signifies the social relationship factors having influence on the eWOM likelihood in case of people under or equal to age of 25 years.

Model	Variables Entered	Method
1	Interpersonal Influence	
2	Social Capital	Stepwise (Criteria – Probability of F to enter<=.05 and Probability of F to remove >=.1)
3	Homophily	

Table 8.37: Age less than equal to 25, social relationships and eWOM<sup>a</sup>

Table 8.38: Coefficients for age less than equal to 25, social relationships and
eWOM <sup>a</sup>

Model	1	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	1.745	.186		9.373	.000
Interpersonal Influence	.242	.042	.337	5.821	.000
Social Capital	.215	.052	.240	4.137	.000
Homophily	.096	.044	.127	2.208	.028

Only three types of social relationships namely interpersonal influence, social capital and homophily have significant relationship with eWOM. This also depicted that social tie strength and trust were not playing a part in generating likelihood to drive eWOM on social networking sites with this age category.

Table 8.37 and 8.38, depicted that with respondents of age more than 25 years, only one social relationship factor of social tie strength was associated i.e. with people of age category more than 25 years social tie strength was the only factor playing a part in influencing eWOM likelihood in online social network websites.

Model	Variables Entered	Method
1	Tie Strength	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

Table 8.39: Age more than 25, social relationships and eWOM<sup>a</sup>

Table 8.40: Coefficients for age more that	an 25 . social relationships and eWOM <sup>a</sup>

Model		Unstanda	ardized	Standardized Coefficients	t	Sig.
		Coeffic	cients			
		В	Std. Error	Beta		
	(Constant)	2.391	.362		6.602	.000
1	Tie Strength	.303	.105	.317	2.894	.005

a. Dependent Variable: eWOM

# **8.9 Relationship between social relationships and eWOM in online social network websites across different income groups**

For the sake of such analysis, respondents were divided into three income groups of less than 20000 INR, more than 20001 INR but less than 60000 INR and third category of more the 60001 INR. In case of first category, i.e. income groups of less than 20000 INR respondents (table 8.41 and 8.42).

Model	Variables Entered	Method	
1	Interpersonal Influence		
2	Social Capital	Stepwise (Criteria – Probability of F to enter<=.05 and	
3	Homophily	Probability of F to remove >=.1)	
4	Tie Strength		

Table 8.41: Less than 20000 INR social relationships and eWOM<sup>a</sup>

a. Dependent Variable: eWOM

People who fall in the income category of less than 20000 INR are associated with all the social relationship except for trust. The relationship with the four factors of social relationship also tends to be significant.

Model	Unstandardized		Standardized		
	Coefficients		Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	1.696	.135		12.597	.000
Interpersonal	.206	.029	.276	7.139	.000
Influence	.200			/102	.000
Social Capital	.189	.034	.206	5.509	.000
Homophily	.095	.029	.122	3.343	.001
Tie Strength	.070	.026	.092	2.678	.008

Table 8.42: Coefficients for less than 20000 INR social relationships and eWOM<sup>a</sup>

On the similar lines it has been found that people with income category of more than INR

20000

But less than INR60000 were influenced by interpersonal influence, social capital and

social tie strength to indulge into eWOM on online social network websites.

Table 8.43: 20000 - 60000 IN	R social relationships and eWOM <sup>a</sup>
------------------------------	--

Model	Variables Entered	Variables Removed	Method
1	Interpersonal Influence	-	Stanwiss (Critaria - Drahahility of E to
2	Social Capital	-	Stepwise (Criteria – Probability of F to enter<=.05 and Probability of F to remove >=.1)
3	Tie Strength	-	~1)

a. Dependent Variable: eWOM

### Table 8.44: Coefficients for INR between 20000-60000 social relationships and eWOM<sup>a</sup>

		andardized efficients	Standardized Coefficients	t	Sig.
Model	В	Std. Error	Beta		
(Constant)	1.390	.271		5.138	.000
Interpersonal Influence	.309	.044	.386	6.982	.000

Social Capital	.165	.061	.149	2.724	.007
Tie Strength	.140	.058	.130	2.403	.017

Considering the table 8.44, the relationship between happening of eWOM and the three social relationships was found to be significant in this income category.

In the final income category of people having income more than INR60000, interpersonal influence and social capital played a significant role in influencing the likelihood to perform eWOM in social networking sites.

	Table 8.45: More than 60000 INK social relationships and ew OW				
Model	Variables Entered	Method			
1	Interpersonal Influence	Stepwise ( Criteria – Probability of F to enter<=.05 and			
2	Social Capital	Probability of F to remove >=.1)			

Table 8.45: More than 60000 INR social relationships and eWOM<sup>a</sup>

a. Dependent Variable: eWOM

Table 8.46: Coefficients for	<sup>.</sup> INR more than 60000 socia	l relationships and eWOM <sup>a</sup>
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	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model	В	Std. Error	Beta		
(Constant)	1.198	.507		2.362	.024
Interpersonal Influence	.358	.124	.419	2.892	.006
Social Capital	.339	.155	.317	2.186	.035

a. Dependent Variable: eWOM

As per the three income group categories, there are different set of social relationship factors that influence the likelihood to do eWOM.

8.10 Relationship between social relationships and eWOM in online social networks across different qualification categories

For the sake of such analysis, respondents were divided into two qualification categories of under graduation or below and graduation or above. Applying step wise multiple regression, the following results were derived.

Model	Variables Entered	Method
1	Interpersonal Influence	
2	Trust	Stepwise (Criteria – Probability of F to enter<=.05 and
3	Homophily	Probability of F to remove $\geq =.1$ )
4	Tie Strength	

Table 8.47: Under graduation or below, social relationships and eWOM<sup>a</sup>

a. Dependent Variable: eWOM

### Table 8.48: Coefficients for under graduation or below, social relationships and eWOM<sup>a</sup>

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model	В	Std. Error	Beta		
(Constant)	1.914	.169		11.297	.000
Interpersonal Influence	.241	.040	.304	6.096	.000
Trust	.082	.030	.134	2.739	.006
Homophily	.115	.040	.141	2.891	.004
Tie Strength	.077	.038	.095	2.023	.044

a. Dependent Variable: eWOM

In case of respondents who were having qualification levels of under graduation or below, it was found that interpersonal influence, trust, homophily and social tie strength play a part in driving eWOM in online social network websites. Social capital, a kind of social relationships which were not found to be prominent in this case.

Model	Variables Entered	Method
1	Interpersonal Influence	Stepwise (Criteria – Probability of F to enter<=.05 and
2	Social Capital	Probability of F to remove $\geq =.1$ )
3	Tie Strength	

Table 8.49: Graduation or above, social relationships and eWOM<sup>a</sup>

#### Table 8.50: Coefficients for graduation or above, social relationships and eWOM<sup>a</sup>

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model	В	Std. Error	Beta		
(Constant)	1.418	.153		9.264	.000
Interpersonal Influence	.281	.028	.370	10.190	.000
Social Capital	.259	.038	.249	6.768	.000
Tie Strength	.075	.032	.083	2.376	.018

a. Dependent Variable: eWOM

Table 8.49 and 8.50 indicates that in case of people having qualification of graduation or above, interpersonal influence, social capital and social tie strength tend to influence the flow of eWOM in SNS, leaving trust and homophily out of the picture.

## 8.11 Relationship between social relationships and eWOM in online social network websites across married and unmarried respondents

In the study three types of marital status were taken of married, unmarried and divorced. Respondents in the category of divorced were only 11 in number which was seriously small for any kind of analysis, so this category is not considered for marital status wise analysis.

Firstly for the respondents who were married, three type of social relationship have been found to be prominent i.e. interpersonal influence, social capital and social tie strength.

Model	Variables Entered	Method
1	Interpersonal Influence	
2	Social Capital	Stepwise (Criteria – Probability of F to enter<=.05 and Probability of F to remove >=.1)
3	Tie Strength	

Table 8.51: Married, social relationships and eWOM<sup>a</sup>

Table 8.52: Coefficients for married, social relationships and eWOM<sup>a</sup>

		andardized efficients	Standardized Coefficients	t	Sig.	
Model	В	Std. Error	Beta			
(Constant)	1.418	.153		9.264	.000	
Interpersonal Influence	.281	.028	.370	10.190	.000	
Social Capital	.259	.038	.249	6.768	.000	
Tie Strength	.075	.032	.083	2.376	.018	
a. Dependent Variable: eWOM						

For unmarried respondents, homophily was an additional component along with all the social relationships associated in case of married respondents. The relationship between married respondents as well as unmarried respondent's social relationships and their likelihood to indulge into electronic word of mouth were found to be significant.

Table 8.53: Unmarried, social relationships and eWOM<sup>a</sup>

Model	Variables Entered	Method
1	Interpersonal Influence	
2	Social Capital	Stepwise (Criteria – Probability of F to enter<=.05 and
3	Homophily	Probability of F to remove $\geq =.1$ )
4	Tie Strength	

a. Dependent Variable: eWOM

	Unstandardized Coefficients		Standardized Coefficients t		Sig.
Model	В	Std. Error	Beta		
(Constant)	1.505	.128		11.775	.000
Interpersonal Influence	.251	.026	.327	9.563	.000
Social Capital	.210	.032	.218	6.618	.000
Homophily	.086	.026	.109	3.335	.001
Tie Strength	.070	.024	.088	2.882	.004

Table 8.54: Coefficients for unmarried, social relationships and eWOM<sup>a</sup>

# 8.12 Relationship between social relationships and eWOM in online social network websites across occupational categories

Three types of categories were discussed in this part i.e. student, service and self-employed or business. Table 8.55 and 8.56 suggested that in case of occupation being a student, interpersonal influence, social capital, and social tie strength and homophily played a part for indulging in eWOM.

Model	Variables Entered	Method
1	Interpersonal Influence	
2	Social Capital	Stepwise (Criteria – Probability of F to enter<=.05 and Probability of F to remove >=.1)
3	Tie Strength	
4	Homophily	

Table 8.55: Student, social relationships and eWOM<sup>a</sup>

a. Dependent Variable: eWOM

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model	В	Std. Error	Beta		
(Constant)	1.587	.138		11.474	.000
Interpersonal Influence	.202	.030	.265	6.659	.000
Social Capital	.210	.035	.230	6.058	.000
Tie Strength	.089	.027	.113	3.237	.001
Homophily	.093	.029	.121	3.233	.001

Table 8.56: Coefficients for student, social relationships and eWOM<sup>a</sup>

In case of self-employed or business people, only one type of social relationship plays its part in likelihood for doing electronic word of mouth in online social network websites and that was interpersonal influence.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model	В	Std. Error	Beta		
(Constant)	2.632	.219		12.038	.000
Interpersonal Influence	.280	.072	.392	3.881	.000

Table 8.57: Coefficients for self-employed, social relationships and eWOM<sup>a</sup>

a. Dependent Variable: eWOM

In the third kind of category of service class people two types of social relationships i.e. interpersonal influence and social capital played a significant part in increasing the likelihood for using online social network websites.

Model	Variables Entered	Method
1	Interpersonal	Stepwise (Criteria: Probability-of-F-to-enter <= .050,
1	Influence	Probability-of-F-to-remove >= .100).

Table 8.58: Service, social relationships and eWOM<sup>a</sup>

2	Social Capital	Stepwise (Criteria: Probability-of-F-to-enter <= .050,
2	Social Capital	Probability-of-F-to-remove >= .100).

### Table 8.59: Summary of demography wise social relationship and likelihood for<br/>eWOM

Demographic variable	Category	Social relationship
	Male	Interpersonal Influence, Social Capital, Tie Strength
Gender	Female	Interpersonal Influence, Social Capital
Age	Less than equal to 25	Tie Strength, Homophily, Trust Interpersonal Influence, Social Capital, Homophily
	More than 25	Tie Strength
	less than 20000 INR	Interpersonal Influence, Social Capital, Tie Strength, Homophily
Income	20000 - 60000 INR	Interpersonal Influence, Social Capital, Tie Strength
	More than 60000 INR	Interpersonal Influence Social Capital
Qualification	Under graduation or below	Interpersonal Influence, Trust, Tie Strength, Homophily
	Graduation or above	Interpersonal Influence, Social Capital, Tie Strength
Marital States	Married	Interpersonal Influence, Social Capital, Tie Strength
Marital Status	Unmarried	Interpersonal Influence, Social Capital, Tie Strength, Homophily
Occupation	Student	Interpersonal Influence, Social Capital, Tie Strength, Homophily

Self-employed	Interpersonal Influence
Service	Interpersonal Influence, Social Capital

Electronic word of mouth in social networking sites is influenced by the social tie strength, social capital, homophily and interpersonal influence among the social network users. Contrary to prior study of Chus (2009), trust among social network users does not make significant influence on likelihood of electronic word of mouth happening in online social networking sites. It simply means that trust is not found to be a significant predictor for likelihood of engaging in eWOM on social networking sites for people of Punjab. Opinion giving behavior in social networking sites is found to be influenced by the social capital, homophily and interpersonal influence among the social network users. Trust and social tie strength among the social network users does not make significant influence on likelihood of opinion giving in social networking sites. Opinion seeking behavior in social networking sites is influenced by the social capital, social tie strength and interpersonal influence among the social network users. Trust and homophily among the social network users does not make significant influence on likelihood of happening of opinion seeking in social networking sites. Across personal and professional ties, professional ties mark a relative high association as compared to person ties to indulge in social networking activities. Informational interpersonal influence leads to increased likelihood of eWOM (electronic world of mouth happening) in social networking sites as compared to value expressive and utilitarian influence. It depicts a desire of making informed decision (Kelman, 1961) in social networking sites increase eWOM likelihood. Susceptibility of informational interpersonal influence in online social networking sites means that individuals regard reference group members as a source of potentially useful information. Weak utilitarian influence implies that users of online sites do feel obliged to fulfill others expectation or to conform to other group members. Bridging social capital is found to be more prominent in affecting electronic word of mouth to happen in social networking sites as compared to bonding social capital. As social networkers from Punjab depict higher degrees of bridging social capital, so people of Punjab are more likely to seek advice from others and to indulge in more of information pass along behavior (Pigg & Crank, 2004). The association between social relationships and electronic word of mouth in social networking sites varies across gender. Only homophily, in case of females is found be associated with eWOM likelihood to happen. The association between social relationships and electronic word of mouth in social networking sites varies across age. For young users, interpersonal influence, social capital and homophily and for mid-aged and older ones social tie strength marks the strength of eWOM happening likelihood. The association between social relationships and electronic word of mouth in social networking sites varies across income groups. In case of respondents who are under graduates or less qualified, interpersonal influence, trust, homophily and social tie strength play a part in driving eWOM in social networking site. Married people are influenced by interpersonal influence, social capital, tie strength and unmarried with interpersonal influence, social capital, tie Strength and homophily to perform the likelihood of word of mouth activity on online social networks. Interpersonal Influence, Social Capital, Tie Strength, Homophily are important social relationship factors for students to start with word of mouth activity on online social networks.

# **Chapter 9**

# FINDINGS, SUGGESTIONS AND CONCLUSION

The study was aimed at online social networking websites users to study value creation process through consumer engagement. The data was collected from both secondary as well as primary sources. Appropriate statistical tools like percentage, mean, multiple regression analysis, preference mapping factor analysis and structured equation modelling were employed. Based on results and discussions, the key findings and conclusions from this study has been recapitulated and presented in the following sections. Based on findings a few suggestions have also been recommended.

#### 9.1 Major Findings

Consumer engagement in virtual world can be observed through the most basic measurement of engagement i.e. user involvement, which in case of online social networks is highlighted with regular visits by large number of social networkers. Consumer make repeat visits to online sites because of value derived from different activities they are performing on these sites. This motivation to use online social network sites has been found to be influenced by five factors as listed in the following section. When consumers or users of online social network websites create content or get engaged in any type of content creation activities, a potential value is created for such consumers. eWOM is influenced by different social relationship in online social network websites. Users in online social networks use brands as reference points in their online conversations (i.e. eWOM) creating brand advocacy and brand loyalty, which are signs for consumer engagement with brands over social networks and value creation for the brands. Objective wise detailed findings are as under:

# **9.1.1** Usage pattern of social networking sites among the social networkers across crosssections of the population

Findings related to usage pattern of social networking sites among social networkers suggested that there are different types of usage habits, user preferences, topics and activities of user interest that are associated with online social networking websites. Major findings among these are:

i. As the frequency of use of online social networking tends to increase so do the amount of time spend on social networking site in a single day increases.

- ii. Facebook is the most frequently used social networking sites with the people of Punjab and Twitter is the least used one. Google+ which is a relatively new service among the four social networking sites under study is quickly finding its place with the people of Punjab as it is the second most preferred platform for online social networking activities by the users.
- iii. If the people have less number of contacts in their social networking sites, they tend to know a larger number of people out of their virtual contacts/friends in the real world or vice versa.
- iv. As more people of Punjab are using social networking sites for linking with personal contacts, it justifies the less use of LinkedIn which is a social networking site for professional networking.
- v. There are contacts in social network profiles of users with whom they never interact individually but definitely would be seeing the updates shared by them.
- vi. Laptop computer and mobile phones are mostly used for social networking by people of Punjab highlighting the importance of convenience and portability in devices used for social networking. These two devices, especially a mobile phone offer users with convenience to access their social networking sites on the go. This intention of keeping oneself social network ready highlights feeling of engagement among the SNS users.
- vii. There are different types of activities performed by social networkers on online social networking sites. But these activities are performed in varying intensities and analysis of the responses gave following results:
  - a) Reading news feeds or comments is mostly performed activity by people on the social networking sites and playing games in least performed activity by the people of Punjab on social networking sites.
  - b) Most people do not like to play games in social networking sites. A large segment of approximately 45 percent of respondents in the survey have never been involved with online social network gaming.
  - c) 51 percent of respondents in study are those who had never or rarely participate in brand communities.
  - d) A good number of nearly 88% of people/social networkers visit brand pages to search information or to learn about the brands. This is good sign for the companies to use social networking sites as an information sharing tool with their existing and potential customers.

- e) Making new friends online is not a frequently performed activity by social networkers of Punjab.
- viii. Home décor related things are least discussed by social networkers. This indicate home décor companies/brands need to excite users to start talking about such topics. This can happen by paid advertisements on social networking sites by the home décor brands. In India for home décor mostly elderly females are responsible in families and such category of people are not using social networking sites.
- ix. Mostly discussed topics over social networking sites are school/college stuff and personal issues.

## 9.1.2 Factors motivating usage of social networking sites

Different factors have been identified which motivate people of Punjab to use online social networking sites. The factors are:

- Need for information exchange: This factor comprises of intentions related to usage of social networking sites in order to learn about useful and unknown things and to get or share new ideas and achievements.
- ii. Need for entertainment fit: This factor comprises of items related to use of social networking sites by users because social networking is free, they can use it anytime and anywhere and social network activity help them in passing their time.
- iii. Need for expression: Third factor is related to use of online social networks for expressing ones emotions. Social networkers use these sites to express their anger to others who will sympathize with them and to talk about their problems and seek advice from others.
- iv. Need for networking: People go for online social networking to search likeminded people and to dialogue with people of similar interests.
- v. Need for social acceptance: User of online social networks are motivated to use such sites in order to create their social acceptance. Individuals use social networking sites because people important to them think that they should use online social networks, because people influencing their behaviour think that they should use online social network, because of the feeling of social warmth on social networking sites and to create ones social identity.

# 9.1.3 Brand personification and social networking sites

Perceived personality notions about brands in the mind of customers leads to formation of personality of a brand in the mind of customers, indicating a relationship between brand users and brand. It has been found that:

- i. Online social networking site Google+ and Twitter are perceived as brands carrying rugged personality. But Twitter is valued more on this personality trait as compared to Google +. This perception of Google+ being a rugged (tough) person is a good sign for the company because Google+ is being positioned as a service underlying many other services of Google Inc. On the other hand, Twitter being a rugged (tough) person definitely meets the idea of successful people joining twitter to connect with their fans.
- ii. Facebook is perceived to have both sophisticated and exciting personality but brand personality element of sophistication is having high degree of association as compared to other one. Brand personality element of sophistication (traits like upper class and glamorous) which is strongly associated with Facebook is a good brand personality position as more and more people are becoming status oriented. This brand positioning would help it in retaining existing and in gaining new customers and also fueling future growth.
- iii. LinkedIn is perceived to have elements of competence and sincerity. Brand personality characteristic of sincerity is perceived more strongly as compared to element of competence. Considering the focus of being a professional networking service provider company, the personality of brand in the mind of people is adequately positioned to be of a sincere and competent person.

## 9.1.4 Value creation for brands through social networking sites

The value creation in terms of relationship between brand advocacy, brand loyalty, and measured variable of momentum effect have put forward the following major findings:

- i. Structural model of brand value creation depicts that value is created for brands through social networking sites and momentum effect leads to brand advocacy and brand loyalty.
- ii. Structural model potrays that loyalty for brands is caused in online social network websites due to momentum effect and due to creation of loyalty, brand engagement

is also created as per Haven (2007). It can be put forward that brand loyalty signifies consumer engagement and engagement is created due to momentum effect.

- iii. Users were found to share information or opinion received from a friend/contact related to a brand with others on online social networks. Value is also co-created when different consumers or users over online social network websites illustrate a pass-along behavior to share content created by other users in the network. When this content created or co-created is related to any of the brands, consumer brand engagement is materialized.
- iv. Customers co-create brand related communication by discussing positive attributes of a brand, recommend brand/brands and share concerns for one or multiple attributes for any brand. This leads to brand advocacy, which is a sign for consumer engagement with brands over social networks.
- v. Social networkers tends to give suggestions for even those brands that they have not used personally and this tendency don't effect brand advocacy.
- vi. People show low levels of interest in keeping themselves updated with information about brands by following them over social networking sites or in regularly visiting company/brand profile pages.

## 9.1.5 Association between social relationships and eWOM

Social relationships signify interaction between two or more individuals. Association between social relationship variables and electronic word of mouth on social networking sites suggested that:

- i. Electronic word of mouth on social networking sites is influenced by the social tie strength, social capital, homophily and interpersonal influence among the social network users. Trust among the social network users does not make significant influence on likelihood of electronic word of mouth happening in social networking sites.
- ii. Opinion giving behavior on social networking sites is influenced by the social capital, homophily and interpersonal influence among the social network users. Trust and social tie strength among the social network users does not make significant influence on likelihood of opinion giving behavior in social networking sites.
- iii. Opinion seeking behavior on social networking sites is influenced by the social capital, social tie strength and interpersonal influence among the social network

users. Trust and homophily among the social network users does not make significant influence on likelihood of happening of opinion seeking in social networking sites.

- iv. Trust as a social relationship has been observed to play no part in happening of opinion giving, seeking and information pass along behavior on social networking sites.
- v. Professional ties mark a relative high influence as compared to person ties to indulge in social networking activities.
- vi. Informational Interpersonal Influence leads to increased likelihood of eWOM (electronic world of mouth) in social networking sites as compared to value expressive and utilitarian influence. This indicates that desire to make an informed decision on social networking sites increase eWOM likelihood.
- vii. Bridging social capital is strongly associated with electronic word of mouth in social networking sites as compared to bonding social capital. It means that people of Punjab are more likely to seek advice from others and to indulge in more of information pass along behavior.
- viii. The association between social relationships and electronic word of mouth in social networking sites varies across gender. Homophily affects the eWOM likelihood only in case of females.
- ix. The association between social relationships and electronic word of mouth in social networking sites varies across age. Social networkers of age less than 25 years indulge in eWOM due to interpersonal influence, social capital and homophily.
   eWOM activity of users with more than 25 years of age is only influenced by social tie strength.
- The association between social relationships and electronic word of mouth in social networking sites varies across income groups.
  - a) For people having income more than INR60000, interpersonal influence and social capital play a significant role in influencing the likelihood to perform eWOM in social networking sites.
  - b) People with income category of more than INR 20000 but less than INR60000 are influenced by interpersonal influence, social capital and social tie strength to indulge into eWOM on social networking sites.
  - c) People with income category of less than INR 20000 are not at all influenced by trust to indulge into eWOM.

- xi. In case of respondents who are under graduates or less qualified, it has been found that interpersonal influence, trust, homophily and social tie strength play a part in driving eWOM in social networking site.
- xii. Married people are influenced by interpersonal influence, social capital and tie strength whereas unmarried ones are influenced by interpersonal influence, social capital, tie strength and homophily to perform the likelihood of word of mouth activity on online social networks.
- xiii. Interpersonal influence, social capital, tie strength, homophily are important social relationship factors for students to start with word of mouth activity on online social networks.

#### 9.1.6 User engagement across social network advertisement types

Analysis to understand the engagement in the form of likelihood of population under study towards different types of social network advertisements suggested that:

- i. Social networkers have shown positive attitude towards reading of posts done by brands on their social network pages.
- ii. Social networkers are less likely to participate in online polling by brands and are nor preferring to see brands in form of in-game placements.
- iii. There is a significant difference across males and females when it comes to liking towards brand pages or brand profiles on social networking sites. Females like to go through brand pages more as compared to males.
- In case of liking towards banner advertisements in social networking sites, females tend to like banner advertisements more on social networking sites as compared to male respondents.
- v. In case of liking towards brand videos, males are found to be more receptive to watch brand videos on social networking sites than females.
- vi. People across two age categories of 19-25 and 26-30 years have similar preference towards banner advertisements on social networking sites. This makes youngsters more receptive to banner advertisements on social networking sites.
- vii. There is a significant difference between married and unmarried people towards likability across all social network advertising types under study. Unmarried respondents have shown a better likelihood to read posts done by brands, to see banner advertisements, to go through brand profiles, to see brand videos, to

participate in online polling by brands and towards In-game placements as compared to married respondents.

- viii. Across all the six advertisement types, students tends to showcase more likability towards all social network advertisements than respondents from the service class.
- ix. Social networkers who are educated up to the level of under graduation are found more receptive to in-game placements and visits to brand pages or profiles as compared respondents with who are post graduates.

# 9.2 Suggestions

The following suggestions based on the findings and observations of the researcher are offered:

- i. Most important factor which motivate people to use networking sites is related to need for information exchange. People are highly motivated to use social networking sites to learn about new and useful things or to get new ideas and also to share information. Brands can use this motivator by promoting interesting facts about their brands and alternate uses of their products. Brands can share new product ideas over social networks to check their feasibility by asking comments from users.
- ii. As sharing of information among the connections over social network is a variable motivating people to use the network, so interesting content should be shared by brands (informational in nature) in any form may be videos or text, which motivate users to share the content within their connections leading to promotion for brands via electronic word of mouth.
- iii. A very careful selection of the social networking sites for brand promotion is required by marketers, as every brand carries a personality image in the mind of the consumers so do every social networking site. A proper match in the personality of brand and personality of social networking site can help in receiving more return on investment for marketers.
- iv. Personality perception of Google+ being a rugged (tough) person is a good sign for the company as Google+ supports many of Google's other properties but at the same time it should also be positioned as having competent (reliable) personality. Brand image of Twitter being a rugged (tough) person definitely meets the idea of successful people joining twitter to connect with their fans but in order to increase its fan base,

Twitter needs to have ingredient of excitement in its personality as in India the larger base of social networking is young people.

- v. Facebook is having exciting personality element to it but this representation is not very strong. Facebook needs to work on strengthening of this exciting element of personality with its brand for long term relationship with existing users.
- vi. LinkedIn as a person is perceived to be sincere and competent. As LinkedIn is promoted to be a network for managing professional identity and to build and engage with professional network, the current positioning is found to be appropriate.
- vii. Low cost promotions on social networking sites offers a great motivation to marketers to use this medium, but every bit of communication by marketers related to products/brand needs to be diligently screened. Screening of information is very important for marketers because any misunderstood information on social networking sites can lead to negative word of mouth for the brands.
- viii. People on social networks tend to give suggestions to others even for those brands which they have not used personally. Brands can target non users segment to create advocacy and loyalty using momentum effect. This could again be done by sharing useful and interesting information about brands. In order to increase consumer engagement, distribution of sales promotion coupons through social networking sites can be a good option.
- ix. Brand engagement in the form of large number of people following the brand on social networking sites, leads to an impression of quality brand. Social relationship of Trust do not influence the likelihood for happening of electronic word of mouth in social networking sites. This means that people are ready to accept information from any type of contacts. A brand which is new to the market (especially) or any established one can use social networking sites to do promotions and if a brand is able to get a large number of consumer associates with it in form of followers, then it is easy for such brands to skim the market by carefully tailoring its market communication.
- x. On social networking sites, for females, homophily is important to indulge into social networking sites. This characteristic can be used by lifestyle brands or female specific publication brands to connect with their audience over social networking sites.
- Professional ties that a person is having in social networks is deemed to be important.
   Brands dealing in enterprise related software's can definitely use social networks to do brand promotions. LinkedIn should offer video conferencing options on lines of

Google+ handout. This would help the brand in developing more advocacy or loyalty for its brand.

xii. In the market of Punjab, marketers should use more of banner advertisements for promoting products related to males and for brands catering to both genders, the brand pages of such brands should use more feminine color tone.

## 9.3 Conclusion

After analysis of all the six objectives under study, it can be concluded that value is created for brands over online social network websites through consumer engagement. Following are the different perspectives as per which user/consumer engagement happens with brands in online social networks.

- i. Perspective One: Engagement for brands over social networks happen if users engage in collaborative activities of sharing thoughts, ideas and concerns related to brands (Evans, 2010). Respondents in the study were found to perform activities of opinion leadership i.e. giving, opinion seeking and information pass along related to brands over social networking sites. All these activities lead to collaborative thought and idea sharing, thus conforming engagement. As per the finding related to momentum effect which is using brand as a reference points in conversation and brand advocacy, it was found that momentum effect leads to brand advocacy. Customers co-create brand related communication by discussing positive attributes of a brand, recommend brand/brands to others and share concerns for one or multiple attributes for any brand. This leads to brand advocacy, which is a sign for consumer engagement with brands over social networks. So consumer-brand engagement happens due to advocacy encouraged by collaborative activities.
- ii. Perspective Two: as per Haven (2007) brand loyalty is signified through consumer engagement. Structural model prepared under objective four, depicts a relationship between brand value creation through momentum effect which leads to brand loyalty. So if loyalty for brands is caused in online social network websites due to momentum effect, so brand engagement is also created.
- iii. Perspective Three: User engagement in virtual world can also be observed through involvement, interaction, intimacy and influence as per (Haven, 2007).

- iv. The most basic measurement of engagement is involvement which in case of online social networks is highlighted with large number of regular social site visits by population under study.
- v. Second measure of consumer engagement is interaction. Interaction is highlighted with user generated content for brands, which could be as simple as a like on Facebook. Out of the total population under study, approximately 86 percent of the respondents were those, who discuss about brands over social networks. This large number of people who discuss topics related to brands over online social networks, signifies a good level of user interaction with brands.
- vi. Third measure of consumer engagement with brands is intimacy. Intimacy with a brand goes beyond the measures of involvement and interaction. Intimacy talks in terms of consumer sentiments towards a brand. It can observed through consumer opinion expression activities over social networking sites. Through eWOM activities of opinion expressing about brands over online social network websites, people were found to express their opinions related to brands. This means that consumer intimacy is happening for brands over online social network websites. So consumers are being engaged with brands online.
- vii. Fourth and the highest level of consumer engagement is influence. Influence happens over social network sites with content forwarding. Users on online social networks were found passing on information or their opinion related to products/brands to their contacts. Moreover, users were sharing information or opinion received from a friend/contact related to a brand. So pass along behavior was shown by respondents over online social networks related to brand information. Based on this information, one can confidently state that value is created for brands over social network sites through consumer engagement.

#### 9.4 Limitations of the study

Like most other studies, this study also does not offer limitation less explanation of the issues under study. Present research study has been carried out under restraints of time and other resources. Through broad review of literature an effort to assimilate all obtainable literature was made, yet understanding may have been reserved by the visualization of researcher. The other limitation of the study is with respect to the generalizability of the results. The data collected for purpose of research is from Punjab only, so the results cannot be generalized completely to the whole of the Indian population.

#### 9.5 Scope for future research

The results of present study also has created contemporary future research directions. Future research can focus on different micro-cultures within India or a comparative study of Indian culture with some other country or culture can be initiated to study motivations for online network usage. Moreover, Other than just online social network sites, such kind of study can also be conducted for different components of social media like video blogging sites, news aggregation sites and wikis etc.

Certain gaps in personality perceptions of social networking sites have been identified, a similar research in a near future would be required to understand whether such gaps have been fulfilled or not. Brand personality related findings for the social networking sites cannot remain constant over the longer period of time. As the social networking sites will change their positing based on relevant points of differentiation and points of parity, the perception of the users about the personality of such sites could also change. So future research will be required to judge these changes in personality perception among users.

Sentiment tracking is the upcoming area in online social network research. This field could be explored with some company specific research for tracking and analyzing the customer sentiments related to usage pattern of online social networks.

User's motivation to indulge in social networking activities could change in years to come with the changes in services offered via social networking sites and advancements in information technologies. User motivation behind use of such services can be performed in future.

Momentum effect in social networking sites leads to brand advocacy and brand loyalty is true for the population of Punjab, but this concept could be cross checked across other cultures, states, ethnicities or countries.

Trust being a social relationship do not make any effect on likelihood of eWOM for people of Punjab in online social networks. A more detailed study just for this parameter could be pursued to retrieve in depth reasons behind the same.

#### REFERENCES

- Aaker, D. A., 1996. Measuring brand equity across products and markets. *California Management Review*, vol. 38, pp. 102-120.
- Aaker, J. L., 1997. Dimensions of brand personality. *Journal of Marketing Research*, vol. 34, pp. 347-356.
- Aaron, D., 2012. Game for Business: the rise of branded social games. [Online] Available at: <u>http://sparksheet.com/game-for-business-the-rise-of-branded-social-games/</u>[Accessed 16 December 2014].
- Abram, C. & Pearlman, L., 2012. Facebook for dummies. Hoboken: John wiley and sons Inc.

Aggarwal, C. C., 2011. Social network data analytics. London: Springer.

- Aggarwal, S., 2013. 2013 India internet outlook. [Online] Available at: <u>http://techcircle.vccircle.com/2013/02/01/2013-india-internet-outlook/</u> [Accessed 3 December 2014].
- Alexa, 2014. *Top Sites in India*. [Online] Available at: <u>http://www.alexa.com/topsites/countries/IN</u>
- Allen, R., 2008. Factors influencing the usage of social networking websites amongst young, professional South Africans, South Africa: University of Pretoria.
- Alreck, P. L. & Settle, R. B., 1995. The importance of word-of-mouth communication to service buyers. In D.W.Stewart & N.J.Vilcasim (Eds.),1995 AMA Winder Educators Proceedings (pp. 188-193). Chicago: American Marketing Association.
- Anderson, J. C. & Gerbing, D. W., 1988. Structural equation modeling in practice: a review and recommended two-step approach. *American Psychological Association, Inc.*, vol. 103, no. 3, pp. 411-423.
- Anderson, R. E. & Srinivasan, S. S., 2003. E-satisfaction and e-loyalty: a contingency framework. *Psychology & Marketing*, vol. 20, no. 2, pp. 123–138.

- Australian Communication and Media Authority, 2008. *Internet use and social networking by young people*, s.l.: Australia's Regulator for Broadcasting, The Internet, Radiocommunications and Telecommunications.
- Azoulay, A. & Kapferer, J. N., 2003. Do brand personality scales really measure brand personality?. *Journal of Brand Management*, vol. 11, no. 2, pp. 143-155.
- Barnes, S. B., 2006. A privacy paradox: social networking in United States. *First Monday*, vol. 11, no. 9.
- Bajpai, N., 2011. Business research methods. New Delhi: Pearson Publications.
- Barker, V., 2009. Older adolescents' motivations for social network site Use: the influence of gender, group identity and collective self-esteem. *Cyberpsychology and Behavior*, vol. 12, no. 2, pp. 209-213.
- Belk, R. W., 1988. Possessions and the extended self. *Journal of Consumer Research*, vol. 15, pp. 139.
- Best, S. & Krueger, B., 2006. Online interactions and social capital: distinguishing between new and existing ties. *Social Science Computer Review*, vol. 24, no. 4, pp. 395-410.
- Blakely, R., 2007. Facebook shrugs off privacy fears with plan for targeted advertising. *The Times*.
- Boundless, 2014. *Types of Internet Advertising*. [Online] Available at: <u>https://www.boundless.com/marketing/social-media-marketing/introduction-to-social-media-digital-marketing/types-of-internet-advertising/[Accessed 2 January 2015].</u>
- Boyd, D. M. & Ellison, N. B., 2007. Social network sites: definition, history and scholarship.. *Journal of Computer-Mediated Communication*, vol. 13, no. 1, pp. 210–230.
- Brodie, R. J., Ilic, A., Juric, B. & Hollebeek, L., 2013. Consumer engagement in a virtual brand community: an exploratory analysis. *Journal of Business Research*, vol. 66, no. 1, pp. 105-114.

- Carmines, E. G. & McIver, J. P., 1981. *Analyzing models with unobserved variables*. Beverly Hills: Sage Publications.
- Carroll, A., Barnes, S. J., Scornavacca, E. & Fletcher, K., 2007. Consumer perceptions and attitudes towards sms advertising: recent evidence from New Zealand. *International Journal of Advertising*, vol. 26, no. 1, pp. 79-98.
- Cory, J. (2010). Social media comes of age. Qualified Remodeler, pp. 79.
- Chen, M. & Pang, X., 2012. Leisure motivation: an integrative review. Social Behavior and *Personality, vol. 40, pp. 1075-1082.*
- Cheung, M. C., Chui, P. Y. & Lee, M. K., 2011. Online social networks: why do students use facebook?. *Computers in Human Behavior, vol.* 27, pp. 1337–1343.
- Choi, W. M., Kim, Y., Sung, Y., & Sohn, D., 2008. Motivations and social relationships: a comparative study of social network sites in the U.S. and Korea. *International Communication Association Convention, Canada*.
- Chu, S. C., 2009. Determinants of consumer engagement in electronic word-of-mouth in social networking sites, Austin : The University of Texas.
- Cohen, D., 2012. *http://allfacebook.com*. [Online] Available at: <u>http://allfacebook.com/pew-research-eight-political-activities\_b102661</u> [Accessed 30 July 2013].
- Connelly, L. M., 2008. Pilot studies. Medsurg Nursing, p. 411.
- Conroy, P. & Narula, A., 2010. *A new breed of brand advocates:* social networking redefines consumer engagement, s.l.: Deloitte.
- Cooper, S., 2013. Social media is becoming the place for video discovery, and that's great news for brands. [Online]
   Available at: <u>http://www.businessinsider.in/Social-Media-Is-Becoming-THE-Place-For-Video-Discovery-And-Thats-Great-News-For-Brands/articleshow/26112193.cms</u> [Accessed 11 06 2014].

Cravens, J. D., 2010. Facebook & infidelity, Greenville: East Carolina University.

- Cronchback, L. J., 1971., Test validation, In Thorndike R. L. (Ed.): Educational Measurement. *American Council of Education*, pp. 20.
- Davidow, M., 2003. Have you heard the word? the effect of word of mouth on perceived justice, satisfaction and repurchase intentions following complaint handling. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Beliavior*, vol. 16, no. 1, pp. 67-80.
- Dean, G., 2010. Understanding Consumer Attitudes. [Online] Available at: <u>http://marketography.com/tag/value-expressive-function/</u> [Accessed 28 May 2014].
- Delbaere, M., McQuarrie, E. F. & Phillips, B. J., 2011. Personification in advertising : using a visual metaphor to trigger anthropomorphism. *Journal of Advertising : Official Publication of the American Academy of Advertising*, vol. 40, pp. 121-130.
- Deloitte, 2010. A new breed of brand advocates: social networking redefines consumer engagement, s.l.: Deloitte Development LLC.
- Dennisoneil.com, 2009. Social Media for business. [Online]
- Available at: <u>http://www.scribd.com/doc/14852401/Introduction-to-Social-Mediafor-</u> <u>Busines</u> [Accessed 12 June 2011].
- Digital Ingredients. (2009, October 4). *Consumer engagement vs social media-the time is now*. Retrieved June 12, 2011, from www.blog.digitalingredients.co.uk: http://blog.digitalingredients.co.uk/2009/10/consumer-engagemenvs-social-media-time.html
- Doruer, N., Menevi, I. & Eyyam, R., 2011. What is the motivation for using Facebook?. *Procedia Social and Behavioral Sciences*, vol. 15, pp. 2642–2646.
- Dumrongsiri, N. & Pornsakulvanich, V., 2010. Social networking sites in Thailand: motives and predictors of university students' behaviors. *International Journal of Innovation and Learning*, vol. 4, no.8, pp. pp. 427-444.
- Elad, J., 2014. LinkedIn for dummies. Hoboken: John wiley & sons Inc.

- Ellison, N. B., Steinfield, C. & Lampe, C., 2007. The benefits of Facebook "friends:" social capital and college students' use of online social network sites. *Journal of Computer Mediated Communication*, vol. 12, no. 4, pp. 1143-1168.
- eMarketer, 2012. Brand advocates: scaling social media word-of-mouth, s.l.: eMarketer.
- Epsilon Company, 2010. A prescription for customer engagement: An inside look at social media and the pharmaceutical industry., Irving: Epsilon International.
- Evans, D., 2010. Social media marketing: the next generation of business engagement. Indianapolis: John Wiley & Sons.
- Evans, D. & Bratton, S., 2010. Social media marketing: the next generation for business engagement. Indianapolis: Wiley publishing Inc.
- Facebook, 2011. Statistics. [Online] Available at: <u>http://www.facebook.com/press/info.php?statistics</u> [Accessed 12 June 2011].
- Facebook, 2014. *About*. [Online] Available at: <u>https://www.facebook.com/FacebookIndia/info?ref=page\_internal</u> [Accessed 7 February 2015].
- Facebook, 2014. Facebook can help you reach all the people who matter most to your business. [Online] Available at: <u>https://www.facebook.com/business/overview</u> [Accessed 7 January 2015].
- Feick, L. F. & Price, L. L., 1987. The market maven: a diffuser of marketplace information. *Journal of Marketing*, vol. 51, pp. 83-95.
- Ferri, F., Grifoni, P. & Guzzo, T., 2012. New forms of social and professional digital relationships: the case of Facebook. *Social Network Analysis and Mining:*, vol 2, no. 2, pp. 21-137.
- Fitton, L., 2012. Twitter for dummies. Hoboken: John wiley and sons Inc.

- Foster, M. K., Francescucci, A. & West, C., B., 2010. Why users participate in online social networks. *Internation Journal of e-Business Management*, pp. 3-19.
- Franzen, G. & Moriarty, S., 2009. *The science and art of branding*. New York: M.E.Sharpe, Inc.
- Fuggetta, R., 2012. Brand Advocates: Turning enthusiastic customers into a powerful marketing force. Hoboken: John Wiley and sons.
- Gangadharbatla, H., 2007. Facebook me: collective self-esteem, need to belong and internet self-efficacyas predictors of the igeneration's attitude towards social networking sites. *Journal of Interactive Advertising*, pp. 1-29.
- Gaskin, J., 2015. Confirmatory factor analysis. [Online]
- Available at:<u>http://statwiki.kolobkreations.com/wiki/Confirmatory\_Factor\_Analysis</u> [Accessed 1 June 2015].
- Gatignon, H. & Thomas, R., 1985. A propositional inventory for new diffusion research. *Journal of Consumer Research*, pp. 849-867.
- Gbadeyan, R. A., 2010. Direct marketing to online social network (OSN) users in Nigeria. *International Journal of Marketing Studies*, vol. 2, no.2, pp. 275-282.
- Gembarski, R., 2014. How Starbucks built an engaging brand on social media. [Online]
- Available at: <u>http://www.brandingpersonality.com/how-starbucks-built-an-engagin-brand-on-social-media/[Accessed 11 December 2014]</u>.
- Gitomer, J., 2007. Value is the king of sale and the Queen of service. *Grand Rapids Business Journal*, vol. 25, no.23, pp. 33.
- Gnanasambandam, C., Madgavkar, A., Kaka, N., Manyika, J., Chui, M., Bughin, J., & Gomes, M., 2012. Online and upcoming: the internet's impact on India, s.l.: McKinsey & Company.
- Goldenberg, J., Barak, L. & Muller, H., 2001. Talk of the network: a complex systems look at the underlying process of word-of-mouth. *Marketing Letters*, vol. 12, no.3, pp. 211-223.

- Gopal, A. & Srinivasan, R., 2006. The New Indian Consumer. *Harvard Business Review*, vol. 84, no. 10, pp. 22-23.
- Government of Punjab, 2014. *Know Punjab*. [Online] Available at: <u>http://punjab.gov.in/know-punjab</u> [Accessed 4 May 2015].
- Gronroos, C., 2008. Service logic revisited: who creates value? and who co-creates? *European Business Review*, vol. 20, no.4, pp. 298–314.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E., 2009. Multivariate data analysis. New Delhi: Pearson.
- Hampton, K. N., 2011. Comparing bonding and bridging ties for democratic engagement: everyday use of communication technologies within social networks for civic and civil behaviors. *Information, Communication & Society*, vol.14, no.4, pp. 510-528.
- Hanneman, R. A., 2005. Introduction to social network methods. In: *Centrality and Power*.Riverside: University of California.
- Haq, A. U. & Chand, S., 2012. Pattern of facebook usage and its impact on academic performance of university students:a gender based comparison. *Bulletin of Education and Research*, vol. 34, pp. 19-28.
- Harden, G. & Beayeyz, A. A., 2012. A comparative analysis of social networking site use in two distinct cultures: evaluating the IT-culture conflict. *Global Media Journal*, pp. 1-17.
- Hargittai, E., 2008. Whose Space? differences among users and non-users of social network sites. *Journal of Computer Mediated Communication*, pp. 276–297.
- Hassanein, K. & Head, M., 2004. Building online trust through socally rich web interfaces: an investigation across different products. New Brunswick, Fredericton, pp. 15-22.
- Hattersley, M., 2012. Google+ companion. Indianapolis: John wiley & sons Inc.
- Haven, B., 2007. *Marketing's new key metric: Engagement,* Cambridge: Forrester Research, Inc.
- Haydon, J., 2013. Facebook marketing for dummies. Hoboken: John wiley & sons Inc.

- Heeler, R. M. & Michael, L. R., 1972. Measure validation in marketing. *Journal of Marketing Research*, pp. 361-370.
- Herr, P. M., Frank, R. K. & John, K., 1991. Effects of word-of-mouth and product-attribute information on persuasion: an accessibility diagnosticity perspective. *Journal of Consumer Research*, vol. 17, pp. 454-462.
- Higgins, E. T., 2006. Value from hedonic experience and engagement. *Psychological Review*, vol. 113, pp. 439-460.
- Hird, J., 2011. 20+ Mind-blowing social media statistics. [Online] Available at: <u>http://econsultancy.com/us/blog/7334-social-media-statistics-oneyear-later</u> [Accessed 2011 12 June].
- Hoffmann, A. O. & Broekhuizen, T. L., 2009. Susceptibility to and impact of interpersonal influence. *Springerlink.com (open access)*, pp. 488–503.
- Hogan, J. E., Katherine, N. L. & Barak, L., 2004. Quantifying the ripple: word of mouth and advertising effectiveness. *Journal of Advertising Research*, vol.47, no.4, pp. 387-397.
- Hsieh, Y.C., Hsieh, J.K. & Feng, Y.C., 2011. Switching between social media: The role of motivation and cost. Singapore, IACSIT Press.
- IBN live, 2014. Thank you, ranbir kapoor, imran khan, kareena kapoor for staying away from Twitter. [Online] Available at: <u>http://ibnlive.in.com/news/thank-you-ranbir-kapoor-imran-khankareena-kapoor-for-staying-away-from-twitter/461780-8-66.html</u>
- Ingram, M., 2010. *Who uses social media more, men or women?*. [Online] Available at: <u>http://gigaom.com/2010/03/04/who-uses-social-media-more-men-or-women/</u>[Accessed 12 June 2011].

Internet society, 2014. Global internet report, Virginia: Internet society.

Isa, W. S., Rozaimee, A., Hassan, H. & Tahir, I. M., 2012. Investigating the patterns of social network sites (SNS) usage among business students. Universal Journal of Management and Social Sciences, vol.2, no.3.

- J. Kuss, D. & D. Griffiths, M., 2011. Online social networking and addiction— a review of the psychological literature. *International Journal of Environmental Research and Public Health*, pp. 3528-3552.
- Judy, S. & Anna, M., 1999. The brand-personality scale. *Cornell Hotel and Restaurant Administration Quarterly*, pp. 48-55.
- Kamineni, R., 2005. Influence of materialism, gender and nationality on consumer brand perceptions. *Journal of Targeting, Measurement and Analysis for Marketing*, pp. 25-32.
- Kannan, R., 2011. When social media booms, will brands take the hint?. The Hindu, 6 June.
- Kelman, H. C., 1961. Processes of opinion change. *Public Opinions Quarterly*, Volume 25, pp. 57-78.
- Khan, M. A. & Mahmood, Z., 2012. Impact of brand loyalty factors on brand equity. *International Journal of Academic Research*, vol.4, no.1, pp. 33-37.
- Khanna, R. M. (2010, August 6). Aircel enters Punjab. *The Tribune*.
- Khan, U., 2009. Facebook students underachieve in exams. *Digital and media Correspondent*.
- Kim, J. H., Kim, M. S. & Nam, Y., 2010. An analysis of self-construals, motivations, facebook use, and user satisfaction. *International Journal of Human-Computer Interaction*, vol.26, no.11-12, pp. 1077-1099.
- Kim, J., Lee, C. & Elias, T., 2011. Why are social media users willing to share information on social networking sites?. *American Academy of Advertising Conference Proceedings*, pp. 100-109.
- Kim, J. Y., Shim, J. & Ahn, K. M., 2011. Social networking service: motivation, pleasure, and behavioural intention to use. *Journal of Computer Information Sytems*. vol.51, no.4, pp. 92-101.

- Kim, Y., Sohn, D. & Choi, S. M., 2011. Cultural difference in motivations for using social network sites:a comparative study of American and Korean college students. *Computers in Human Behavior*, pp. 365–372.
- Knappe, M. & Kracklauer, A., 2007. Verkaufschance web 2.0: dialoge fördern. *Absätze Steigern:Neue Märkte erschließen.*
- Knight, K., 2009. PQ Media: WOM spend to reach \$3 billion. [Online] Available at: <u>http://www.bizreport.com/2009/07/pq\_media\_wom\_spend\_to\_reach\_3\_billion.html [Accessed 1 April 2010].</u>
- Kozinets, R. V., 1999. E-Tribalized Marketing?: The Strategic Implications of Virtual Communities of Consumption. *European Management Journal*, vol.17, no.3, pp. 252-264.
- Krasnova, H., Hildebrand, T. & Gunther, O., 2011. Why participate in an online social network: an empirical Analysis. pp. 1-12.
- Kutner, M. H. & Nachtsheim, C. J., 2004. Applied linear regression models. s.l.:McGraw-Hill.
- Kwak, D. H. & Kang, J. H., 2009. Symbolic purchase in sport: the roles of self-image congruence and perceived quality. *Management Decision*, vol.7,no.1, pp. 85-99.
- Lacity, M. & Jansen, M. A., 1994. Understanding Qualitative Data. *Journal of Management Information System*, pp. 137.
- Lai, L. S., 2010. Social commerce e-commerce in social media context. World Academy of Science, Engineering and Technology, pp. 39-44.
- Lazarsfeld, P. F. & Merton, R. K., 1954. Friendship as a social process: a substantive and methodological analysis. *Freedom and Control in Modern Society*, pp. 18-66.
- Lee, C. K. & Conroy, D. M., 2005. Socialisation through consumption: teenagers and the internet. *Australasian Marketing Journal*, vol.13, no.1, pp. 8-19.
- Leng, S. G., Lada, S. & Muhammad, Z., 2011. An exploration of social networking sites (SNS) adoption in Malaysia using technology acceptance model (TAM), theory of

planned behaviour (TPB) and intrinsic motivation. *Journal of Internet Banking and Commerce*. vol.16, no.2, pp. 1-28.

- Lewix, B., 2014. *Raising children in a digital age: enjoying the best, avoiding the worst.* s.l.:Lion Books.
- Lim, H. & Dubinsky, A. J., 2005. The theory of planned behavior in e-commerce: making a case for interdependencies between salient beliefs. *Psychology & Marketing*, pp. 833–853.
- Lin, C. & Bhattacherjee, A., 2010. Extending technology usage models to interactive hedonic technologies: a theoretical model and empirical test. *Information Systems Journal*, vol.20, no.2, pp. 163-181.
- LinkedIn, 2014. *About us.* [Online] Available at: <u>http://www.linkedin.com/about-us?trk=hb\_ft\_about</u> [Accessed 11 September 2014].
- Lis, B. & Neßler, C., 2014. Electronic word of mouth. *Business & Information Systems Engineering*, pp. 63-65.
- Lowenstein, M. W., 2012. The customer advocate and the customer saboteur: linking social word-of-mouth, Brand Impression, and Stakeholder Behavior. s.l.:Nook Book.
- Lusted, M. A., 2011. Social networking: Myspace, Facebook, & Twitter. North Mankato: Technology Pioneers.
- Madden, M. & Zickuhr, K., 2011. Women maintain their foothold on SNS use and older Americans are still coming aboard, Washington: Pew Research Center.
- Mankani, Y. (2010, January 26). *Internet usage statistics of India- A 2010 report*. Retrieved June 12, 2011, from www.goospoos.com:
- http://www.goospoos.com/2011/01/india-internet-broadband-usersgender-age-statistics-2010/
- Malhotra, N. K. & Dash, S., 2014. *Marketing reserach: an applied orientation*. New Delhi: Pearson.

- Mangold, W. G. & Faulds, D. J., 2009. Social media: the new hybrid element of the promotion mix. *Business Horizons*, vol.52, no.4, pp. 357-365.
- McKinsey, 2007. *How companies are marketing:a McKinsey global Survey*, s.l.: McKinsey Inc.
- McPherson, M., Lovin, L. S. & Cook , J. M., 2001. Birds of a feather: homophily in social networks. *Annual Review of Sociology*, vol.27, no.1, pp. 416-418.
- Nielsen, 2011. Indians now spend more time on social media sites than on personal email. [Online] Available at: <u>http://in.nielsen.com/news/20110509.shtml</u> [Accessed 12 June 2012].
- Nielsen, 2012. Australian online consumer report, s.l.: Sensis.
- Okazaki, S., 2006. Excitement or sophistication? a preliminary exploration of on-line brand personalities.. *International Marketing Review*, vol.23, no.3, pp. 279-303.
- O'Reilly, T., 2005. *What is web 2.0?*. [Online] Available at: <u>http://oreilly.com/lpt/a/6228</u> [Accessed 12 June 2011].
- O'Reilly, T. & Milstein, S., 2012. The Twitter book. Sebastopol: O'Reilly Media Inc.
- Pagani, M., Hofacker, C. F. & Ronald, G. E., 2011. The influence of personality on active and passive use of Social Nenworking Sites. *Psychology and Marketing*, pp. 441-456.
- Pappalardo, L., Rossetti, G. & Pedreschi, D., 2012. "How well do we know each other?": detecting tie strength in multidimensional social networks, Pisa: KDD Laboratory.
- Pempek, T. A., Yermolayeva, Y. A. & Calvert, S. L., 2009. College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, pp. 227-238.
- Pandey, A., 2009. Understanding consumer perception of brand personality. *IUP Journal of Brand Management*, vol.6, no.34, pp. 26-50.

- Pfeil, U., Arjan, R. & Zaphiris, P., 2008. Age differences in online social networking: a study of user profiles and the social capital divide among teenagers and older users in MySpace. *Computers in Human Behavior*, pp. 643-654.
- Pigg, K. C. & Crank, L. D., 2004. Building community social capital: the potential and promise of information and communications technologies. *The Journal of Community Informatics*, vol.1, no.1, pp. 58-73.
- Psychster Inc., 2010. *Comparing user engagement across seven interactive and social-media ad types*, Seattle: www.psychster.com.
- Putnam, R. D., 1993. The prosperous community. American Prospect, pp. 35-42.
- Putnam, R. D., 2000. Bowling alone. New York: Simon & Schuster.
- Putnam, R. D. & Robert, D., 2002. 'Introduction.' in the dynamics of social capital. s.l.:Oxford University Press.
- Raacke, J. & Bonds-Raacke, J., 2009. Myspace and Facebook: applying the uses and gratifications theory to exploring friend-networking sites. *Cyberpsychol Behavior*, pp. 169-174.
- Ramanathan, R., 2010. E-commerce success criteria: determining which criteria count most. *Electronic Commerce Research*, pp. 191–208.
- Rappaport, S. D., 2007. Lessons from online practice: new advertising models. *Journal of Advertising Research*, vol.47, no.2, pp. 135-141.
- Recabarren, M., Nussbaum, M. & Leiva, C., 2008. Cultural divide and the internet. *Computers in Human Behavior*, vol.24, no.6, pp. 2917–2926.
- Rossolatos, G., 2013. Towards a semiotics of brand equity: brand coherence and communicative consistency through structuralist operations and rhetorical transformations. s.l.:George Rossolatos.
- Richards, J. I. & Curran, C. M., 2002. Oracles on "advertising": searching for a definition. *Journal of Advertising*, vol.31, no.2, pp. 63-77.

- Rubin, A. M. (2002). The Uses-and-Gratifications Perspective of Media Effects. In J. Bryant,
  & D. Zillman (Eds.), *Media effects: advances in theory and research* (pp. 525-548).
  Mahwah (NJ): Lawrence Erlbaum Associates.
- Rutledge, P. A., 2012. Sams teach yourself Google+ in 10 minutes. s.l.:Perason education.
- Rutledge, P. A., 2012. Sams teach yourself LinkedIn in 10 minutes. s.l.: Pearson Education.
- Ryan, B. & Gross, N. C., 1943. The diffusion of hybrid seed corn in two Iowa communities. *Rural Sociology*, vol.8, no.1, pp. 15-24.
- Sawhney, M., Wolcott, R. C. & Arroniz, I., 2006. The 12 different ways for companies to innovate. *Sloan Management Review*, vol.47, no.3, pp. 75–81.
- Schaefer, C., 2008. *Motivations and usage patterns on social network sites*. s.l., University of Karlsruhe.
- Schaefer, C., 2010. Motivations and usage patterns on social network sites.. University of Karlsruhe (TH), Institute of Informations Systems and Management.
- Schiffman, L., O'Cass, A., Paladino, A. & Carlson, J., 2014. *Consumer behaviour*. NSW: Pearson.
- Schiffman, L. & Kanuk, L., 2009. Consumer behavior. 9 ed. New Delhi: Pearson.
- Schurr, P. H., 2007. Buyer-seller relationship development episode: theories and methods. Journal of Business & Industrial Marketing, pp. 161-170.
- Schultz, D. E., 2008. *The Changing Role of Integrated Marketing Communication*. Queensland, Queensland University of Technology.
- Sengupta, S., 2007. *Brand Positioning: strategies for competitive advantage*. New Delhi: Tata McGraw-Hill Education.
- Sensis, 2011. What Australian people and businesses are doing with social media, Melbourne: Sensis in association with AIMIA.

- Shambare, R., Rugimbana, R. & Sithole, N., 2012. Social networking habits among students. *African Journal of Business Management*, pp. 578-786.
- Sharma, R. & Verma, R., 2012. Social networking sites and consumer engagement. International Journal of Management & Information Technology, vol.1, no.1, pp. 21-25.
- Sophonsiri, S. & Polyorat, K., 2009. The impact of brand personality dimension on brand association and brand attractiveness: the case study of KFC in Thailand. *Journal of Gloabl Business and Technology*, Vol. 5, no.2, pp. 51-62.
- Stefanone, M. A., Lackaff, D. & Rosen, D., 2011. Contingencies of self-worth and socialnetworking-site behavior. *Cyberpsychology, Behavior and Social Networking*, pp. 41-49.
- Stever, G. S. & Lawson, K., 2013. Twitter as a way for celebrities to communicate with fans: implications for the study of parasocial interaction. North American Journal of Psychology, pp. 339.
- Subrahmanyam, K., Reich, S. M., Waechter, N. & Espinoza, G., 2008. Online and offline social networks: use of social networking sites by emerging adults. *Journal of Applied Developmental Psychology*, pp. 420–433.
- Sung, Y. & Tinkham, S. F., 2005. Brand personality structures in the United States and Korea: common and culture-specific factors. *Journal of Consumer Psychology*, vol.15, no.4, pp. 334-350.
- Sun, T., Youn, S., Wu, G. & Kuntaraporn, M., 2006. Online word-of-mouth (or mouse): an exploration of its antecedents and consequences. *Journal of Computer-Mediated Communication*.vol.11, no.4, pp. 1104-1127.
- Supphellen, M. & Gronhaug, K., 2003. Building foreign brand personalities in Russia: the moderating effect of consumer ethnocentrism. *International Journal of Advertising*, vol.22, no.2, pp. 203-226.
- Tan, T. & Wee, T., 2004. Extending human personality to brands: the stability factor. *Journal of Brand Management*, pp. 317-330.

- Taylor, D. G., Lewin, J. E. & Strutton, D., 2011. Friends, fans, and followers: do ads work on social networks? how gender and age shape receptivity. *Journal of Advertising Research*, pp. 258-261.
- Tham, J. & Ahmed, N., 2011. The usage and implications of social networking Sites: A survey of college students. *Journal of Interpersonal, Intercultural and Mass Communication*, pp. 619.
- Takahashi, T., 2010. MySpace or Mixi? Japaneseengagement with SNS(social networking sites)in the global age. *New Media & Society*, vol.12, no.3, pp. 453–475.
- The Hindu, 2014. India has slowest internet penetration growth in APAC. The Hindu, 5 June.
- Thomas, B. J. & Sekar, P. C., 2008. Measurement and Validity of Jennifer Aaker's Brand Personality Scale for Colgate Brand. *Vikalpa*, vol,33, no.3, pp. 49-61.
- TNS, TRU & Marketing Evolution, 2007. *Never Ending Friending A Journey in to Social Networking*, s.l.: Fox Interactive Media, Inc.
- Tuli, K. R., Kohli, A. K. & Bharadwaj, S. G., 2007. Rethinking customer solutions: from product bundles to relational processes. *Journal of Marketing*, vol. 71, pp. 1-17.
- Tutent, T. L., 2008. Advertising 2.0: social media marketing in a web 2.0 world. Westport: Greenwood publishing group.
- Vidyarthi, N., 2010. 5 big brands that are using facebook games to reach new audiences.
  [Online]
  Available at: <u>http://socialtimes.com/5-big-brands-that-are-using-facebook-games-to-reach-new-audiences\_b17441</u> [Accessed 14 June 2011].
- Vogt, C. & Knapman, S., 2008. The atanomy of social networks. *Market leaders*, vol.40, no.3, pp. 46-51.
- Waddill, D. & Marquardt, M., 2011. *The e-HR Advantage: the complete handbook for technology-enabled human resources*. London: Nicholas Brealey Publishing.

- Waxman, O. B., 2012. Polling and social media collide with 'social polling'. [Online] Available at: <u>http://techland.time.com/2012/02/20/polling-and-social-media-collidewith-social-polling/</u> [Accessed 23 July 2013].
- Wikipedia Foundation Inc., 2011. Social network advertising. [Online] Available at: <u>http://en.wikipedia.org/wiki/Social\_network\_advertising</u> [Accessed 12 June 2011].
- Wise, K., Alhabash, S. & Park, H., 2010. Emotional responses during social information seeking on Facebook. *Cyberpsychology, Behavior and Social Networking*, pp. 55-62.
- Wu, A., DiMicco, J. M. & Millen, D. R., 2010. Detecting Professional versus Personal Closeness Using an Enterprise Social Network Site, CHI Proceedings. Atlanta
- Yang, J., He, X. & Lee, H., 2007. Social reference group influence on mobile phone purchasing behaviour: a cross-nation comparative study. *International Journal of Mobile Communication*, vol.5, no.3, pp. 319-338.
- Yoo, B., Donthu, N. & Lee, S., 2000. An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, vol.25, no.2, pp. 195-211.
- Yu Lin, K. & Lu, H.-P., 2011. Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*. vol. 27, pp.1152-1161.
- Yuan, Y. C. & Gay, G., 2006. Homophily of network ties and bonding and bridging social capital in computer-mediated distributed teams. *Journal of Computer-Mediated Communication*, vol.11, no.4, pp.1062-1084.
- Zafarani, R., Abbasi, M. A. & Lui, H., 2014. *Social Media Mining: An Introduction*. New York: Cambridge university press.
- Zimmerman, J., 2011. *Web Marketing For Dummies, 3rd Edition*. Hobiken: John Wileya and Sons, Inc.