



MBA Final Project Dissertation

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http://www.daddydesign.com/wordpress/wp-content/uploads/2010/03/free_social_icons.jpg

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Social Media Marketing: The Social Incentive



<http://www.dilbert.com/> (Adams, 2011)

'All men can see these tactics whereby I conquer, but what none can see is the strategy out of which victory is evolved.'

- (Sun-Tzu, 544-496 BC)

Abstract

Web 2.0 brought a new way to people to use the web through User Generated Content. The ease to edit content gives rise to content in perpetual movement, result of a collective intelligence. Virtual communities through their different exchanges lead to new social interactions on the web, the final result of this trend is the creation and emergence of micro blogging, social media and social networks.

Integration of social media into population has been facilitated by the omniscience of the web that went mobile with Smartphones, tablets and useful specific tools associated to them, such as Geolocation and Augmented Reality. Nowadays, Facebook, Google+, LinkedIn and twitter are among the tools most used on a daily basis.

Marketers react by creating new ways to evaluate Return on Investment, new Web Analytical tools to gather and interpret all the data now available as a result of information collected from users browsing. This is still challenged by the emergence of Web3.0. Another effect of the socialisation and exchange is that the classic Word of Mouth Marketing access a new dimension because of the myriad of connections each user has on social networks to become Viral Marketing.

On a sociological perspective, Social Networks are a great opportunity to leverage Social Capital even if this usage is not the most popular and is mainly employed by students, managers and executives. It gives also opportunity to individuals to brand themselves by being proactive through pertinent communication on specific topics.

The real success of social networks is due to the ease given to the population to maintain their connections and sustain their group affiliation. Digital natives' generation are also natural users of these tools. There are some psychological factors that affect people and reassure them by seeing that others have similar life and make them feel well integrated into society. The result of this search for conformity is that people will broadcast more spontaneously communications with consensual topic, universal value or moral attached to their message or post.

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List of abbreviations

AR	Augmented reality
AJAX	Asynchronous Javascript and XML
BI	Business Intelligence
B2B	Business to Business
B2C	Business to Consumers
CGM	Consumer Generated Media
CRM	Customers Relationship Management
CSR	Corporate Social Responsibility
ERP	Enterprise Resource Planning
IaaS	Infrastructure as a service (Related to cloud computing)
ICT	Information and Communication technologies
IP	Internet Protocol
IT	Information Technology
KPI	Key Performance Indicator
OS	Operating System
PaaS	Platform as a service (Related to cloud computing)
PR	Public Relations
RIA	Rich Internet Applications
ROI	Return On Investment
SaaS	Software as a Service (Related to cloud computing)
SEM	Search Engine Marketing
SEO	Search Engine Optimization
SLAs	Service Level Agreements
SME	Small and Medium Enterprise
SWOT	Strengths, Weaknesses, Opportunities, Threats
UGC	User Generated content
VR	Virtual Reality
QR code	Quick response code
WOM	Word of Mouth
WOMP	Word of Mouth Process
WWW	World Wide Web
W3C	World Wide Web Consortium

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1 Introduction

1.1 Background and context

The premise of the Web started back in 1989 in a laboratory of the European Organization for Nuclear Research; then it moved slowly to the university and next it spread to the population. At first, the now called Web 1.0 was mainly a static page where companies, individuals and organisations were delivering information.

During the first decade of the 21st century, the technological development has been followed by a sociological change, the web has been captured and integrated by people. It was not anymore a tool for geeks but a place where people could share, exchange, communicate. Blogs and social networks brought a disruptive way of using internet. One of the first big hit on this field was Second Life, launched in June 2003 by Linden Lab, but it was still a virtual world where people were having second and parallel life. Facebook brought the real change in social networks. It was launched in 2004 in the University of Harvard but went really available to anyone during 2006. Then people were able to exchange thoughts and content about their real life through this platform.

Web finally became an extension of the normal daily life, Web 2.0 and all the tools and technological aspects became highly popular and accepted by the whole population. This trend leads to social Media allowing internet users to interact with each other on an easier and faster way than ever before and now Facebook has even more than 629 Million active users (Jess3, 2011).

Of course as happen with any other thing that becomes highly trendy and well integrated into people's life, marketers started to study this topic, the different possibilities and the available outcome to bring to customers what they were expecting. Out of the new marketing tools that emerge from new behaviours of customers over the Web 2.0, Viral Marketing is a tremendous one.

Viral Marketing is basically the electronic extension of Word of Mouth (WOM), but because of the high number of connections that each individual has over social networks, and the easiness and speediness of broadcasting messages, Viral Marketing accessed a new dimension of promotion.

1.2 Project aims & Objectives

Web 2.0 has been long discussed but hardly well defined. The boundaries are still vague especially considering that Web 3.0 is arising. Nowadays thanks to Smartphones and tablets, Web became mobile and omniscient. It moved from online directories and search engines to Social Media and broad interactions in between users.

The aim of this paper is to understand new people's behaviours associated to this evolution. To do so it is necessary first, to define and understand all the concepts associated to the Web 2.0 and Social Media. As Web 3.0 is already present but not yet fully developed, it is also necessary to understand what will be the future changes to adopt them early enough to don't be disrupted.

The popularity of Social Media, questions the efficiency of the traditional marketing tools, even if theory seems the same, the way to use it needs to be actualized to this new trend. With Social Networks there is now incredible variety of consumers' data available, this leads to a better segmentation of products and communication channels but also to new ways to gather data, exploit them and measure Return on Investment (ROI). All those topics need to be investigated during the literature review phase on this paper.

Internet became the theatre of a wide type of conversation. Brand communication doesn't belong to companies anymore. They have to manage it with their advocates and various influencers, taking in account internet doesn't allow empty spaces, if brands don't manage their image then someone else will do it and fill out the space.

To understand why people communicate on companies and diffuse their message without any tangible incentive it is necessary to consider the sociological aspect of the web to see: what are the expectations from people to use it, what are the topics they communicate on, how people socialize online and the potential offered by those social networks.

2 Research Methodology

2.1 Choice of Method

Research refers to the organized method to outline a research problem, formulate a hypothesis, gather data or facts, analyse that data and arrive at conclusions that are either solutions of the enunciated problem or a theoretical framework (Kothari, 2008).

This project has the main research objective of understanding people behaviours and motivations towards to share information in the online space, and its impact for marketing purposes. In order accomplish this main objective, first it is necessary to gain familiarity with this phenomenon and increase insights to allow the formulation of hypotheses; this part of the study is considered as exploratory research making the Literature Review an integral part into the research methodology. Then the application of a quantitative survey will be conducted to better understand the phenomenon and test the formulated hypotheses; and finally reach the conclusions based on the combination of knowledge from the exploratory research, the survey results and additional data, gatherer after the conduction of the survey to help the understanding and explanation of the questionnaire results (Kumar, 2005) (Gill & Johnson, 2009).

For this paper the Literature review is fully part of the research because the Web is a really wide topic. Thus to be able to elaborate pertinent Hypotheses it was previously needed to define completely the topics and different tools adopted by users to see which one would be relevant to leverage the outcome of the study and to see how generate and measure a successful viral campaign. Before entering the academic literature review a complete screening of the different 'Guru' and trending blogs has been necessary. To write about Web 2.0 and User Generated Content (UGC) it is needed to know what the behaviour of those users is, and read the different posts and comments they generate to understand it. Considering the perpetual change in the Web domain and the time for the research paper to be published, there is a risk of having a literature review out of date by relying only on academic papers. This is where the importance of blogs such as Mashable, was of great help to have the latest news from the different experts on Social Media. It helped defining the topics and Keywords by selecting the ones that were cited with the highest frequency.

The sources of data, theory and information gathered for this project, have been both qualitative and quantitative which leads to a pluralist research choice. From the philosophical research point of view, the approach taken in this project intends to analyze theory and data objectively and impartially. Nevertheless the recognition of the fact that the author sight of the world influences the method selection, data interpretation and conclusions; make this project be based on post positivism philosophy combined with interpretivism, as the research object is also related to human beings and their behaviour analysis (Saunders, *et al.*, 2009).

2.2 Research Strategy

2.2.1 Secondary research

The information formerly collected with a different objective than the one in the present research project is called secondary data. These data will help to develop initial ideas and insights about the subject and then get a direction for further research (Wilson, 2006).

Because of this reason, an initial exploratory research has been conducted to establish a solid background to help the posterior collection of primary data. An extensive literature review has been done in order to better understand main concepts and close the existing academic gap around web 2.0 and web 3.0, mobile trends, social networks, viral marketing, sociological aspects and other significant concepts that facilitate the research objective approach.

The first step on the literature review was to identify the main sources for the research and prepare a checklist with possible sources: books, libraries, academic experts, agencies, etc. For the online search was advisable to prepare a list with key words in order to facilitate the search through online search engines and record the results for future review. Then a scan of articles was done to select the most relevant ones based on author's academic reputation, relevance of the theory and closeness to the research objective. Finally all collected data were systematically organized and

integrated to prepare the final report. This report structure facilitated to clearly outline the relevant literature related to the research objective and helped to formulate the research hypotheses (Singh & Bajpai, 2007), (Sowers, *et al.*, 2001).

A lot of online literature was found related to the subject, nevertheless there is still a lack of academic reliable sources of theory, previews studies and data, which led to a carefully selection of sources that could at the end be used for the results of this project. Furthermore, there are few preview qualitative and quantitative studies with focus on people behaviour in the online space, which has motivated the posterior use of a survey to get primary data that will help to better understand the people online behaviour to share information and through it, reach the project conclusions (Singh & Bajpai, 2007).

Some of the external quantitative and qualitative sources used after the literature scan to conduct the secondary exploratory research are:

- Books and guru author's publications.
- Databases including Business Source Complete, EBSCO, Dawsonera, Factiva and Science Direct among others.
- Business and Academic Journals: Harvard Business Review, The economist, Financial Times, Campus Tech, Journal of Consumer Marketing, The American Journal of Sociology, International Journal of Market Research, etc.
- Online sources: TED, Mashable, TechCrunch and SlideShare, among others.
- Quantitative external data: ComScore, ComMetrics, Gartner, Nielsen, Mckinsey, etc.

Finally additional secondary sources will be also used to reach last conclusions and compare results with the primary research.

2.2.2 Primary Research

To conduct the primary research, a quantitative approach was used in order to obtain results which can be measured, represented and explained using numerical values, and then be more objective and reliable (Thomas, 2003).

To attain this purpose, a survey strategy was implemented and a cross sectional structured questionnaire was designed. This technique allows the researcher to analyse characteristics and behaviours from a sample and then infer that the population can have similar traits (Saunders, *et al.*, 2009).

The conduction of the survey was made among existing contacts, in an online format and spread using social networking sites, email and other online tools. The structured questionnaire designed for this project has the following characteristics:

- *Online survey*: The online survey was the method that better adapted to the needs of this project, because it allowed reaching the target audience by filtering all possible consumers groups into the internet users only.
- *Multiple choice closed questions*: The design of the questions was key, as they must be clear, easy to understand, easy to answer and include all possible answers in order to avoid results biases.
- *Likert Scale questions*: Likert scale was used in half of the questionnaire to ask the degree of agreement or disagreement to a series of statements.
- *One page questionnaire*: Short survey that motivates people to fill it out in less than 3 minutes.
- *Ethics*: All people were informed about the intention of the survey, likewise the results confidentiality. The survey did not ask for any personal information to maintain the anonymity (Jackson S. L., 2010).

2.3 Limitations of research Methodology

2.3.1 General Limitations

The limitations of this research can be divided in two:

- *Limitations from the secondary data:* the information gathered in this stage are general data and not specifically designed to meet this project needs, and then they should be prioritized based on the availability, accuracy, applicability and comparability traits which may lead to researcher partiality.
- *Limitations from the primary data:* This includes the inference from a sample to try to describe and understand the characteristics of the population. This procedure is affected by the statistical confidence interval and standard error.

2.3.2 Limitation of Structured Questionnaire

The first limitation of the structured questionnaire used in this project is that while conducting online surveys there is no control on the responses neither respondents. Furthermore there is no person available to clarify questions or responses when needed by the respondent.

Another limitation is that this online survey was sent to existing contacts through online networks mainly, was not a public open survey available for everyone on the web, and then the characteristics of the population where limited to group and peers similarities.

Further limitations will be discussed previous to the data analysis.

3 Literature Review

3.1 Web 2.0 and technological aspect

One of the most well known bubbles of recent times is the dot com phenomenon that occurred in 2001 and since then, the software sectors have adopted major changes. During the last decade the development and maturity of internet has been tremendous, and all this transformation has led to the advance of WEB 2.0 (Musser & Tim, 2006). WEB 2.0 most important feature is that it is about people and sharing while WEB 1.0 was just about commerce and branding. This change happened probably because of the web usage shifted, as before it was something created and used only by engineers, while now it has been transformed in a friendlier tool to be used by all human society. This new web, can be assimilated as an open architecture and thus instead of having boundaries, it offers a core structure where almost everything can gravitate around. Nowadays, WEB is not the main purpose anymore but rather a platform, and thus new applications can be perceived as channels or services (Musser & Tim, 2006). With this new support, content is not only written by gurus or experts, but also by common users and end users, building then collaborative content through Tags, Blogs, and Wikis. This is highly powerful because it shows that the content is in perpetual movement and it is the result of collective intelligence and experiences (Levy, 2009).

This collective community gives rise to social networking and social media. There are now virtual communities with social interactions where users create, share, exchange and comment contents (Toivonen, 2007). This virtual community has been made possible because of the move into the digital world, especially with the wide diffusion of digital cameras among the population, its integration into mobile phones and the easiness of the distribution activity through global internet access. With this support people have content to share with each others (O'Reilly, 2005).

Users are not just users anymore but they are also suppliers of content. They assure its distribution, and they also assume the key role of criticising, reviewing and filtering those contents (Ahlqvist, *et al.*, 2010).

The World Wide Web (WWW) was created by Berners Lee, while working on a project with the European Organization for Nuclear Research (CERN) back in 1989. Later on, he moved to the Massachusetts Institute of Technology (MIT) where he created the WWW Consortium (W3C) in 1994. So Berners is one of the gurus in the WWW area and he raised some criticisms regarding the term Web 2.0 that is perceived from him as just as a dialectic concoction because the whole philosophy is the same in Both Web 1.0 and 2.0. His main argument is that Web 1.0 was about connecting people through Hypertext Markup Language (HTML) and Hypertext Transfer Protocol (HTTP) and that WEB 2.0 is not much more than using these tools with JavaScript to build new features such as blogs and Wikis. As the purpose of this new object is to help people communicate and get connected, he claims that the all spirit of the web didn't change, and thus people talking about Web 2.0 don't know what they are talking about (Berners-Lee, 2006). At that time he was already talking about what will be the future of the web i.e., Semantic Web, that is seen by many experts as the Web 3.0. This topic will be explored and discussed in chapter 3.2.

So of course the philosophical and sociological aspect of what the Web was and will be, hasn't changed much but nevertheless the use and adoption of The Web changed considerably between its creation in a laboratory and the actual usage.

These new tools have been highly accepted and used by the society and especially by the new generation leading to changes in the social relations. The different changes and its causes can be studied on a psychological and sociological point of view.

Four basic reasons explain the popularity of social media (Dong-Hun, 2010):

- People can express themselves and be part of a group through blogs, twitter, and Facebook.
- People can get latest news about topics and products that are relevant to them, and if they get recommendations from relatives, then it's much more valuable than through usual media.
- People can 'peep' others and satisfy their desire to know what others are doing.

- People have access to a new way to escape from their daily life.

Marketers can use this on a different way; the most obvious one is to use it as a direct sales channel. Companies are using it also to replace or to support their call centers and to deliver better services to customers. Good use of social media can also help to build sustainable relationships with customers (Dong-Hun, 2010). The different messages, reviews and comments posted by friends or relatives about products and companies, can be assimilated to word-of-mouth (WOM), and with internet; the information is spread much faster and to a wider audience. WOM is the ancestor of the recent and trendy marketing that arise during this decade, i.e. viral marketing. One of the tactics is to have individuals to diffuse the marketing message to others through social media. There is some challenge in this, Viral Marketing campaigns shouldn't end up as mass media marketing. It's easy to create buzz, but it shouldn't bring away the real work of collecting and mining customer data to identify them, furthermore you need to bring content and data to customers to make sure they identify you and engage themselves in your segment (Rick, 2008).

3.1.1 Long Tail

From the well known Pareto distribution, more commonly known as the 80-20 rule, statisticians ended up with a probability distribution known as Long Tail. This tool and concepts associated to it have been first developed in an article written by Chris Andersen in WIRED. The main idea behind this concept, is that the future of businesses is to sell less of a specific product but more of different types to accommodate to any possible customer profile and behaviour in order to reach more consumers (Anderson, 2004).

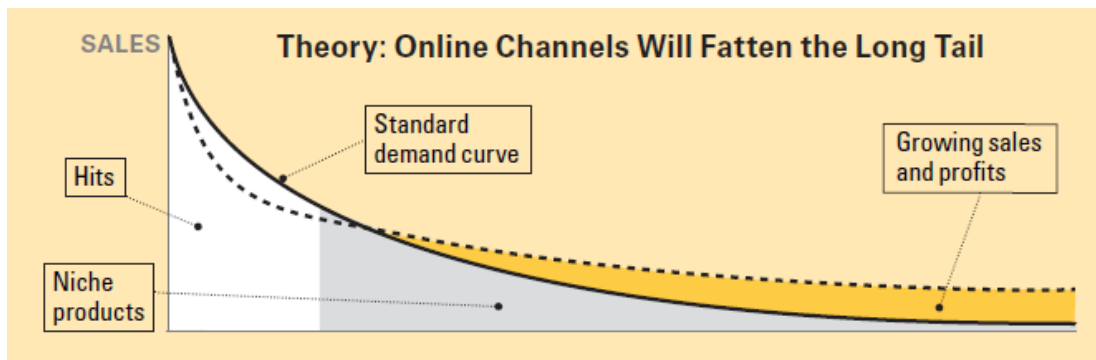


Exhibit 3-1 : Online channels Will Fatten the Long Tail.
(Elberse A. , 2008)

Even if the market changed significantly with the offers that literally exploded due to the entire e-commerce boom, big hits are still absorbing the biggest market share. Customers get easy access to niche markets and to some obscure products but they are still nibbling on these slots. This trend has been confirmed by an interview to Will Page, economist for the English Music Collecting Societies, MCPS-PRS Alliance, rebranded in January 2009 PRS for Music. In this interview he explains that out of 13 million tracks available, 10 million don't get any buyers, 40 titles represent 3% of the sales and 8% of the titles make 80% of the income (Page, 2008). This shows that diversity of product is not necessarily synonym of diversity of consumption. Thus if the long tail is a real phenomena due to different factors like: e-marketing, changes in supply chain management, low marginal cost, number of references available to consumers and non competitor products on a specific niche market; then the ability to adopt this model to create net income doesn't seem too straight forward. It implies a different strategy for profit aggregators or for particulars.

This has also been studied back in 1963 by William McPhee; obscure products are more known by people with large culture who know alternatives. These people surprisingly enough have less chance to appreciate those products as they are aware also of the blockbuster products and they rather prefer those popular ones. This gives a double disadvantage to niche products, as they are known by the smallest proportion of customers and they are less likely to be appreciated (McPhee, 1963).

Due to the organic nature of the Web 2.0 world, tags and keywords are highly used to classify web based materials. Taxonomy used and created by web users is called

Folksonomy and it helps people to classify, search and arrange content on internet. The most well known examples in literature are Delicious and Flickr (Rader & Wash, 2006), (Rafferty & Hilderley, 2007). This tends to be more powerful and pertinent than the old hierarchical organisation because the vocabulary is then generated by end users and then it is part of the familiar language of the community. Furthermore there is no parent-child relationship as there is no hierarchical connection which allows multiple entries in the search system to access the desired content. Vocabulary changes over time and as Folksonomies, it is not controlled; the system adapts itself better to trends and changes (Mathes, 2004), (Shirky, 2005).

This principle is highly useful for Search Engine Optimization consultants and marketers, wishing to build viral campaigns. To be successful and strengthen presence on viral channels, it's better to focus on the most popular product of the portfolio and if some resource reallocation is necessary, strong means still have to be allocated to blockbusters. To work in the tail end ensure to keep the fixed costs as low as possible because there is no guaranty that sales will take place. Obscure products presence can be leveraged by the most popular product, and this popular one will help to acquire and manage customers (Elberse A. , 2008). To assure visibility in the tail end is necessary to be there alone, this implies that tags to define products have to be absolutely unique, because of the very high specificity of the audience and the new potential market associated to them, the landing page needs to bring them content and value as well. Because of the low probability to get a new customer, energy has to be deployed to ensure to keep the few passing by and encourage them to browse regularly on the given web site by bringing them value and satisfaction.

This theory has been criticized by practitioners and academic literature. Anita Elberse in the review of HBR previously cited, studied the sales patterns of music and video industry. From this research she found out that the big hits get more sales and are more concentrated than before so their market share is growing. The tail tends to get longer and extremely flat (see dotted line in Exhibit 3-1) and both, heavy and light consumers had strong preferences for the big hits rather than the ones in the tail. Out of this, she had a debate with Chris Anderson each one trying to make their point of

view, with different analysis of data and no strong evidence can be concluded out of this (Elberse a. , 2008).

So critics to the Long Tail theory are not really strong, nevertheless they show that this theory is not universally recognised, but evidence shows that it depends on your market and distribution channel. Amazon and Apple with their app store managed really well with this concept. On the other hand for big oil industry such as Exxon this is not relevant. Nevertheless it is interesting to notice that during August 2011 Apple managed to have for a short time a bigger market value than Exxon. But there is actually no way that Exxon can use the long tail theory to start selling some specific petrol at its service stations. The fact is that in some markets people prefer standardized products and are not ready to move from. For small companies this long tail is a great opportunity because they don't have the size to compete with big corporations and their only way to be sustainable is to use this niche slot. Furthermore it might be the only place where they can afford to exist (Wu, 2006), (Campbell, 2008).

3.1.2 Six degree of separation

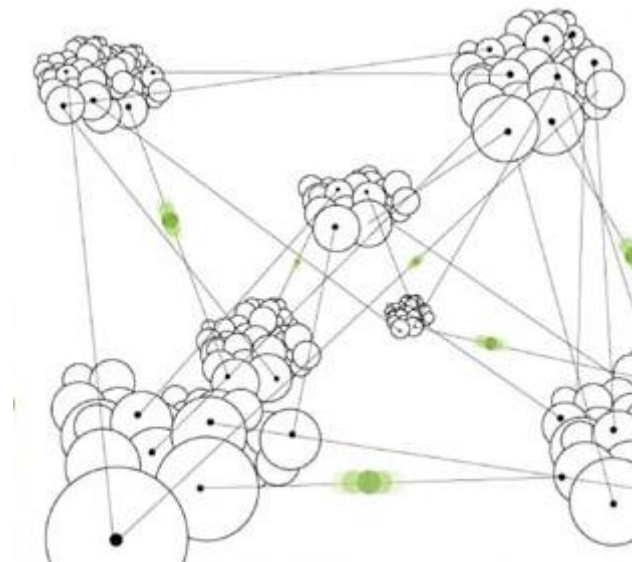


Exhibit 3-2 : Six degree of separation illustration.
www.stlukes.co.uk

Web2.0 and social networks give great opportunities to people to get connected, of course inter-human relationships are quite different through digital and physical life, but they influence also our perception of reality and the way we notice and define ourselves. One of the main differences between humans and animals is the need to socialise. Babies who don't receive love and care from their parents or any substitute, tend to die really young from what is called failure to thrive (Block & Krebs, 2005). Without going into this extreme, it has been studied also that children that do not socialize much tend to have slower intellectual development (Schmalz & Boos, 2009), (Bithoney, 1986). Social interaction affects also our reality because our perception is influenced by others perception. So our network does matter and repercussion of the digital life on real life is factual. Social networks are not just good to meet strangers, but mainly because they allow us to make our networks visible (Haythornthwaite, 2005).

The idea was first developed by a Hungarian writer who said in his short story 'chains', that any two people could get connected to each other's by five handshakes (Karinthy, 1929). The social psychologist Stanley Milgram conducted some experiments about social connections to test this concept of sixth degree of separation. One of these experiments was to ask people to pass letters to reach a specific recipient, out of his experiment he concluded that we live in a small world (Milgram S. , 1967).

The use of the social network to get connected and reach new connections can have many purposes. With help of tags and research, it's possible to reach people outside our real network or location area, in order to get contacts that share common interests. To achieve this, special design of the main Facebook page or other sites, is applied to accommodate peers search. Users also tend to use social browsing or social searching (Lampe, Ellison, & Steinfield, 2006). Then a question can be asked to see if these connections represent a tangible asset. The social capital can be separated into two categories, Network capital and Participatory capital. The first one is focused on the relationship with contacts whereas the second one is described as the involvement into social organizations, politics, or think tank blogs (Putnam, 2000).

From this perspective, losing friends or contacts is equivalent of losing such capital. On an emotional point of view it's never pleasant either to find out that one of your connections unfriended you. This is most of the time done on a unilateral way without any explanation to the other party. Obviously there is some kind of injustice and bad feeling or slight depress that can occur to the one getting dumped. This topic is getting sensible for some people and an application has been already developed under Facebook to monitor own connections friendship activity; nevertheless on LinkedIn this feature has not been developed yet. One of the reasons might be that LinkedIn represents a professional network whereas for many people Facebook represents accurately and positively who they are (Lampe, *et al.*, 2006). We can assume that losing connections on Facebook can be assimilated to losing real friends whereas losing a connection on LinkedIn is more assimilated as losing a colleague relationship, as it could happen often in any company for various reasons (Shu & Chuang, 2011). Thus personal and psychological effect is much more important when losing friends on Facebook. It seems also that people follow much more their connections on Facebook rather than on other networks, because on other networks connections are used for specific purposes whereas on Facebook contacts are used for personal social life, pleasure and prestige (Lampe, *et al.*, 2006).



Exhibit 3-3 : Create your network.

<http://lifeisyourplayground.com/4-create-your-network-12/>

The interesting thing to notice is that a metaphor can be made between, on one hand human networks' organisation, structure and distribution and on the other hand computer or electrical distribution networks. Some people appear to be a node in the network and thus give access to many contacts on second, third and more sublevels. The drawback of this system is that loss of this node can cut off a huge potential. This perspective shows also the limitation system of the six degree of separation. Of course on a very large sample this might be demonstrated, but depending on the primary network, social and academic belonging, the opportunity to know the right node, people on second or third tier will change dramatically (Donath & Boyd, 2004), (Fornell & Larcker, 1981). The importance of the structure has been studied and studies show that structure matters. The arrangement of a network relationship can influence a team performance and behaviour. Similarly, the same can occur on a node level. For example in a really central node system, the central point interferes on the speediness of flow and distortion of information. It gives power to the central tie on a business perspective, political and decision making (Padgett & Ansell, 1993), (Borgatti, *et al.*, 2009). Exclusion can also occur and can have repercussions on a Business to Business (B2B) basis. In a linear node system, a party can choose to short circuit intermediaries and thus other party and all sub networks associated. The network depending on nodes at both ends of the chain is also highly dependent of all its intermediaries because they can be isolated by the unilateral decision of one of them (Yamagishi, *et al.*, 1988). When building a network it's important to have a backup path to reach some community, else huge assets or opportunities can easily disappear.

Strong or weak ties within a network relation, present advantages or disadvantages depending on the perspective and the ultimate goal. Strong ties are defined by long term, recurrent and sustainable interactions between constituents of the network. This type of thought relations tends to create overlap on both networks. The redundancy created by such cohesion reduces opportunities, knowledge access and growth contingency. Due to the strong mix between the two networks, chances are great that a lot of cross reference occur and then each core node is not a gate to another network but simply a constituent of both networks and don't represent any more added value (Granovetter, 1973). This shows that is much more valuable to

access larger audiences to augment probability to hit deep into a special community, to build wider information resources and to build strong ties. Another advantage of such process is that it reduces considerably the social cost and increases trusts among participants (Levin & Cross, 2004). When it comes to information sharing, mutual trust between members is highly relevant. This trust is also linked to the trust in the social network media and information channels. Information sharing flow is more important on Facebook than on MySpace, thanks to the trust built by the privacy policy and the potential mapping of social activities (Dwyer, 2007), (Shu & Chuang, 2011).

In conclusion of this topic, it's interesting to notice that the notion of six degree of separation gives some great insight on viral marketing perspective. The amount of potential reachable customers is massive but depending on the audience targeted, if as in statistics, the snow ball technique is applied then to focus on the right node should be made to ensure to enter through the right gate and guarantee a wider and deeper diffusion of the message within the expected community. Another key point is that as viral marketing is associated to Word of mouth marketing, the use of the right social media or network is important because of the degree of confident associated to the media used.

3.1.3 Going Mobile

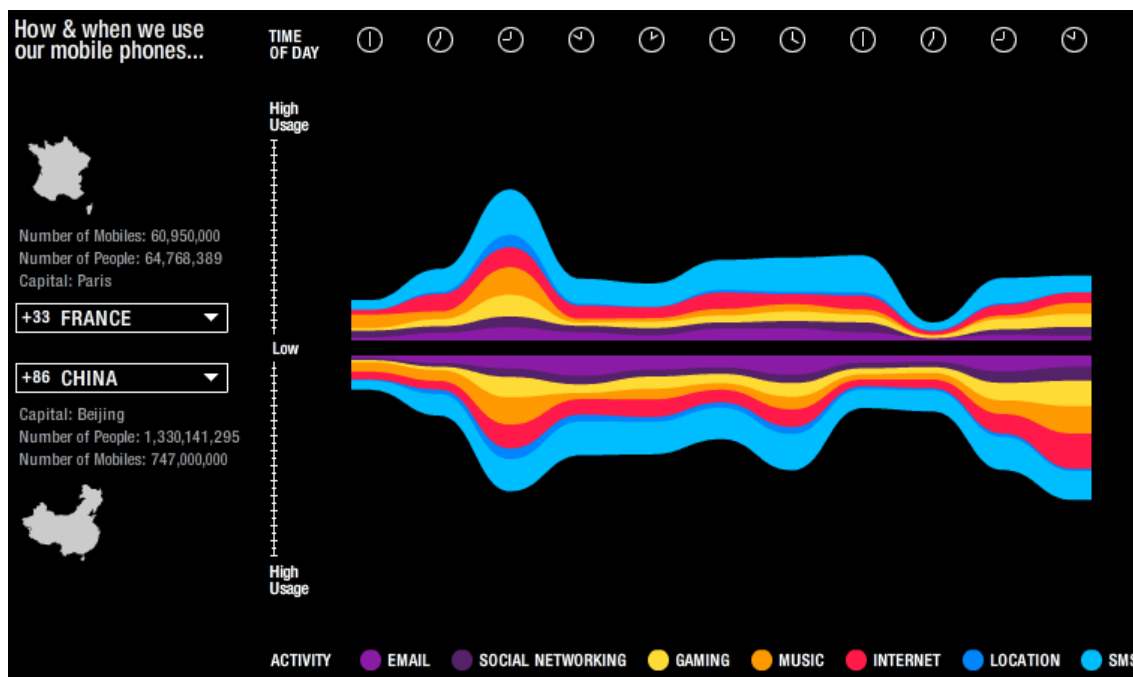


Exhibit 3-4 : How and when we use our mobile phones.

<http://discovermobilelife.com/>

With the emergence of smartphones, tablets, 3G and soon 4G mobile devices, web applications are not anymore restraint to be used on a fixed location. Furthermore these devices are not used on a silo style, boundaries between PCs and Mobiles are more and more shrinking, and the emergence of tablets is changing consumer's behaviour of web and social media use.

Mobile devices and especially phones and tablets are nowadays omnipresent methods of communication (see Exhibit 3-4) and even more important, on a sociological point of view, a status symbol (Jenkins, 2006). One of the major differences between PCs and any other mobile device connected to the internet is the notion of personality, ubiquity, the huge levels of personalisation available, and last but not least phones are something tactile and even their Operating System (OS) is getting this property. These four parameters impose to reinvent consumers' interaction models. Marketers gain great new features available to them because they know where we are and most of the time also who we are. Behaviours of users are affected by these sociological parameters, hardware, ergonomic of the device and the business model imposed by Apple's iPhone gave also some new trends.

Mobile users exploit more internet data through apps than through the usual browser. A study of TNS Global Research shows also that the sites most commonly visited on Mobiles are the Social Networking Sites (Sinton, 2011). One of the Gurus of the web, i.e. Dr. Eric Schmidt, Chairman of the Board at Google, during his keynote at the Internet Advertising Bureau's Annual Leadership Meeting, said that the use of mobiles is growing faster than all the forecast they made, He reported also that 78% of Smartphone users access the web while shopping and thanks to their phone, people are getting better, smarter and more involved consumers (Schmidt, 2011).

Phones are a great opportunity to create brand loyalties, and a holistic mobile experience. To do so, it is decisive to think about the diverse available options of this mobile internet usage with user's media and other offline practices. Then if the option of the app is decided, precious care on the strategy and objective definition has to be placed. This market can be highly associated to the red ocean.



Exhibit 3-5 : Number of Apps Available At Smartphones' Apps Stores.

<http://www.businessinsider.com/charts-of-the-week-ipad-competition-is-toast-2011-3#google-is-closing-the-gap-on-apples-app-store-3>

The competition is getting really high with more than 250K applications available on the platforms of the two major mobile competitors (see Exhibit 3-5). The apps market is now mature but as consumers are highly mature as well and innovation oriented, then their expectation is higher also. These consumers are waiting for more quirky flavours, new user experiences, and they are not willing to be treated as 'sheep consumers', then the personalisation phenomena. Added value is becoming one of

the major key differentiators. Nowadays brands and app developers don't have much choice to emerge out of the crowd than to push the usual settle down boundaries (Yarow, 2011).

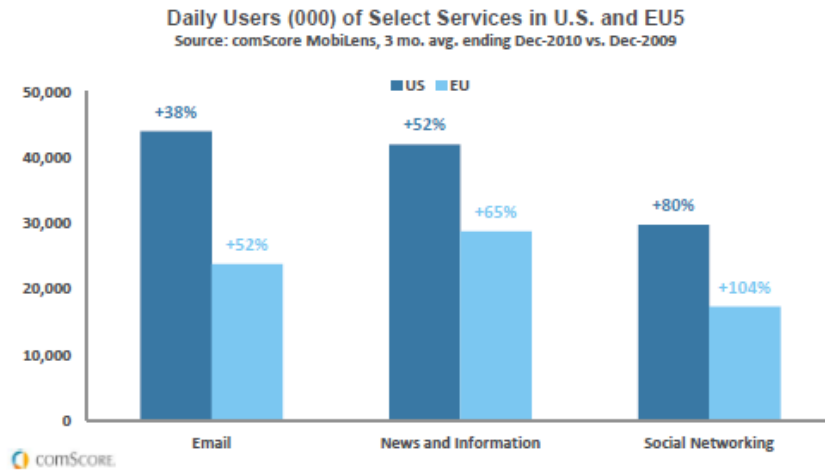


Exhibit 3-6 : Daily Users of Select Services in U.S and EU5.

http://www.comscore.com/Press_Events/Presentations_Whitepapers/2011/2010_Mobile_Year_in_Review

Out of the studies of ComScore (Exhibit 3-6) and the first graph of this chapter (Exhibit 3-4), we can notice that Social Network represents the greatest increase in services access and the use of it if spread on the whole day, but the principal trend is that usage is now becoming part of daily life as consumers are using these services on a daily basis. If few years ago mobile media was more considerate as a novelty, nowadays it moves rapidly from an occasional activity to an indispensable tool (comScore, 2011).

Distinct differences in application usage across OS platforms

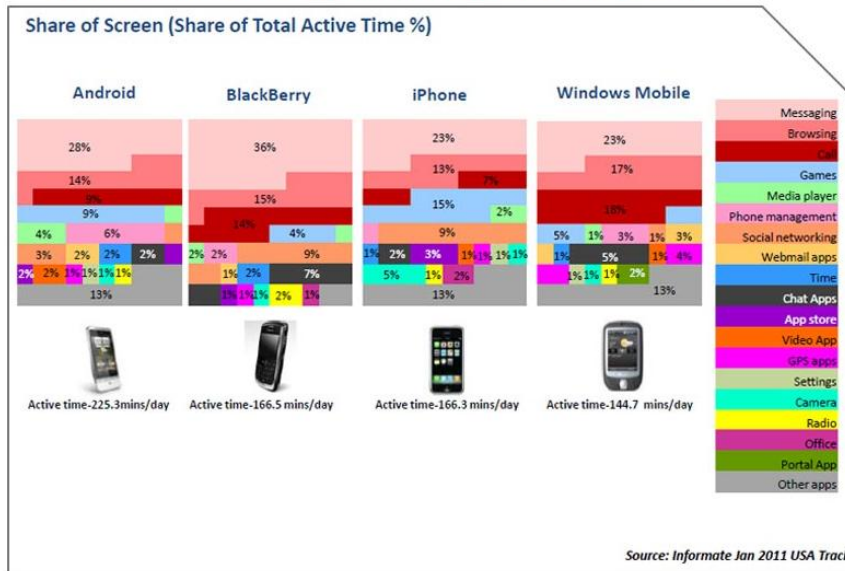


Exhibit 3-7 : Distinct differences in application usage across OS platforms.

<http://www.smartmobi.us/os-wars.htm>

If the app designed to reach the targeted audience doesn't have cross platform capabilities then it's necessary to choose the right one, taking in account that social networking access is higher on iPhone and BlackBerry users (see Exhibit 3-7). This trend could have been easily guessed on iPhone but it's interesting to notice that is also true on BlackBerry which is more perceived as a Business platform (Smartmobi.us, 2011).

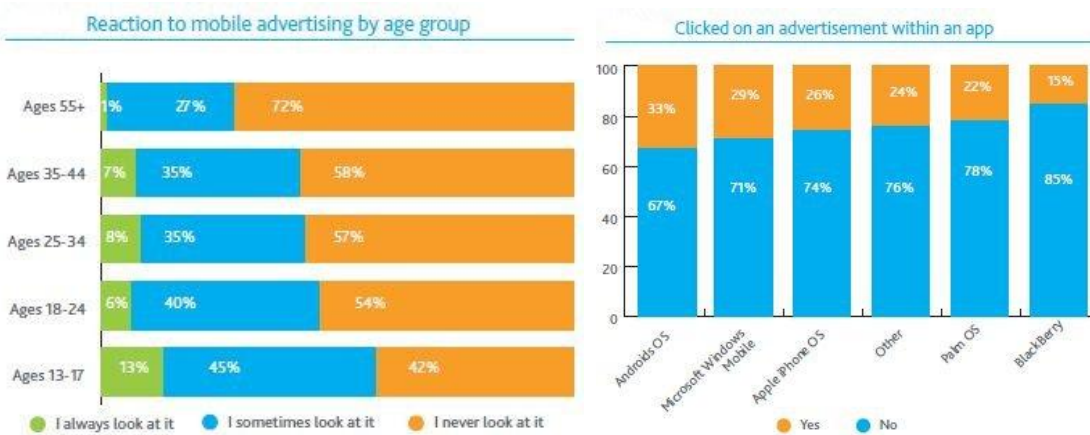


Exhibit 3-8 : Reaction to mobile advertising by age group / Clicked on an advertisement within an app.

<http://blog.nielsen.com/nielsenwire/wp-content/uploads/2010/09/NielsenMobileAppsWhitepaper.pdf>

As apps are getting popular, marketers and advertisers got new media to diffuse their message and get feedback. The younger the targeted audience the more likely they

are to respond to the advertisement (see Exhibit 3-8). Men are also more receptive than women. The business connotation of Blackberry, is confirmed by the fact that their users are the less likely to click on an ad, whereas Android that is an open source operating system, has the most users ready to respond positively to a commercial message. To choose which application to install, mobile users appreciate to have recommendations from third parties. Advice can then come from personal relationships or from special services offering ratings and reviews. The first alternative, send us back to word of mouth marketing associated to social media and viral effect (Nielsen, 2010).

If launching an app or advertising on an app then the choice of either free or paid application has to be made. As discussed previously Android is the platform where users have more chance to respond to the advertisement but it's also the platform where users get priority to free apps. To illustrate this it can be noticed that only during March and April 2011, six paid apps had been downloaded more than 500k times just in the United States on the Apple store; while on the Android's market, only two apps managed to be downloaded more than 500k worldwide and this, since the creation of the Android's market (Distimo, 2011).

Actually 20% of the emails sent for marketing campaigns are read from a mobile device. Out of all these users, iPhone customers are the most fervent readers. Customers tend to open these emails more on early morning and late evening. This trend can be easily explained, because during working hours, customers will use mostly desktops to access their emails. This implies for marketers to adapt messages, links and other call to actions to these assets because if the link clicked on such devices ends up on a web site not adapted to mobile display, then the campaign is ineffective (Siwicki, 2011). Another big tendency is that from now on, time spent on mobile apps has surpassed desktop and mobile web browsing.

U.S. Mobile Apps vs. Web Consumption, Minutes per Day

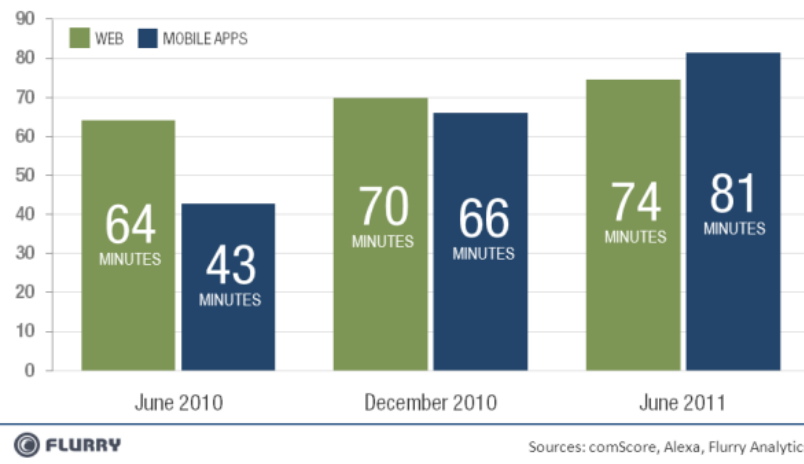


Exhibit 3-9 : U.S. Mobile Apps vs. Web Consumption, Minutes per day.

<http://blog.flurry.com/bid/63907/Mobile-Apps-Put-the-Web-in-Their-Rear-view-Mirror>

The change that has occurred in just 3 years (see Exhibit 3-9) is just drastic and the reason is mainly due to the high popularity of iPhone OS and Android's platform. Moreover from the 81 minutes spent daily on apps, 32% are used on Social Networks and Facebook and they represent almost a sixth of all time spent. Facebook is also working on a project based on HTML5 called Spartan to counter fight the hegemony of iOS and Google over mobile apps. This gives insight on how companies fight to build a direct relationship with consumers as media usage is moving from desktop to mobile (Newark-French, 2011).

The adaptation of the platform is also true for Search Engine Optimization (SEO), but because of the multiplicity of devices and platforms associated to it, it's better to consider a device agnostic approach to ensure to don't get lock into one system and prevent any marketing campaign to be on the shadow of any other system. The optimization of the site to portable devices, easy navigation and key content will improve the web ranking of such websites (Taylor J. , 2011).

3.1.4 Geolocation

As mobility implies moving, then location based services are also becoming a key resource and a drastic change in business model.



Exhibit 3-10 : Geolocation illustration.
<http://socialiving.wordpress.com/tag/sociaux/>

Engineers and product developers have different quest. The first ones create new technologies to solve issues, to invent new 'cool' stuff or for the glory of innovation. While on the other hand, product developers need to scan all these new technologies available to check which one could bring some added value to customers or products. Interestingly enough, it can happen that adoption of new technologies provides only minor innovations and is only used for product differentiation. Thankfully in some other cases the added value is more tangible, integration of a camera into mobile phones is a good example. At the beginning, the resolution was so poor that for many people it was clear that phones will stay phones and won't compete on cameras market. But with time it changed a lot, nowadays resolution and dedicated software embedded into the phone allow it to compete on some of the camera market segments. With the added functionalities of picture geolocation, social media accounts and the direct upload option, mobiles are now serious competitors; furthermore these extra functionalities gave new advantage opportunities to marketers (Pitta, 2011). The Geosocial networking has today two major actors, Gowalla and Foursquare. Facebook also launched this type of feature in 2010 with Facebook Places. The development of such services has been made possible by the extension of Smartphones and the decrease in prices of the GPS chipset that is included into most of the Smartphones. The main feature of this social service is to

let connections know the places where we check in, leave comments and rank it through micro blogging and storytelling. Service providers reward users by giving virtual badges. Some local retailers now are giving special discounts to users, which need to compete between themselves to get special badges and to be able to claim their rewards. This is a way to transform an intangible reward, into a financial incentive to drive customers (Socialiving, 2010).

For small retailers it's not easy to see the benefit of such applications because nowadays there are not much users compared to global population, around 10 million on foursquare on June 2011 (see Exhibit 3-11), but this number will increase exponentially (Foursquare, 2011).

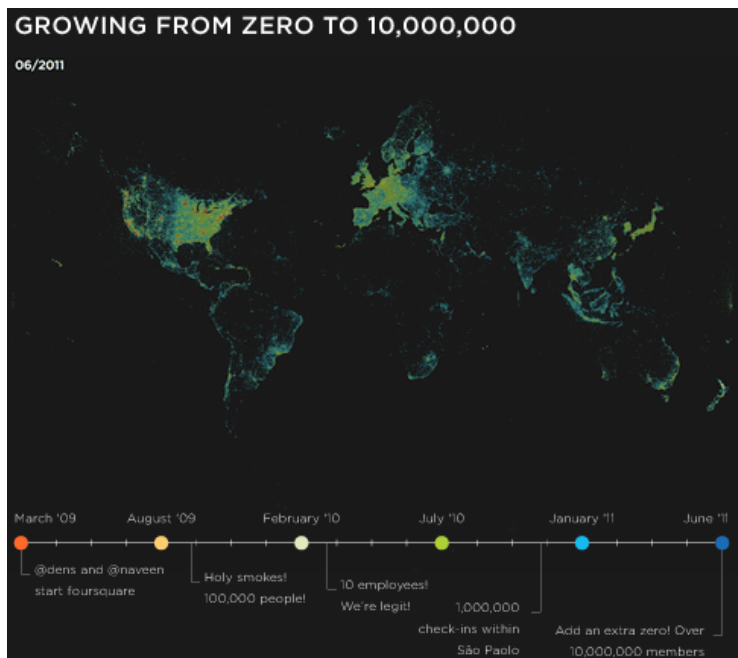


Exhibit 3-11 : Foursquare from 0 to 10 Million users.

<http://socialiving.wordpress.com/tag/sociaux/>

Its common sense that total users register data, don't help much on the world distribution and therefore the local potential of customers in a specific business area. Also because of psychological effect, people are reluctant to new technologies and thus keep on working on their usual way, but there are always some huge opportunities for early adopters. The main benefit of entering this kind of services today, knowing that only a few portion of customers are using it so far, is to establish presence by being pioneers. Other benefits are to profit from word of mouth

marketing, strengthen credibility, bringing some fun in the business and creating a bit of peer pressure (Pitta, 2011). If you are in now you start building your reputation and you have more chance to be a prospect influencer on this media. These tools are not only useful for newcomers into an area. It's frequent that some locals discover a business next to their place many years after settle down into a specific area. This is because people are mostly receptive to messages at the moment where they need it. This gives some more insight to viral marketing. It shows that it's more efficient to address a specific audience many times rather than a large audience once (Altschuler, 2010).

This tool can seem more useful for local retailers or Small and Medium Enterprises (SMEs) rather than big corporations, but building local presence and presence on social networks can always affect positively any firm brand image and reputation. Some argue that consumers are reluctant to globalization (Jackson P. , 2004). Because of negative impact on consumer's perception of this globalization, it's becoming crucial for multinational companies to be able to develop local presence and ensure that the Public Relations (PR) department let the different stakeholder broadly know about it. This can be integrated into the Corporate Social Responsibility and then be used as a political tool to protect companies interests (Detomasi, 2008). The different elements to be addressed locally to build good reputation and overpass consumer's scepticism can be, to strengthen the local community relations by developing local economy and creating jobs. Usually large companies are high public sector tax contributors. Nowadays by choosing conscientiously the way of constructing buildings for organisations or working on supply chain and operation management, it's possible to reduce the global, and more important, local ecology footprint. Care can be also addressed on value expressed by customers through internalising calculation on environmental and social cost. These can be enhanced to act collectively to build a strong institution and great integrated local image (Seyfang, 2007). As in all social media tools, customer's rating is very important and all levels of stakeholders' satisfaction have to be taken into account in addition to product and service satisfaction.

3.1.5 Web analytics



Exhibit 3-12 : Google web Analytics tools.

<http://willscullypower.wordpress.com/2010/06/14/5-ways-web-analytics-can-save-the-new-aged-marketer/>

“Web analytics is the measurement, collection, analysis and reporting of internet data for the purpose of understanding and optimizing web usage” (WAA, 2011). This Kind of tool is not just useful to measure basic traffic i.e. number of visitors, number of page views, visit duration and unique user; it can be used also for marketers to verify which page and content, encourage users to purchase more or to take action, social media oriented websites can also measure visibility and buzz creation levels (IFABC, 2009). Being able to measure effectiveness of a website is crucial to any company as it is with any other investment and thus important factors are ROI, profitability, effectiveness, reliability, utility and competitive advantage. Success factors of websites are not universal, and the targeted goal can vary from one organisation to another, but being able to measure success is a common denominator (Phippen, *et al.*, 2004). There are many tools available to feature such tasks; the two main families are log file analysis and system page tagging. The first method uses a web server log file that collect information about activity on the website whereas the second method gather information from the visitor’s machine with invisible codes and these data are then sent to a specific server for analysis through a different set of computing tools. The latest techniques developed to track data are hybrid and use a mix of both previous cited systems.

Log file Data are stored immediately on the web site which gives to the owner full control on it. Data collected are in raw form, it implies to reprocess the data to get the relevant information. Data collected are not dependent on the visitors browser security set up. The log file can capture HTML and non HTML files actions but has no interaction for page accessed through cache or proxy server. This can represent a serious issue as cached pages can represent a third of the number of pages viewed.

Page tagging data are stored on a third party web server and thus availability of this resource, depend on this entity giving the freedom to outsource the web hosting and this feature is getting important nowadays with the emergence of cloud computing. It overcomes the issue of cached pages as the script is still active, furthermore the script can intercept actions than do not request server action such as Flash animation, onMouseOver or onFocus. This information can help to see and understand how users read and react to the webpage structure. The customisation of the file is greater due to all the possibilities of programs included into the page code. The cookies usually installed on the client side allow to screen repeating visitors and to identify the most targeted ones i.e. the new ones (WebTrends, 2005), (Nakatani & Chuang, 2011).

Some free tools such as Google analytics, offer a complete set of intelligent reports which give useful information such as the device used to access the webpage and the location. Location was already available previously with the IP address but now GPS featured into mobile devices can give more accurate position and show also successive emplacement of the user and help to build a behaviour type. The tremendous number of available tools and techniques to run web analytics should question companies on their organisation and goals as there is a risk of overlap between Search Engine Marketing (SEM) and SEO teams. Synergy of these two entities can reduce costs and bring added value if they are not considered as two separate disciplines and if they can run in complementary programs. To achieve this, it's important to identify where those functions are overlapping, where they don't and where they should. The ability of an organisation to understand the impact of a web structure and/or a viral campaign, and the action to be taken correspondingly to the analytical studies, will determine the value of the tools used by that organisation (Gassman, 2009). Industry that competes the most on analytical is usual the financial

sector, this culture has now to be adopted by other sectors and move of scale from simple business units to an enterprise global perspective (Davenport, *et al.*, 2005).

Social media metrics due to their distinctive culture, need a slightly new approach compared to traditional old broadcast media or usual websites. It's not just about unique visitors or transaction rates any longer, but more important are users registered and returned visitors who actually sign in. What characterize mostly social media to traditional transaction key indicators is that the quality of the relationship is getting more valuable. Today the key of successful business is to create value for all the stakeholders, which implies to create value for both the customer and the company. Regarding this statement, just selling products is not enough, users have to enjoy the product they are getting, feel good about the buying process and any intangible value such moral or green charge attached to the product. Therefore even is quantity matters, quality and satisfaction have to be taken into account, thus Key Performance Indicators (KPI's) have to be chosen carefully to reflect this new trend. Social media works on a two way channel as you give and receive content. By sharing, extra feedback can be measured and deeper understanding of consumer needs can be brought and used to defined governance strategies. This moves companies social media aspect to true Business Intelligence (BI), as knowledge management or information system, the technology is only a tool and emphasis has to be brought to the operation management resulting in the use of these new tools available (Atchison, 2009). Another challenge faced for Web Analytics programmers is to make efficient tools for Rich Internet Applications (RIA). Traditional websites are made of myriad of pages, each one having one or more applications embedded, but now with RIA using tools such as Asynchronous Javascript and XML (AJAX), Flash elements, 'mashups', and other elements of the same type then the browsing philosophy changed completely. It is not necessary anymore going from page to page and having pages loading, reloading scripts, with RIA, a single page works like a rich desktop application integrated into a browser and thus the usual analytical tracking tools used to monitor communication and activities are not efficient on these technologies (Midnightcoders, 2011).

This is about technology, of course tools need to adapt to this new trend but it doesn't change the main objective for businesses i.e., increase the bottom line.

Avinash Kaushick developed a concept he called Trinity, where the result is supposed to be a win-win situation for both corporations and customers. The concept is a close loop back that goes through Behavior, Outcomes and Experiences. The behaviour refers to the usual clickstream data analysis. The outcome is the interesting part as he stated: “Why does your website exist?” this simple question shows that the website and the analytical tools need to be strongly tied to the company strategy to be efficient. The experience part refers to understand what are the causes and reasons of customers’ behaviours (Kaushik, 2006).

Big data can generate significant financial value across sectors



SOURCE: McKinsey Global Institute analysis

Exhibit 3-13 : Big data can generate significant financial value across sectors.
http://www.mckinsey.com/mgi/publications/big_data/pdfs/MGI_big_data_full_report.pdf

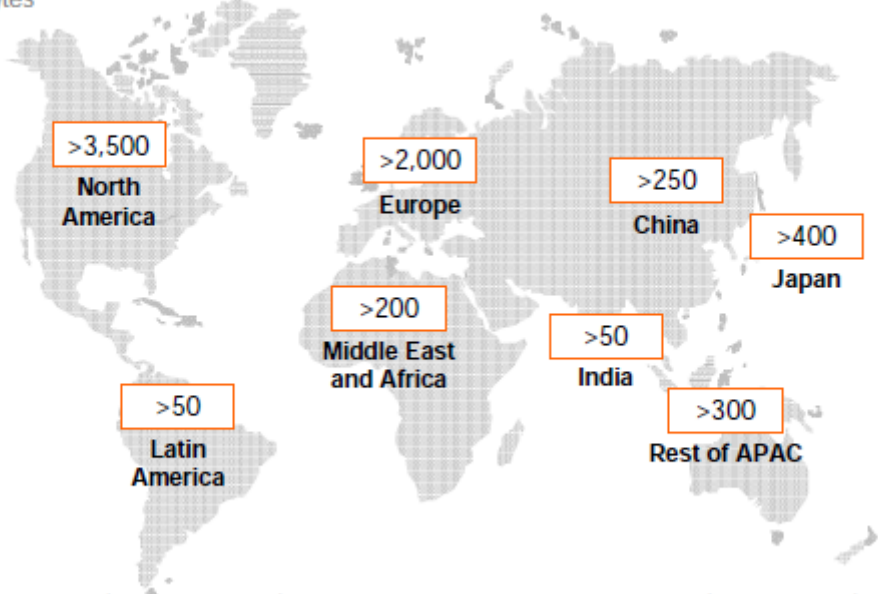
Some citizens are getting suspicious as they are thinking that companies are becoming very intrusive into their private life because of the huge and growing amount of data that is globally collected. If it's true that all these data play a major economic role for private companies, there is also some positive repercussion on national economies and these citizens, through the economical value created by

enhancing productivity and thus effectiveness and competitiveness for both companies and public sector.

Consumer data and KPIs have existed for long but because of the technological trend of our society and the number of people connected through different kind of devices and numbers of sensors integrated into daily objects used, the quantity of data tend to expand as computer calculation capability increase following Moore's Law. The collection of data is now obvious but as the inflection point has been reached we can now question the ability of companies to stock, aggregate and combine this big database created to perform valuable analysis. One of the major issues that companies will face soon is to recruit the right people to handle this. Analytical tools variety to compile those data are wide, it goes from traditional data base process to real time analysis such as stream processing and more visual tools like Clustergram and Historyflow.

Amount of new data stored varies across geography

New data stored¹ by geography, 2010
Petabytes



¹ New data stored defined as the amount of available storage used in a given year; see appendix for more on the definition and assumptions.
SOURCE: IDC storage reports; McKinsey Global Institute analysis

Exhibit 3-14 : Amount of new data stored varies across geography.
http://www.mckinsey.com/mgi/publications/big_data/pdfs/MGI_big_data_full_report.pdf

A recent report done by McKinsey on Big data (see Exhibit 3-14), states that the key component for such talent is a set of analytical, technical, statistical and business

skills. Currently in US there is a lack of formation in deep Mathematical aptitudes and this picture is believed to be also global. Thus it will be strategic to recruit the right task forces or to retrain existing ones to face this change (McKinsey, 2011).

3.1.6 Augmented reality

Will virtuality enhance reality? Virtual Reality (VR) has been long used by novelists and science fiction authors where people have got trapped in a virtual world. The first blockbuster to relate this topic was TRON directed by Steven Lisberger in 1982, over time it has become a cult film and probably has impacted consciously and subconsciously many programmers. At that time technologies were the greatest limit to the development; Pranav Mistry student at the MIT Media Lab probably touch the tipping point of this concept during his TED's presentation (Mistry, 2009). The name has been given by extension to the traditionally recognized human five senses used in our tactile world; the new digital sense added has been called the sixth sense. The prototype presented through the TED Conference was built with a standard webcam and a Projector, all connected through internet via a mobile phone.



Exhibit 3-15 : Pranav Mistry sixth sense.

<http://connect.in.com/pranav-mistry-sixth-sense/photos-sixthsense-682d20235ff120d8.html>

The whole idea was tremendous; pictures could be taken just by using a fingers frame in front of the webcam. By reading a newspaper, updated information was sent by projector onto the newspaper (see Exhibit 3-15). The software was developed on open sources and hardware cost was around USD\$ 350, nevertheless the project has been discontinued and no one is working on it anymore. If next generation of phone or tablet integrate projectors then this project could become part of our daily life (Zetter, 2009). On more simple way, virtual reality has been part of many

professionals for years through computer-aid design, simulators or Stereolithography. Today, thanks to the technologies embedded into our cell phones, VR and Augmented Reality (AR) can be made available to any one and at any time.

Another famous application was the so known virtual world Second Life edited by Linden Lab, launched on June 2003. At the peak of its success many companies were represented, universities had virtual campus and countries such as Maldives even had their own embassy. The noticeable thing is that they managed to have their own virtual money known as L\$ that could be exchanged versus dollars and €, all this on a commercial platform without control of any government. It explained the popularity of gambling over this platform, but then Linden changed rules and included VAT for European residents (Wikipedia, 2011). One of the biggest critics was that the editors could change rules and thus revenue plan and competitive advantage at any time. So maybe this virtual world collapsed by a lack of democracy, whereas one of the main ideas emerging with social media and all applications attached to it, is the freedom of users to divulgate information, criticize companies' products or governments and to be able to influence all of them through the crowd sourcing. The recent revolution 2.0 in Tunisia, Morocco and Egypt show the power of the community through social media to gain more democracy.

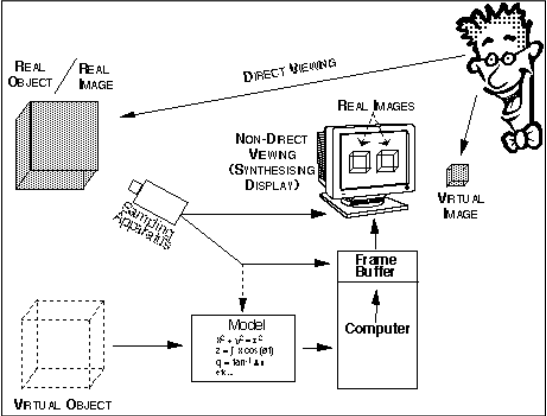


Exhibit 3-16 : Different aspects of distinguishing reality from virtuality. http://etclab.mie.utoronto.ca/people/paul_dir/IEICE94/ieice.html

One of the first definitions given for AR was: *“a particular subset of Virtual Reality (VR) related technologies that involve the merging of real and virtual worlds somewhere along the “virtuality continuum” which connects completely real*

environments to completely virtual ones” (Milgram & Fumio, 1994). Quick Response (QR) code is one of the most widely applications adopted by marketers and consumers.

This QR code (see Exhibit 3-17) has been adopted by many Museums to give extra information on painting and sculpture. Brands such as Diesel also allow consumers to use QR code to put a ‘like’ on products and get discounts within shops (Wasserman, 2011).



Exhibit 3-17 : QR code illustration.
<http://sflacour.com/>



Exhibit 3-18 : Marker illustration.
<http://www.burtonposey.com/thecard>

Markers are also used by brands, music bands, or games to bring new user experiences with AR or by individuals to market themselves through different media and with added value (See Exhibit 3-18).

The real powerfulness of AR embedded into phones, is to bring digital information overlay. By looking at landscapes through a phone (see Exhibit 3-19) it's now possible to access live information and extend normal visual information to an additional digital sense (Owyang, 2010).



Exhibit 3-19 : Augmented Reality illustration.

<http://www.cnx-software.com/2010/12/06/what-is-augmented-reality-how-to-develop-augmented-reality-applications/>

On top of adding real time information, such technologies also allow showing what is not directly visible such as satellite or sky maps by pointing devices towards the universe, i.e. applications such as Skypix already implemented this attribute. Some others apps integrate all the features of a theodolite and for marketing purposes there are also apps that show where Tweets are coming from. Obviously all these, mainly use the advantages of the Geolocation besides the graphic features bringing tools much more edutainment for end consumers. These entertainment layers are a great opportunity for marketers to collect data smoothly and have a picture on the way a message is diffusing from a geographic point of view, without bringing much negative perception to customers on the process to collect those data.

Another perspective of AR is to build better relationships between a brand and its customers. Consumer satisfaction is built through different stages, pre-purchase, during purchase and post-purchase stages. AR gets new experiences during the pre purchase stage and thus contributes on the overall customer satisfaction (Fill, 2009). The pre-purchase stage is a complex process with myriad of sociological and psychological aspect and thus it's difficult to determine what trigger the purchase decision making process. As causes can be multiple, any added functionality that might help the customer to pass the threshold is an added value to the business.

While the customer is assessing his buying decision, AR gives the opportunity to put the product directly into the 'consumers' hand', for them to try it and play with it as if they were already owning it (Owyang, 2010). Another application to help consumers to make their choice, would be to allow this device to recognise on shelves within retail stores, products that you are looking for, or to prevent you from products you are allergic to. Connections between potential contacts could also be improved, by identifying and recognising individuals you are connected to in any social network within a delimited space. All the time saved and services given to customers will bring positive opinions related to the supplier and will add value on brand perception (Havens, 2011). This technology is quite new and the literature associated to it is still confined but from a viral marketing perspective, the future opportunity seems huge. Once software embarked into portable devices will be able to recognise faces and people, then it will be feasible to display the profile of a person along with the different information associated to his different profiles. Thus it will be even more easy to get new connections from any event, meeting or similar occasions and then for viral campaigns to be wide spread and deeper into a specific community.

As a drawback of this technology as any other tool associated to social media marketing, if it helps to build brands reputation, it can also help consumers to complain and damage this reputation. A recent example was a card made by activists to protest against child labour in the Hershey's cocoa supply chain. Activists put these cards in US supermarkets, in the shelf next to the company's products with QR code on it, that linked to an online protest and petition website (Green-America, 2011).

3.1.7 Cloud Computing

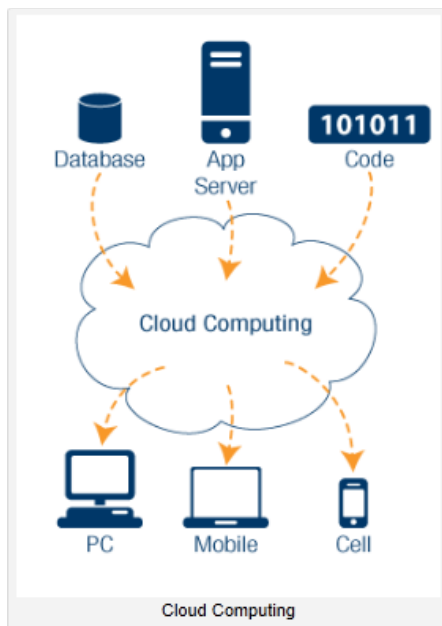


Exhibit 3-20 : Cloud Computing illustration.

<http://www.accessus.net/business-services/cloud-computing/>

Many attempts have been done to define precisely cloud computing but as this technology is recent, it's still in perpetual development. Out of the literature, the definition that is more commonly used is:

“Clouds are a large pool of easily usable and accessible virtualized resources (such as hardware, development platforms and/or services). These resources can be dynamically reconfigured to adjust to a variable load (scale), allowing also for an optimum resource utilization. This pool of resources is typically exploited by a pay-per-use model in which guarantees are offered by the Infrastructure Provider by means of customized SLAs” (Vaquero, et al., 2009).

Cloud refers to both software applications and hardware provided by data center as a service. If the cloud is available to public, such as Amazon Web Services, Google AppEngine and Microsoft Azure in a pay-as-you go manner, then it's referred as Public Cloud. Private Cloud is a term used to define internal data center owned by the companies using this service for its own business or for a limited number of users through a firewall to reinforce security issues. These two kinds of cloud can also be mixed to offer Hybrid Cloud, where critical business data are kept inside the

organisation while non critical data are out on public cloud. Finally there is also some community cloud, term used when organizations with common interests share data and information over the cloud (Zhang, *et al.*, 2010).

The three different categories of services delivered by cloud computing are:

- Infrastructure as a Service (IaaS) provides all the hardware resources and the consumers can deploy its own software, applications or OS through management interfaces. This service provides a fully virtual server system.
- Platform as a Service (PaaS) provides infrastructure on which consumers can develop and deploy new applications or expand the ones previously created. It's mainly used by companies to run customized applications or by independent software developers making business on vertical niches.
- Software as a Service (SaaS) provides specific applications in a cloud structure. This is the most common type of cloud use for customer relationship management (CRM), product lifecycle management, enterprise resource planning system (ERP) and ultimately supply chain management. Salesforce.com, with revenues in 2010 of \$ 1.6 Billion is a major actor and a good example of CRM over the cloud (Gray, 2010).

Cloud computing in today's Information and Communication technologies (ICT) and marketing strategies is becoming ubiquitous. Usual businesses face tremendous technological issues through the variety of software and hardware that are necessary to develop and run on a daily basis. This specifically implies many human resources with high technical skills and hardware infrastructure associated to software development. While an IT department of large structure can handle this, it's more problematic for SMEs. For this type of business, cloud computing comes naturally as it removes all the maintenance, test, update and security processes. This isn't the core competencies of such businesses then it makes sense to outsource such tasks. Furthermore scaling down or up is easier and need less immobilisation of assets. The other advantage of this system is the mobility procured. Where ever your sales forces or managers are, relevant information are pushed to them and available at anytime and anywhere making collaborative jobs much easier. Companies can focus on the services brought rather than the hosting and the implementation of such services.

For users cloud computing is also a great opportunity. Due to the number of devices used to access data and information, synchronisation of these devices is easier and possible without any constraint of platform compatibility (FT, 2011).

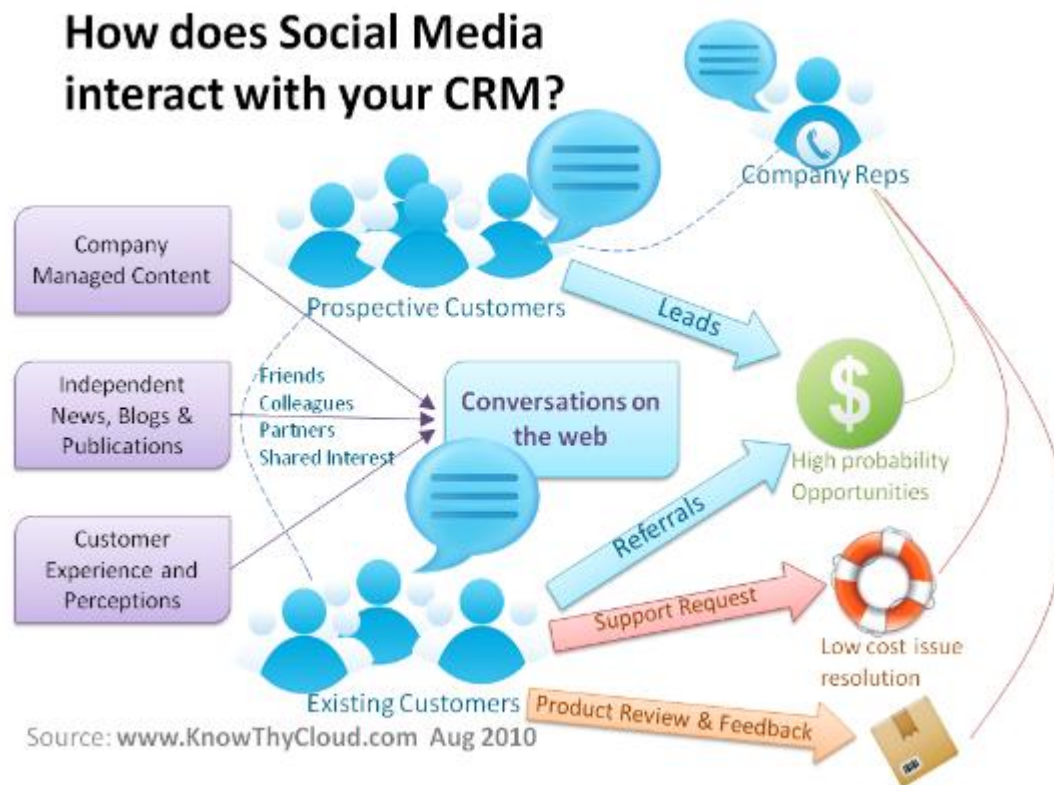


Exhibit 3-21 : How does social Media interact with your CRM?

<http://www.knowthycloud.com/sfdc-salesforce-com/how-does-social-media-interact-with-your-crm>

CRM is essential if not vital to be included into the marketing plan, of companies that use social media as key element of their strategy. CRM through web based helps relationships between a company and its customers (see Exhibit 3-21) during the three main stages:

- Acquire new customers through viral marketing campaign prospection, contact management, sells process and complacency. Marketing efficiency is increased through the automation of customer studies.
- Enhance the relation with the help of online communication for sales, services and support. This gives to the customer the possibility to reach any desired department through a unique and convenient channel to him. The satisfaction

of the customer is improved by the real time dimension that such services offer. Customer service can be highly improved by the amount of knowledge that can be collected through the gathering of information during the purchase process. The knowledge base can also be shared easily between the diverse departments requiring it.

- Retain the customers by managing an efficient database and web analytics to reward loyal customers and anticipating futures needs and market research (Razvan, 2010).

3.2 Web 3.0

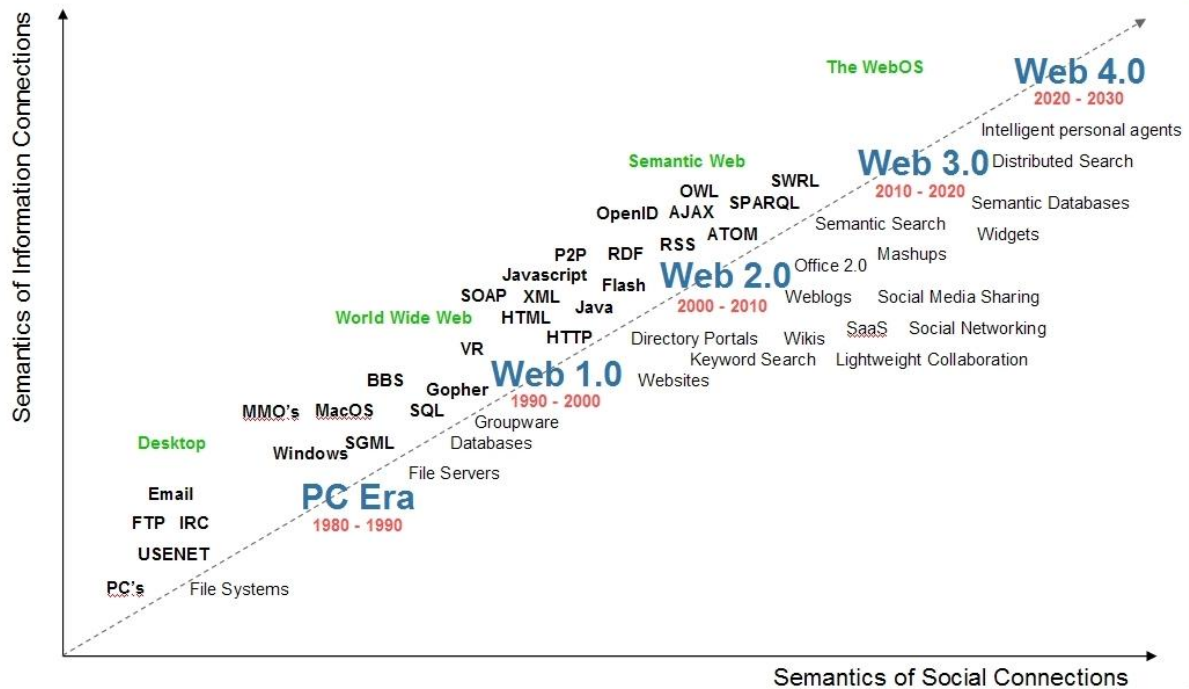


Exhibit 3-22 : How the WebOS Evolves?
<http://novaspivack.typepad.com/RadarNetworksTowardsAWebOS.jpg>

The definition of what the 3.0 revolution of Web is or will be is not yet fully delimited. Semantic web is often used as synonym of Web 3.0. So far Web 1.0 and 2.0 used mainly raw data but Web 3.0 will be partly about how all data are linked to each others. The basic information of a picture for example is the file size, name and number of pixel and resolution. With help of all technological tools cited previously it's now possible to know where the picture has been taken, the specific time when it has been taken, the person who took the picture where it has been uploaded and also who are the different persons or objects on this picture. This gives a tremendous flow of available information, the cross link between those data and the different information gathered out of it, shows what semantic Web will be. Functionality and usability of search engines will be improved drastically (O'Dell, 2010). Another trend that is rising about Web 3.0 is that it will be omnipresent, mobile, more multimedia, multi devices, knowledge based and almost omniscient. The convergence between the physical and virtual worlds is already under process through AR applications. It is believed that in the future all items will be connected to the web, and with multiplication of sensors and introduction of pervasive semantic web. All these

devices connected will have embedded artificial intelligence and should be able to collect and interpret surrounding information. The data collected could interfere with the existing knowledge accumulated to analyse the situation and react appropriately to the given context (Vasquez, *et al.*, 2006).

Personalisation will be another key success to the next Web. The quantity of information collected is getting colossal and it will keep on growing. One of the major issues nowadays is to find the relevant information. This is done through search engines using keywords and the result depends on algorithms and indexes created by these search engines. But even with help of these tools all the critical thinking and intelligence of humans are necessary to sort out the results. Any enquiry gives more than one million results (Strickland, 2008). Actual literature predicts that in the future internet will work for or instead of people. The relevance of a result will depend on your previous search, comments and links posted on various social media, places you have checked in, your personal connections and so on. Internet should be able to interpret all the factual and environmental parameters to give you the most suitable information. A new social dimension will appear as web will move from an information based system to a people based web. Today it's already very difficult to browse on internet anonymously, so in close future it will be almost not feasible. If this brings a lot of new opportunities and services to both users and companies, then special care will need to be addressed to keep privacy controls (Wharthon, 2011). This social way will suggest that companies will need even more than now to occupy a space on internet and fill any slot that might be vacant. If not then this space can be taken by the consumer and thus without full control on brand reputation being built on internet. Brand strategy implies to measure and listen what is said by the community. The social positioning and all backward information and actual metadata will build the future results of search engines. Once a reputation has been built it takes much more resources to reposition it rather than constructing it on a deliberate and proper way at first. Furthermore there is an ethical issue on flooding the web with fake consumer reports, getting links and recommendations from the most influential person on a given topic and all other similar techniques known as black hat marketing services (Segal, 2011).

Implication for companies is that they will not only need to produce content but also to define the context associated to this content to target their audience. This will allow databases to communicate with each other's and that is why cloud computing might be a real strength, because the one owning the data will also be able to build the appropriate language to exchange and process the content and thus get the most out of it. Marketing will face a new paradigm as it will need to be data based. Ontology issue will be addressed to manage raw data and knowledge databases. Data are used by consumers to make decisions and by marketers to persuade and help customers on the buying process. Up to now data are stored into silos. Within companies each department generates and uses its own databases. Data are stored on documents, spreadsheets, presentations and databases. Result of this knowledge management is that information are duplicated, spread out and sometimes not up to date. The semantic dimension of web 3.0 will help organisations to address this issue as all data will be linked and easily published in a structured way. Within this new dimension the new trend shouldn't be to just collect more data through the new analytical services that will be available. Sharing this information will be also crucial as the objective will not be to collect data about stakeholders but producing relevant data for the different stakeholders. Bringing pertinent content help to strengthen relationships among the diverse parties addressed (Brinker, 2010).

3.3 Social Media

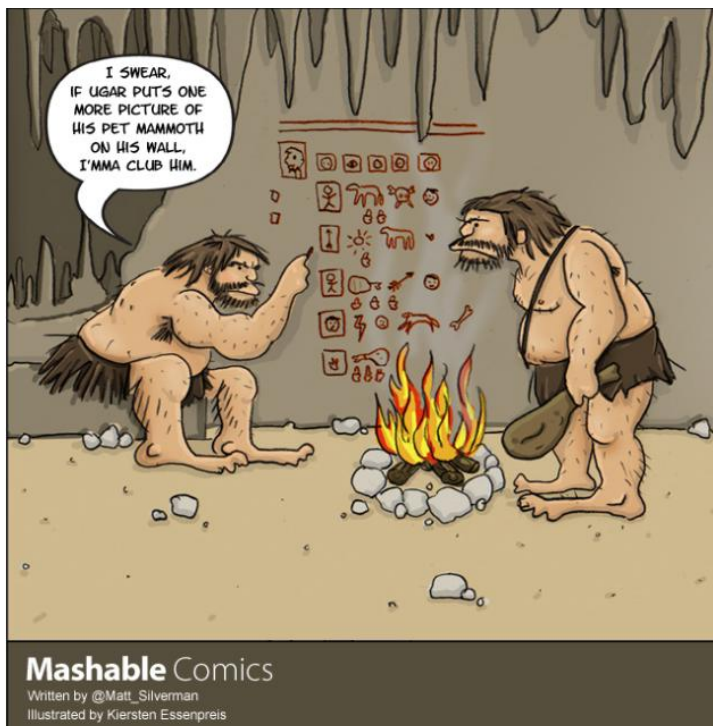


Exhibit 3-23: The earliest social network ever discovered.

<http://mashable.com/2011/07/10/top-mashable-comics/>

Social media is perceived as a powerful instrument by companies to enhance marketing and relationships with customers. Web 2.0 brought a disruptive innovation compare to the static Web 1.0 as it let users interact and publish content. This concept is well known as User Generated Content (UGC). Wikipedia is a great example on this, and thanks to the Crowdsourcing it is becoming a source of information as accurate as many other encyclopaedias. The first platform created where people could post public messages was USENET. This system has been created by two students of the University of North Carolina: Tom Truscott and Jim Ellis (O'Reilly, 2001). The major change with Web 2.0 is that now internet is wide spread into population and the 'generation Z' also called the 'net generation' are contributing significantly to this trend. Younger's are born into a digital world and they have no cultural or technological barriers to engage themselves into the online community. Out of this postulate, Kaplan and Haenlein proposed a definition for social media:

“Social Media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of User Generated Content” (Kaplan & Haenlein, 2010).

Cohen tried to differentiate social media and social networking as these two words are quite new into literature and industries. There is some confusion and these terms are often interchanged without full understanding of the real meaning of each one. Social media refers to the content created, broadcasted and shared over internet as well as platforms that gives possibilities to share experiences and to collaborate, whereas social network refers to tools and software used to connect to each other within a virtual community (Cohen, 2009).

Companies are challenged by the rapid change that have occurred during these last few years, to adapt their business model to the Buzz, through and around social media. Before, brands were mostly impacted by traditional media and with good public relations departments it was feasible to control and monitor their reputation. But now the reputation is created over a more powerful media than the ones they used to deal with, and the activists who got the most influence are the ones that they never use to hear directly from i.e., normal consumers. One of the biggest challenges out of it; is to try to manage something that occurs over internet, in an environment that is out of control and where regulations are still low. In fact reputation and ownership of brands have always been controlled by and belonged to the consumers, even if companies' marketing departments though to have it fully managed through diverse techniques. If companies want to take control of their brand over social media, special care needs to be addressed. Building a presence is fundamentally different than controlling the brand image as social media is about to build a quality relationship with consumers. Brands thus need to be proactive on the media and channels procured over internet. This includes going through active listening and monitoring, and above all, building a strategy (Booth & Matic, 2011), (Chung & Austria, 2010). Another issue to be faced when going on multiple social media channels is to have a non coherent activity, storytelling and communication through all these channels. The purpose of building relationships is to prevent and solve any ambiguity. “Whenever there is any doubt, there is no doubt” (Frankenheimer, 1998). Different channels can address different goals and reach

largest and diverse customer's categories, but the different messages should not be contradictory to avoid any confusion in people's mind that would be prejudicial to the brand. At the same time due to the interactive communication way, companies benefit from trust that is built through this channel by eliminating potential misunderstanding that occur in a one way channel. This can prevent also small communication issues to be transformed into a crisis. Compared to classical mass media, costs reduction can be drastic; also because the diffusion cost usually necessary in the past is now avoided. Time saved also makes social media much more effective (Kaplan & Haenlein, 2010).

From the consumer perspective, social media brings few evolutions and revolutions. Most of them are related to word-of-mouth (WOM) and third effect person that is studied later on this paper. Nevertheless one of the main differences brought by mass media and social media is matter of trustiness. Individuals are much more eager to believe in comments and reviews from a contact rather than any stranger when in a purchase process. Velocity and persistence over time of the available information bring added value of social media over traditional mass media. Information are delivered by users community on a time line frame that is not dependent as with mass media, on corporate products schedule or marketing policy. Once the information has been broadcasted on social media it's almost available at any time and for an unlimited time as it's saved. There is also a chronology that is built and that allows consumers to check the evolution over time of reviews (Dong-Hun, 2010). The content of social media is accessible to almost any web user and most of the time is free of charge. The only limit is web access policies from governments afraid that their population get thirst for more democracy. If there is any barrier of language then any message can be spread easily to a great number of people as the network is constituted on autonomous and deliberate choices. It gives an extra power to the classic word of mouth that is more local to a global dimension (Kwak, *et al.*, 2010), (Newman, 2003).

3.4 Word of Mouth Marketing



Exhibit 3-24: WOM Illustration.

<http://www.freshnetworks.com/blog/2010/04/assessing-the-impact-of-word-of-mouth-marketing-a-mckinsey-report/>

Word of mouth (WOM) or “heard” information passed person to person like news or rumours is not different from the elderly ways of communication and referrals, where Oral Tradition and Storytelling were the regular ways to bypass information and knowledge from generation to generation; but so far it has transformed the way of doing businesses worldwide.

One of the multiple definitions of Communication is “*a process in which participants create and share information with one another in order to reach a mutual understanding*” (Rogers, 1986). Messages, senders, receivers and vehicles, are considered to be the fundamental components of communication. The basic communication structure has not changed, nevertheless what have made a difference and have implied a transformation in how people and communities communicate nowadays, are the vehicles used to communicate and the power and impact those vehicles have to reach a great amount of people and deliver an accurate message. Storytelling and oral tradition most common transmit mediums were oral, face to face and written in texts, manuscripts, books, etc; afterwards some

important innovations like phone, radio and television, altered the way to reach individuals and communities, and became the main vehicles used by companies marketing and Public Relations (PR) departments to advertise and promote products and services (Dennis, *et al.*, 2008).

The revolution we are seeing nowadays with the introduction of Internet is that the Word of Mouth communication has been multiplied by millions, changing the conventional ways of creating marketing campaigns and PR by lowering the budget and contacting directly the consumers by going online (Scoble & Israel, 2006), (Meerman Scott, 2010).

3.4.1 Effect on company sales and growth

Word of Mouth is the main component to position brands and to guarantee the long term success of start-up companies. Word of Mouth principle is based in the Sales cycle of effective pull marketing tactics that influence consumers buying behaviour (see Exhibit 3-25).

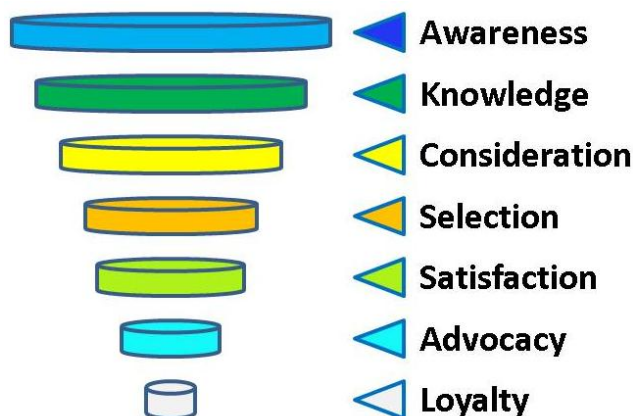


Exhibit 3-25: Customer Lifecycle.

<http://tpmmorse.wordpress.com/2009/11/30/thought-leadership/>

WOM has its pillars in finding and attract the interest of main product or service's Ambassadors in order to plant a seed that could generate the necessary Positive Buzz to spread the word and communicate relevant characteristics, data or intended message to all the target community, reaching the final objective of attracting new customers and retaining the actual ones (Morse, 2009).

WOM has been related mainly to Business to Consumers (B2C) but there is still a lot to be written and reviewed on WOM in Business to Business (B2B), as it has also a huge potential to positive impact B2B sales lead generation, through the use of the Word of Mouth Process (WOMP) to take advantage of the whole WOM virtues (Cullinane, 2006).

WOM strategies and tactics vary from participative, offline and online among others and the selection of the right strategy will depend on each company marketing plan including its target audience, product or service traits and long term ambitions (Agent Wildfire, 2011). It is not the same a WOM campaign designed for a mass product or than another for exclusive ones; i.e. High uniqueness consumers trend to recommend privately instead of publicly. Some luxury brands, high tech companies or new products launches campaigns would prefer to use the right “elite influencers” to confidentially recommend its products, instead of originating a massive message for all audiences. Spread the communication in exclusive circles is part of the strategy to originate buzz in key listeners, using for example referral WOM or restricted advisory panels, and reach through them the precise traced objectives (Cheema & Kaikati, 2010).

Companies aware of the power of WOM, have the potential to grow sales exponentially, increase market share and efficiently gain more new customers. Studies have shown that WOM is the main reason behind 20 to 50 % of buying choice mainly related to expensive products or services consumption (Bughin, *et al.*, 2010). Interpersonal references are more effective than PR, advertisement or any other marketer controlled source of information; besides due to its reliability and flexibility WOM has a unique ability to influence consumer decisions (Breazeale, 2009).

3.4.2 Word of Mouth and traditional marketing

Word of Mouth or Word of Mouse Marketing start point is to generate a strong message with relevant content capable to originate buzz and attract people to listen, read, watch, and above all *to share* what is being told. The message must be interesting, funny, valuable; a magnet to get people talking (Meerman Scott, 2010).

Nowadays, common individuals are exposed to a huge amount of daily advertisements from different kind of media like TV, magazines, newspapers and street banners; nevertheless, recent studies have found that 78% of global consumers trust and believe other people's recommendations more than any other conventional medium (Ainsworth, 2007). Consumers are prone to find information –of virtually everything- by seeking out of others like themselves. However, conventional media is still a useful resource to implant an idea of the product or service on people's minds, and then when they need it, they could ask to their contacts or look for more information on the web in order to support a purchase decision. Studies have also shown that 90% of WOM take place offline, i.e. face to face or on the phone and nearly a quarter of it, is motivated by advertisement (Keller & Berry, 2006).

WOM referrals to gain new customers are also more effective than traditional marketing in terms of new customers' long term loyalty to a product or service. Moreover, it is important to differentiate between Organic WOM and Paid WOM. The first one is originated by a remarkable message and is passed from one source to another spontaneously, while Paid WOM or Fertilized WOM is an incentive strategy originated from the company in order to pay some people or influencers to help to diffuse the message. Companies need to take in account that fertilized WOM may be substantially less effective than organic WOM, mainly if people know that the company is paying to get the message circulating (Trusov, *et al.*, 2009).

Brand strength, product and service quality, consumer experience, traditional media and consumer generated media (CGM) are the starting point to implant the seed and originate the appropriate WOM to spread the message. Now, as having the adequate message or seed, it is key to have the right ambassadors or influencers who will then help to multiply it (Meerman Scott, 2010).

3.4.3 Word of Mouth influencers

Also known as ambassadors, spreaders, alphas, mavens, advocates or seeders among others, are people with a “*greater than average reach or impact through word of mouth in a relevant marketplace*” (WOMMA, 2010). Most of them are very active online through blogs or social media. Identify the right influencers and establish a loyal relationship with them, is one of the most important tasks of any marketing department in order to generate and succeed in online marketing campaigns based on Word of Mouth. Many companies could use the help of WOM agencies in order to find and retain such Ambassadors to constantly contribute with the firm product and services success. Other possible ways to find them is to use online tools like: Technorati, Delicious, Radian6, SocialMention; or to create filters in TweetDeck and HootSuite, and then design customized campaigns to help the company retain, involve and track the spread behaviour of identified influencers (Ducharme, 2011).

WOM multiplies through influencers and could be positive, neutral or negative. A successful word of mouth campaign helps to spread a positive message about a brand or product. Two out of three parts of WOM is positive versus 8% negative (Keller & Berry, 2006). Positive WOM is supported on recommendations based on personal experiences with the product or service, while neutral WOM consists mainly on mentioning the characteristics of the product and negative WOM is mostly based on complaints and criticism (Cheema & Kaikati, 2010).

3.5 Viral Marketing

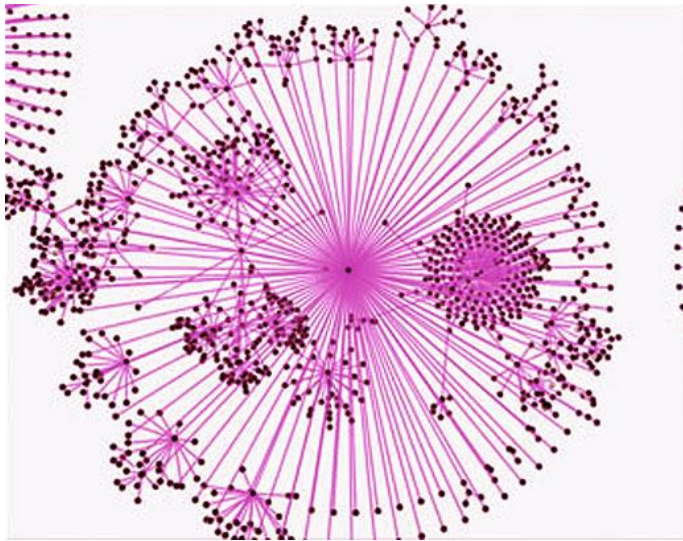


Exhibit 3-26: Viral Marketing Illustration.

<http://silvertounge.net/category/marketing/viral-marketing/>

“Traditional media takes weeks to build brand awareness and months to build preference. The Internet can make your brand famous literally overnight” (Gordon, 2010).

Viral Marketing or Buzz Marketing consists on creating multimedia messages, emails or any marketing campaign that are *“so infectious that customers will want to pass it along to their friends”* (Kotler & Armstrong, 2010). The message is then spread like an epidemic, behaving like a virus through the social and online spaces (Gladwell, 2000). Andrew Walmsley, i-level co-founder, explained Viral Marketing as *“advertising at its most Darwinian: In other words, the ads that are good enough to be forwarded survive, and those that aren’t simple die out”* (Nutley, 2004).

But viral is not only associated to marketing and promotion of companies’ products, it also relates to news, politics, sports and other major events that are quickly spread over online platforms such as YouTube, Twitter, Facebook or mobile messages systems, due to its particular trait to amuse and attract a huge amount of people. For example the recent Bin Laden death, Egypt revolution or the Japan tsunami news where first passed on social networking sites such as Twitter, Facebook or My space; originating a social movement communication and message dissemination (Pryor, 2011).

Viral Marketing is considered as one type of WOM and one of the most effective ways to build brand awareness and capture the attention of current and potential customers (Meerman Scott, 2010). Before internet, companies were using traditional marketing to create advertisements with the hope to impact a particular audience and make them talk about their products. Now companies try to build viral effects by producing creative videos and impacting storytelling material and publish them on their websites or on social sites to take them massive. Nowadays marketers need to “*Let go*” their message to the virtual world without forcing the comments, reactions and effect of their online campaigns, they will speak for themselves and show at the end, how effective was the story told on the social platforms (Sadowsky, 2011).

In our time where people have access to numerous communication media and countless advertisements messages, it is becoming more valuable to have the option to choose and filter the kind of messages one is interested in (Dăniasă, *et al.*, 2010). People are becoming less fascinated by traditional marketing messages and in some grade are losing trust in what companies are transmitted through this kind of communication, as they perceive lack of creativity or deceive advertising, and are more inclined to trust better their social cycles, and messages that come from friends or brand unrelated contacts (Gil-Or, 2010).

Companies are investing in Viral Marketing campaigns in an effort to take the marketing mix to the next level and harness all benefits of internet, social networks, mobile connectivity and in general the online marketplace. Viral Marketing has the ability to reduce the costs of product promotion and accelerate the adoption pace (Dăniasă, *et al.*, 2010). A study made by the media research firm PQ Media, shows that companies’ expenditures on WOM marketing rose from US\$76 million in 2001 to US\$1,543 million in 2008 and is forecasted to reach over US\$3 billion annually by 2013 (PQ Media, 2009).

To build a successful viral campaign is not an easy task. Most companies fail when they have this as an objective as no one can control what material will become viral and what not. Commonly the most thriving viral messages, have been brand free material with unique content that touch a deep emotion, that have been made with

the intention to amuse close friends, and without control, have become viral (Meerman Scott, 2010).

The adoption of a new product could also be increased by amplifying the peer to peer promotion, adding passive and active viral features to the product itself; “*Simply adding a ‘Share’ button to your product can increase peer-to-peer influence over product purchase by 400%*” (Aral & Walker, 2011). Viral product design has been shown to be up to 10 times as effective at increasing adoption as traditional banner ads and up to twice as effective as e-mail campaigns”.

Based on the big wave and revolution social networking has created to viral marketing campaigns, many companies also opt to hire viral marketing firms that have built an important online panel of consumers and then follow some standard procedures to promote their products and disseminate their messages. Some agencies offering such services are e.g. BzzAgentTM, SheSpeaksTM, Tremor and Vocalpoint (Toubia, Stephen, & Freud, 2009).

The traditional procedure to follow by those companies to disseminate the message is:

- Create a panel of consumers and participants, or use existing ones
- Fill out an enrolment survey to help measure their disposition towards the product or service
- Give free samples of the product in order they can experience it
- After some weeks they are invited to evaluate the product
- Offer incentives in order they can start sharing their experiences into Blogs, social networking sites and in their daily offline communication, among others
- To report back their WOM activities in a regular basis

Another reason why companies hire the viral marketing services of these firms is that they offer a methodology to help track and measure WOM activities through a rigorous control of campaign objectives and the analysis of the reports sent by the

online panel. Nevertheless the measurement of the efficacy of viral campaigns is still a subject of study (Toubia, *et al.*, 2009).

There is however a lot more to be investigated, regarding the main reasons why people share content on their blogs, or social pages; but some studies have shown that the power of the message in regards of hilarity, recommendation from a friend or competition related are the most kind to be spread (Moffitt, 2007). Connecting with people emotions through personal experience could also guarantee the message propagation; a good example is the *Guerrilla Marketing*, a type of viral marketing capable to create a big impact in the audiences it targets, by making people connect with the product by recreating its characteristics in a direct and simple way (Elliott, 2010).

3.6 R.O.I of Social Media and Viral Marketing

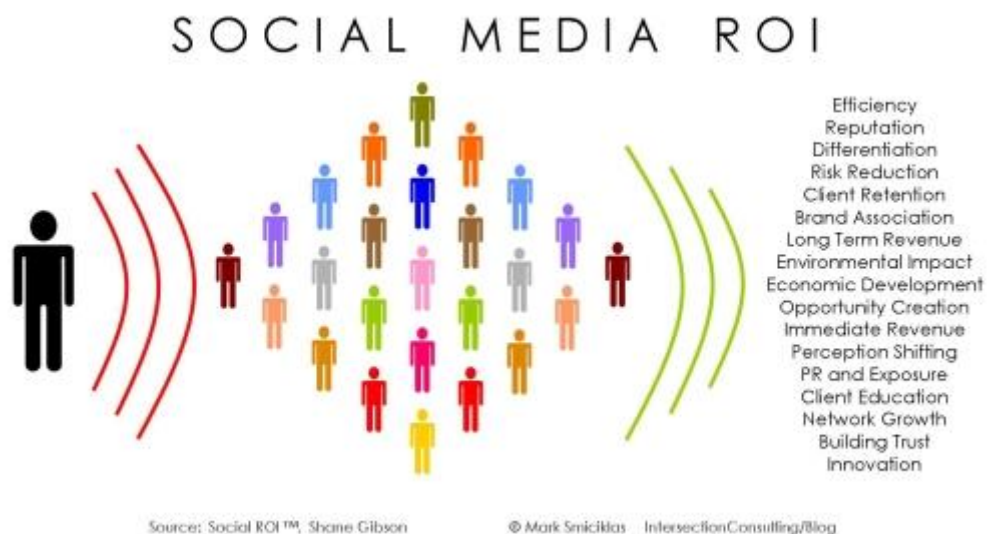


Exhibit 3-27: Social Media ROI.

<http://www.intersectionconsulting.com/2009/social-media-roi/>

From a purely financial perspective, one of the primary reasons to operate business is to generate income for the benefit of the common stockholders and thus the effectiveness of viral marketing and online company activities, as any others resources and assets used within a company, need to be measured. Return On Investment (ROI) represent a useful ratio to conduct this task but is still a marketing

challenge to determinate it. The drawback is the difficulty to evaluate this ratio due to the specificity of viral marketing, on first sight it seems straight forward but reality and previous experiences shows the complexity to get a reliable value. Viral Marketing is the last marketing trend, small and big brands launch videos on YouTube and other social media sites. Their big hope is that their campaign become a buzz, goes viral and hit the largest number of potential consumers. Video and media shared with peers, build awareness of the brand but the aim of a marketing campaign it not just about creating advocates or preachers of the brand. At one stage the campaign needs to turn into market share and effect on the bottom line of such campaign need to be measured (Ferguson, 2008).

There are various formulas to calculate and quantify ROI, in simple terms ROI is the existing connection among resources spent on a task or project and the turnover of that investment (Pullen, 2011):

$$\text{ROI (\%)} = [(\text{Return} - \text{Investment}) / \text{Investment}] * 100 (\%)$$

One of the challenges faced by marketing divisions is the lack of systematic tools to help on the measurement of quantitative and qualitative results of their campaigns and be able to present the expected results at the executive level, in terms of sales and units sold, revenue and cost; and at the same time optimize their Go to market campaigns (Toubia, *et al.*, 2009).

Most CEOs would not care about web metrics like re-tweets, comments, mentions, likes and followers among others; they would rather expect the hard evidence: “*show me the ROI on Social Media Marketing and I will give you the budget*” (Bullas, 2009). Marketers should then set up, measure and follow specific KPIs; establish core management goals and periodically evaluate business drivers to achieve the desire results; in other words prepare a strategic marketing plan (Bartholomew, 2009).

A number of steps to be followed in order to measure ROI could be summarized as:

Establish clear goals: Marketing could impact 3 main goals into the company mission: Brand awareness, customer retention and lead generation. To know and separate marketing campaigns within these three main goals could facilitate the

posterior measurement of results for accountability reasons and executive reports (Nichole & HootSuite, 2011).

Set objectives, tactics and KPIs: For each goal, the marketing department should clearly state tactics like where to publish content and the frequency. Some of the preferred online sites where to publish content are Blogging, Twitter, Facebook, LinkedIn and You Tube due to their high traffic. Other options are to publish links and banners on the social media websites, search engines like Google or Bing, and other targeted websites (Snapp, 2009).

In regards KPIs, there are different kinds of available metrics to measure and analyse the effectiveness of the online marketing plan.

Based on the goal to be measured:

- *Brand awareness:* Cost per Site Visit, Cost per Engagement, Cost per Impression and Cost per Click among others.
- *Customer retention:* Customer retention rates, Average Revenue per Purchase, Average Units per Purchase, Average Transactions per Customer, Life Time Value of a Customer and others.
- *Lead Generation:* Cost per Lead, Cost per Subscriber, Cost per Sale, Average Revenue per Sale, Average Units per Sale and Conversion Rate of Leads, among others.

Or based on the site where the content is published, some examples are:

- *Facebook engagement:* New Page likes, posted link clicks, site visits and comments.
- *Twitter engagement:* New followers, direct messages, re-tweets and site visits.
- *Banners, Ads and links:* Pay per click, cost per click, cost per action or acquisition and pay per share (Nichole & HootSuite, 2011).

Measure partial and final results: To frequently measure the campaign online behaviour will help to optimize the final results by making strategic decisions on time. But some of these metrics like awareness and offline WOM are related to soft ROI or intangible results that directly affect company brand value, perception and reputation

at long term rather than short term metrics. Soft ROI is very difficult to calculate and more subtle to measure but not for this reason is less valuable to invest in (Paul, 2009).

Social media ROI measurement could be divided in 5 categories: Exposure, influence, engagement, action and retain:

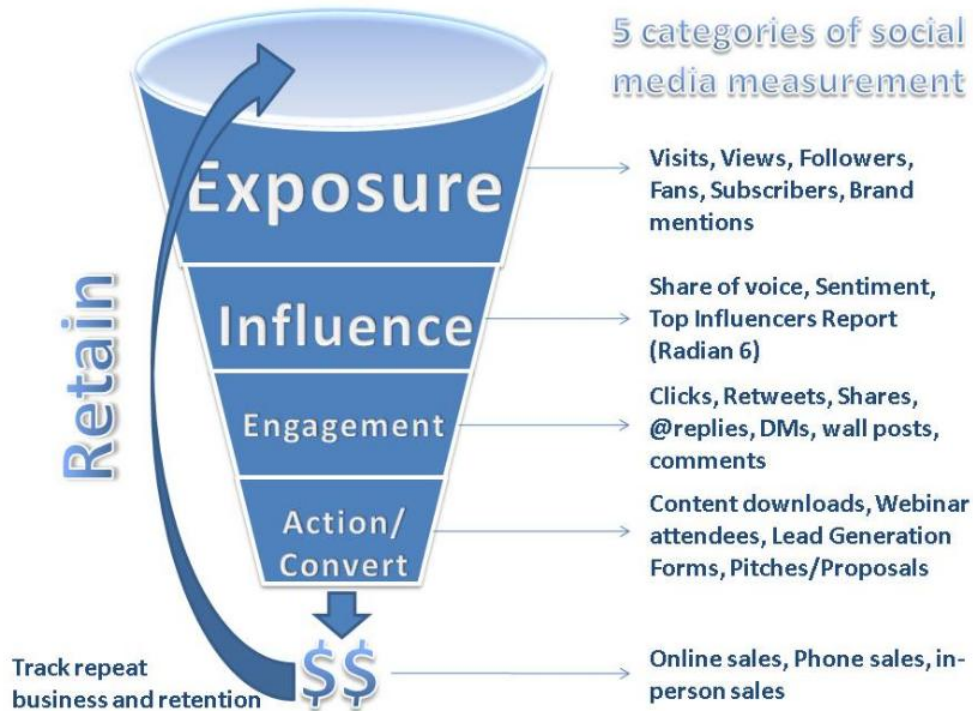


Exhibit 3-28: 5 categories of social media measurement.
<http://fullfrontalroi.com/2010/02/5-categories-of-social-media-measurement/>

The first part of the funnel is related mainly to soft ROI or Brand awareness while the last part, could help marketers to measure hard ROI and deliver tangible results at executive level, by producing leads or prospects that could then go through the normal sales process of the company (Nichole, 2010).

But in order to convert all online marketing efforts in Leads it is important to introduce comprehensible and simple “Call to actions”, to capture potential and current customers attention to go to the next level and end in effective sales. Most call to actions are related to the Lead redirection to the company webpage or a coding landing page, where they can obtain necessary additional product information, fill out

contact request forms, contact a sales representative or directly make an online purchase (Solis, 2010).

Calculate ROI and present results: ROI metrics are possible to calculate thanks to web analytics tools and other available business intelligence software that facilitates this work; nevertheless there are still a large number of limitations, like the difficulty to integrate data from different web and social media sites to calculate single variables and present comprehensive reports. Analytical tools provide metrics based on specific research approaches that are applicable to calculate social business ROI: Direct Linkage, Staff Cost Reduction, Correlation modelling and econometrics, exposed and not exposed, and Integrated cross-platform research (Bartholomew, 2009).

However current limitations, below is a list of some of the most used analytical tools for tracking online results (Bullas, 2009):

- *Free applications:* Google alerts and Google analytics, Technorati, Jodange, Trendrr, Lexicon, Monitter, Tweetburner and Twendz.
- *Paid applications:* TruCast, HootSuit, Radian6, Cision, Techrigy and Collective Intellect.

Optimize current and future campaigns: The advantage with the online sources is the availability of web metrics in real time that allow marketers to make instant decisions and optimize current campaigns. While measure the behaviour and success of their content in the online space, marketers could also introduce post sales tactics to retain current customers or offer additional services to increase up and cross sales opportunities. Finally, to avoid the failure of ROI measurement, companies should understand that behind every online marketing ROI calculation, a suitable customizable plan with clear goals, SMART objectives (Specific, Measurable, Attainable, Relevant, Time-bound) and understandable KPIs, must be first in place (Gattiker, 2009).

3.7 Sociological aspect

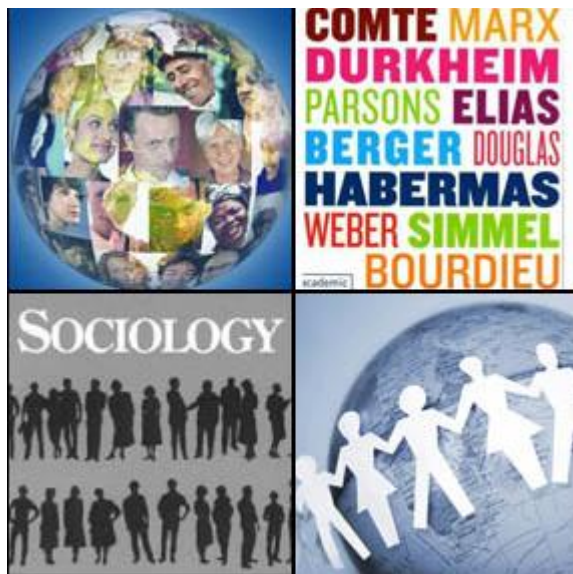


Exhibit 3-29: Sociology illustration.
<http://www.grad.sunysb.edu/brochure/sociology/>

Sociology is a powerful discipline to help understand social media and social networking, as this science is associated to the relationship between individuals and their relationship with society. We live in a world where rationality is taking much and much place but by the end we are still mainly driven by emotions, and thus even if everyone think that they are different from others, psychologist and sociologist, got models on population and know how to categorise and influence people behaviours. Institutional media such as press are called the fourth power, because of the influence they have on executive, legislative and judicial branches that represent separation of power. Internet and social media becomes a serious client in competition with the economic system to become the fifth power because of the high influence it's getting over the actual society (Giddens, 2009). From the recent events and the circumstances that developed the London riots, protests and revolutions in Egypt, Libya, Syria and Tunisia showed. Analysts say that most of the communication during the London riots went through Blackberry Messaging service rather than classic Twitter messages. Blackberry represents a more secure way to communicate, but the important thing to notice is the ability offered to crowd sourcing through this new channel to communicate live and efficiently. The consequence of this is that now governments are even more willing to monitor and in certain cases

control or close social media channels to prevent such manifestations. This shows that social media are deeply anchored into actual civilization and can show the most up to date trend of population's behaviours (Edington, 2011), (Butcher, 2011). If population's conduct and opinion can be monitored by governments for security or other purposes; then the same could be done by brands and marketers to offer to customers their last expectation. Furthermore sociology can also explain the purpose of this paper i.e. to understand what are the reasons for customers to diffuse your message without any tangible incentives?

To comprehend this, it is necessary to realize first why people are socializing, connecting and communicating through the social network. This kind of behaviour comes naturally for the digital native generation. For this age group everything goes to digital. As an example in a recent survey, 75% of students say that they wouldn't be able to study without the help of technology, 98% of them own a digital device, and tablets are supposed to be replacing school books soon. More surprising, students using twitter to increase engagement during classes have better grades (Education Database Online, 2011). For this generation, digital life is an ordinary extension of their natural life, but social media is also deeply installed into older generations. Into the actual work force there are Baby boomers born between 1945 and 1964, then the gen-X from 1965 and 1980, the gen-Y born between 1981 and 1990 and finally the gen-Z born after 1990. Usually the term digital native includes both gen-Y and gen-Z (Yu & Miller, 2005). Today, even generations that were not born with internet know-how are big users of these technologies and understand the profit they can gain out of the digital tools to maintain and develop their networks. These networks facilitate people to promote and diffuse their image. Obviously this image is often consciously or unconsciously distorted mostly on a positive way. This is common on any social interaction and is not dependant on the channel of communication. People are willing to manage the image that others perceive of themselves. Some people bias this perception consciously to achieve a goal or for necessity, while some others will do it unconsciously because their own perception is already biased (Goffman, 1959). From a more ethical and philosophical way, to build a sustainable respectable reputation rely on the old classical model: "*The way to gain*

a good reputation is to endeavour to be what you desire to appear” (Socrates, 469-399 BC).

If being a proactive networker is useful to build network and reputation, then as suggested by Pierre Bourdieu this situation allows to build capitals. From his notion, capital shouldn't be seen only as financial capital but also as cultural and social capital, nevertheless the purpose of those is at the end to transform it into economical capital. If cultural and social capital are inevitably linked to the economical capital and profit on each of them is compensated by cost on others, in the long term the overall value created is greater. The social world is made of all past events and thus the notion of capital is made from all past events plus their effects.

Cultural capital is subdivided into three states, embodied, objectified and institutionalised.

- The embodied state refers to the culture acquired through the social environment and social class. This acquisition is made over time and requires personal effort and investment. It's continually created and reproduced through generations but effort is necessary as it cannot be directly given and part of this transmission is made unconsciously. This type of transmission is mainly inherited and thus hidden, becoming a great strategy for upper class families to protect their wealth and preserve their influences as this cannot be controlled.
- The Objectified state refers to material goods such as paintings, writings and other forms of arts or engineering objects. The material property, assets and economical capital associated to it can be directly transmitted but to gain cultural capital out of it then the embodied social capital is needed to fully understand these goods and get the potential benefit out of it. The upper class such as executives or engineers have also possibilities to gain profit from the use of such capital e.g., production machines, because they have the cultural capital and knowledge to use them and to get profit from this form of capital. It implies that the collective strength for owners of such cultural capital will grow.

- The Institutionalized state refers to the cultural capital sanctioned by an academic qualification. It's all about the difference between an autodidact and a person that receive the academic qualification which is legally guaranteed. The academic certification attests the value of a person relative to a specific culture. This facilitates the transformation of the culture capital into economic capital by giving to its owner a value on the labour market which establishes a direct conversion rate. But this exchange rate is fluctuant as any other open market, it can change mainly because of a sector economical situation or by inflation in qualification awarded.

Social capital is associated to the resources linked to a network, which means all resources and collective capital available within a group. This network can be instituted by affiliation to a family, class or can be more informal and rely on people with whom there is material or symbolic exchange. This notion gives a direct link between the social capital owned by a member and both the size of its network and the capital available for each agent of this network. To create and maintain this network, personal implication is necessary to reaffirm proximity between the members and the potential benefit depends on the degree of solidarity within the network. It's the result of a personal strategy to establish social relationships which can potentially produce benefit on short or long term. Material or non material exchange is important to acknowledge mutual recognition within an established network. A noticeable exception is people with already great accumulated capital, those people are known by much more people than the ones they know and people will tend to try to connect to them. From their social background they have the soft skill knowledge to make their social connection on a productive way. Nobility's title is an example of social capital that can bring great opportunity. This explains partly how the potential capital is proportional to the accumulated one (Bourdieu, 1986), (Bourdieu & Wacquant, 1992).

This concept makes social capital an ambiguous concept where social network is a personal resource and a collective asset. The notion of a network as a resource is old Hobbes declared, "To have friends, is power" (Hobbes, 1651). Renan developed also this concept in a famous essay "what is a Nation" from which he delivered a lecture at

the Sorbonne (Renan, 1882). Bourdieu used some concepts developed by Renan to make his own research, obviously Bourdieu's research was oriented as one of his main topics was the schism between each social class and the way the high class reproduce and protect their interests. This explains why from his point of view the time involved into developing social networks and maintaining social relations has to be considered as a specific social work where time, money and specific skills need to be invested. He gives a utility view of the social relation. Even if at that time social networking services such as Facebook or LinkedIn didn't exist, those are only tools and we can make easily a parallel between his theory and actual social networking through internet. As he explained, people with great reputation don't need to work as hard as others to gain benefit and transform their social capital. They are the actual node on the network, people that -as seen with six degree of separation theory- are able to connect you to many other members and networks. Nevertheless from his theory even if volume of network is not as important as the strength of the interaction that occurs between members, the cultural capital is the most important and necessary in order to develop social capital. For Héran, the economic, cultural and social capitals are too much linked to each other to differentiate the importance in between them and to be able to give an autonomous dimension to social capital (Héran, 1988). Lin explained that for two persons with equivalent education and cultural capital, the social capital dimension was more important than the human capital for financial wealth achievement (Lin, 2001).

During the 90's there was a big panic about the decline in social connectivity, some technophobes said that phones, radio and television were preventing people from community engagement (Putnam, 2000). Studies showed that from 1985 to 2004 strong relation links went down by 28% in US and that most of social exchange was done among neighbours and not any more within close friends. Internet was then accused to increase loneliness, the decline in social involvement and to engender a generation of closed and isolated asocial persons only comfortable in front of a computer (Fisher, 2009), (McPherson, *et al.*, 2006). But then another study made over 5 years showed that from 2002 and 2007 numbers of friendships links for American adults from 25 to 74 years old increased (Wang & Wellman, 2010). Online social networks changed the group structure. It moved from mainly homogenous

structured and unified to more heterogeneous, highly specialized and link between members were getting wicker. The big trend brought by Facebook, to make friends over online social network, established a new way of constituting personal networks. The new network structure uses more the bridging techniques, rather than the human bonding, i.e. these networks are used to build new connections rather than to reinforce the actual link of our personal network (Steinfeld, *et al.*, 2008). The strength of the link on those networks can also be questioned by the theory of the anthropologist Rubin Dunbar and the limit he established. From the size of primate neocortex, the average volume for a manageable network is around 150 (Dunbar, 1993). Nowadays there are people with over 1000 friends on Facebook and the actual system limit is 5000 friends, but on twitter and Google+, there is no limit on people that can follow you or add you up into their circles (Taylor c. , 2011).

So far we have seen that online social networks allow individuals to develop new groups, interact with more people and also to brand themselves and control their reputation. The next question will be to know if this gives possibilities for individuals to reinvent themselves or change their own perception.

Internet, Social media and interpersonal communication development had a repercussion on individual identity and relational structures. The heterogeneity of the different personal social networks gives the opportunity to individuals to handle their ambivalent personality without having a too strong cohesion and transparency, appearing in networks that could have individuals facing open contradictions (Bidart & Lavenu, 2005). At first studies on internet stated that online social network was encouraging weak ties and thus social diversity by giving possibilities to people to brand themselves differently on any different network. This allowed people to have a more flexible multiple personality, to play with their image and reputation and could even give possibilities to mislead others and manipulate their own information (Ehrenberg, *et al.*, 2008). Internet would be the place where it's easy to act and where we can look differently from what we really are, it's a more comfortable and less demanding place to be. This could explain the high popularity of this media within the teenager population (Livingstone & Haddon, 2008). The use of internet and mobile phones by teenagers goes way beyond the simple technical usage. They help them to construct their own identity and facilitate to maintain a boundary between the

familial and the friends social environment (Kredens & Fontar, 2010). Before Facebook was launched and became so popular, the other trendy social network was Second Life. In this virtual world, people used avatars to depict themselves, but now this time is over. With the emergence of the new social networking sites and picture sharing websites, then there is a renewal of the personality on internet. It's not anymore possible to hide our real personality considering it had been possible. Even if people were able to hide or modify their physical characteristics, it was difficult to hide their real social belonging. Through verbal and even more through writing exchange it's easy to determine the social capital of someone. Indications are given through the syntax, vocabulary, cultural references or knowledge of specific communication tools such as smiley and SMS abbreviations. Now it's really difficult to dissociate real and digital life, nowadays through social network everyone is subject to friends, family and colleague's opinion. Online networks can show so much of someone personality that it's quite common for companies to look for information about job candidates over internet (Granjon & Denouël, 2010), (Mercklé, 2011). People that are more active on social networks get more connections as it could be guessed. But being active is not just about having private communications, it implies also to give personal information, share pictures and talk about personal tastes and preferences. People who bring down their privacy settings also increase their network at a higher rate and have stronger ties. Then personal preferences tend to change with the different interactions induced by the one posted, there is a cross cultural subjectivity occurring. The interesting part of this is that this cross exchange doesn't alienate the personal cultural diversity and this diversity support bridging without preventing human bonding. But if this diversity is manifested, most of the exchanges are made about common place preferences, on topics that are mostly consensual and with universal value (Casilli & Turbaro, 2010). From this we can conclude that social media doesn't disrupt the usual way to deal in-betweens, self expression and social capital accumulation (Erickson, 1996), (Mercklé, 2011).

3.8 Literature review summary

The aim of this paper is to find the intangible incentives for people to diffuse commercial messages. The Web 1.0 was about connecting people but past events show that people start to understand this potential feature and adapt to it, with the appearance of the Web 2.0 and all the new tools associated to it. To understand people behaviours it was important to understand the new technologies that are offered to them and even more critical to understand what is the usage they are doing of this technology.

The long tail for example is not something that has been designed specifically for consumers but it's the opportunity offered by the popularity and integration of the Web into the population and the usage that has been done of it, that allowed this trend to be studied and used on a profitable way.

Some people have been passionate about the six degree of separation, showing that with a connected device it is possible to reach and communicate with almost anyone and by extension, have access to a broader source of knowledge and products. Once social media was established widely within the population, marketers and businesses had no other choice than to adapt their strategy to this new sociological trend to build or keep competitive advantage. They adapted the 'old' WOM Marketing theory to change imposed by the social web, to design new viral marketing campaigns that correspond to the new standard. The omniscience of mobiles in people's life was a great opportunity if not a dream for marketers, they had new tools to follow the pattern of consumers, and those consumers are happy to share their geolocation. Of course consumers don't share this information deliberately but applications and services offered to them; represent a great advantage compared to the constraint of having the location tracked. Because of the multiple devices used to access internet and the myriad of ways to use it, marketers needed also to build analytical tools to track consumers' new behaviours and to offer products and services adapted to them. Finally to be a sustainable company it is necessary to generate profit and also to find new ways to calculate ROI because of the specific nature of social media and the popularity of these tools, especially Social Networks.

3.9 Hypotheses

Out of this broad literature review on all aspects of Social Media and Viral Marketing, it seems obvious that social aspect is one of the major reasons to explain such popularity. It became apparent that these tools coordinated with social networks, are great to stay in touch with contacts: relatives, friends, peers, colleges, etc. Humans need social relations to survive, exist, make commerce and business and thus group belonging is important. The need of this social interactivity is proved by the importance and omnipresence of online social networking. Some people like to speak about personal things or insights, for some others it might be easier to simply forward tweets, existing news or commercials, to show their presence on the web. Those traits help to bring the first hypothesis of this project.

H1: Message diffusion helps to sustain group affiliation.

Being part of a community is important but feeling central and play a role within this community can be a major issue for people who like to feel others attention on them, or want to play a major role and influential position on their relations. And a way for them to affirm their leadership within a group is to post to occupy a space. From this point, I setup a second hypothesis.

H2: Diffusing a message allows individual to appear as a node/broker in a network and to strengthen ties.

Then the last level of the theory would be to have people with enough comprehension of the surrounding world and society to understand that building a presence and reputation on the web, could help them to expand their social capital and then to achieve personal goals out of their network or just to insure their prosperity. This assumption leads to the third hypothesis.

H3: Being proactive within a network empower social capital expansion.

4 Results, Analysis and interpretation

4.1 Data sample and techniques

The choice of the snowball sampling has been made to conduct this survey. These techniques seemed to be the most efficient and relevant in the given context. The first reason was mainly due to financial and time resources limitation. The second one was that the population needed for the survey, was population using social media and social networks as they are the more likely to be the one targeted by marketers for viral marketing. Subsequently it wouldn't have made more sense to take a complete random sample of the population, and thus a non-probability sampling has been used.

When using quantitative data, the sample size is important in order to have reliable and exploitable figures. The strategy chosen to contact the maximum number of people in a shorten period of time, was to contact potential respondents mostly through Facebook, Google +, LinkedIn and Twitter. A public post had been set up and all the connections of my network had been contacted directly also, to ask them to fill in it the survey and to ask their own contacts to do so as well (see Appendix1: Web based survey covering letter).

The population using these tools cannot be counted exactly, but can be assimilated as large. On a statistical point of view to calculate error, once the population is over 20.000 individuals, it doesn't make much difference. The confidence level on a survey is supposed to be at least 95%, and considering that the survey got 277 complete answers, this gives a confidence interval of 5.8%.

The data collection took place between the 13th and the 17th of September 2011. An e-survey (see Appendix2: Web based Survey Questionnaire) has been conducted to collect the necessary data. It gives the advantage to let people answer the survey at their own leisure, and to overcome time differences issues with respondents from other continents. Furthermore this feature allows also imposing some constraint, as the respondents had to answer all question to validate the survey. A deliberate choice also has been made, to keep it short and simple so that respondents don't get bored or discouraged by the length of the survey and then get a higher probability of

having enough complete answers to be able to handle a further relevant analysis. The last choice made was to don't use open questions in order to make easier the analysis for researcher, and insure also a higher response rate as sometimes people don't like to answer this type of questions. Having only 'thick box' questions was time saving for respondents.

Finally on an ethical point of view to assure confidentiality of the respondents, no name either email address has been asked on the survey. Respondents have been also informed that the purpose of this survey was for academic use.

4.2 Limitation

The first limitation of the results is the diversity of the sample (see Appendix3: Web based Survey Results). From the answers, we have a good distribution in the Gender but then between the different types of population, the usual mix is not respected. People who answered were in majority from the gen-X, European with a master degree and working as managers. This shows limitation in snowball techniques having reached people through direct contact, as we tend to social interact with people with similar background and culture.

As there was only one respondent from gen-Z and only one previous to baby-boomer generation, they have been both included into the respective nearest generation. For precise and direct comparison, when the number of respondents was too low in a specific category, then this category has been intentionally removed in order not to bias much potential results.

A typical five level Likert item questions have been used to test the different hypotheses. One of the limitations with this tool is that respondents tend to avoid extreme responses, resulting in higher Mean score. There is also some acquiescence bias that favour respondents behaviour to agree with the statement presented (Dawes, 2008).

4.3 Global data analysis

The first part of the survey was composed of 9 general questions to gather information about the respondents profile such as gender, age education and use of social networks. The second part was made of 11 Likert item questions to verify the 3 hypotheses.

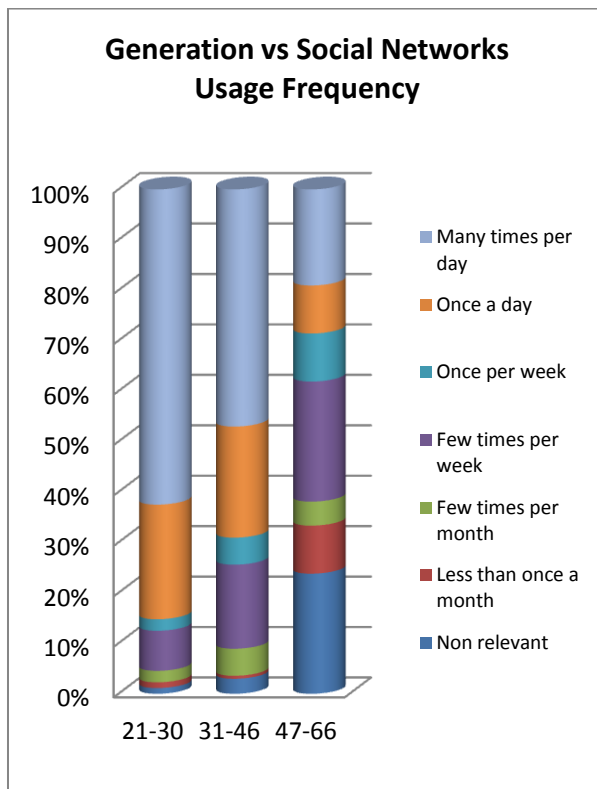


Exhibit 4-1: Generation vs Social Networks Usage Frequency.
Source: Author

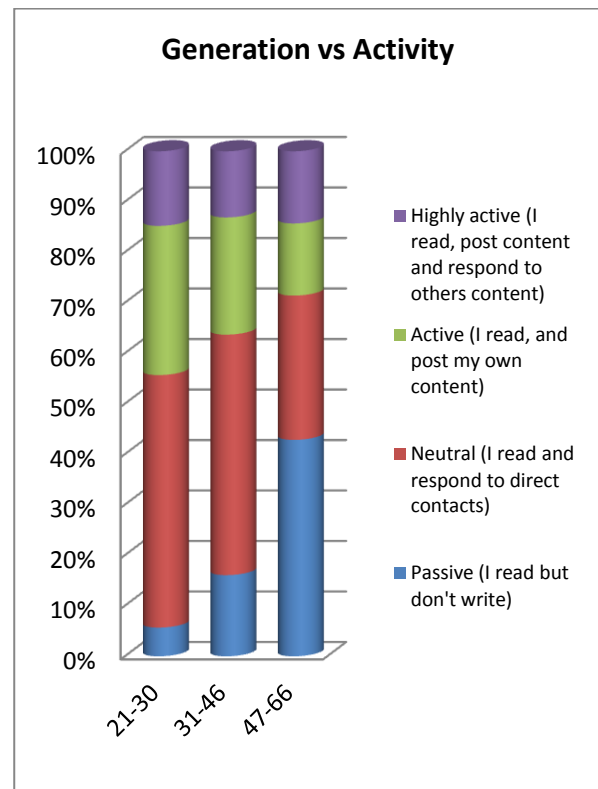


Exhibit 4-2: Generation vs Activity
Source: Author

These graphs (Exhibit 4-1 & Exhibit 4-2) seem obvious from the literature review as they show as expected, that digital natives tend to use more social networks than previous generations, but it is good to test some well known facts to see and validate if the data collected have a real meaning. On this graph we see clearly the social networks adoption by respectively Y, X and Baby-boomers generations.

Even if no answer from Z-gen has been collected, a survey done by TNS Sofres in June 2011 shows that in France 96% of this Z-gen are using internet and 48% of them have their own profile on Facebook. The trigger on Social network adoption is done when entering junior high school around 13 years old and the frequency of

usage is quite high also, as 59% of people having Facebook accounts get connected at least once a day (Tns-sofres, 2011). This survey confirms the one conducted into this paper, to affirm that youngest generations are more active users of internet and social networks and corroborate as well, that marketers need to adapt to this big trend.

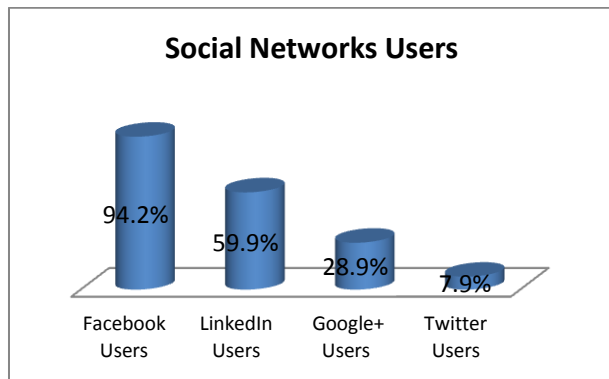


Exhibit 4-3: Social Networks Users

Source: Author

Regarding social network users numbers, Facebook confirms its huge diffusion into this type of population (see Exhibit 4-3). On the other hand, although Twitter now offers more social networking features, on an academic point of view it is considered more as a micro-blogging site, and this is why it was not proposed into the survey as a native choice; nevertheless many respondents chose to include it into their answers. Because of this, obtained Twitter percentage might be lower than reality, but it's interesting to notice that it's popular and starts to be perceived as a social network tool. The other surprise is the popularity of Google+ that has been launched only 3 months ago, but as many people are already familiar with usual Google tools, this could explain this phenomenon. It shows also that Google+ can become a serious competitor to Facebook hegemony in a short time with a good strategy. To have a broader view of the social tools used through the world, in May 2011, Jess3 gathered the information that is presented in a graph in the Exhibit 4-4: The Geosocial Universe 2.0. This confirms that Facebook is the major actor on the social network field, but it shows also, as discussed in the literature review, the big popularity to access to all these tools through Mobile devices. Skype is the only tool having more registered users and it's now offering a Facebook integration module to work as a dashboard. LinkedIn is far behind but they target clearly the professionals

and during the study of hypothesis 3, the usage differences between Global users and LinkedIn users will be better explained. Surprisingly enough, Asmallworld social network is never mentioned by respondents neither in other studies.

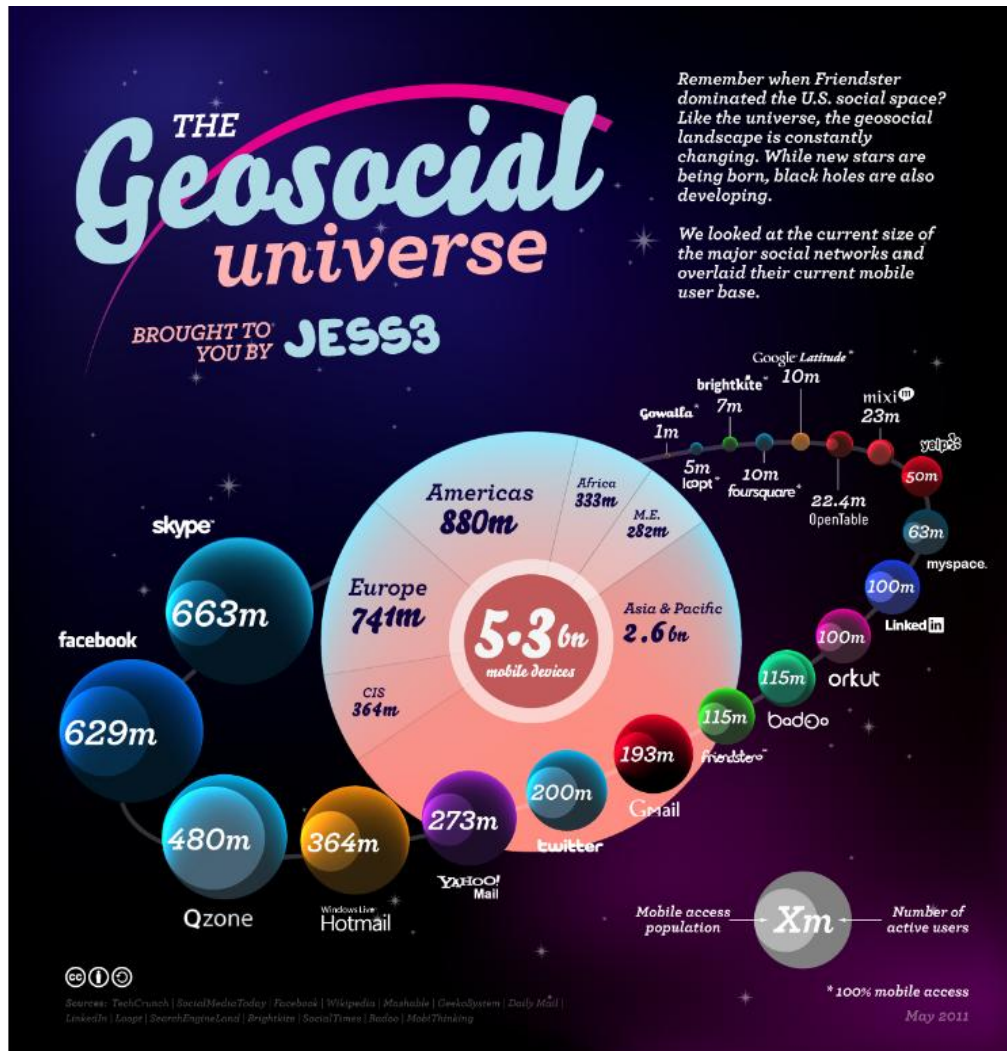


Exhibit 4-4: The Geosocial Universe 2.0
(Jess3, 2011)

As discussed in the sociological part of the literature review, the average number of connections for a manageable network is around 150 (Dunbar, 1993). This survey shows that 71% of respondents have more than 150 contacts in their network; it would have been interesting to detail more the range of 150-500 contacts as it's the one where most people belong to (see result Q3, Appendix 3). This really questions the strength of the ties, especially for people having more than 500 contacts in their network, as it seems difficult on a time frame to manage so many relations, but those network tools help it anyway giving the possibility to create groups and addressing

specific messages to particular groups. Anyway the boundaries described by Dunbar are highly overpassed.

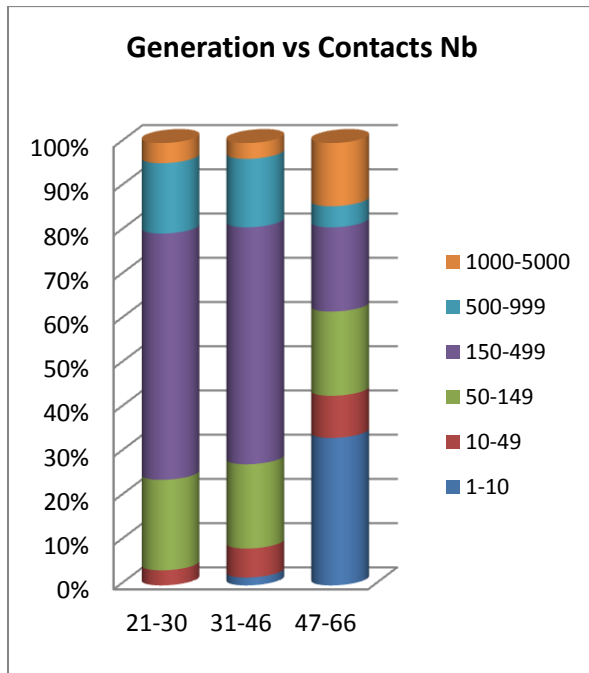


Exhibit 4-5: Generation vs Contacts Nb
Source: Author

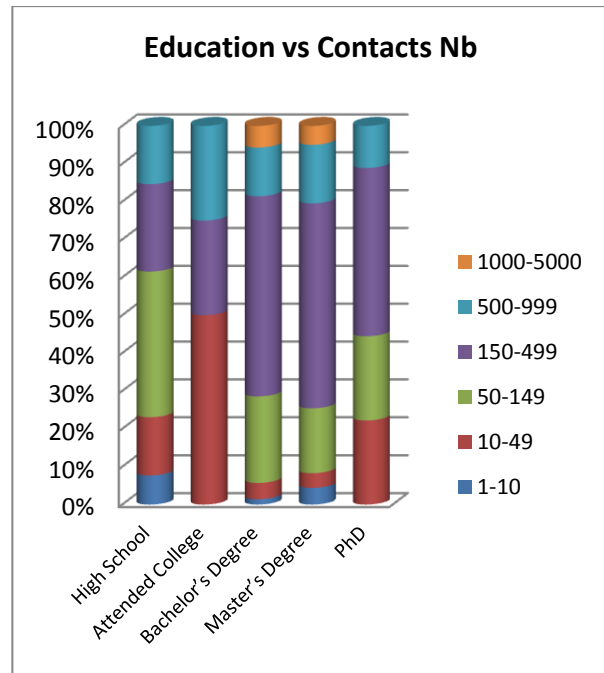


Exhibit 4-6: Education vs Contacts Nb
Source: Author

The graph 'Generation vs Contacts Nb' (Exhibit 4-5) has been drawn to check if the digital native generation had more contacts than the others, as they were more active users than others. The graph doesn't prove this hypothesis, it could be because they use social networks to maintain their connections rather than expand them. The second possibility could be that the number of contacts was not a matter of activity on social networks but a matter of socio-cultural environment.

The graph 'Education vs Contacts Nb' (Exhibit 4-6) has then been drawn to verify if there was a relationship between those two variables. From the results, it seems that people having at least degree, have more contacts on social networks. One explanation is that by spending time in University it's easier to connect to people. University can be seen as a big melting pot with a lot of opportunities to meet new people during classes and various events associated to the university's cultural and academic life. The second explanation would be that by staying longer in an environment with a huge variety mix, the probability to meet people with similar interests is greater.

4.4 Hypothesis 1 data analysis

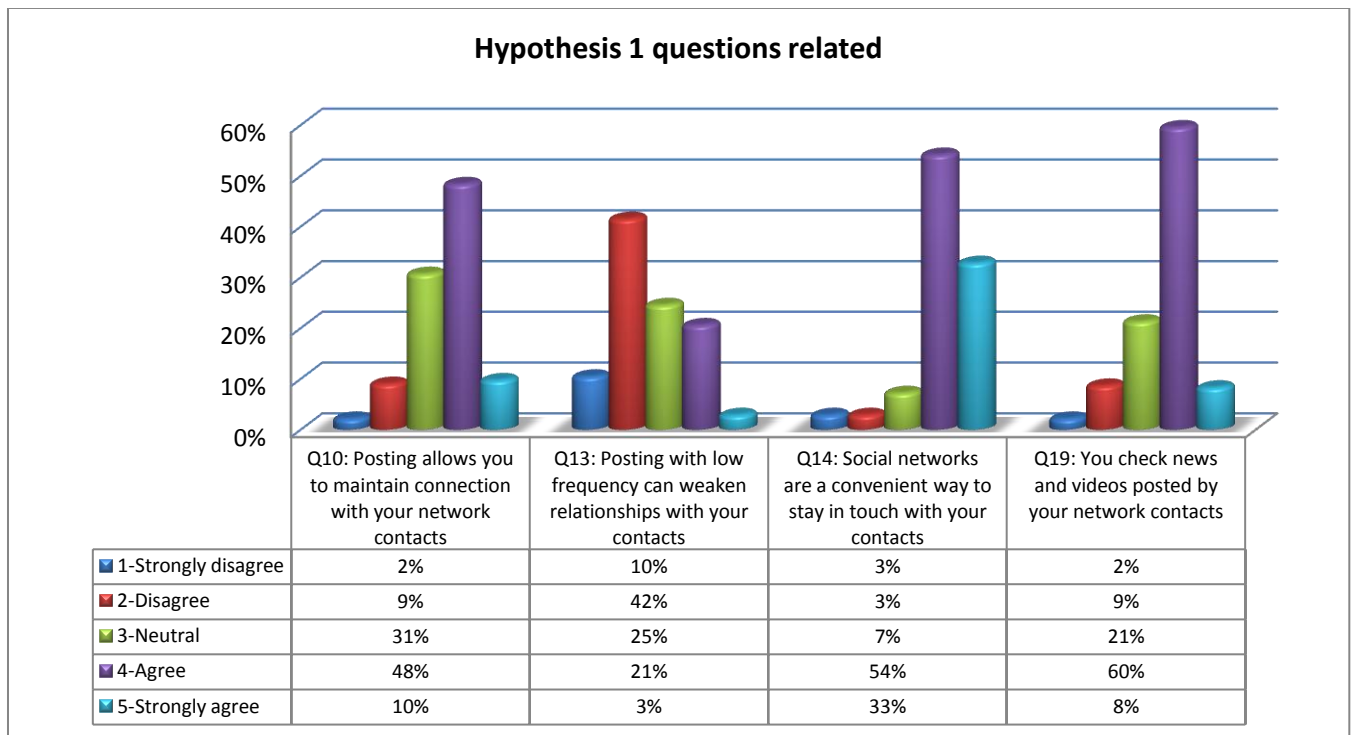


Exhibit 4-7: Hypothesis 1 questions related

Source: Author

H1: Message diffusion helps to sustain group affiliation.

Q10: Posting allows you to maintain connection with your network contacts.

Q14: Social networks are a convenient way to stay in touch with your contacts.

Those were straight forward questions and thus got straight forward answers. Social networks are an efficient and easy way to stay in touch with our various contacts. One of the greatest features about social networks is that they represent a large dynamic directory. It's now possible to contact any of our connections without having their up-to-date mail or phone number; it's just needed to select a person from our list and to message him. These new communication tools bring also some new communication codes. Nowadays when writing to someone through social networks, it's not necessary anymore to use all the time formal forms; this trend has been developed also by SMS on phones due to size limits. It's also possible to message directly all our connections by posting directly on our wall. The other dynamic feature is the easiness to attach photos or videos to any message. Communication is made

easier, and people appreciate simple and efficient tools that help them to stay linked to their connections.

Q13: Posting with low frequency can weaken relationships with your contacts.

The answer seems to be in complete contradiction from Q10 and Q14. How to explain that on one hand posting helps to keep connection which implies that those actions lead to a reaction, and then on the other hand, explain that no posting doesn't have any effect i.e., a lack of action don't lead to a lack of reaction.

Either the question has been wrongly formulated and misunderstood, or else there is a refusal or a fear from people to lose their contact or group affiliation. As human beings we need social life to exist, thus to admit we can lose part of our networks can be associated to losing part of what we build during our life and it's difficult to accept for anyone. This topic has been discussed in the chapter Six degree of separation, our digital social life does have repercussion on our real life, and there is a strong psychological impact on losing friends on Facebook (Lampe, Ellison, & Steinfield, 2006). People unconsciously will tend to refuse that being out of others sight on social network, could bring them also out of people's minds.

Q19: You check news and videos posted by your network contacts.

Strong approbation on this question is seen. The goal of this question was to create a feedback from previous one. People use posts to give news, but what was necessary to find out was if those posts were read. The answer was expected from theory, as discussed in the chapter Web 2.0 and technological aspect. One of the four main motivations why people appreciate social media is because it satisfies their desires to know what others were doing (Dong-Hun, 2010). Through this process of following what is going on in other people life, people also get news from them.

From these four elements H1 can be confirmed, the diffusion of messages and posts allow to maintain connections as it's an easy and convenient way to stay in touch and a big majority of people check those messages posted.

4.5 Hypothesis 2 data analysis

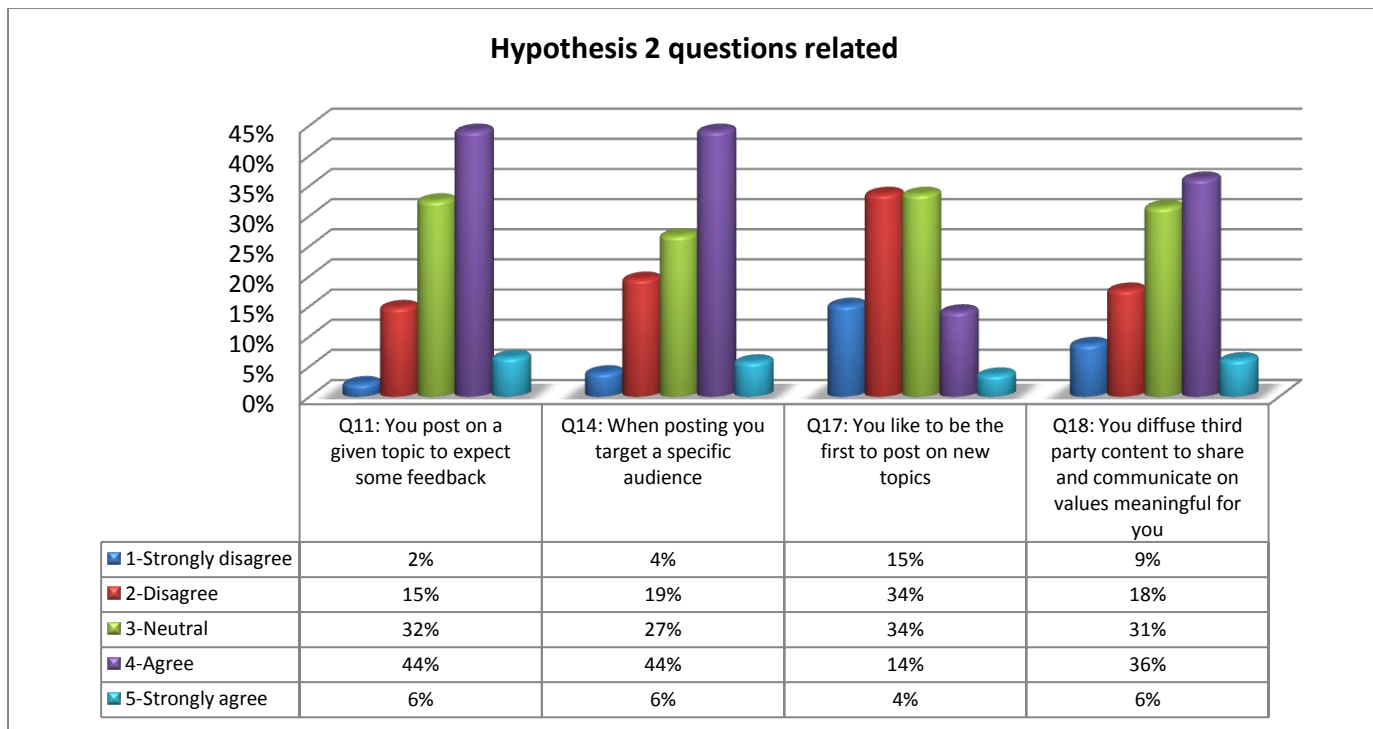


Exhibit 4-8: Hypothesis 2 questions related

Source: Author

H2: Diffusing a message allows individual to appear as a node/broker in a network and to strengthen ties.

Q11: You post on a given topic to expect some feedback.

This question is interesting to compare to Exhibit 4-2: Generation vs Activity. Most of the people declare to be either passive or neutral users and at the same time when they post, they do expect others to be mostly active in order to get some feedback. If people want a feedback on their posts is in order to feel their interaction with others. A dialogue to take place needs at least two people, with this interaction they can feel part of the society and strengthen ties with others.

Q14: When posting you target a specific audience.

This question was needed, because many people on generalist social networks such as Facebook, post about their mood or other things that may be seem as irrelevant to the great majority. So the purpose was to know if in general, they were mainly posting to write and to show to others they were alive or if their posts were aimed to

have some meaning to a particular audience. It seems that this last supposition is the right one.

Q17: You like to be the first to post on new topics.

This question did not get approbation. It's difficult to be a leader in opinion and most people feel more secure to post on topics that already receive great approbation from others, then the results could be related to risk aversion and groupthink behaviours. It could be uncertain to start talking about a topic that could report negative feedback or generate conflict. By doing this, individuals could feel rejected from their social group. This question can then be related to the next one.

Q18: You diffuse third party content to share and communicate on values meaningful for you.

From the Q8: How do you consider yourself on social Networks, 38.2% declare to be highly active or active i.e., post content. From Q18, 42% of the respondents diffuse content which is slightly more. The interpretation is that third party content is an easy way to communicate on value. If the content has been published from a serious source then as on the previous question, there should be no risk of forwarding such post / information. To feel integrated and accepted within a community, one of the safest strategies is to avoid conflict and to diffuse on universal value or sometimes to criticize the same topic as others. The advantage on diffusing on universal value is that it's possible to gain recognition. Literature review about sociology also stated that people were mostly willing to exchange about consensual topic and universal value (Casilli & Turbaro, 2010).

The global analysis concerning H2 is that conformity is the key. Out of the hypothesis it can be confirmed that posting allow individuals to strengthen ties with others but the part about appearing as a node/broker within the network is still challenged and cannot be affirmed from this survey or the last option is that it's possible but it's not what people try to get out it.

4.6 Hypothesis 3 data analysis

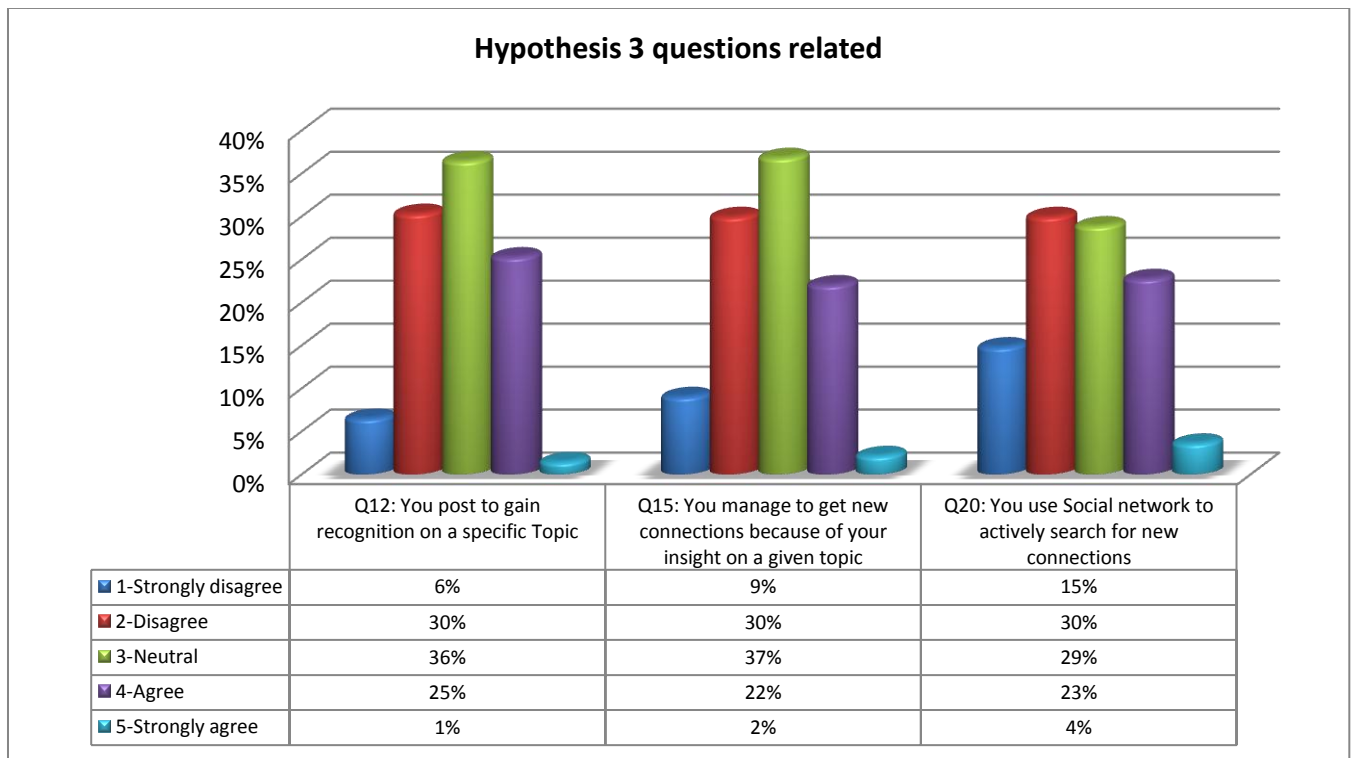


Exhibit 4-9: Hypothesis 3 questions related

Source: Author

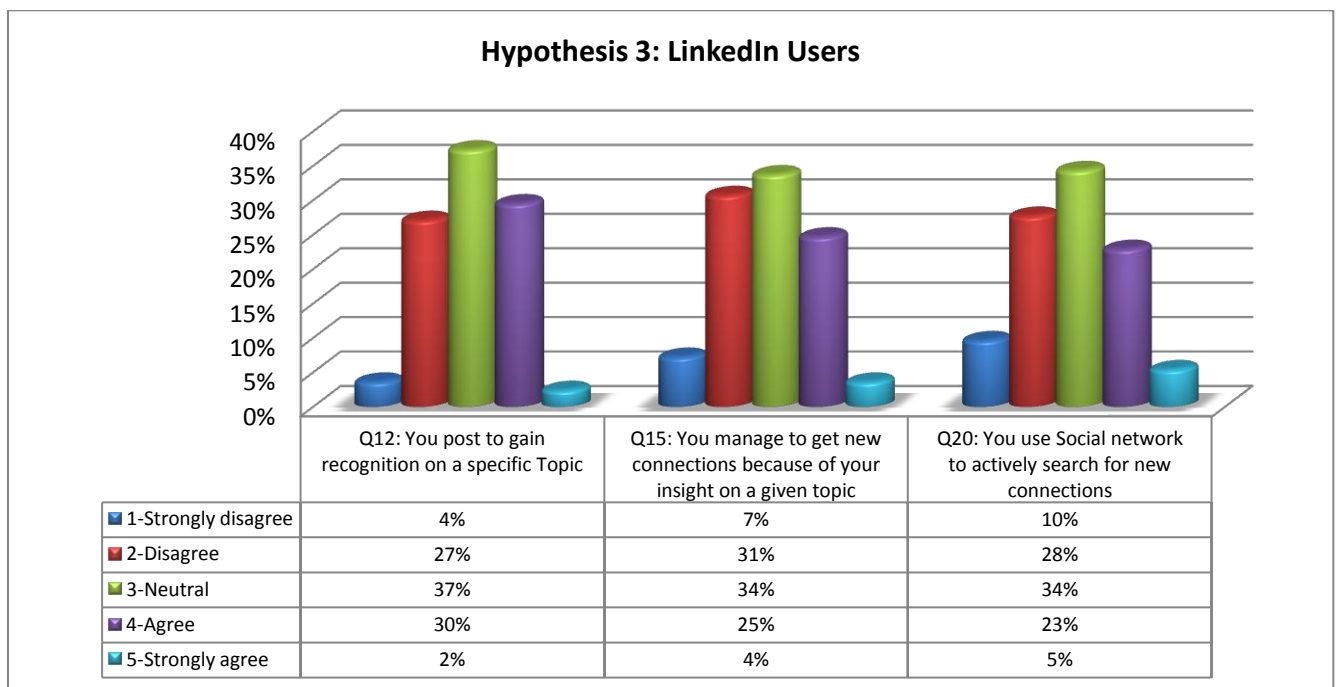


Exhibit 4-10: Hypothesis 3: LinkedIn Users

Source: Author

H3: Being proactive within a network empower social capital expansion.

For this hypothesis analysis it was decided to compare the global population with population using LinkedIn. As this last network is mainly use for professional networking and businesses purposes, the assumption was that these users were much more active. As expected there is a difference among the results from the global and the LinkedIn populations, but this variation is small and the main tendency on all the answers is Neutral – Disagree.

Q12: You post to gain recognition on a specific Topic.

Social networks are great tools to easily post, comment and forward information and thus appear as a guru on a given topic. One of the limitations so far is that those posts were quite difficult to make public and accessible to a great number of people through web search engine or others sites. This is one of the strengths of Twitter, a tweet with good hashtags has the potential to reach a large audience, and once you are recognized on a given topic, people can start following you even if they are not part of your direct or secondary contacts, unless you change the privacy settings. This might be where Google + will make the whole difference, as the philosophy of this social network is somewhere in the social media world in between Facebook and Twitter, plus extra features. This will not change dramatically the trend, as people will stay mainly Non Highly Active on social networks, but for the ones that wish to use fully all these social tools a new opportunity is appearing. Another assumption for those answers is that it might not seem politically correct to admit that we use the social networks where we are mainly connected to our friends and relatives, to change their perception on our self.

Q15: You manage to get new connections because of your insight on a given topic.

For this question it would have been cleverer to ask only to people attending to get new connection through their post if they have been successful. Nevertheless around 25% of the population using social networks manage to get new connections thanks to their effort of putting insight about a specific topic on social networks. This is a great feature as it allows the individual to be awarded for the time and effort he is putting into his communications, through an increase of its social capital. As

discussed in the sociological part of this paper to transform this social capital into economic capital will depend on the skills, culture, sociological background and familial environment of individuals.

Q20: You use Social network to actively search for new connections.

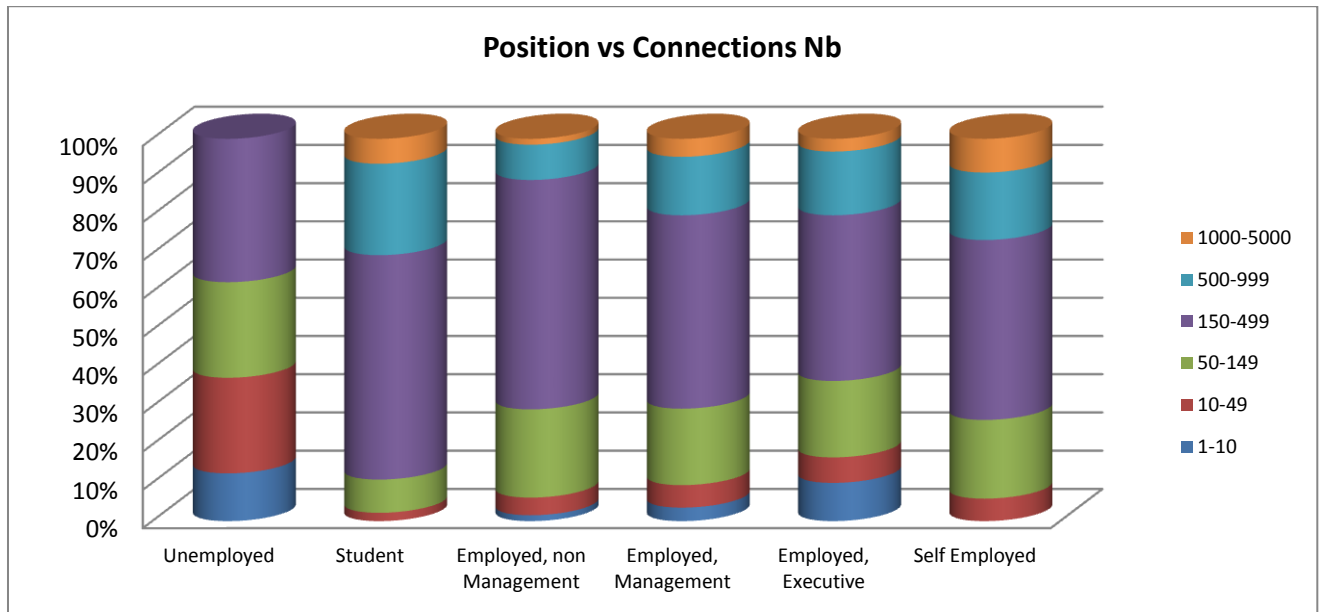


Exhibit 4-11: Position vs Connections Nb

Source: Author

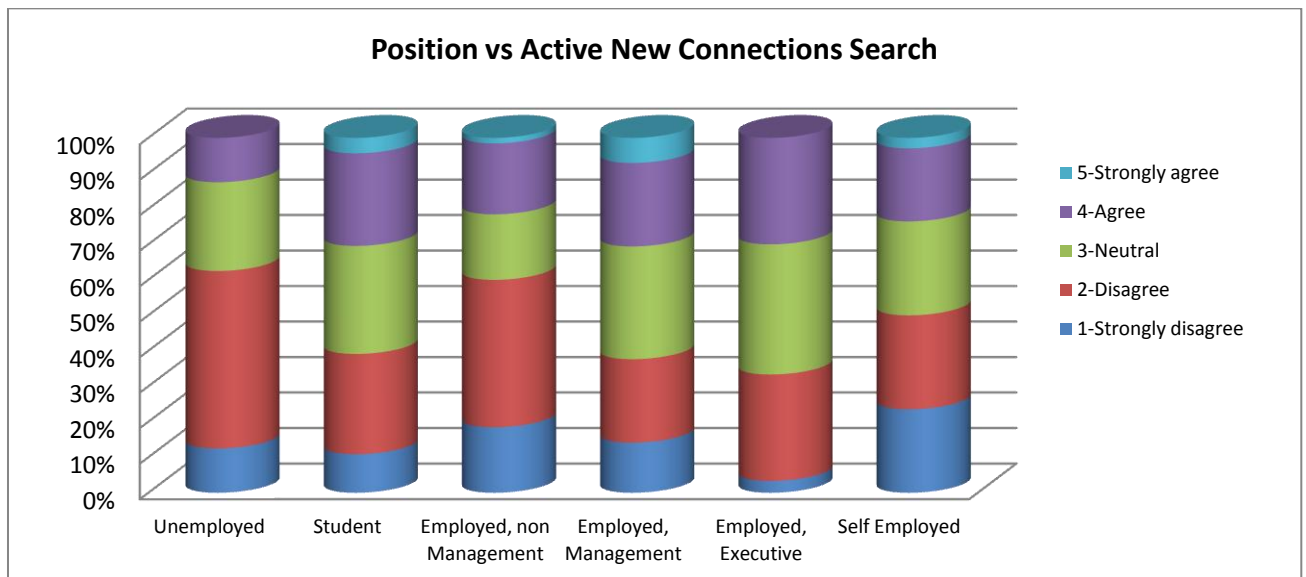


Exhibit 4-12: Position vs Active New Connections Search

Source: Author

As Q20 didn't get a majority of agreement, the first conclusion would be that those social networks are mostly used to maintain relations within the existing network rather than to expand it. This is why Exhibit 4-11: Position vs Connections Nb and Exhibit 4-12: Position vs Active New Connections Search have been sketched to see the interaction between social class, connections chase and volume. Thus the following step was to see which types of population use the most social networks to expand their connections. The level of disagreement is lower for Student, Manager and Executive than for other type of population. At the same time self employed is not one of the categories who expand the most its network through social networks, but it is among the categories having the most number of connections. For self employed it seems natural to have a huge network as the professional activity is most of the time proportional to it but we can question, why are they not the more willing to try to expand it through social media tools. For students it seems natural also to promote themselves and build reputation on social networks as they are the future potential job hunters. Finally, Managers and Executives are the categories who disagree the less with this statement, they are probably aware of the opportunity offered by the expansion of social capital and have better position to transform it into financial capital from their surroundings.

H3: Being proactive within a network empower social capital expansion. This Hypothesis was from the beginning the most difficult to verify, from Q8, with only 13.7% of people being highly active, it seemed clear that the full power of social network was not mainly use. Despite the fact that this hypothesis did not receive a strong approbation, there are still some people that manage well and increase their social capital through social networks. The overall results tend to verify the theory of Bourdieu discussed previously in the sociology chapter, which states that only a portion of the population had the culture to see their connections as a personal resource. Only this population that usually are part of high social class, take the time to strengthen ties of their network and to expand their social capital.

5 Conclusions

5.1 Review of project hypothesis Aims & Objectives

This chapter intends to recall the different hypotheses and put them in perspective to the literature review. In the next chapter, a complete review of the different findings will be done.

The aim of this paper was to find ways to leverage viral marketing and to find the reasons for customers to diffuse companies' messages without any tangible incentives. After a wide literature review of different topics associated to the actual use of internet, it seemed that the social aspect, need of affiliation and expansion of social capital were the right fields to investigate in order to understand people behaviours over social networks.

The first step was to check if message diffusion helps individuals to sustain group affiliation, strengthen ties and to appear as a node/Broker within a network. The study shows that despite the theory developed by Dunbar, nowadays it is common for people to manage a network with more than 150 individuals (Dunbar, 1993). People use social networks to maintain their connections, especially on Facebook. One of the reasons found in the theory is the psychological impact that people would face on losing friends on social networks (Lampe, *et al.*, 2006). Ties are maintained and probably strengthen while posts diffused are mainly read and thus senders get receivers. This was theorised by Dong-Hun who explained that people appreciate social media because they can express themselves, get the latest news and recommendations from relatives and satisfy their desire to know what others are doing (Dong-Hun, 2010). Once ties are strengthened, it is difficult to measure or define the real intensities of those ties, considering the myriad of different connections each individual deals with on their networks.

It is possible to appear as a node by being active, although this is not the common usage done by people over social networks. From theory it has been discussed that over social networks, people tend to exchange mainly on consensual topics, with universal value (Casilli & Turbaro, 2010). This explains partly why people don't use the opportunity offered to brand themselves by posting on unconventional subjects.

It can be also linked to the last part of the study i.e., to check if being proactive empowers social capital expansion. Again theory has been confirmed and as stated by Pierre Bourdieu, there is a schism between each social class. Mainly high class reproduce and protect their interests through the development of social capital (Bourdieu, 1986), (Bourdieu & Wacquant, 1992). This trend tends to be reproduced on social networks as people trying to empower their social capital are mainly students, managers and executives. The literature confirmed that this is a key issue to affirm a social status as with equivalent education and cultural capital, the social capital dimension is more important than human capital to achieve financial wealth (Lin, 2001).

5.2 Summary and Findings

With the development of mobile devices and their applications, internet is getting omnipresent in our life. The Web 1.0 intention was to connect people, but the development of Web 2.0 and social networks finally did it. Geolocation is getting trendy, and associated to augmented reality can open new perspectives as these two features combined are still not developed to their full potential by marketers. The hyper connectivity leads to instant behaviours and reactions; and this has imposed to companies to build new public relations with their customers and advocates through social media. The multiplication of manageable connections available through social networks transformed the traditional WOM marketing into a new dimension called Viral Marketing. All these new technological tools and social behaviours constrained marketers to request new analytical tools to investigate customer's new behaviours with social media.

Digital natives are the native users of social networks. They share about their life through online networks as previous generation would have done while meeting peers at any social event. They don't have any psychological or social inhibition to display their life on social networks and they use them naturally as an extension of their social life. Some could say that they also have a lack of experience to properly manage their image on the net.

The main difference is that all communication done through internet is a potential data that can be included into a marketing research. Facebook is the leader on its market segment, and because of the number of accumulated active users and the integration into population usage, it has a real competitive advantage. Nevertheless because of the particularity of this industry if they lose their leadership, it will be difficult if not impossible to gain it back. The recent profound changes in Facebook show that they are aware of this threat, Google+ will compete with them hardly, thanks to the various Google tools integration into people usage of the Web. On the other hand, LinkedIn is really strong for professionals. Marketers need to monitor these different social networks when choosing their channel to diffuse communications.

Social networks are a convenient way to maintain already established connections and strengthen ties with all contacts made through our traditional life. People appreciate these tools to share their state of mind, pictures, videos and life events and they are even more pleased to scan at others life. It is psychologically reassuring to see that others are facing same issues or emotions through their life or just that our behaviour is similar to others. This feeling of conformity is both, reassuring and allows individuals to feel well incorporated into society. The drawback is that by being compliant with social codes; people are also risk averse and reluctant to become opinion leaders to gain credibility on specific topics and occupy a node position on those networks. At the same time, it gives opportunities to third parties to have their posts or communications being wide spread, if they have universal values connotation attached to their messages.

To be a guru on a specific topic or to manage to get new connections and expand social capital, is not a matter of generation or the efficiency in the use of social networks. Social codes operate the same way in digital than in 'real' life, and social networks usage is mainly conditioned by familial, educational and sociological backgrounds that will provide the individual with the necessary culture and skills to take advantage of these new technological tools to be able to develop social and economical welfare.

5.3 Implication for practitioners

Companies cannot manage their brands as they used to do and can't rely only on the message they diffuse. The image is now the result of a strong interaction with the different stakeholders, especially bloggers and brand advocates on social networks. It is not possible to control fully the branding on this scenario but there are new and multiple ways to manage it effectively.

Nowadays it is essential to use Web 2.0 tools, companies need to be aware of Web 3.0 and then the semantic dimension needs to be incorporated. Search engines are becoming more selective and complex and it's necessary to fill the online space with pertinent content delivered to the targeted stakeholders.

Companies need to identify who are their fans and who are their advocates, and while it's important to take care of the first ones, it's even more important to pamper the second ones.

Common sense would guide to not invite problems, but if they occur, the key is to be transparent. With crowd sourcing all information becomes public, Ostrich theory of denials should be avoided at any cost. When crisis occurs, it's now possible to engage even more with customers and use humours campaigns to admit potential errors and clear off potential minefield.

People are willing to show a favourable image of themselves on social networks and this is why universal value is a good incentive for people to diffuse companies' communications.

Social dimension in today's world, where modern economy is badly perceived because of the recent and repeated stock market crash, is a good opportunity to leverage e-marketing. Strong customers' relationships can be achieved through community management and engagement. Success, more than ever, depends on the capacity of companies to listen and analyse with the help of social aggregators and web analytical tools. The engagement needs strong implication on the different Social Media, to be linked to the objectives and fully integrated into company strategy. And as with any other marketing tools, before going on social media or going viral, a clear SWOT analysis need to be addressed.

5.4 Theory and Suggestions for future Research

This paper was about a topic that is in perpetual movement and evolution: of social media marketing, and more specifically social networks. This paper shows also the actual technological and sociological stages of the latest development of the web and their implication for marketers. Despite some specificity, social networks don't represent a disruptive way for people to manage their relationships with others, they appear more as an extension of their usual behaviour with some extra features. The main changes are that now it's easier to manage a greater number of connections than ever before, and there are new tools to expand social capital. There is also a bridge that can be built between sociological and economical perspectives through the notion of social capital.

The first social network notion was used in 1954 by Barnes (Barnes, 1954). It's not sure that internet caused a real revolution in this field but it did bring new questions such as what is a relation between two entities, what are the social links that people establish with their connections over social networks, is there a horizontalisation of the relationships. To re-evaluate effect and significance of long geographical distance relationships.

The real limitation of this paper has been the population reached with the survey as respondents were in majority European with a master degree working as managers and from the gen-X. Thus it would be good to conduct a survey with a better distribution in the Education, professional position, cultural background and generation fields. This would give the opportunity to study more deeply and accurately the differences in usage of social networks based on the socio-cultural background.

A topic that would be relevant to study is the strength of relationship ties. Due to the myriad of connections in people's networks, there are obviously different types of affiliation and commitment. Thus it would be interesting to see how people perceive their relationships ties, what do they expect of them and their variation over a period of time depending on categories and activities to sustain them. Then a correlation between these ties and social capital transformation into economical capital could be studied as there is a deficiency of empirical research to consistently evaluate its efficiency.

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7 Appendices

7.1 Appendix1: Web based survey covering letter

Dear friends,

I am running a short survey for my final MBA thesis. I would appreciate your help to fill in it; all results will be used for academic purposes only. If you are further interested in the result or want a copy of the thesis feel free to contact me.

The survey is only one page and should take less than 5mins.

If you could also forward this survey to your contacts and colleague, this help would be highly appreciated.

Thank you in advance and best regards,

<https://www.surveymonkey.com/s/7DHWBQ>

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7.2 Appendix2: Web based Survey Questionnaire



Social aspects in Social Media

Results of this survey are confidential and will be used for academic purposes only.

Contacts, refer to any person in you networks i.e. Friends, Virtual Friends, Relatives, Peers, Colleagues, Classmates etc...

*1. Gender

- Female
 Male

*2. Age

- ≤20 21-30 31-46 47-66 ≥67

*3. What defines you best?

- Student Employed, non Management
 Self Employed Unemployed
 Employed, Executive Retired
 Employed, Management other

*4. The Highest Level of Education you have reached is

- High School Attended College Bachelor's Degree Master's Degree PhD

*5. To which culture do you feel like belonging the most?

- North American European South African
 Central American and Caribbean Middle east Asian
 South American North African Australian and Oceania

*** 6. Which of the following social networks do you use?**

- | | | |
|---|-----------------------------------|---------------------------------------|
| <input type="checkbox"/> Bebo | <input type="checkbox"/> Hi5 | <input type="checkbox"/> Orkut |
| <input type="checkbox"/> Facebook | <input type="checkbox"/> LinkedIn | <input type="checkbox"/> Renren |
| <input type="checkbox"/> Friendster | <input type="checkbox"/> Myspace | <input type="checkbox"/> None of them |
| <input type="checkbox"/> Google+ | <input type="checkbox"/> Ning | |
| <input type="checkbox"/> Other (please specify) | | |

*** 7. With which frequency do you use social network sites?**

- | | |
|--|--|
| <input type="radio"/> Many times per day | <input type="radio"/> Few times per month |
| <input type="radio"/> Once a day | <input type="radio"/> Less than once a month |
| <input type="radio"/> Few times per week | <input type="radio"/> Non relevant |
| <input type="radio"/> Once per week | |

*** 8. How do you consider yourself on social Networks?**

- | | |
|---|--|
| <input type="radio"/> Passive (I read but don't write) | <input type="radio"/> Active (I read, and post my own content) |
| <input type="radio"/> Neutral (I read and respond to direct contacts) | <input type="radio"/> Highly active (I read, post content and respond to others content) |

*** 9. How many contacts do you have in your networks?**

- 1-10 10-49 50-149 150-499 500-999 1000-5000 >5000

*** 10. Posting allows you to maintain connection with your network contacts**

1-Strongly disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly agree

-

*** 11. You post on a given topic to expect some feedback**

1-Strongly disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly agree

-

*** 12. You post to gain recognition on a specific Topic**

1-Strongly disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly agree

-

*** 13. Posting with low frequency can weaken relationships with your contacts**

	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree
-	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 14. When posting you target a specific audience**

	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree
-	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 15. You manage to get new connections because of your insight on a given topic**

	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree
-	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 16. Social networks are a convenient way to stay in touch with your contacts**

	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree
-	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 17. You like to be the first to post on new topics**

	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree
-	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 18. You diffuse third party content to share and communicate on values meaningful for you**

	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree
-	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 19. You check news and videos posted by your network contacts**

	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree
-	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 20. You use Social network to actively search for new connections**

	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree
-	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7.3 Appendix3: Web based Survey Results

Social aspects in Social Media



1. Gender			
		Response Percent	Response Count
Female		48.7%	135
Male		51.3%	142
answered question			277
skipped question			0

2. Age			
		Response Percent	Response Count
≤20		0.4%	1
21-30		31.4%	87
31-46		60.6%	168
47-66		7.2%	20
≥67		0.4%	1
answered question			277
skipped question			0










3. What defines you best?

		Response Percent	Response Count
Student		16.6%	46
Self Employed		12.3%	34
Employed, Executive		10.8%	30
Employed, Management		30.7%	85
Employed, non Management		23.5%	65
Unemployed		2.9%	8
Retired		0.7%	2
other		2.5%	7
		answered question	277
		skipped question	0


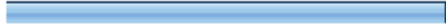









4. The Highest Level of Education you have reached is

		Response Percent	Response Count
High School		4.7%	13
Attended College		1.4%	4
Bachelor's Degree		25.3%	70
Master's Degree		65.3%	181
PhD		3.2%	9
		answered question	277
		skipped question	0








5. To which culture do you feel like belonging the most?

		Response Percent	Response Count
North American		5.8%	16
Central American and Caribbean		0.4%	1
South American		33.6%	93
European		47.3%	131
Middle east		2.5%	7
North African		0.4%	1
South African		1.1%	3
Asian		7.9%	22
Australian and Oceania		1.1%	3
		answered question	277
		skipped question	0





6. Which of the following social networks do you use?

		Response Percent	Response Count
Bebo		0.4%	1
Facebook		94.2%	261
Friendster		0.4%	1
Google+		28.9%	80
Hi5		2.9%	8
LinkedIn		50.9%	168
Myspace		3.2%	9
Ning		0.7%	2
Orkut		2.5%	7
Renren		0.0%	0
None of them		4.0%	11
Other (please specify)		16.6%	48
		answered question	277
		skipped question	0

7. With which frequency do you use social network sites?

		Response Percent	Response Count
Many times per day		49.8%	138
Once a day		21.3%	59
Few times per week		14.4%	40
Once per week		4.7%	13
Few times per month		4.3%	12
Less than once a month		1.4%	4
Non relevant		4.0%	11
		answered question	277
		skipped question	0

8. How do you consider yourself on social Networks?

		Response Percent	Response Count
Passive (I read but don't write)		14.8%	41
Neutral (I read and respond to direct contacts)		46.9%	130
Active (I read, and post my own content)		24.5%	68
Highly active (I read, post content and respond to others content)		13.7%	38
		answered question	277
		skipped question	0

9. How many contacts do you have in your networks?

		Response Percent	Response Count
1-10		3.6%	10
10-49		5.8%	16
50-149		19.5%	54
150-499		51.6%	143
500-999		14.8%	41
1000-5000		4.7%	13
>5000		0.0%	0
answered question			277
skipped question			0

10. Posting allows you to maintain connection with your network contacts

	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree	Response Count
-	2.2% (6)	9.0% (25)	30.7% (85)	48.4% (134)	9.7% (27)	277
answered question						277
skipped question						0

11. You post on a given topic to expect some feedback

	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree	Response Count
-	2.2% (6)	14.8% (41)	32.5% (90)	44.0% (122)	6.5% (18)	277
answered question						277
skipped question						0

12. You post to gain recognition on a specific Topic						
	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree	Response Count
-	6.5% (18)	30.3% (84)	36.5% (101)	25.3% (70)	1.4% (4)	277
answered question						277
skipped question						0

13. Posting with low frequency can weaken relationships with your contacts						
	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree	Response Count
-	10.5% (29)	41.5% (115)	24.5% (68)	20.6% (57)	2.9% (8)	277
answered question						277
skipped question						0

14. When posting you target a specific audience						
	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree	Response Count
-	4.0% (11)	19.5% (54)	28.7% (74)	44.0% (122)	5.8% (16)	277
answered question						277
skipped question						0

15. You manage to get new connections because of your insight on a given topic						
	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree	Response Count
-	9.0% (25)	30.0% (83)	36.8% (102)	22.0% (61)	2.2% (6)	277
answered question						277
skipped question						0

16. Social networks are a convenient way to stay in touch with your contacts						
	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree	Response Count
-	2.9% (8)	2.9% (8)	7.2% (20)	54.2% (150)	32.9% (91)	277
answered question						277
skipped question						0

17. You like to be the first to post on new topics						
	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree	Response Count
-	15.2% (42)	33.6% (93)	33.6% (93)	14.1% (39)	3.8% (10)	277
answered question						277
skipped question						0

18. You diffuse third party content to share and communicate on values meaningful for you						
	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree	Response Count
-	8.7% (24)	17.7% (49)	31.4% (87)	36.1% (100)	6.1% (17)	277
answered question						277
skipped question						0

19. You check news and videos posted by your network contacts						
	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree	Response Count
-	2.2% (6)	8.7% (24)	21.3% (59)	59.6% (165)	8.3% (23)	277
answered question						277
skipped question						0

20. You use Social network to actively search for new connections

	1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree	Response Count
-	14.8% (41)	30.0% (83)	28.9% (80)	22.7% (63)	3.6% (10)	277
	answered question					277
	skipped question					0

Q6. Which of the following social networks do you use?

1	skype, messenger	Sep 18, 2011 9:37 PM
2	nothing	Sep 16, 2011 12:47 AM
3	Xing	Sep 14, 2011 11:34 PM
4	sports forum	Sep 14, 2011 11:17 PM
5	some Latvian local networks	Sep 14, 2011 9:07 PM
6	Twitter	Sep 14, 2011 7:13 PM
7	Twitter, Foursquare	Sep 14, 2011 5:46 PM
8	odnoklassniki.ru	Sep 14, 2011 4:49 PM
9	twitter	Sep 14, 2011 3:32 PM
10	twiter	Sep 14, 2011 3:26 PM
11	twitter	Sep 14, 2011 3:05 PM
12	Academia	Sep 14, 2011 2:39 PM
13	Vkontakte.ru Odnoklassniki.ru	Sep 14, 2011 1:05 PM
14	xing	Sep 14, 2011 12:36 PM
15	www.odnoklassniki.ru	Sep 14, 2011 12:23 PM
16	Viadeo	Sep 14, 2011 10:41 AM
17	Xing	Sep 14, 2011 9:08 AM
18	viadeo	Sep 14, 2011 8:45 AM
19	Twitter	Sep 14, 2011 8:28 AM
20	Viadeo, Twitter	Sep 14, 2011 8:03 AM
21	Twitter	Sep 14, 2011 6:42 AM
22	twitter, Foursquare, youtube	Sep 14, 2011 2:54 AM
23	Tweeter	Sep 14, 2011 12:43 AM

Q6. Which of the following social networks do you use?		
24	Twitter!!	Sep 14, 2011 12:02 AM
25	meinvz.net	Sep 13, 2011 11:55 PM
26	Yelp, meetup	Sep 13, 2011 10:59 PM
27	Meetup.com	Sep 13, 2011 10:23 PM
28	viadeo	Sep 13, 2011 10:08 PM
29	Leebug	Sep 13, 2011 10:03 PM
30	viadeo	Sep 13, 2011 9:48 PM
31	Twitter	Sep 13, 2011 8:58 PM
32	viadeo	Sep 13, 2011 8:21 PM
33	VIADEO	Sep 13, 2011 6:47 PM
34	Twitter	Sep 13, 2011 6:42 PM
35	twitter, slideshare	Sep 13, 2011 6:04 PM
36	Twitter	Sep 13, 2011 6:00 PM
37	twitter	Sep 13, 2011 5:47 PM
38	twitter, flickr	Sep 13, 2011 5:47 PM
39	Twitter	Sep 13, 2011 5:32 PM
40	Twitter	Sep 13, 2011 5:28 PM
41	xing	Sep 13, 2011 5:25 PM
42	use to use friendster and myspace and orkut	Sep 13, 2011 5:05 PM
43	Twitter	Sep 13, 2011 5:02 PM
44	twitter - tumblr	Sep 13, 2011 4:45 PM
45	iwiw	Sep 13, 2011 4:40 PM
46	Twitter, Vkontakte	Sep 13, 2011 4:39 PM