## WEB 2.0 SOCIAL NETWORK SITES AND FACEBOOK MARKETING

## **Andreas Chang**

Jurusan Manajemen, Fakultas Ekonomi dan Komunikasi, BINUS University Jln. K.H. Syahdan No. 9, Palmerah, Jakarta Barat 11480 <a href="mailto:achang@binus.edu">achang@binus.edu</a>

### **ABSTRACT**

The use of Web 2.0 and Social Network Sites (SNS) has become an amazing phenomenon. In fact, one of the fastest-growing arenas of the World Wide Web is the space of so-called social networking sites. Face book, Tweeter, MySpace and other Social Network Sites have huge population of users. Almost seven hundred million people use Facebook, and hundreds of million others use other social networking sites. More and more advertisers switch their marketing budget to these SNS. This study contributes to our understanding of the Web 2.0 and the use of social networking websites by examining available literature. It seeks to understand what Web 2.0 and SNS mean, the trends, its functions and how they can be leveraged for marketing purposes.

Keywords: Social Network Sites (SNSs), marketing, facebook, online social networking sites (SNSs), Web 2.0

## **ABSTRAK**

Penggunaan Web 2.0 dan Social Network Sites (SNS) telah menjadi suatu fenomena yang luar biasa. Sesungguhnya, arena World Wide Web yang paling cepat berkembang adalah social networking sites. Face book, Tweeter, MySpace dan Social Network Sites lainnya telah memiliki pengguna yang sangat banyak. Hampir tujuh ratus juta orang mempergunakan Facebook, dan ratusan juta lainnya mempergunakan social networking sites lainnya. Makin hari makin banyak pemasang iklan yang mengalihkan anggaran mereka ke SNS ini. Karya tulis ini mencoba memahami apa itu Web 2.0 dan penggunaan Social Network Sites dengan mempelajari berbagai literature yang ada. Karya ini mencoba memahami apa makna, kecenderungan, fungsi Web 2.0 dan bagaimana bisa didaya gunakan untuk tujuan-tujuan pemasaran.

Kata kunci: Social Network Sites (SNSs), marketing, facebook, online social networking sites (SNSs), Web 2.0

## **INTRODUCTION**

Web 2.0 presents businesses with new challenges but also new opportunities for getting and staying in touch with their markets, learning about the needs and opinions of their customers as well as interacting with them in a direct and personalised way. (Constantinides & Fountain, 2008). This has leaded the world to witness a coming-together of the technological networks that connect computers on the Internet and the social networks that have linked humans for millennia. Beyond the artifacts that have sprung from this development—sites such as Facebook, LinkedIn, MySpace, Wikipedia, digg, del. icio.us, YouTube, and flickr—there is a broader process at work, a growing pattern of movement through online spaces to form connections with others, build virtual communities, and engage in self-expression. (Kleinberg, 2008). In fact, one of the fastest-growing arenas of the World Wide Web is the space of so-called social networking sites. A social networking site is typically initiated by a small group of founders who send out invitations to join the site to the members of their own personal networks (Trusov, Bucklin, & Pauwels, 2009)

Moreover, social networks are not only available through the internet on personal computers but are becoming accessible from cellular phones and public internet sites (e.g., airports, schools) as well. According to Wireless Week, social networking applications are increasingly driving the growth of the mobile internet audience, especially among women. eMarketer forecasts that more than 800 million people worldwide will be participating in a social network via their mobile phones by 2012, up from 82 million in 2007; and the number of mobile social networking users will grow to 243 million in 2009 from 147 million in 2008. This increased availability of the Web to its users allows organizations more chances to reach these audiences (Threatt, 2009).

According to Socialnomics, a popular social media blog and famous for its Social Media Revolution videos, by 2010 Generation Y will outnumber Baby Boomers and 96% of them will have joined a social network. It also states other astonishing facts about social media. For example, social media has overtaken porn as the #1 activity on the web and 1 out of 8 couples married in the U.S. last year met via social media. There are over 200,000,000 blogs and 54% of bloggers post content or tweet daily. And perhaps the most fascinating fact of all is that it took 38 years for radio to reach 50 million users, 13 years for television, 4 years for the Internet, only 3 years for the iPod and Facebook added 100 million users in less than 9 months and most recently, iPhone applications hit 1 billion in only 9 months. Clearly, social media has become huge and it isn't limited only to the younger generations. In fact, according to Socialnomics again, the fastest growing segment on Facebook is 55-65 year-old females (Coon, 2010).

Of all the Social Network sites, the growth rate of Facebook users has been amazing. As of June 2011, the world-wide population of Facebook is over 687 million and is predicted to reach 700 million soon. (Su, 2011). Here are some stats provided by insidefacebook.com as of March 2011. The total World Facebook population is made of millions of people across a range of ages groups. It is used by 1 in every 13 people on earth, with over 250 million of them (over 50%) who log in every day. The average user still has about 130 friends, but that should expand in 2011.48% of 18-34 year olds check Facebook when they wake up, with 28% doing so before even getting out of bed. The 35+ demographic is growing rapidly, now with over 30% of the entire Facebook user base. The core 18-24 year old segment is now growing the fastest at 74% year on year. Almost 72% of all US internet users are now on Facebook, while 70% of the entire user base is located outside of the US.

Over 700 Billion minutes a month are spent on Facebook, 20 million applications are installed per day and over 250 million people interact with Facebook from outside the official website on a monthly basis, across 2 million websites. Over 200 million people access Facebook via their mobile phone, 48% of young people said they now get their news through Facebook. Meanwhile, in just 20

minutes on Facebook over 1 million links are shared, 2 million friend requests are accepted and almost 3 million messages are sent (Facebook Statistics, Stats & Facts For 2011, 2011).

Facebook's US advertising revenue will total roughly \$2.2 billion in 2011, displacing Yahoo Inc to collect the biggest slice of online display advertising dollars, according to a new study. Facebook's U.S. advertising revenue will give it a 17.7 percent share of the market for graphical display ads that appear on websites, according to a report released on Monday by research firm eMarketer. Last year Facebook had 12.2 percent share of the U.S. market (Oreskovic, 2011).

Palo Alto, Calif.-based Facebook is set to collect over \$2 billion from ads this year, and control nearly almost 20 percent of the U.S. market. This year, the social network more than doubled its global ad revenue from last year, reaching over \$4 billion in sales, according a study by research firm eMarketer (Calamia, 2011).

#### **METHOD**

This paper studies various papers, dissertations, publications and reports to seek the understanding of Web 2.0 and Social Network Sites (SNSs) marketing in particular Facebook Marketing.

### **DISCUSSION**

#### WEB 2.0 and Social Network Sites

Web 2.0 is a collection of open-source, interactive and user-controlled online applications expanding the experiences, knowledge and market power of the users as participants in business and social processes. Web 2.0 applications support the creation of informal users' networks facilitating the flow of ideas and knowledge by allowing the efficient generation, dissemination, sharing and editing/refining of informational content (Constantinides & Fountain, 2008).

As to the categories of Web 2.0, Constantinides et al., propose a basic classification based on application types divided into five main categories: (1) Blogs: Short for Web logs: online journals, the most known and fastest-growing category of Web 2.0 applications. Blogs are often combined with *Podcasts*, that is, digital audio or video that can be streamed or downloaded to portable devices. Examples: http://gizmodo.com , http://www.boingboing.net , http://www.huffingtonpost.com; (2) Social networks: applications allowing users to build personal websites accessible to other users for exchange of personal content and communication. Examples: http://www.myspace.com http://www.facebook.com , www.hyves.nl , http://www.ning.com/; (3) (Content ) Communities : Websites organising and sharing particular types of content. Examples are applications of Video sharing: http://video.google.com , www.youtube.com , http://etsylove.ning.com ,Photos sharing: http://www.fl ickr.com , Social Bookmarking www.digg.com , http://del.icio.us and publicly edited Encyclopedias www.wikipedia.org , http://en.citizendium.org/wiki/Main\_Page; (4) Forums / bulleting boards: sites for exchanging ideas and information usually around special interests Examples: www.epinions.com, www.personaldemocracy.com, <a href="http://www.python.org">http://www.python.org</a>; (5) Content aggregators : applications allowing users to fully customize the web content they wish to access. These sites make use of a technique known as Real simple Syndication or Rich Site Summary (RSS). Examples http://uk.my.yahoo.com/, http://www. google.com/ig , http://www.netvibes.com/ (Constantinides & Fountain, 2008).

Next to the young consumers, there is evidence that practitioners are becoming increasingly attracted by the Web 2.0 realm: more than 50 per cent of professionals participate already in social networks according to the Social Network Practitioner Consensus Survey of May 2007 (BizReport.com, 5 June 2007). On the other hand, the mainstream online consumer has noticed that Web 2.0 applications offer new and previously unknown possibilities and empowerment not only in the form of information sourcing but also as forums of dialogue and confrontation of producers and vendors with their social, ethical and commercial responsibilities. The power of these media can be very substantial and there are already several cases of 'citizen journalism' exposing product failures or corporate misconduct and forcing companies to respond. Some highly publicised cases include the recall of a Dell laptop model and the Kryptonite bicycle lock after blogs exposed serious shortcomings of these products, and American On Line (AOL), which was forced to abolish its high-pressure tactics to prevent customers from giving up their subscriptions. All these cases started with a blog posting that reached millions of users and ultimately reached the wider public through the traditional media (Constantinides & Fountain, 2008).

## **Growing Demand Web 2.0 and Marketing**

In today's digital-focused marketing environment, the internet as a communication and transaction channel adds two more inputs and influencers of buying behavior to the model: the online marketing mix (C), which basically represents the controllable online experiences provided by the corporate website (Constantinides, 2004), and the Web 2.0 influences (D), which are by and large beyond the marketer's control. Figure 1 underlines the increasing complexity of the customer decision-making process in the Web 2.0 environment: as the web user and the technology mature, marketers discover that influencing the consumer behaviour by means of traditional marketing media and practices becomes less effective. Next to the new parameters entering the decision process equation, an additional problem is the increasing mistrust of consumers for traditional, mass marketing tactics as explained earlier; these consumer attitudes are reflected on the diminishing effect of mass media. (Constantinides & Fountain, 2008).

#### What is Social Network Sites

Boyd & Ellison define social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site (Boyd & Ellison, 2007). On the other hand, David Beer argues that it would be that given these rapid cultural shifts and the dynamic and disjointed nature of much contemporary online culture there is a pressing need to classify in order to work toward a more descriptive analysis. As we can see in the above definition, 'social network sites' as used by Boyd & Ellison, stands for something quite broad. Whereas the term 'social networking sites' describes something particular, a set of applications where, to a certain extent, networking is the main preoccupation. In short, the motivation to form expanding networks, the practice of 'networking' as described by Boyd & Ellison, that defines social networking sites should be the grounds for separating out different types of site (along with other established differences). It seems a shame to adjust our classifications so that they no longer account for this nuance (Beer, 2008).

### **Trends**

Social network sites (SNSs) have the potential to fundamentally change the character of our social lives, both on an interpersonal and a community level. Changes in interaction patterns and social connections are already evident among young people, who are the heaviest users of these sites. As adoption spreads to a wider audience, we expect such changes to be amplified across all segments

of society. At an interpersonal level, the identity information Included in public profiles serves to lower the barriers to social interaction and thus enable connections between individuals that might not otherwise take place. On a community level, the organizing features of these sites lower the transaction costs for finding and connecting with others who may share one interest or concern but differ on other dimensions. Both of these processes have the potential to have positive effects on society at large because they encourage disparate individuals to connect, communicate, and take action (Ellison, Cliff, & Steinfield, 2009).

An astounding 70% of social networkers keep in touch with family via their various online networks, up from 61% a year ago. As of April 26, 2010, 46% of the U.S. online adult population reported having visited Facebook in the past 30 days (2010 Social Networking Report, 2010).

Armano sees the following near-term trends, in no particular order. *Social media begins to look less social*. With groups, lists and niche networks becoming more popular, networks could begin to feel more "exclusive." Not everyone can fit on someone's newly created Twitter list and as networks begin to fill with noise, it's likely that user behavior such as "hiding" the hyperactive updaters that appear in your Facebook news feed may become more common. Perhaps it's not actually less social, but it might seem that way as we all come to terms with getting value out of our networks, while filtering out the clutter.

Corporations look to scale. There are relatively few big companies that have scaled social initiatives beyond one-off marketing or communications initiatives. Best Buy's <u>Twelpforce</u> leverages hundreds of employees who provide customer support on Twitter. The employees are managed through a custom built system that keeps track of who participates. This is a sign of things to come over the next year as more companies look to uncover cost savings or serve customers more effectively through leveraging social technology.

Social business becomes serious play. Relatively new networks such as <u>Foursquare</u> are touted for the focus on making networked activity local and mobile. However, it also has a game-like quality to it which brings out the competitor in the user. Participants are incentivized and rewarded through higher participation levels. And push technology is there to remind you that your friends are one step away from stealing your coveted *mayorship*. As businesses look to incentivize activity within their internal or external networks, they may include carrots that encourage a bit of friendly competition.

Your company will have a social media policy (and it might actually be enforced). If the company you work for doesn't already have a social media policy in place with specific rules of engagement across multiple networks, it just might in the next year. From how to conduct yourself as an employee to what's considered competition, it's likely that you'll see something formalized about how the company views social media and your participation in it.

Mobile becomes a social media lifeline. With approximately 70 percent of organizations banning social networks and, simultaneously, sales of smart phones on the rise, it's likely that employees will seek to feed their social media addictions on their mobile devices. What used to be cigarette breaks could turn into "social media breaks" as long as there is a clear signal and IT isn't looking. As a result, we may see more and/or better mobile versions of our favorite social drug of choice.

Sharing no longer means e-mail. The New York Times iPhone application recently added sharing functionality which allows a user to easily broadcast an article across networks such as Facebook and Twitter. Many websites already support this functionality, but it's likely that we will see an increase in user behavior as it becomes more mainstream for people to share with networks what they used to do with e-mail lists. And content providers will be all too happy to help them distribute any way they choose. (Armano, 2009).

Finally, all indications point to the fact that the social media are here to stay. In the future, Marketers should learn to co-exist and communicate with a powerful customer very little sensitive to old-fashioned push marketing and by and large determined to participate as an equal in the marketing process (Constantinides & Fountain, 2008).

## **Top Social Network Sites**

About.com categorizes Social Network Sites into two broad categories: the Top Social Networking Sites of General Interest. *Facebook*, founded by Mark Zuckerberg. *Facebook* was designed as a social networking site for Harvard students. After spreading from Harvard through the university ranks and down into high school, Facebook was opened to the public in 2006.

MySpace started in 2003. MySpace was a driving force in popularizing social networking and still maintains a large user base. A highly customizable social network, MySpace continues to reposition itself in the industry.

Twitter is what started out as a micro blogging website has quickly grown into a social messaging platform and one of the top social networks in the world. Twitter is phenomenon that transcends social networking to provide an outlet for news, trends, buzz, and chat among many other uses.

<u>Ning</u> as a social network for creating social networks. *Ning* takes the idea of groups to a whole new level. The ability to create your own community makes *Ning* a great home away from home for organizations and groups looking to fill the social void.

Other top social networking sites in special interests are: (1) Flixster, with a tagline of "stop watching bad movies," Flixster combines social networking with movie reviews; (2) Last.fm, billing itself as a social music site, Last.fm allows members to create their own radio station that learns what the person likes and suggests new music based on those interests. In addition to this, you can listen to the radio stations of friends and other Last.fm members; (3) LinkedIn, a business-oriented social network, members invite people to be "connections" instead of "friends." Linkedin is a contact management system as well as a social network, and has a question-and-answer section similar to Yahoo! Answers; (4) Xanga, a social blogging site that combines social networking elements with blogging. Members earn credits for participating in the site and can spend credits on various things such as buying mini-pictures to post in the comments of a friend's blog.

#### **Functions**

Joinson (2008) maintained that social networks serve a number of functions in offline life –for instance, providing social and emotional support, information resources and ties to other people. Similar kinds of social networks have been identified in online communities, with users turning online for both emotional support and as an information resource (e.g. via a mailing list). In both cases, an online social network may provide users with social capital. Online social networking sites may also serve a number of other purposes. Lampe et al. draw a distinction between the use of *Facebook* for 'social searching—finding out information about offline contacts, and 'social browsing'—the use of the site to develop new connections, sometimes with the aim of offline interaction. A survey of over 2,000 students, found evidence that the primary use of Facebook was for 'social searching'; that is, using Facebook to find out more about people who they have met offline, or who they attend class or share a dormitory with. The use of Facebook for 'social browsing', for instance, to meet someone via the site with the intention of a later offline meeting, or to attend an event organized online, scored relatively low amongst their sample.

The main use reported by the sample studied by Lampe et al. was to, "keep in touch with an old friend or someone I knew from high school", an activity that while expressing the offline aspects of social searching, also suggests a social capital function for Facebook. Golder et al. report that while the vast majority of messages are sent to friends (90.6%), a large proportion (41.6%) is sent to friends outside of one's local network. This suggests that messaging is used to maintain and build social ties across distances. In comparison, 'pokes' (a form of content-free messaging) were primarily exchanged within a network / school (98.3% of all pokes were within a network). Golder et al. argued that friendship ties require little effort or investment to maintain, while messaging with geographically distant friends is used to build social capital.

According to Lampe et al., social networking sites like Facebook may also serve a surveillance function, allowing users to "track the actions, beliefs and interests of the larger groups to which they belong". The surveillance and 'social search' functions of Facebook may, in part, explain why so many Facebook users leave their privacy settings relatively open. If 'social searching' is a public good, then reciprocity rules would dictate that by enabling a degree of surveillance of oneself, one would should also be able to engage in reciprocal surveillance of others. For instance, Gross & Acquisti report that only 1.2% of users changed the default 'search' privacy setting, and less than ½% of users changed the default 'profile visibility' privacy settings (Joinson, 2008).

## **Users View**

According to Ellison et al. users derive a variety of uses and gratifications from social networking sites, including traditional content gratification alongside building social capital, communication, surveillance and social networking surfing. The different uses and gratifications relate differentially to patterns of usage, with social connection gratifications tending to lead to increased frequency of use, and content gratifications to increased time spent on the site. The variety of uses to which Facebook is put by its users identifies particular challenges for the designers of such sites. For instance, a default privacy setting may be *too restrictive* for users seeking to meet new people, or who wish to allow new people to discover them.

Since user's desire to engage in surveillance of their peers also motivates the frequency of site visit, this also poses a unique challenge in balancing user's privacy concerns and controls with a key *raison d'être* of social networking sites like Facebook. At present, Facebook allows users to manage their 'feed', removing 'stories' as they wish. This solution not only provides a degree of privacy control to users, but it also enables users to engage with the site as a self-presentation tool at numerous levels—not only via their profile and network, but also through their activity (and the removal of specific 'stories'). As perpetual contact continues to develop, designers will need to face the challenges of providing continual feeds between users, and the desire of users to control their self-representation via such sites (Ellison, Steinfield, & Lampe, 2007)

## **Marketing Strategies**

As discussed in the introduction, when buyers influence each other, the seller can conduct sales in an intelligent sequence and offer intelligent discounts so as to optimize its revenue. In this section we formally describe the space of possible selling strategies. A marketing strategy has the seller visiting buyers in some sequence and offering each buyer a price. Each buyer either accepts (buys the item and pays the offered price) or rejects (does not buy and does not pay the seller) the item; we assume that each buyer is considered exactly once. Both the prices offered and the sequence in which buyers are visited can be adaptive, i.e, they can be based on the history of accepts and rejects. A marketing strategy thus identifies the next buyer to visit and the price to offer it as a function of the history. A run of a marketing strategy consists of sequence of offers, one to each buyer in V along with the set of accepted and rejected offers. The revenue from the run is the sum of the payments from

the accepted offers. A marketing strategy and the value distributions together yield a distribution over runs—this defines the expected revenue of the marketing strategy. We call the marketing strategy that optimizes revenue the optimal marketing strategy.

## **Facebook Marketing**

Based on data collected in February 2011, the infographic by Ria Novosti shows how Facebook is the undisputed leader in terms of user numbers, but also that the Chinese Qzone is hot on the heels with 480 million active users. The difference between East and West in general is striking, with Facebook hardly in a pole position in Japan, Russia and China. (Peter, 2011). Having more than 650 million users globally Facebook is undoubtedly very attractive.

Levy suggested that Facebook can be used effectively by businesses in three main ways, which are: (1) community building, a community building strategy is needed if the goal is to develop a strong presence on Facebook. Most tools available on Facebook can be used when businesses use a community building. The overall goal is to generate conversations, drive awareness, increase fan base, and be an active part in theis community. No community is ever successful without a strong community manager; (2) marketing and Promotion, using Facebook as a marketing and promotional tool can be useful to drive traffic to landing pages or event registration or in promoting awareness around a product launch or special offer; dan (3) advertising, a straight advertising strategy through Facebook is the most limited strategy of the three; however some organizations want to use Facebook only as another advertising stream for their company, product, or service. This is okay but you will not be harnessing the true power of Facebook. Tools are in place, as we have previously discussed, that enable you to solely advertise through Facebook (Levy, 2010).

#### **CONCLUSION**

Web 2.0 is a collection of open-source, interactive and user-controlled online applications expanding the experiences, knowledge and market power of the users as participants in business and social processes. One of the categories of Web 2.0 is Social Network Sites. Social Network Sites (SNSs) are applications allowing users to build personal websites accessible to other users for exchange of personal content and communication. SNSs have the potential to fundamentally change the character of our social lives, both on an interpersonal and a community level. There are three main ways businesses can use Facebook effectively, namely: Community building, Marketing and Promotion, and Advertising.

#### REFERENCES

2010 Social Networking Report. (2010). Experian Information Solutions. Experian Simmons.

- Armano, D. (2009, November 2). Six Social Media Trends for 2010. Retrieved June 29, 2011, from Harvard Business Review Blog Network: <a href="http://blogs.hbr.org/cs/2009/11/six\_social\_media\_trends.html">http://blogs.hbr.org/cs/2009/11/six\_social\_media\_trends.html</a>
- Beer, D. (2008). Social Network(ing) sites... revisiting the story so far: A response to danah Boyd & Nicole Ellison. *Journal of Computer-Mediated Communication*, 13, 516–529.
- Boyd, D. M. (2008). Taken Out of Context. Dissertation.
- Boyd, D. M., & Ellison, N. B. (2007). Social Network Sites: Definition, History and Scholarship. *Journal of Computer-Mediated Communication*, 13 (article 1.).

- Calamia, M. (2011, June 21). *Facebook Sells Most Ads, Tops Google, Yahoo*. Retrieved June 29, 2011, from Moobiledia: http://www.mobiledia.com/news/94675.html.
- Constantinides, E., & Fountain, S. J. (2008). Web 2.0 Conceptual Foundations and Marketing Issues. *Journal of Direct, Data and Digital Marketing Practice*, 231=244.
- Coon, M. (2010). Social Media Marketing: Successful Case Studies of Business Using Facebook and Youtube with An In-Depth Look into the Business Use of Tweeter. Communication M.A. Project.
- Ellison, N. B., Cliff, L., & Steinfield, C. (2009, Januar y + Februar y). Social Network Sites and Society: Current Trends and Future Possibilities.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 1143–1168.
- Facebook Statistics. (2011). Stats & Facts For 2011. DigitalBuzz.
- Joinson, A. N. (2008). 'Looking at', 'Looking up' or 'Keeping up with' People? Motives and Uses of Facebook. *http://www.portal.acm.org/* (pp. Proceeding of the twenty-sixth annual SIGCHI). Florence, Italy: ACM.
- Kleinberg, J. (2008). The Convergent of Social and Techonological Networks. *Communication of the ACM*, Vol 51, no.11.
- Levy, J. R. (2010). Facebook Marketing: Designing Your Next Marketing Campaign. Indianapolis, Indiana 46240 USA: Pearson Education.
- Oreskovic, A. (2011). Facebook Ad Revenue To Surpass Google, Yahoo In 2011: REPORT. San Fransisco: Reuters.
- Peter. (2011, March). *Updated World Map Of Social Networks 2011*. Retrieved June 29, 2011, from Reface your Facebook: <a href="http://reface.me/news/updated-world-map-of-social-networks-2011/">http://reface.me/news/updated-world-map-of-social-networks-2011/</a>
- Threatt, S. R. (2009, August). FACEBOOK and the ideal social marketplace: a study of the marketing benefits of social media practices. A Thesis Presented to the Faculty Of the Graduate School University of Southern California.
- Trusov, M., Bucklin, R. E., & Pauwels, K. (2009). The Effects of Word-of-Mouth Versus Traditional Marketing: Findings from An Internet Social Network Site. *Journal of Marketing*, Vol. 73.

## **APPENDIXES**

# The world map of social networks



