SOCIAL NETWORKS' USERS: PROFILES AND MOTIVATIONS

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ABSTRACT

The present work aims at analyzing the profiles of social networks' users, having accomplished an online questionnaire. A sample of 230 cases was obtained (limited to a deadline of a thesis that combined this study with another about enterprises' involvement in social networks). From the socio-demographic data obtained (age, time of day in social networks, level of education and occupational status) there are different behaviors. The results highlight the need of harnessing the potential of recruitment and business partnerships/projects through social networks. This is important because the vast majority of respondents use these platforms for more than one year and a significant percentage accesses them every day. Another issue is that mobile phone connection has a significant expression, thus relevant for ubiquitous business or work applications. Regarding the actions performed, besides seeing/sending messages as the most usually done, searching for knowledge (new contents) is also expressive what is relevant for innovative initiatives. Regarding the motivation factors, it is interesting that besides communication with friends and meeting old friends, the use of such platforms for professional relations has high importance what corroborates some potentials mentioned.

Keywords: Social Networks, Users, Profiles, Behaviors, Motivations

JEL Classification: O35

1. INTRODUCTION

New communication technologies allow a global interaction like never before imagined. Internet evolution, and especially Web 2.0 (O'Reilly, 2005), opened new opportunities and benefits, given its ease of communication and information dissemination (Brandão and Marques, 2010; Fernandes and Almeida, 2009). One of the greatest opportunities was the opening of new online applications of network environments known as social networks (Tredinnick, 2006; Boyd and Ellison, 2007; Constantinides *et al.,* 2008). Today, the internet presents itself as the platform of greater access, in which millions of individuals daily enter at any place or time (Tapscott and Williams, 2007). In this context, new environments appeared (Evans, 2008) such as the social networking sites, including *Facebook, YouTube, LinkedIn, Twitter, Hi5, Bebo,* and *MySpace,* among others, in which users either communicate or share content (Pei *et al.* 2011; Boyd and Ellison, 2007). The growth of these cyber-communities is a notable social phenomenon. Empirical studies have described new forms of social and economic behavior that call for deeper analysis.

On those platforms, people create their profiles, communicate, exchange pictures, share movies, or join groups on a particular interest, creating communities. The participation in these communities, and their influence, can add value to any business. The networked

individuals can actively participate in innovation, wealth creation and social-economic development in a way never thought of before (Qualman, 2009). According to the study "Internet use in Portugal 2010" (Taborda, 2010), more than 60% of the users of social networks in Portugal consider it important that companies also have a profile there. The continuous entry of firms in these applications can completely change the way of doing business.

Some authors have suggested that, after the knowledge economy and digital economy, a new economy is happening now, naming it "Socialnomics" (Qualman, 2009), "Economy of relations" (Robison and Ritchie, 2010), or "Economy of integrity" (Bernasek, 2010). Thus, the key features of business and innovation, which in past decades were tangible, are now replaced by intangible assets such as connections, knowledge, and integration. Studies on social networking sites have expanded, receiving increased attention from the scientific community (Boyd and Ellison, 2007). These sites are currently a major research focus in several areas. One example is the *Facebook* application, which has been studied by Dwyer *et al.* (2007), Acquisti and Gross (2006), Lampe *et al.* (2007), and Stutzman (2006).

The present work aims at characterizing a group of users involved in social networks as their profiles will be increasingly important for enterprises' business models and strategies. Enterprises need to look deeper and analyze these new environments with multiple perspectives as they allow communication that covers millions of different features and potential customers (Vasconcelos and Campos, 2010; Tapscott and Williams, 2007; Brandão and Marques, 2010; Constantinides *et al.,* 2008). The firms' adaptation to this new reality will help them to innovate their strategy and market approach (Magalhães, 2011).

2. SOCIAL NETWORKS: MAIN TRENDS

Arima (2010) points out that "social media" is an opportunity for organizations to build brands, demonstrate leadership behaviors, expand resources, reach new audiences and find new sources of ideas. The study of Ingelbrecht et al. (2010), using a sample of 4000 consumers in 10 markets worldwide (including USA, France, Germany, and China), gives to social networks, like Facebook and LinkedIn, the role of being the emergent places for retailing and shopping activities. The same study indicates that companies can use mass collaboration as a link between business value and social networking technologies. For example, they can examine a target community of a particular product and interact with it in order to rethink ways of selling or innovating the product.

Social networks help to further intensify networking activities, ideas' exchange and knowledge integration. They can also increase the cooperation among stakeholders (Cross and Thomas, 2010). The most visible issue on these relations in enterprise-social networks is the engagement with the community: the company has the possibility to be near its customers and share benefits with them. The benefits of this representation/participation exist if the companies manage to understand the power of collective behavior in the impulse of positive changes in business (Bradley, 2011). For companies, it is important to find their social momentum, which is the social dynamics that, using the internet specificities and interactivity, provides not only an increment to the economic value of the business model but also a return maximization (Hummel and Lechner, 2002).

A review of Falcão (2010) on a study from IGMarketing concluded that social networks are a set of tools that benefits the company as much as it invests in them. Through social networks, it can participate, create content, increment the network, talk to the community, observe, and examine. This results in skills and competencies for the team or individual worker's activity. Currently, social networking sites are being invaded by companies seeking

for a presence or with products to promote. Some companies are even breaking down the barriers between the virtual and physical, hiring their professionals online (E.life, 2010). Companies are migrating to social networks, keeping their first web sites on a secondary strategic line.

The large volume of digital information which many companies deal with (*Big data*), along with social media (social networks, blogs, etc.), will have combined applications. With the mobile wave, these will expand into useful and well-designed applications (apps). Brands will realize the need of strategies to create, distribute and capture consumer attention. The challenge for advertisers is to understand consumer habits in all of those and decide which investment is necessary to capture attention (since they know the financial power of consumers). Several data specialists defend techniques such as *basket analysis*, *clustering,* and correlations of social media data to better understand consumer habits, elected brands, and behaviors (Carravilla, 2014).

This study then tries to search for a group of users involved in social networks and discover their socio-demographic characteristics and attitudes in order to discuss potentials and trends from which enterprises or individuals can take advantage.

3. DATA COLLECTION

We used a questionnaire oriented to users of social networks (QUTI), which aims at characterizing the profiles within a group of users of these kinds of platforms. The questionnaire was constructed using a specialized online tool (SurveyMonkey www.surveymonkey.com) which allows the creation of a website where the questionnaire is available. The use of this tool in research is justified because it allows quick access to the questionnaire and facilitates a faster response. It has also the advantage of analyzing the data obtained. Along with a community of other users and companies, it is interesting to get to know this innovative and efficient means of research and data processing. This tool is already used by a considerable number of researchers. For example, Barry et al. (2008) used it in their research and cite several studies where it was also used. Evans et al. (2009) recommend the use of this service, SurveyMonkey, in future research as it allows users with less knowledge to develop and design efficient psychometric questionnaires.

Data were collected from October to December 2010, with participants having the opportunity to turn back to earlier questions and review their answers. The electronic version of this instrument validates and allows the questionnaire's completion with certain questions requiring a mandatory answer. An email was sent describing the main objective of this study with a link to the questionnaire online (QUTI). Responses were given directly in SurveyMonkey, then exported to Excel, and some issues were analyzed with the SPSS software. The data collected are confidential and private, and they can only be accessed through the use of a login and password (data between server and client are encrypted, encoded). The data are grouped by questions to be treated and compared (Minayo et al. , 2007).

The types of question fields used in the questionnaire included: multiple choice (one or more answers), array of options (multiple answers) and comment box (open response). The file migrated to SPSS tests the consistency of the collected data by validating answers codes, question by question.

3.1. Universe and sample

Regarding the purpose of this study, the universe consists of a group of users of social networks. From a group of 1500 regular users of the Facebook platform, we received 230 answers from

them in the referred period (from October to December 2010), related with the deadline of a thesis that combined this study with another about enterprises' involvement in social networks. Data collection began with the process of releasing online the users' questionnaire (QUTI). The QUTI was relatively easy to answer and required the introduction of the users' e-mail addresses for their post reception of this investigation and its results.

4. RESEARCH DEVELOPMENT

After closing the process of online questionnaires, the collected data were then processed. The data treatment began within SurveyMonkey, which was later complemented by a statistical analysis and compared with other studies in the same area.

4.1. Collecting data from users

Table 1 shows the 16 questions of the QUTI directed to the users, as well as the respective domain (possible values) and types of answer. These types are a multiple choice, with one or multiple responses, and an array of options. A latter attribute (comment box) appears if it is an open answer; in the case of being a closed answer, data entry is not permitted. The questions presented in this survey are based on the comparison of studies and discussion groups on social networks.

Table 1. Characterization of the questions to users - QUTI

Question	Domain	Type of answer
QUTI1: Which social networks do you use?	*Facebook; Hi5; LinkedIn; MySpace; Orkut; Twitter; Youtube*	Multiple choice (several responses), closed
QUTI2: In which social network do you spend more time?	*Facebook; Hi5; LinkedIn; MySpace; Orkut; Twitter; Youtube*	Multiple choice (unique response), closed
QUTI3: How long are you registered in social networks (*Facebook, LinkedIn, Twitter, Youtube, Orkut*, others)?	Less than 1 month; between 1 month and 6 months; more than 6 months and less than 1 year; more than 1 year	Multiple choice (unique response), closed
QUTI4: How long do you use the internet?	Less than 6 months; between 6 months and 1 year; more than 1 year and less than 2 years; more than 2 years and less than 3 years; more than 3 years and less than 5 years; more than 5 years and less than 8 years; more than 8 years	Multiple choice (unique response), closed
QUTI5: Which device do you use to connect the internet?	Phone, Computer, mobile phone	Multiple choice (unique response), closed
QUTI6: Given the following actions, which do you most frequently do?	See and send messages; insert videos; create blogs; develop web pages; share photos; chat; change profiles; download of music and games; search for a job; search for people; search for knowledge (new contents); send news to friends (ex: new products); playing games	Multiple choice (several responses), closed
QUTI7: How much time do you spend in social networks?	Once in a month; 5 hours per week; every day; only at weekends; 1 or 2 hours per day; more than 2 hours per day	Multiple choice (unique response), closed
QUTI8: At what time of day do you use social networks?	It varies during the day; in the morning; in the afternoon; by night	Multiple choice (unique response), closed
QUTI9: Are you more time at home since you start using social networks?	Yes; No	Multiple choice (unique response), closed

QUTI10: Which are the motivation factors for using social networks?	Meet new people; meet old friends; being creative; desire of expressing ideas; knowledge sharing; knowing new products; communication with friends; professional relations; stay informed about events; curiosity about other people; desire of status; dating with people	Array of options (several responses), closed
QUTI11: How old are you?	<10 years old; 10 to 14 years old; 15 to 17 years old; 18 to 24 years old; 25 to 44 years old; 45 to 65 years old; >65 years old	Multiple choice (unique response), closed
QUTI12: Your gender	F; M	Multiple choice (unique response), closed
QUTI13: Which is your education level?	Primary level; Secondary level; Graduated/ Bachelor; Master/ PhD degree	Multiple choice (unique response), closed
QUTI14: Which is your professional situation?	Employed; entrepreneur; unemployed; housewife; student	Multiple choice (unique response), closed
QUTI15: Civil status	Married; Separated; Single; Single (living with parents); Single (living with other)	Multiple choice (unique response), closed
QUTI16: your email address	Open answer	Text box, open, confidential

Source: Own elaboration

4.1.1. Profiles of social networks' users

It was observed that respondents generally use more than one social network. Following the analysis (Table 2), the most used social networks are: Facebook (100%) and YouTube (55.1%), followed by Hi5 (26.9%), LinkedIn (12.8%), MySpace (6.6%), Twitter, and Orkut (both 5.7%). This happens because many individuals have joined Facebook, which is the social platform where they spend the most time (74.9%), with an increasing difference from other social networks. Twitter is second, according to time spent on using it (17.2%). As in other studies (E.life, 2010b), social networks have more female participation (57.5%). The main ages of users who answered this survey are between 25 and 44 years (62%), followed by users between 18 and 24 years (19.2%). Some recent studies, however, denote users from 25 to 44 years old quitting Facebook and younger users augmenting their participation.

Regarding their education level, most respondent users have the 'secondary level' (46.1%), followed by the 'Graduated/Bachelor' level (44.3%). According to the civil status, most users are single. Most professional situations are active, where 53.7% are 'employed' and 20.3% are entrepreneurs, followed by 'students' (13.7%), 'unemployed' (10.1%), and 'housewives' (2.2%). For the item related with internet access, most respondents still use a 'computer' connection (57.5%), although a 'mobile phone' connection is getting a significant expression (42%). For the item 'age of internet use', most respondents have used it for more than 8 years (54.8%), contrasting with those who have used it for less than 6 months (1.3%). Finally, for the item 'age of social networks use', the vast majority of respondents (73.3%) have used these platforms for more than 1 year, in contrast to those who have used them for less than 1 month (0.9%).

For the item 'time of the day in social networks', most users replied that it varies during the day (50.2%), followed by 45.7% who access them by night. Interestingly, 78.7% answered that they do not spend more time at home since they began using social networks, as only 21.3% spend more time at home due to social networks' access. Regarding the 'time spent on social networks', a significant percentage of users access these platforms every day (33.3%). There are even users spending more than 2 hours per day in social networks (13.3%). About 25.3% spend from 1 to 2 hours per day, 14.2% spend 5 hours per week, 9.3% access them only on the weekend, and 4.4% of respondents access them once in a month.

Table 2. Social networks' users and their profiles

Item	Characteristics/values	Percentage
Social networks used	*Facebook*	100%
	Twitter	5.7%
	Orkut	5.7%
	Youtube	55.1%
	Hi5	26.9%
	LinkedIn	12.8%
	MySpace	6.6%
Social network in which users spend more time	*Facebook*	74.9%
	Twitter	17.2%
	Orkut	0.0%
	Youtube	1.3%
	Hi5	2.6%
	LinkedIn	0.9%
	MySpace	2.6%
Gender	Masculine	42.5%
	Feminine	57.5%
Age	< 10 years old	0.9%
	10 to 14 years old	1.7%
	15 to 17 years old	3.1%
	18 to 24 years old	19.2%
	25 to 44 years old	62.0%
	45 to 65 years old	12.2%
	> 65 years old	0.9%
Education level	Secondary level	46.1%
	Primary level	3.5%
	Graduated/Bachelor	44.3%
	Master/PhD	6.1%
Civil status	Married	30.1%
	Separated	12.8%
	Single	22.1%
	Single living with parents	21.2%
	Single living with other	13.7%
Professional situation	Employed	53.7%
	Entrepreneur	20.3%
	Unemployed	10.1%
	Housewife	2.2%
	Student	13.7%
Age of internet use	Less than 6 months	1.3%
	Between 6 months and 1 year	1.7%
	More than 1 year and less than 2 years	2.6%
	More than 2 years and less than 3 years	5.7%
	More than 3 years and less than 5 years	14.3%
	More than 5 years and less than 8 years	19.6%
	More than 8 years	54.8%
Age of social networks use	Less than 1 month	0.9%
	Between 1 month and 6 months	7.6%
	More than 6 months and less than 1 year	18.2%
	More than 1 year	73.3%

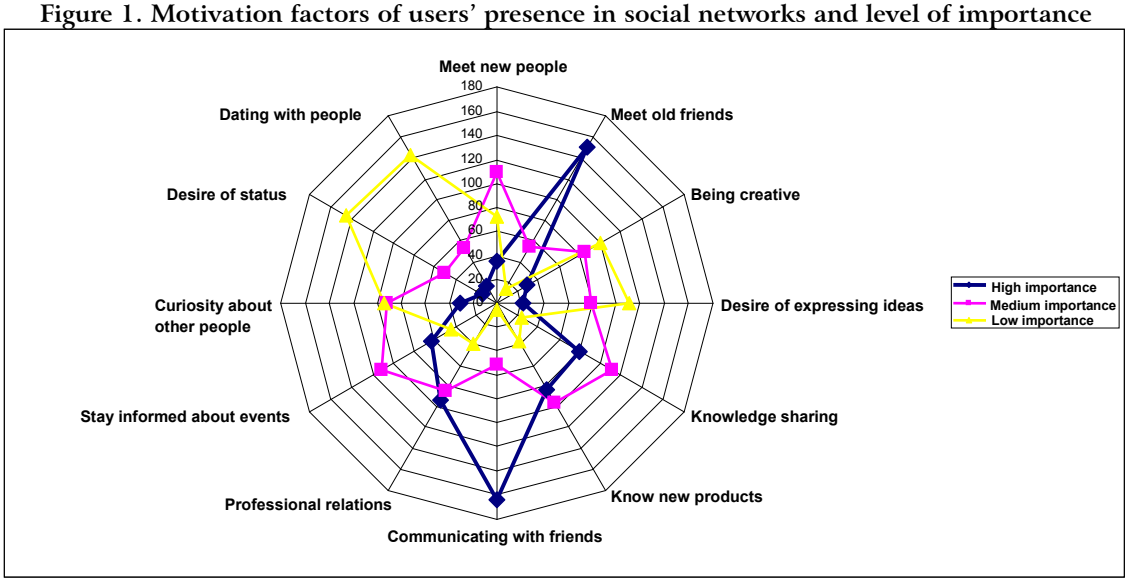
Time spent on social networks	Once in a month	4.4%
	5 hours per week	14.2%
	every day	33.3%
	only at weekends	9.3%
	1 or 2 hours per day	25.3%
	More than 2 hours per day	13.3%
Time of the day in social networks	It varies during the day	50.2%
	In the morning	0.9%
	In the afternoon	3.1%
	By night	45.7%
More time at home since social networks' use	Yes	21.3%
	No	78.7%
Mean of connecting the internet	Phone	0.4%
	Computer	57.5%
	Mobile phone/smartphone	42.0%
Actions performed in social networks	See and send messages	85.1%
	Insert videos	22.4%
	Create blogs	5.7%
	Develop web pages	9.2%
	Share photos	45.2%
	Chat	24.6%
	Change profiles	18.4%
	Download of music and games	36.4%
	Search for a job	18.4%
	Search for people	25.9%
	Search for knowledge (new contents)	53.9%
	Send news to friends (ex: new products)	21.1%
	Playing games	23.2%

Source: Own elaboration

Regarding the actions performed in social networks, this study highlights 'See and send messages' as the most commonly done (85.1%), followed by 'Search for knowledge (new contents)' (53.9%), 'Share photos' (45.2%), and 'Download music and games' (36.4%). Interestingly, the actions related with 'Create blogs' (5.7%) and 'Develop web pages' (9.2%) are still weak. However, an item that is already expressive is 'Send news to friends (ex: new products)' (21.1%).

An important issue to analyze is the motivation behind using social networks. Thus, in this item (which are the motivation factors for using social networks - QUTI10) the following figure shows that 'Communication with friends' is the main motivation (N=164 individuals), followed by 'Meet old friends' (N=149). These results confirm what other studies defend: the existence of relationships before having a presence in social networks (Boyd and Ellison, 2007). Thus, Facebook tends to be more frequently used to consolidate relationships that already exist offline than to create new relationships. Figure 1 illustrates several other motivations of the respondent users for adhering to social networking sites (the radar main lines have different colors according to a scale of importance: high/medium/low).

Figure 1. Motivation factors of users' presence in social networks and level of importance

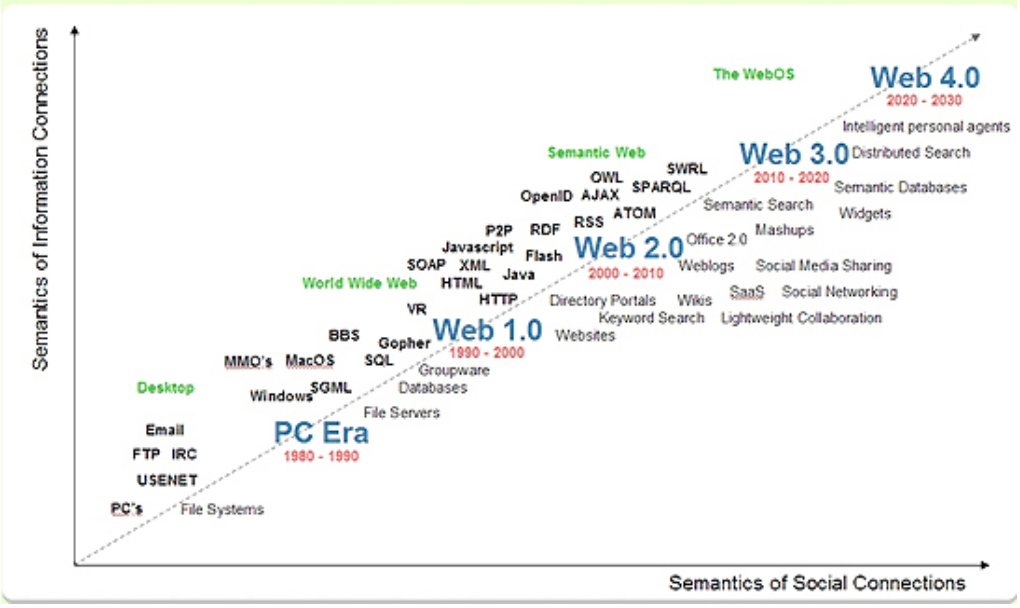


Source: Own elaboration

The use of such platforms for 'professional relations' is also high (N=94). Classified as medium importance factors are the following: 'knowledge sharing' (N=111) and 'stay informed about events' (N=111). Users are also receptive to learning about new products through social networks (N=96, medium importance). Interestingly, 'dating with people' in social networks is of low importance (N=143), followed by 'desire of expressing ideas' (N=110), 'being creative' (N=99), and 'curiosity about other people' (N=94). These results confirm that social networks' use focus more on benefits to users than on dating with people or on curiosity about people's lives.

Social networks are really important to study and explore by enterprises and researchers because these kinds of platforms are included in the Web level 2 (together with blogs, wikis, video sharing, web services, etc.), which is evolving rapidly to the Web level 3 (known as the "intelligent web"). This level will enable the use of autonomous agents to perform tasks for the user. Its goal is to create a capability that anticipates user needs, easily integrates available information, and provides ubiquitous access to personalized content (see Figure 2). Tags and keywords offer a new way for organizing and retrieving web resources (Borrero and Caballero, 2013).

Figure 2. The third generation of web is coming



Source: http://www.novaspivack.com/articles

5. DISCUSSION AND CONCLUSION

In summary, by analyzing the socio-demographic data obtained in this study (such as age, time of day in social networks, level of education, and occupational status), we can think of different users' profiles. So, from data collected, we know that 20.3% of respondents are entrepreneurs and 44.3% have graduation/bachelor as their education level. These results can highlight the need of enhancing the potential of recruitment strategies through social networks or of starting business partnerships/projects. This is important because the vast majority of respondents (73.3%) use these platforms for more than one year, and a significant percentage (33.3%) access them every day. Another issue to consider here is that the mobile phone connection is getting a significant expression (42%), thus making it relevant for new business and work applications. Regarding the actions performed in social networks, besides viewing/sending messages as is most commonly done (85.1%), searching for knowledge (new contents) is also expressive (53.9%) and can be relevant for innovative initiatives. Finally, in the item related with the motivation factors for using social networks, it is interesting that, besides communication with friends and meeting old friends, the use of such platforms for professional relations is of high importance, which corroborates some of the potentials mentioned above.

Social networks introduced fundamental changes in the behavior of users. Firms have recognized this change by taking advantage and expanding their activities, building communities, and selling their products online (Evans, 2008). This can bring great benefits to business, once technology becomes one of the main tools used to innovate. Several empirical studies demonstrate links between information/communication technologies, innovation, and competitive success (Edquist and Henrekson, 2006). Social platforms have the advantage of cheap communication, leading to a very large membership and causing the network to grow fast and connect users around the world (Hempel, 2009). What leads this process is the fact that users share common interests (Weber, 2009) without having to meet in the same, physical space (Kardaras et al., 2003). These online communities can suddenly join a crowd of individuals (Golder et al., 2007; Shirky, 2010).

With the implementation of social login (login-connection of social networks), more consumer information will be available to brands which, combined with information obtained through monitoring, can provide managers a closer and customized relationship with customers (Trusov et al., 2010). The relationship with consumers through social networks is becoming one of the biggest digital markets with great service operations on Twitter, Facebook, and multiplatform mobile applications (such as instant messaging - WhatsApp).

It is interesting that when new blogs or social sites appear—such as, for example, 'Branch' designed specifically for those who want to socialize by subjects to discuss or develop together (in partnership)—other major social networks end up buying these new sites because they recognize their potential. Thus, companies should consider this because niche markets can exist in the virtual world just like in the real world. Such niches (or even new markets) may emerge, attracting public attention through the analysis of their behavioral profiles, trends, discussion of ideas/news, and deep analysis of relationships (social networks analysis - vectors of who links to whom successively).

Although users have numerous connections to other members, only a fraction of those may actually influence a member's site usage. So, the influence of potentially hundreds of connections needs to be evaluated for each user. Inferring precisely who is influential–and, therefore, of managerial interest for the advertising, targeting, and retention effort–is difficult. However, researchers in this area acknowledge that descriptors from user profiles (e.g., gender, dates, objectives) lack the power to determine who, per se, is influential. For detecting this, the longitudinal records of members' log-in activity can be used (Trusov et al., 2010). Because all networks are connected, users within Facebook are connected to, and are presumably influenced by, their level 1 network[1] and level 2 network[2] in Twitter, LinkedIn, or every other social network in which they participate. Such an understanding can enable more precise targeting, as well as retention efforts, aimed at sustaining or increasing the activity of influential existing users and, therefore, future revenue.

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[1] A user is part of a level 1 network through an established "friendship" link (i.e., an accepted invitation).
[2] A level 2 network user is a friend that is not part of the user's level 1 network but is in the level 1 network of one of their friends.

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