

Do You Have Social Profile? Users And Non-Users Of Social Networking Sites In The Web 2.0

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ABSTRACT

In light of the increasing importance of Social Networking Sites (SNSs) for both personal and professional relationships, the aim of this work is to contribute to the knowledge framework regarding the interactive behaviour of Internet users, particularly within Web 2.0, describing its evolution from Web 1.0. Moreover, this paper analyses the different behaviours on the Web by people who use or not use SNSs, as well as to determine whether any such differences are significant in order to discover the reasons why these people participate.

As results, initial characterization of the users themselves is followed by an analysis of the main differences between users and non-users of these applications. With this information, companies can play an active role in this Social Web by becoming company 2.0 and participating actively in already existing SNSs or creating their own social network service.

Keywords: Web 2.0 and SNSs Framework, SNSs Users, Descriptive SNSs Behavioural Analysis

1. INTRODUCTION AND OBJECTIVES

The increasing use of the Internet as a global communications channel over the past few years has resulted in a radical change in the way individuals interact, their leisure activities and the way they get to know each other and form friendships. As a result of the technologies derived from the second-generation Internet, perhaps better known as Web 2.0 or the Social Web, the consumer has become the main protagonist on the web (Celaya, 2008). Indeed, the web has ceased to be an objective in itself and has instead become a platform that allows active members of a community who share an interest or related need to interact. In light of this, the user now plays a more active role by not only accessing information but providing content and knowledge (Tapscott and Williams, 2007).

Of the various tools within Web 2.0, Social Networking Sites (SNSs), such as Facebook, Tuenti, LinkedIn, etc., stand out due to the importance they have acquired. Indeed, despite being a relatively recent trend, SNSs have attracted millions of users, many of whom have integrated these networks into their daily life.

The creation of social networks is a phenomenon which has existed since society itself began (Barabasi, 2002). Everybody feels a need to form friendships and groups and, thanks to technology, especially these social networking web sites, this creation of bonds has increased both qualitatively and quantitatively.

Due to growing of utility of SNSs for both personal and professional relationships, the aim of this work was to contribute to the knowledge framework regarding the interactive behaviour of Internet users, particularly within Web 2.0, and to analyse the different behaviours on the web of those people who make use of SNSs and those who do not, as well as to determine whether any such differences are significant and to discover the reasons why these people participate.

2. WEB 1.0, WEB 2.0 AND SOCIAL NETWORKING SITES

2.1. From Web 1.0 to Web 2.0

Internet use has grown almost exponentially in recent years. Indeed, according to statistics provided by Internet World Stats¹, there are now more than 1,800 million Internet users, more than a quarter of the world. Internet use in Spain grew by 440% in the period 2000–2009 to leave the country in seventh position in terms of growth of Internet users in the EU.

In 1992, Tim Berners-Lee created the World Wide Web, which is currently known as Web 1.0. Pages in this web were characterised by being static, with their administrators, or webmasters, having absolute control of all the information controlled therein. These pages were designed to be read, with essentially no interaction between users (O'Reilly, 2005). The role of the Internet user during this developmental phase of the Web was therefore as a mere information consumer.

The term Web 2.0, or Social Web, has been used more and more often recently to refer to a new trend in the design and use of web pages whereby the user is both the centre of the information and content generator. This concept has been conceived as a philosophy, an attitude, a new way of doing things that has arisen due to the evolution of the technology itself, which has allowed Internet users to move on from being simply consumers to become producers and creators as well.

The birth of Web 2.0 was marked by the appearance of specific communication tools for Internet users, such as blogs, chats, newsgroups and SNSs, which promote a greater degree of participation. Indeed, as discussed by Riegner (2007), as well as providing benefits for consumers, this interaction has major commercial implications as the consumers themselves now have an increasing influence on products and the strategies used to sell them (Fumero and García Hervás, 2008).

The difference between traditional web pages and Web 2.0 therefore lies in the fact that in the former individuals or organisation only provided information about themselves (Arroyo, 2007), whereas the communication channels in Web 2.0 are two-way: Top-down and bottom-up. As discussed by O'Reilly (2005), a true Web 2.0 application is one which improves the more people use it. The key to such applications therefore lies in finding a balance between personal and social interests (Melucci, 2001).

2.2. Social Networking Sites. Present and future

There are various definitions of a SNS, but basically, according to INTECO (2009), an Internet-based social network is “an online application which allows its users to generate a public profile, share information, collaborate in the generation of content and participate spontaneously in social movements and currents of opinion in a completely decentralised manner”.

As time goes by and the number of social networking sites increases, their variety, objectives and means of organising themselves, etc., also increase. Thus, there are various means of classifying such networks, for example, depending on the initiation type we find registration-based networks (accessed of one's own accord) or connection-based networks (access by invitation only), although they can also be classified in terms of their purpose: Generalist or leisure-based (e.g. Facebook, Tuenti, Hi5, and MySpace), specialised or vertical (e.g. Moterus, which is dedicated to motorbikes, Match and Meetic, to finding a partner, and Dogster and Huesin, in which users participate by creating a profile for their pets), and professional (e.g. LinkedIn, Xing and Viadeo).

The boom experienced by SNSs has meant that user participation has increased exponentially in only a short period of time, thus making such networks one of the most popular channels for online communication on the Internet (Monsoriu, 2008). Indeed, according to the consultancy Hitwise (2010), Facebook traffic has recently exceeded that generated by Google searches in the US market.

¹ <http://www.internetworldstats.com/>

A study performed by Alexa Internet Inc. (2009), which involved measuring and analysing Internet traffic and resulted in a list of the 500 most-visited web pages in the world, found at least five social networks (Facebook, MySpace, Hi5, Orkut, Friendster) in the top 20.

Data published by Nielsen (2009) show that Facebook is the most popular social network worldwide, followed by MySpace. Furthermore, a study of active users (users who connect frequently) of such networks found that Facebook and LinkedIn have experienced rapid growth in such users (by 168% and 137%, respectively), whereas MySpace activity has decreased by 3%, thus showing that users of the former are more faithful.

Figures provided by ComScore Media Metrix (2011) show that 211 million of the 282.7 million European Internet users aged 15 or older who connected to the Internet at home or work during December 2010 visited a SNSs (a reach of 74.6% and a growth of 13.7% with respect to the previous year). Of the 16 European countries included in the study, Spain had the highest proportion of social network users (73.7%) after the United Kingdom (UK) (79.8%). Spanish Internet users between the age of 15-24 spent most time on SNSs with an average of 11 hours in December 2010, followed by 15-24 year olds from the UK and Italy. 35-54 year old Internet users in the UK spent on average more time on SNSs than their 25-34 year old counterparts.

In light of the above, the study and understanding of SNSs becomes of vital importance due to the reach they currently have, and are likely to have in the future, in order to provide the greatest benefit for both individuals and companies.

3. METHODOLOGY

A total of 500 Internet users representing the current proportion of SNSs users and non-users (399 and 101, respectively) were sampled. A non-probabilistic quota-based sampling method was used to obtain the sample in order to ensure that the various subgroups in the population were represented in the sample in terms of their relevant characteristics and in the correct proportion. Thus, information was collected by applying an online survey to a panel of Internet users from a market research company in March and April 2010.

This allowed us to obtain a representative sample of the sampling universe (by quotes), based on data for 2009 published by the Statistical National Institute in its “Survey of the Possession and Use of Information and Communication Technologies in the Home”, as regards the sociodemographic profile of Internet users aged between 16 and 74 years who have connected to the Internet in the past three months. Our sample consisted of almost identical percentages in terms of sex, age and Autonomous Community of residence.

The questionnaire was structured on the basis of closed, di- and multichotomous, simple- and multiple-response questions together with Likert scales to obtain information regarding the level of Internet use in general and Web 2.0 and SNSs use in particular.

4. ANALYSIS AND EMPIRICAL FINDINGS

The level of adoption and use of the Internet, Web 2.0 tools and SNSs by Spanish Internet users is described below, and the differences between SNS users and non-users in terms of behaviour and use analysed.

4.1. Internet use and adoption of Web 2.0 tools

According to our study, the majority of such individuals are long-term Internet users. Furthermore, there is association² between being a SNS user and the length of time the person has been online, with SNS users having been online for longer (61.4% of SNSs users have used the Internet for eight years or more, whereas only 46.5% of non-users have done so).

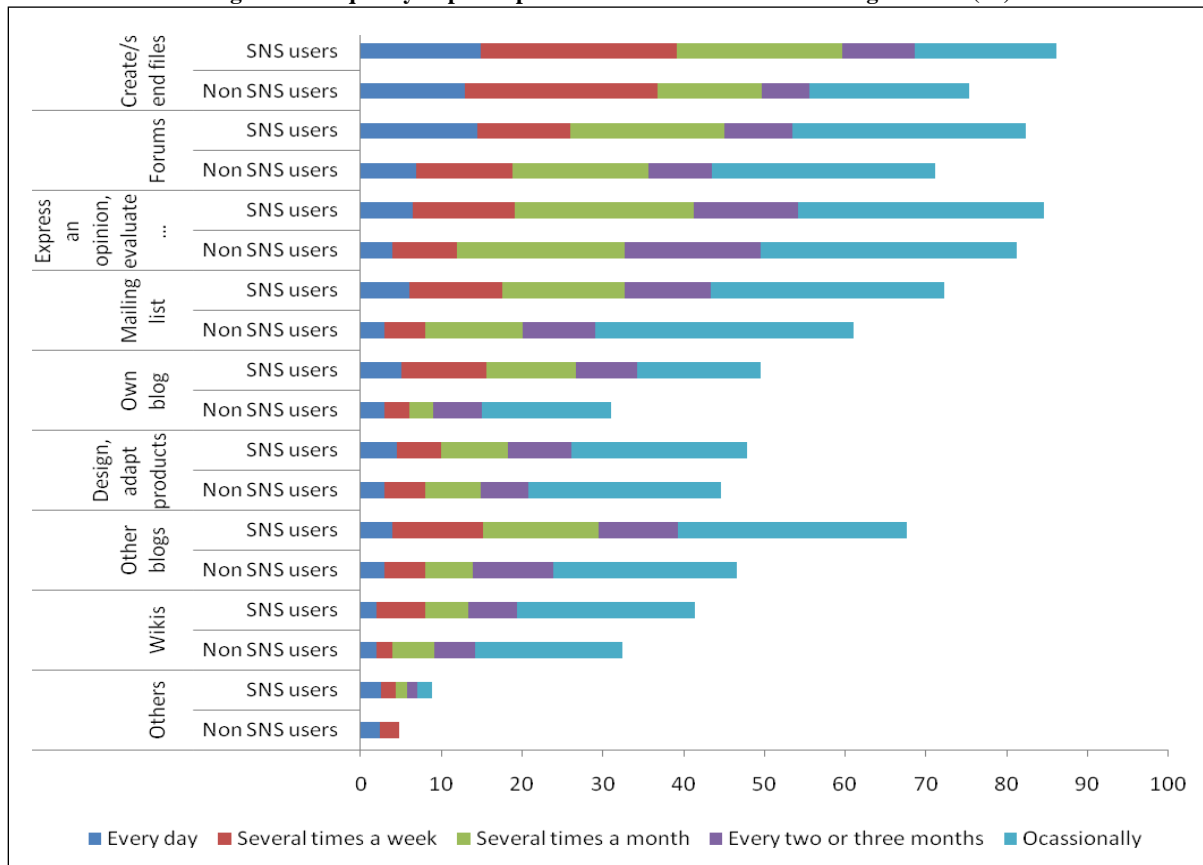
² The chi-squared test for independence was applied to determine the existence of an association or relation between any two variables. In this test, the null hypothesis used for comparison is that there is no association between the two variables. In this specific case the null hypothesis was rejected, thus indicating that length of Internet use and being a SNS user or not are not independent variables, in other words they are related.

An analysis of the frequency with which the Internet is accessed from different locations and devices showed that there is only a relationship between being a SNSs user or not and accessing the Internet via a mobile phone, with such access being much more common amongst SNSs users (26.3% vs. 13.9%).

Internet use has mainly increased to the detriment of doing nothing (for 60% of Internet users), watching TV (57.8%), searching for information in libraries, catalogues, etc. (38.8%), reading (35.4%), playing sports (21%), sleeping (20.6%), studying (16.2%), listening to the radio (13.6%), going to the cinema (13.4%), working (10.2%), and going for a walk, going out with friends, spending time with the partner (9.4%). However, there is no relationship between being a SNS user or not and the activity to which less time is dedicated in order to connect to the Internet, except in the case of watching TV and searching for information in libraries, catalogues, etc., where a larger percentage of SNS users spend less time on these activities (60.2% of SNS users vs. 48.5% of non-users and 42.6% of users vs. 23.8% of non-users, respectively).

Numerous different Internet tools can be used to obtain information (such as in Web 1.0) or generate content (such as in Web 2.0). The frequency with which different Internet users (SNSs users and non-users) make use of the different Internet tools used to obtain information or communicate. It can be seen that SNSs users make up a higher percentage of users for all such tools and that they use them more frequently. However, the use of such tools does not depend on being a SNSs user or not, simply that there is an association as regards the use of instant messaging programs, viewing and listening to files via the Internet, file sharing peer to peer (P2P), consulting information in newsgroups, reading blogs, file transfer (FTP), consulting wikis and making phone calls over the Internet (IP telephony). In other words, the Internet tools used by both SNS users and non-users are email (which is used by all Internet users), subscription to certain alerts, consultation of product reviews, news, etc., consultation of mailing lists and the use of avatar-based customer services. It should be noted that all the applications indicated involve the user simply receiving information rather than generating content.

Figure 1. Frequency of participation in Web 2.0 tools as content generator (%)



The frequency of use for the Web 2.0 tools (Figure 1) used actively by Internet users to generate web content, that only a relatively small number of both SNS users and non-users generate content and that the frequency of use for those who do is lower than the passive participation in other Internet tools. Although a greater number of SNS users than non-users use these tools actively, it should be noted that the degree of use of such tools is not associated with being a SNS user or not, except for the case of uploading content to a personal blog and adding comments to somebody else's blog. Specifically, irrespective of the degree of Internet use, the activities undertaken by the greatest number of Internet users include crating and/or sending files via the Internet (83.9%) and expressing opinions and ratings concerning products, news, trivia, etc. (83.9%), followed by participating in newsgroups (80.2%), sending messages to mailing lists belonging to communities or groups (69.9%), adding comments to someone else's blog (63.4%), designing and/or modifying products or services (47.2%), uploading content to a personal blog (45.8%) and adding content to wikis (39.6%).

4.2. Adoption and use of social networking sites

This section analyses the degree of adoption of SNSs by their users and the use they make of them, as well as the reasons why they participate.

The majority of SNSs users have been users for more than a year (44.1%), followed by those who have been users for between one and six months (27.1%), between six months and a year (25.1%) and a small number who have been users for less than a month (3.8%). These figures show that SNS use is still relatively new but is increasing all the time.

As far as the means of accessing SNSs is concerned, the vast majority of users use a computer (92.7%), with only a very small number connecting via a mobile phone (0.8%); the number of users who connect via both devices is somewhat larger (6.5%).

In terms of frequency of access to SNSs, several times a day from home is the most popular category (35.3%) followed by every or almost every day (24.3%), although some users connect several times a day from work (12.8%) or every or almost every day (10.5%); the frequency of access from a university, public terminal or mobile phone is very low. Furthermore, a comparison of the frequency of SNSs access with that of Internet access in general shows that the latter is much higher.

Based on this study, the **most popular SNSs generalist** are Facebook, Tuenti, MySpace, Badoo, and Hi5. The **most popular professional social networks** are Xing and LinkedIn. The large number of loyal users who have a Facebook account (69.7%) is worthy of mention. Furthermore, it can be seen that generalist social networks are used more often than professional ones, and are better known.

An analysis of both the generalist and professional/specialised social networks in which a user has an account and uses it shows that 43.4% of users are loyal to just one such network, 24.8% to two, 11.8% to three and 7.5% to three or more. Furthermore, 12.5% of users are registered with a SNS but rarely use it, in other words they are aware of SNSs but cannot be termed users. Clearly, although users may have an account with various SNSs and use them, **some networks will always be more used than others**. Facebook, as well as having the largest number of users, is almost the SNSs which is used most often, as both first and second choice (54.4% and 11.5% respectively), with 69.7% of SNSs users considering it to be one of their top five most used networks, followed by Tuenti and MySpace. However, Tuenti is used more as first choice (19%) and MySpace as second choice (7.5%).

Contingency table 1 shows the percentage of users with an account and who use each social network by age. It can be seen from this table that Tuenti is most popular amongst people aged between 16 and 24 years, whereas Facebook is most popular amongst people aged more than 25 years, especially amongst those aged between 25 and 34 years (83.3%). Furthermore, a greater number of users aged between 25 and 44 years use MySpace than any other age group. Finally, it should be noted that professional social networks have a greater number of adult users than younger users.

Table 1. SNSs used by age group (%)

		16–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65–74 years	Total
General social networks	Tuenti	61.5	26.2	5.1	4	1	0	24.8
	Facebook	57.1	83.3	75.8	63.5	46.2	20	69.7
	MySpace	16.9	46.2	24.6	9.2	3.1	0	16.3
	Badoo	5.5	5.6	13.1	3.8	3.8	0	7
	Hi5	1.1	7.9	5.1	17.3	7.7	0	6.8
Professional social networks	Xing	1.1	4.8	12.1	1.9	3.8	0	5.3
	LinkedIn	2.2	0	8.1	3.8	0	0	3

As far as the status of the user's profile(s) on SNSs is concerned, 31.3% of users have a public profile (which can be seen by anyone) on some sites and a private one (which can only be seen by contacts) on others. A similar percentage of users (31.3%) have a private profile only, with a slightly lower number having a public profile only (29.8%) and a very small number being unaware of their profile's status (7.5%).

The information included by the majority of users in their profile includes their real name (81.5%), their home town/city (80.7%), date of birthday (78.9%), photograph (78.7%) and email address (57.6%). This information is mainly aimed at classifying users and the means of contacting with them, and without it would be impossible to locate or find that person, which is the real purpose of social networks. In contrast, information concerning a user's personal or private situation is provided by a much lower number of people.

The number of contacts that each user has in their most-used social network differs depending on the person concerned. Most users (46.9%) have between 10 and 50 contacts, followed by those with between 51 and 100 (21.3%). The number of users with many more or many fewer contacts is much lower. Thus, 16.3% of users have fewer than 10 contacts and 15.5% have more than 100.

Figure 2. Types of contacts maintained in SNSs (%)

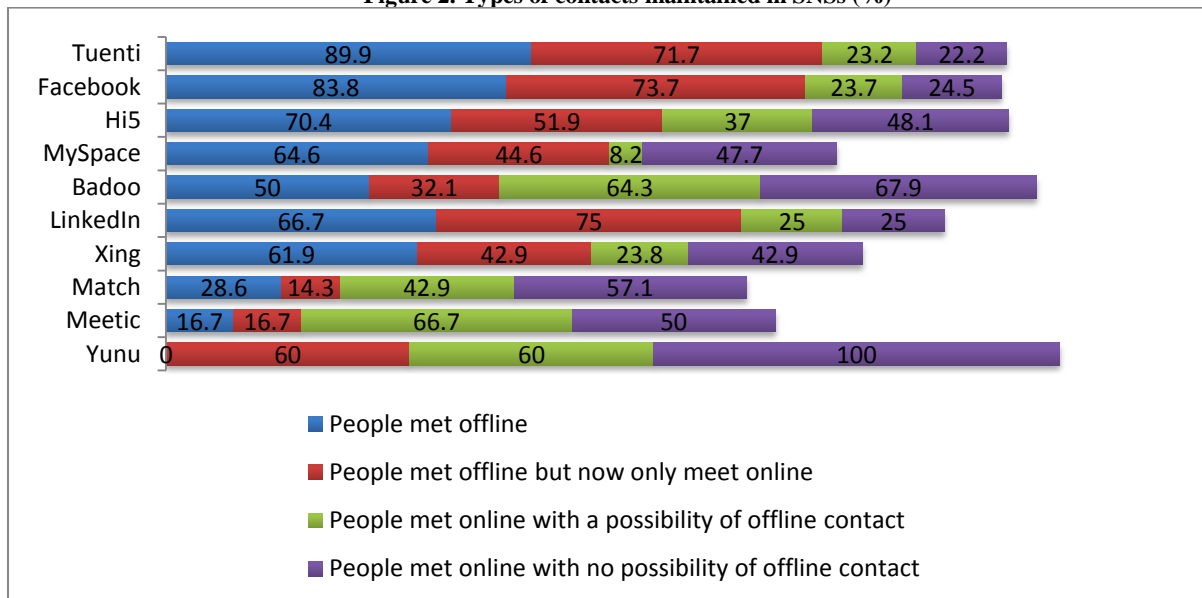


Figure 2 shows the different types of contacts maintained in the major social networks (several types are possible in the same network). These figures refer only to those users who stated that they had an account in these social networks and that they used it. Thus, it can be seen that, except in the case of specialised social networks, the majority of users have people they know from their *offline* environment as contacts, with this proportion being

notably higher for Tuenti and Facebook (89.9% and 83.8%, respectively). In contrast, the proportion of contacts met only via the Internet and with whom there may never be any real contact is much lower for the aforementioned networks. This distribution is the opposite for the specialised networks studied (Mathc, Meetic and Yunu) and for Badoo, as these networks are principally aimed at meeting new people and even finding a partner.

The main reasons why social network users participate in these networks, the most important of which are entertainment (74.9%), communication (64.9%) and because they were invited to join by a friend (64.2%), are shown in Figure 3.

Figure 3. Main reasons for using SNSs (%)

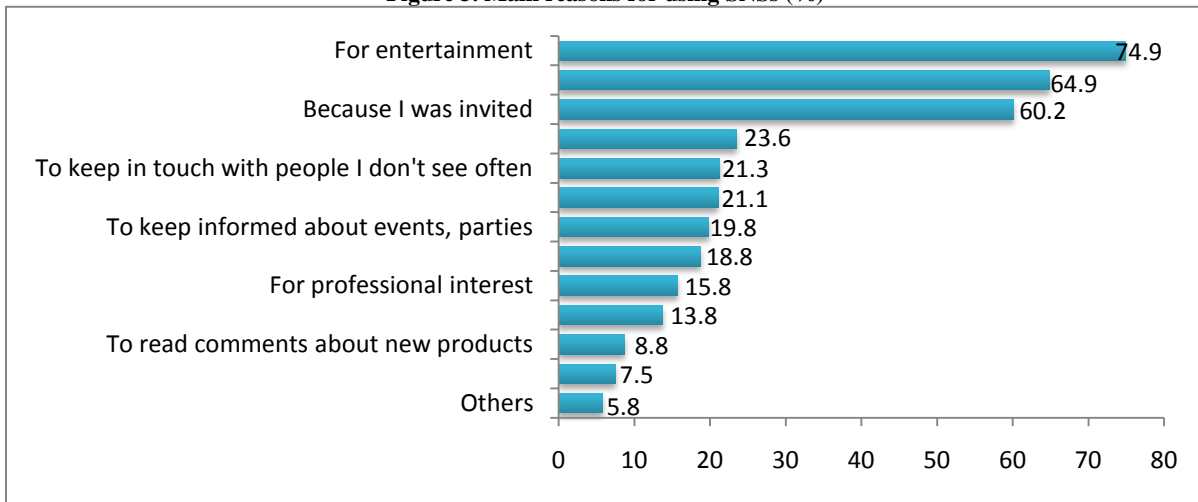
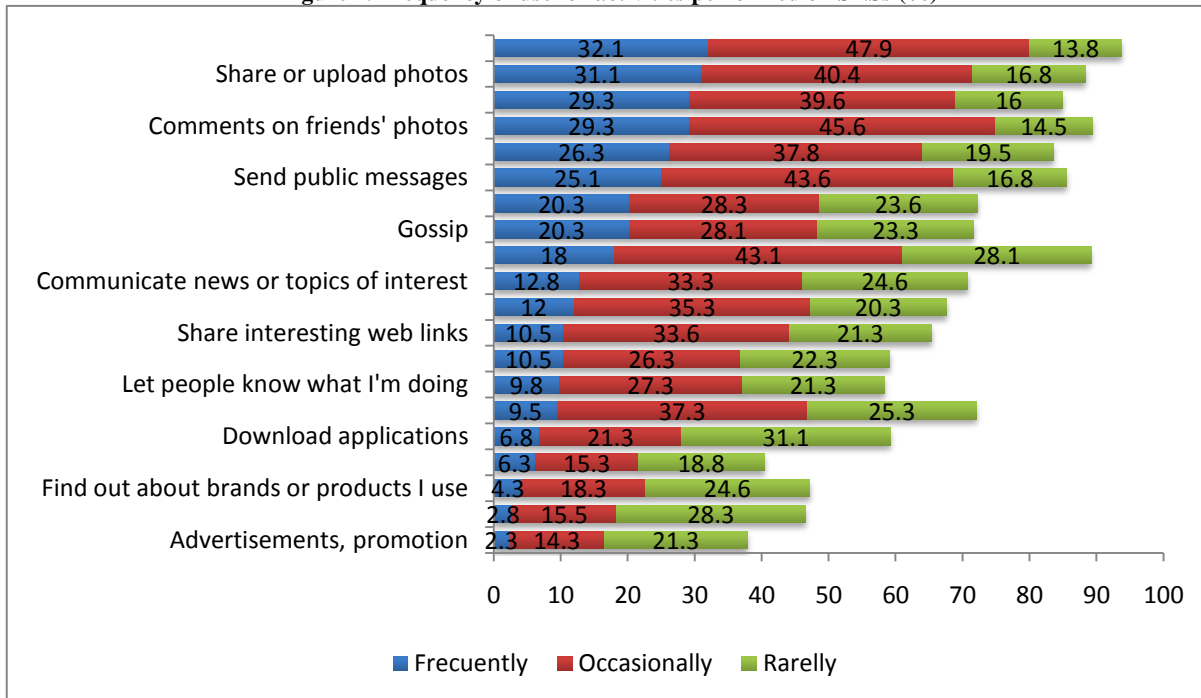


Figure 4. Frequency of use for activities performed on SNSs (%)



The activities which can be undertaken in social networks vary. The main such activities are shown in Figure 4, where it can be seen that the tool itself generates communication regarding photos and user profiles. The majority of users send private messages within the network, share or upload photos, comment on what other contacts are saying or doing, or regarding their photos, find out about things they are interested in, send public messages, which are normally published on their own wall or on one of their contacts' walls, label friends in photos, gossip with other users and update their profile relatively often. Other activities which are less closely related to the socialisation of the user are undertaken by a lower number of users and with a lower frequency. Furthermore, it should be noted that brands and their products are often the subject of conversations, and even their advertisements and publicity provoke comments.

It should be noted that younger users tend to undertake most of these activities more often, except for those such as sending private messages or communicating thoughts and ideas, which tend to be undertaken more often by older users, and those related to information regarding areas of interest to the user, where there are no major age-related differences.

SNSs offer numerous possibilities for companies, including the ability to advertise their brand or organise an event. We therefore decided to analyse whether users are aware of such company advertisements on social networks, and whether they had ever decided to find out more about the product/brand being advertised. The results of this study showed that 72.2% of users admitted to having seen advertising on social networks, but that only 42.4% of these users (in other words 30.6% of all users) had ever clicked on such an advertisement.

5. CONCLUSIONS

The rapid adoption of new social technologies has meant that the Internet has become one of the most important distribution channels for many companies (Celaya, 2008). Thus, whereas the Internet was previously simply a means of searching for, and providing, information, the arrival of Web 2.0 has transformed it into a place where those companies which are able to personalise their content and which allow the creation of communities to collaborate and share tend to prosper. The most recent online marketing trends report from the consulting firm McKinsey notes that, in 2011, the majority of consumers will discover new goods and services on the Social Web, and that a third of them will decide to purchase them.

Despite being a relatively recent trend, SNSs have attracted millions of users since their introduction, and many of these users have incorporated these virtual interaction spaces into their day to day life, thus making SNSs one of the most popular online communication media on the Internet.

SNSs users tend to be the most active on Web 2.0, use a greater number of social tools and do so more often. This percentage of Web 2.0 users, or more specifically SNS users, is growing, and will continue to grow, exponentially, therefore companies should jump on board and take advantage of the numerous benefits offered by such networks. From a marketing point of view, the importance of these SNSs for companies is clear and increases almost daily for numerous reasons. In Web 2.0 in general, and SNSs in particular, consumers themselves can influence the opinion of other consumers by way of conversations exchanged on these networks, as well as recommendations, comments and ratings, amongst others. In contrast, companies can use Web 2.0 as a market research tool by browsing through it to discover the tastes, wishes, worries, needs, behaviour, etc., of its users, as well as their sociodemographic profile, thus allowing them to locate their target clients and contact them directly. Furthermore, companies can play an active role in this Social Web by becoming company 2.0 and participating actively in already existing social network sites or creating their own social network service, which will encourage the formation of emotional bonds and a sense of belonging to a group in the consumer, thereby increasing a sense of loyalty towards the company.

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