PRIVATE INFORMATION REVEALED BY ROMANIAN FACEBOOK USERS - AN EXPLORATORY ASSESSMENT

Vegheş Călin, Orzan Mihai, Acatrinei Carmen, Dugulan Diana

Marketing Department, Faculty of Marketing, Bucharest University of Economic Studies, Bucharest, Romania c_veghes@yahoo.com mihai.orzan@ase.ro acatrinei.carmen@gmail.com diana.dugulan@yahoo.com

Abstract: The use of online social networks has become part of our lives. More and more people join networks, create their online profile, add pictures with themselves, add personal information about them, find people they know and connect with them, share and like posts, comments, pictures or movies and many more. The social networks allow more and more features and people are open and willing to try them. In this context, it is important for those who own such a profile to be aware of how their personal information is handled, who can view the data they publish in the social network and how they can protect the information they post, by granting access to it only to those persons they want to. The objective of this research was to study what type of information Romanian Facebook users are revealing on their profiles. We have conducted an empirical research, based on an online questionnaire which was available to be accessed in March 2013. 42,5% of the respondents, aged between 21 and 40, formed mostly my employees, managers and students, have not shared on their profiles neither their phone number, their home address, nor their messenger ID. Even though we have considered that the email address was also considered personal and very private information, our assumption did not confirmed, about 30% of the respondents have their email address shown on their profile. At the opposite side, it was confirmed that the gender, real name, personal pictures, birthday and current town are information published by more than 80% the respondents. The respondents do know and do make a difference between having their profile shown when searched on Facebook and allowing their profile to be visualised by whomever they want. Even though most of the respondents have their profile public when searched for it, the great majority have set that only their friends to be able to see the information they post online. Only about 10% of the respondents have added or have accepted friendship requests from people they did not know before and about 30% have never accepted such requests. Overall, we may say that our respondents are careful about what their share on Facebook.

Keywords: consumer private information; online privacy; social media privacy; Facebook Romanian users;

JEL classification: M31;

1. Introduction

The growing popularity of social networks can be explained by the fact that people want to get in touch with new persons, to be connected to their friends, family, colleagues or acquaintances or to be present online. By using social networks members can create the profile they want for themselves, share photos, videos, music, play games or use different applications available, compile lists of friends that they can link to, create or join groups of people with similar interests, announce events and invite people to attend. In the same time, they can easily communicate with the persons they know, send and receive messages, share their ideas, write entries on their own and the others profiles, walls or timelines, allow comments to their posts.

According to Alexa (2013), the most visited websites worldwide in March 2013 were: google.com, facebook.com, youtube.com, yahoo.com, baidu.com, wikipedia.org, live.com, amazon.com, qq.com, taobao.com, blogspot.com, twitter.com, google.co.in, linkedin.com, yahoo.co.in and bing.com. It can be observed that most of the websites are search engines, but among the top three, there are two social networks. According to their website there were more than a billion monthly active users as of December 2012, out of which about 82% are users located outside US or Canada (Facebook, 2013).

2. Literature review

Social networking websites have added a new dimension not only to the way people and organizations communicate, but also to the way in which they use the wealth of information available in the social network (Malik, Malik, 2011), how they search or how they investigate other persons or competitors. Social networking sites record information about users such as: name, gender, birthday, relationship status, educational and employment history, religious or political views, sexual preference etc. (Qi, Edgar-Nevill, 2011, p. 76) and this information will be kept in perpetuity and taking into consideration that one entity collects and controls so much personal data, a user should find a balance between his updates and the protection of his and his beloved ones privacy.

When being members of online social networks people should keep in mind that their privacy and their privacy's 5Ws what, where, who, why and how is important. The inputs (what) that they or their connected profiles (mostly friends) submit, enter the network, from where, it can be seen, accessed and observed by other members of the network, who, for different reasons may use that information constructively or negatively (how). The study done by leng-Fat. Kuan-Ta and Ling-Jyh confirms that revealing personal information online is a double-edged sword and discuss the problem of information leakage in social network services (2008, p.2). They also explain the fact that other people may reveal information about a Friend through the comments they make (Friend is "the best steak chef in Boston" - from where the occupation and location is disclosed), by tagging and describing photos uploaded (Him and Friend at Someone's wedding - how friend looks like and the fact that he knows a third person) or by adding them in lists (for instance Faculty colleagues). All this information (and much more) can get on the wrong hands and may lead to stalking (Al Hasib, 2009, p. 291, Tan et.al, 2012, p.212), spamming or phishing (spear or social) (leng-Fat, Kuan-Ta, Ling-Jyh, 2008, p.13), malvertising (Sophos, 2010), profile squatting throught identity theft (Ulrike, 2011).

3. Methodological notes

The objectives of the research included: study the type of information Romanian Facebook users are revealing on their profiles; the use of privacy settings regarding the search and visualisation of their profile; identify some activities done by the consumers on the social network.

A survey was conducted using an online questionnaire, which was delivered randomly over Facebook. We conducted the survey in March 2013 and received 160 full answers, all of the respondents owning at least one Facebook account, for an approximately 4% response rate. The respondents are Romanian, almost evenly balanced between genders, being aged 21 to 40, half of the women and men being aged under or equal 25 years old. 91 of the respondents live in Bucharest and the rest in other towns. A large majority (over 83%) is made of university graduates and hold a professional status as presented in Figure 1 - only 4 of the respondents mentioned that they were unemployed at the moment of filling in the questionnaire.

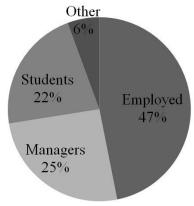


Figure 1: The professional status of the respondents (%)

The "employed" respondents mentioned to be part either of public or private organizations; the "managers" are either freelancers (16,66%), have their own company (40,47%) or they are department managers (42,87%) within private or public organizations. The "students" are either faculty enrolled students, master students or doctoral students. Among the "other" occupations there were mentioned housewives or in maternity leaves.

In Table 1 it is presented the marital status of the respondents, both male and female, in accordance with their age (either under or equal to 25, or above 25 years old up to 40).

Table 1: Marital status of the respondents (%)

| Marital status | Age | | Total | |
|----------------------------|-------|-------|-------|--|
| Iviantai Status | ≤25 | >25 | Total | |
| married | 1,9% | 20,6% | 22,5% | |
| live together, not married | 6,9% | 5,0% | 11,9% | |
| not married | 41,3% | 23,8% | 65,0% | |
| divorced | 0,0% | 0,6% | 0,6% | |
| Total | 50% | 50% | 100% | |

One of the respondents mentioned to be divorced, all the rest were either married (22,5%) or not (76,9%).

The questionnaire included 16 questions, out of which seven were related to their demographic details and social networks' usage and the rest were approaching the privacy of the Facebook account and the way this account was used by the respondent in the last 12 months.

4. Main findings

None of the Facebook users interviewed mentioned to use this social network less than 1 or 2 times a week and only 7 of the respondents do not use or do not have a YouTube account, as seen in Table 2.

Table 2: Frequency of social networks usage (n=160)

| I able 2. I | . Hequency of social networks usage (n=100) | | | | | | | |
|-------------|---|----------------------------|---------------------|---------------------|-----------------------------|----------------|---|--|
| | more times a day | about one time a day | 3-5 times a week | 1-2 times a week | once in several weeks | seldomly | I do not own an account in this network | I do not know / I do not answer |
| Facebook | 127 (79.38%) | 22 (13.75%) | 9 (5.63%) | 2 (1.25%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| YouTube | 64 (40.00%) | 36 (22.50%) | 25 (15.63%) | 20 (12.50%) | 4 (2.50%) | 4 (2.50%) | 7 (4.38%) | 0 (0.00%) |
| LinkedIn | 8 (5.00%) | 11 (6.88%) | 12 (7.50%) | 25 (15.63%) | 12 (7.50%) | 20 (12.50%) | 59 (36.88%) | 13 (8.13%) |
| Twitter | 6 (3.75%) | 2 (1.25%) | 1 (0.63%) | 6 (3.75%) | 8 (5.00%) | 25 (15.63%) | 100 (62.50%) | 12 (7.50%) |
| Google + | 23 (14.38%) | 6 (3.75%) | 3 (1.88%) | 5 (3.13%) | 15 (9.38%) | 43 (26.88%) | 56 (35.00%) | 9 (5.63%) |
| Pinterest | 1 (0.63%) | 5 (3.13%) | 5 (3.13%) | 5 (3.13%) | 10 (6.25%) | 11 (6.88%) | 104 (65.00%) | 19 (11.88%) |
| Hi5 | 0 (0.00%) | 1 (0.63%) | 0 (0.00%) | 2 (1.25%) | 1 (0.63%) | 24 (15.00%) | 116 (72.50%) | 16 (10.00%) |
| Netlog | 1 (0.63%) | 0 (0.00%) | 0 (0.00%) | 2 (1.25%) | 4 (2.50%) | 9 (5.63%) | 127 (79.38%) | 17 (10.63%) |
| Neogen | 0 (0.00%) | 0 (0.00%) | 1 (0.63%) | 1 (0.63%) | 0 (0.00%) | 9 (5.63%) | 130 (81.25%) | 19 (11.88%) |
| MySpace | 0 (0.00%) | 0 (0.00%) | 1 (0.63%) | 0 (0.00%) | 2 (1.25%) | 12 (7.50%) | 128 (80.00%) | 17 (10.63%) |
| Flickr | 1 (0.63%) | 0 (0.00%) | 2 (1.25%) | 1 (0.63%) | 6 (3.75%) | 9 (5.63%) | 124 (77.50%) | 17 (10.63%) |

On average, 15 respondents did not hear about social networks such as LinkedIn, Twitter, Google +, Pinterest, Hi5, Netlog, Neogen, MySpace or Flickr and about 105 of them do not have accounts on these networks. The most popular social networks are, by far, Facebook and YouTube, followed by Google + and LinkedIn, all the rest turned out to be not that attractive for the Romanian users.

The percentages are kind of balanced between those respondents who have set for their profile to be private (43,75%, both for friends and friends of friends) and public (42,5%) when *searched* for it. 22 of the respondents do not know the setting of their searched profile, do not know how to set it or just do not consider important this

setting. As it appears in Figure 2, the things change dramatically when asked about who can *see* the information they post on their personal Facebook profiles.

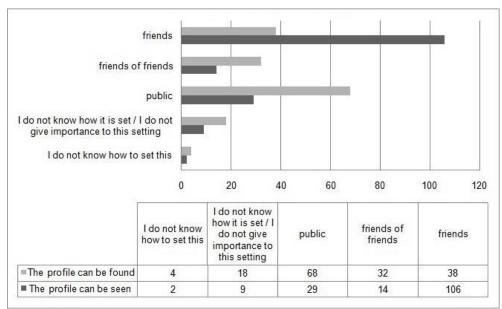


Figure 2: The profile privacy setting for search and visualisation

There were only *nine* respondents who mentioned that they did not give importance to this setting or do not know how to set this, out of which four of them are aged under 25 years old (one manager, two students and one other professional status / three females and one male respondent), and from the rest (above 25 years), three are employed and two are managers. The *two* respondents who recognised they do not know how to make the setting are 28, respectively 32 years old. From this total of 11 respondents, nine are among those 22 who answered similarly about their preference for their *searched* profile.

From those 68 respondents whose profile is public when searched on Facebook, 41 of them permit only to their friends to see their information and what they post; two allow also to the friends of their friends, 24 kept it public also for visualization and one does not know for sure.

According to the type of information the respondents have posted on their own Facebook profiles, we have identified that on this social network there are *four* types of privacy levels, presented in Table 2. We consider information such as: home address, messenger ID, webpage and phone number as *very private* information, because equal or less than 15% of the respondents have provided these sections on their Facebook profiles. The religion, favourite quotations, previous jobs, email addresses, whether interested in men or women section, personal motto, upload of a personal movie, political views or the automatically appearance of the location when posting on Facebook are considered to be *private* information since less than half of the respondents provided them on their profiles. Of course, it should be taken into consideration the fact that some people may have not filled in some of these sections not because of their privacy, but because they do not consider it is worthy

to have this information specified (whether interested in men / women, motto, favourite quotations), not having this information (previous jobs, website) or for any other personal reasons.

Table 2: The information revealed on the respondents' profiles

| Information revealed | | | |
|-------------------------------------|-----|------------|--|
| | 150 | Percentage | |
| Gender | | 93,75% | |
| Real name (both first and family) | 147 | 91,88% | |
| Added at least one personal picture | 141 | 88,13% | |
| Birthday | 138 | 86,25% | |
| Current town | 131 | 81,88% | |
| Levels of education graduated | 109 | 68,13% | |
| Added at least one family member | 104 | 65,00% | |
| Hometown | 102 | 63,75% | |
| Where studying | 89 | 55,63% | |
| Relationship status | 86 | 53,75% | |
| Current workplace | 84 | 52,50% | |
| Foreign languages | 82 | 51,25% | |
| Religion | 57 | 35,63% | |
| Favourite quotations | 57 | 35,63% | |
| Previous jobs | 57 | 35,63% | |
| Email address (other than Facebook) | 47 | 29,38% | |
| Interested in (men / women) | 44 | 27,50% | |
| Motto / About you | 44 | 27,50% | |
| Added at least a personal movie | 39 | 24,38% | |
| Political views | 33 | 20,63% | |
| Automatically location appearance | 33 | 20,63% | |
| Phone number | 24 | 15% | |
| Webpage | 24 | 15% | |
| Messenger ID | 23 | 14,38% | |
| Home address | 5 | 3,13% | |

More than half of the respondents, but less than three-fourths of them, specify the levels of education they graduated, family members, hometown, where they are currently studying, their relationship status, current workplace and the foreign languages they speak, on their Facebook profile. These types of information are *less private*. Due to the fact that more than 80% of the respondents have no problem with offering information such as: current town, birthday, personal picture, real name and gender, on their profiles, we tend to consider these types of information as *not private*. We can conclude this by referring to the presence on Facebook of Romanian consumers who have given access to their friends and friends of friends in a proportion of 75%. It should also be highlighted that only 18.8% of the respondents checked out their Facebook profiles when answering the question.

Being asked about their activity on the social network from the last year, only 17 respondents mentioned that they added people they do not know, as friends on Facebook (and then most of them confirmed that one of the reasons they use this network is to become more popular) and 10 of these have also accepted friendship invitations from people they did not know before. Taking into consideration the rest, 47,5% mentioned they rarely or very rarely have added unknown persons into their network, 40% mentioned they have never added strangers and 3 respondents did not remember or did not want to answer. More than half of the respondents (58,13%) have rarely accepted invitations from people they did not know and 31,25% have never accepted such friendship requests.

Almost half of the respondents uploaded often or very often personal pictures or movies on their profile, only 9 have never uploaded such a file. The great majority (95,62%) of the Facebook users confirmed they have appeared in at least one picture or movie uploaded by their friends and 92,5% have accepted to be tagged in it (to be created a link to their profile, their name to appear on the picture or status), 4 respondents have never appeared and 3 did not remember.

It is very important to be noted the fact that 58 persons have never filled on their Facebook profile, information such as home address, phone number, email address or messenger ID. In Figure 3 there are presented their demographic characteristics:

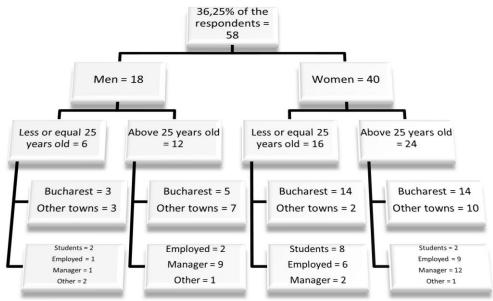


Figure 3: Demographic information about those respondents who have never filled in private information

5. Conclusions and future directions of research

People are not concerned about providing their real name and adding a picture of their self on their Facebook profile. On the other hand, some members sign in social networks, connect to people they know and prefer not to share any information about themselves, but they should also be careful about their privacy, since their friends may disclose such data about them.

One of the most surprising conclusion that we draw, was the fact that the personal email address of the respondents did not turn to be that private in social networks. We have started this research with the hypothesis of having as very private information: the home address, phone number, email address and messenger ID, but the email was not confirmed to be as private as we supposed. We may say that the websites do not appear on people's profiles mainly because they probably do not own a company / a blog etc. and do not have to promote it on their Facebook profile. There were a percent of 63,12%, 101 respondents who have not initially filled in the home address, phone number, email address and their messenger ID, but out of which only 58 persons still have not filled in any of those fields in the last year. It would be interesting to assess in the future the perceived usefulness, ease of use, privacy concern and behavioural intention of the Romanian consumers about Facebook. Another future direction of research could include the assessment of the user's awareness about the threats and management of privacy preferences on the social network. Also, it would be interesting to research the existing legislation and whether it deals with the challenges offered by the social networks.

6. Acknowledgements

The authors of this paper would like to thank the UEFISCDI (Executive Unit for Financing Higher Education, Research, Development, and Innovation) for the support provided in conducting this research and the dissemination of its results, through the Research Grant No. 27/26.10.2011.

References

Al Hasib, A. (2009) "Threats of online social networks", *IJCSNS International Journal of Computer Science and Network Security*, Vol. 9, No. 11, pp. 288-293. Alexa (2013) [online] Available: http://www.alexa.com/topsites, [15 March 2013]. Facebook, (2013) [online] Available: http://newsroom.fb.com/Key-Facts, [15 March 2013].

leng-Fat, L., Kuan-Ta, C., Ling-Jyh, C. (2008) Involuntary Information Leakage in Social Network Services, *Proceedings of IWSEC 2008*, pp. 1-17.

Malik, H., Malik, A.S. (2011) "Towards identifying the challenges associated with emerging large scale social networks", *Procedia Computer Science*, Vol. 5, pp. 458-465.

Qi, M., Edgar-Nevill, D. (2011) "Social networking searching and privacy issues", *Information security technical report*, Vol. 16, pp. 74-78.

Sophos Group (2010) *Security Threat Report: 2010*, Boston, MA, [online] Available: www.sophos.com/sophos/docs/eng/papers/sophos-security-threat-report-jan2010-wpna.pdf, [25 March 2013].

Tan, X., Qin, L., Kim, Y., Hsu, J. (2012) Impact of privacy concern in social networking web sites, *Internet Research*, Vol. 22, No. 2, pp. 211 - 233.

Ulrike, H. (2011) Reviewing person's value of privacy of online social networking, *Internet Research*, Vol. 21, No. 4, pp. 384 - 407.