
Technical Reports

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Survey of sharing practices in online social networks

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Abstract

Social Networks is one of the major technological phenomena on the Web 2.0. Hundreds of millions of people are posting articles, photos, and videos on their profiles and interacting with other people, but the sharing and interaction are limited within a same social network site. Although users can share some contents in a social network site with people outside of the social network site using a public link of content, appropriate access control mechanisms are not supported. In order to understand the challenge of cross-site interaction more deeply, we perform an online survey for users' social networking experience, privacy preference, and content sharing experience.

1 Introduction

We conducted a survey to understand user's content sharing experience on social networking sites¹. The survey investigated users' social networking experience, privacy setting, and content sharing experience. On users' social networking experience, we inquired whether participants have accounts in multiple social networking sites, for what reasons are participants using multiple social networking sites, and how often participants access social networking sites. On user's privacy setting, we inquired what kinds of relationships are on social networking sites, whether participants organize customized group to apply different privacy setting, and whether participants block or except any friends to protect their privacies. On content sharing experience, we inquired whether participants have experienced the cross-site content sharing problem, whether participants like to share a content with a specific list of friends on other social networking sites, and what content sharing services prefer to use. The survey consisted of a mix of multiple choice questions, yes/no questions, and Likert scale questions. We posted advertisements to social networking sites, micro blog sites, and campus to attract our desired demographic of the general class of Internet users. We recruited 403 participants to start the survey, of which 306 participants completed the online survey and 97 participants did not complete the survey. The participants

¹IRB Protocol No: 09-03-16, Title: Cross-site Interaction between Social Networks

received entry into a drawing for 4 iTunes gift cards (\$15), 30 Osfoora for iPhone APP, and 30 OsfooraHD for iPad APP. We investigated the survey results of 306 participants who completed the survey.

2 Survey Results

2.1 Most participants have accounts on multiple social networking sites

87.6 % of participants reported they have accounts on multiple social networking sites such as Facebook, MySpace, Orkut, LinkedIn, Twitter, YouTube, and Flickr. They selected Facebook (82.1 %) and Twitter (81.3 %) as mainly used social networking sites. The participants also reported the reason of using multiple social networking sites is to get different services or to meet the scattered friends on different social networking sites (Table 1). “Twitter for fun, Facebook to keep in touch with family” one participant noted. In the question about spending time of social networking services, 40.8 % of participants said they access their social networking sites a few times a day and 42.8 % of participants said they access the social networking sites constantly (Table 2). It shows most participants’ daily life is connected with their favorite social networking sites. We also asked about their experience of social applications and social connection services such as Facebook Connect, MySpaceID, and TwitterID. 67.0 % of participants have used social applications such as Lockyou and Farmville and 65.0 % of participants have used the social connection services to register or login to other 3rd party sites.

For what reasons are you using multiple social networking sites?	
To get different services (Facebook: fun, LinkedIn: professional)	76.5 %
Friends are scattered (College friends: facebook, Indian friends: orkut)	51.1 %
To meet others who have similar hobbies	24.3 %
For curiosity	26.5 %
Other	6.0 %

Table 1: To get different service and meet scattered friends are main reasons to have accounts in multiple social networking sites. (N=268, multiple responses and manual input allowed)

How often do you access social networking sites?	
Constantly	42.8 %
A few times a day	40.8 %
One a day	7.5 %
Once or twice a week	6.9 %
Once a month or less	1.0 %
No answer	1.0 %

Table 2: 91 % of participants access their social networking sites at least one time a day (N=306)

2.2 Some participants organized friends using the Friend List to apply different privacy settings

Participants described their friendship mainly consisted of family, school friends, co-workers, and acquaintance. 92.2 % of participants who had accounts on multiple social networking sites reported they used similar privacy setting between social networking sites. 35 % of participants stated they organized their friends using the Friend List to apply different privacy settings. Their average number of Friend List is 4-6 Friend Lists ($\sigma = 0.78$). They generally categorized their friends based on friends' affiliation and friendship (Table 4). 90.7 % of them agreed that the Friend List is helpful to protect privacy on social networking sites. We also asked to the participants who were not using the Friend List about the reason why they were not using the Friend List. The participants mentioned various reasons. 30.8 % of participants said they did not know about the Friend List. 30.8 % of participants said they did not have many friends to use the Friend List. 22.7 % of participants said they wanted to use it, but they were lazy. Other participants mentioned that they did not need it. These results showed participants who concerned about their privacies on social networking sites organized friends into different Friend Lists and applied different privacy setting. In addition, 67.3 % of participants reported they had blocked someone on social networking sites to protect their privacy.

What kind of relationships are between you and your friends on social networking sites?	
Family	86.9 %
School friends	84.9 %
Co-workers	78.1 %
Acquaintance	68.0 %
Neighbor	23.9 %
Other	11.1 %

Table 3: Most participants have similar relationships with friends (N=306, multiple responses and manual input allowed)

How do you categorize your friends into friend lists?	
Based on friends' affiliation (same school or same company)	60.2 %
Based on friendship (best friends or just friends (acquaintance))	63.0 %
Based on location or nationality	6.5 %
Based on common interest	33.3 %
Based on common features (gender, religious, or relationship status)	11.1 %

Table 4: Most participants categorize their friends based on affiliation and friendship (N=108, multiple responses allowed)

2.3 Social networking services become major content sharing tool

For sharing a content such as photo, video, and others, we found social networking services to be the most common route (Table 5). 46.1 % of participants reported they preferred to use social networking sites for sharing content. It showed social networking services were closely connected the daily life of participants and they preferred to use it as a sharing tool than other sharing methods.

When you share a content such as photo, video, and others with friends, what service do you prefer to use?	
Social network services such as Facebook and MySpace	46.1 %
Content sharing services such as Flickr and Youtube	16.3 %
Email Services such as Hotmail and gmail	9.1 %
Micro blog service such Twitter	26.8 %
Personal blog services such as LiveJournal and Blogger	1.6 %

Table 5: Most participants prefer to use social networking service for sharing content (N=306)

2.4 A content sharing service between social networking sites is necessary

44.4 % of participants had the same experience that they posted same content different social networking sites to share it with scatted friends. We asked participants' opinion about the necessity of a content sharing service between social networking sites. It was measured on a Likert scale (5 point rating scale, where 1 = Strongly Disagree and 5 = Strongly Agree). Participants took positive attitudes toward the content sharing service between social networking sties was necessary ($M = 3.58, SD = 1.03$). We also asked participant's opinion about the sharing content with a specific Friend List on other social networking sites using the same Liker scale. Participants also took positive attitudes toward the Friend List($M= 3.55, SD = 0.98$). These results suggested us to share content from one social networking site with specific Friend Lists or friends on other social networking sites.

3 Survey Responses

The results consist of 306 responses provided between June 23, 2010 and August 12, 2010.

Part 1. Tell us about your self

Are you male or female?

Female (64)	20.9 %
Male (242)	79.1 %

(N=306, one response allowed)

What is your age range?

under 18 year old (14)	4.5 %
20-29 year old (108)	35.3 %
30-39 year old (90)	29.4 %
40-49 year old (57)	18.6 %
50-59 year old (28)	9.2 %
over 60 year old (9)	2.9 %

(N=306, one response allowed)

What is the highest level of education you have completed?

Less than High School (8)	2.6 %
High School (42)	13.7 %
2 year College (44)	14.4 %
4 year College (99)	32.4 %
Master's Degree (76)	24.8 %
Doctoral Degree (26)	8.5 %
Other (11)	3.6 %

(N=306, one response allowed)

Part 2. Social networking site experience

Do you have accounts in multiple social networking sites?

Yes- I have accounts in several social networking sites such as facebook, myspace and so on (268)	87.6 %
No- I have an account in only one social networking site (36)	11.8 %
No- I don't use social networking sites (2)	0.7 %

(N=306, one response allowed)

For what reasons are you using multiple social networking sites?

To get different services (205) (Facebook: fun, LinkedIn: professional)	76.5 %
Friends are scattered (137) (College friends: facebook, Indian friends: orkut)	51.1 %
To meet others who have similar hobbies (65)	24.3 %
For curiosity (71)	26.5 %
Other (16)	6.0 %

(N=268, multiple responses and manual input allowed)

Please select two(2) social networking sites that you are
mainly using.

Facebook (220)	82.1 %
Myspace (14)	5.2 %
Orkut (11)	4.1 %
LinkedIn (41)	15.3 %
Twitter (218)	81.3 %
Youtube (25)	9.3 %
Flickr (12)	4.5 %
Other (8)	3.0 %

(N=268, multiple responses and manual input allowed)

What percentage of your friends are duplicated between two social networking sites that you selected in the prior question?

0 % duplicated friends (24)	9.0 %
10 % duplicated friends (107)	39.9 %
20 % duplicated friends (40)	14.9 %
30 % duplicated friends (40)	14.9 %
40 % duplicated friends (10)	3.7 %
50 % duplicated friends (17)	6.3 %
60 % duplicated friends (5)	1.9 %
70 % duplicated friends (12)	4.5 %
80 % duplicated friends (5)	1.9 %
90 % duplicated friends (3)	1.1 %
100 % duplicated friends (5)	1.9 %

(N=268, one response allowed)

How often do you access social networking sites?

Constantly (131)	42.8 %
A few times a day (125)	40.8 %
One a day (23)	7.5 %
Once or twice a week (21)	6.9 %
Once a month or less (3)	1.0 %
No answer (3)	1.0 %

(N=306, one response allowed)

Have you ever used any social applications in social networking sites?

Yes (205)	67.0 %
No (101)	33.0 %

(N=306, one response allowed)

Have you ever used Facebook Connect, MySpaceID,
or OpenID to register or login to other 3rd party sites?

Yes (199)	65.0 %
No (107)	35.0 %

(N=306, one response allowed)

When you register for a new site, do you like to use
social connect services (Facebook Connect, MyspaceID,
or OpenID) or fill up a registration form and create
an account?

I'd like to use the connect service (121)	60.8 %
I'd like to fill up the form and create an account (78)	39.2 %

(N=199, only answer this question if answered "Yes"
to the previous question)

Part 3. Privacy preference

What kind of relationships are between you and your friends on social networking sites?

Family (266)	86.9 %
School friends (260)	84.9 %
Co-workers (239)	78.1 %
Acquaintance (208)	68.0 %
Neighbor (73)	23.9 %
Other (34)	11.1 %

(N=306, multiple responses and manual input allowed)

How do you set up your privacy settings on
the social networking site that you mostly use.

MyStatus and profile picture	
Everyone (126)	41.2%
Friends of friends (38)	12.4 %
Friends only (138)	45.4 %
Myself (4)	1.3 %
Bio	
Everyone (84)	27.5 %
Friends of friends (46)	15.0 %
Friends only (165)	53.9 %
Myself (11)	3.6 %
Photo album and video	
Everyone (40)	13.1 %
Friends of friends (44)	14.4 %
Friends only (200)	65.4 %
Myself (22)	7.2 %
Birthday	
Everyone (50)	16.3 %
Friends of friends (39)	12.7 %
Friends only (174)	56.9 %
Myself (43)	14.1 %
Family and relationship	
Everyone (40)	13.1 %
Friends of friends (32)	10.5 %
Friends only (191)	62.4 %
Myself (43)	14.1 %
Email address or IM	
Everyone (31)	10.1 %
Friends of friends (26)	8.5 %
Friends only (189)	61.8 %
Myself (60)	19.6 %
Phone number and address	
Everyone (14)	4.6 %
Friends of friends (19)	6.2 %
Friends only (144)	47.1 %
Myself (129)	42.2 %

(N=306, one response allowed)

Do you use similar privacy settings for other social networking sites?

Yes (247)	92.2 %
No (21)	7.8 %

(N=268, one response allowed)

Do you organize your friends into customized groups (Friend Lists) to apply different privacy settings?

Yes (108)	35.3 %
No (198)	64.7 %

(N=306, one response allowed)

Why don't you organize your friends into groups and apply different privacy policy?

I don't know this group function (61)	30.8 %
I want to use it but I'm lazy (45)	22.7 %
My friends are not many so I don't need it (61)	30.8 %
Other (31)	15.7 %

(N=198, only answer this question if answered "No" the previous question)

How many customized groups do you have for managing your friends?

0 group (3)	2.8 %
1 - 3 groups (52)	48.1 %
4 - 6 groups (34)	31.5 %
7 - 10 groups (18)	16.7 %
11 - 15 groups (1)	0.9 %

(N=108, only answer this question if grouped friends)

How do you categorize your friends into groups (Friend List)?

Based on friends' affiliation (65) (same school or same company)	60.2 %
Based on friendship (68) (best friends or just friends (acquaintance))	63.0 %
Based on location or nationality (7)	6.5 %
Based on common interest (36)	33.3 %
Based on common features (12) (gender, religious, or relationship status)	11.1 %

(N=108, multiple responses and manual input allowed)

Do you think customized groups help your privacy protection on social networking sites?

Yes (98)	90.7 %
No (10)	9.3 %

(N=108, only answer this question if grouped friends)

Do you block any people on social networking sites?

Yes (206)	67.3 %
No (100)	32.7 %

(N=306, one response allowed)

Have you ever excepted some friends when you share a content on social networking site?

Yes, I have excepted some friends (121)	39.5 %
No, I have not excepted some friends (126)	41.2 %
I know it but I have not used it (59)	19.3 %

(N=306, one response allowed)

Part 4. Content sharing experience

Have you ever uploaded a same content to multiple social networking sites to share it with scattered friends?

Yes (136)	44.4 %
No (170)	55.6 %

(N=306, one response allowed)

I think a content sharing service between social networking sites are necessary

Strongly Agree (56)	18.3 %
Agree (118)	38.6 %
Neither Agree nor Disagree (91)	29.7 %
Disagree (28)	9.1 %
Strongly Disagree (13)	4.2 %

(N=306, one response allowed)

I want to share a content with a specific group of friends on other social networking sites

Strongly Agree (50)	16.3 %
Agree (118)	38.6 %
Neither Agree nor Disagree (97)	31.7 %
Disagree (33)	10.8 %
Strongly Disagree (8)	2.6 %

(N=306, one response allowed)

Have you ever used any sharing services to share your favorite content such as videos, articles, and photos with your friends?

Yes (232)	75.8 %
No (74)	24.2 %

(N=306, one response allowed)

When you share a content such as photo, video, and others with friends, what service do you prefer to use?

Social network services such as Facebook and MySpace (141)	46.1 %
Content sharing services such as Flickr and Youtube (50)	16.3 %
Email Services such as Hotmail and gmail (28)	9.1 %
Micro blog service such Twitter (82)	26.8 %
Personal blog services such as LiveJournal and Blogger (5)	1.6 %

(N=306, one response allowed)