Report of "What Matters To Users? Factors That Affect Users" Willingness To Share Information With Online Advertisers"

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Summary report of the research on how companies' "privacy practices" influence users' decision making to share information with online advertisers. Three aspects of "privacy practice" are duration of the data kept by the company, users' permission to modify data and the information usage context are being studied whether it affect users' willingness to share their personal information. Participants (n=2,912) are also asked which sort of information they could share among 30 different kind of data for "Online Behavioral Advertising" (OBA) purpose. Based on the findings, users' are reluctant to share their important personal information such as credit card number, address and phone number. Half of them are not willing to share any data at all while some are willing to reveal information about their country, gender, operating system and web browser. Users would be more willing to allow data collection if the company practice restrictive control on users' data.

1. Introduction

Summary report of a paper title "What Matters to Users? Factors that Affect Users' Willingness to Share Information with Online Advertisers" [1]. This paper has been published in Proceedings of the Ninth Symposium on Usable Privacy and Security (SOUPS) 2013 [2]. The research investigates users' privacy decision making on "Online Behavioral Advertising" (OBA). This research looks into factors which have an impact to influence users' decision on their data collected for "OBA" purpose. Moreover, it highlights what sort of information user think they want to share with advertising company in order to receive advertisement. The following section describes "OBA" and the research purpose, followed by a brief description of the research method and finally the research findings and conclusion.

2. Overview of the study

2.1 Definition of OBA

"Online Behavioral Advertising" (OBA) can be defined as activities where companies show relevant advertisement to user (also known as "target ads"), which match the user interest based on their browsing history. The company needs to collect user's information and use it to show "target ads" which they think is relevant to user.

2.2 Research purpose

This research investigates the relationship between companies' "privacy practice" towards user attitude to allow their online data sharing. Thus, what kind of companies' "privacy practice" gives more impact on users' to allow their data being collected for "target ads"? The three aspects of "privacy practice" are:

- Duration of the data holding by the company.
- Users' permission to modify their collected data.
- The information usage context, to which extend the companies' will use their data.

The study also examines what sort of information user prefers to share online with the advertising company.

2.3 Research method

There are 2,912 participants (mean age = 31), took part in the online survey. Participants have 20 minutes to answer 47 survey questions regarding website advertising. Participants are given description on "OBA" and "privacy practice" which control their data collection and how it influence them to allow data sharing after they know the "privacy practice" applied by the company.

3. Results and findings

3.1 Impact of data sharing based on companies' "privacy practice"

The research findings discuss which factors have an impact on users' decision to allow their data sharing. According to the companies' "privacy practice" in this study, two factors have great impact on user's preference.

First, users are concern about the duration of their data being kept by the companies. They prefer if the data collected are used during their browsing session time only, they do not like if the company kept their data for a long time.

Second, the information usage context. User wants to know what kind of information collected by the company and how the company uses their information.

Meanwhile, the other factor which is users' permission to modify their collected data has a minimal impact on users' decision for data sharing with advertisers.

3.2 Other factors impacting users' data sharing preferences

User's knowledge on privacy. If users are concern and knowledgeable in privacy, they tend to be more protective with their own information sharing online.

Next, regularity of using Facebook. Users who are frequently using Facebook are more open to reveal their information online.

The other factor is the user's age. Older participants are more likely to reveal their location information rather than demographic information.

Furthermore, the advantages of "target ads" to user. If users think the advertisement brings advantages to them, they are more likely to share their information with the company.

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3.3 Types of information user willing to share

About 50 percent of the users in this research did not want to reveal their own information in order to receive the "target ads".

Almost nobody reluctant to share their personal information such as credit card number, social security number, address and phone number.

Meanwhile, half of the users are willing to reveal some information such as their gender, country, type of operating system they use and the web browser information.

4. Conclusion

Two companies "privacy practice" that affect users' attitude towards sharing their personal information online with the advertising companies are the duration of the data holding and the users' information usage context. Better control on users' data increase users willingness to allow their data sharing online. Advertising companies should inform users how they use the users' information so that users are aware of the "privacy practice" taken towards their collected information to make them feel comfortable with "OBA".

Reference

1) Leon, P.G., Ur, B., Wang, Y., Sleeper, M., Balebako, R., Shay, R., Bauer, L., Christodorescu, M., and Cranor, L.F. "What matters to users? Factors that affect users' willingness to share information with online advertisers", In *Proceedings of the Ninth Symposium on Usable Privacy and Security* (SOUPS2013), Article 7, pp. 1-12, (2013).

2) Symposium on Usable Privacy and Security (SOUPS) 2013, Newcastle, UK. http://cups.cs.cmu.edu/soups/2013/

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