

## Chapter 76

# A Usability Evaluation of Facebook's Privacy Features Based on the Perspectives of Experts and Users

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### ABSTRACT

*The issue of privacy in social networks is a hot topic today, because of the growing amount of information shared among users, who are connected to social media every moment and by different devices and displays. This chapter presents a usability evaluation of the privacy features of Facebook's social network. The authors carry out an evaluation composed by three approaches, executed in three stages: first by the analysis and inspection of system's features related to privacy, available for both systems (Web-based systems and mobile-based systems, e.g. app). The second step is a heuristic evaluation led by three experts, and finally, the third step is a questionnaire with 605 users to compare the results between specialists and real users. This chapter aims to present the problems associated with these privacy settings, and it also wants to contribute for improving the user interaction with this social network.*

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## INTRODUCTION

From its beginning, the Internet had provided a series of applications that directly influence the daily lives, including e-mail, e-commerce applications, e-learning, and various other web-based services. Currently, web experiences have a new category of applications, related to users' social relations. Many of these applications have been distinguished by their wide use, such as social networks. A social network can be characterized as a set of autonomous participants, focusing ideas and resources around shared values and interests (Marteletto, 2001). A social network can also be understood as a collection of individuals linked together by a set of relations (Downes, 2005).

According to Nielsen (Nielsen Group, 2009), social networks have attracted millions of users, and social media, a term used to identify the content created and disseminated through social interactions, has become the fourth most popular online category – ahead of personal email. This popularity is associated with a common feature among all social networks: creating and sharing content. This content can be in many ways, from writing informing activities during the day, even multimedia content such as photos and videos.

There are several types of social networks, among which we named: professional networks (e.g. LinkedIn) and networks to share specific information, such as short messages (e.g. Twitter), photos (e.g. Instagram) and videos (e.g. Youtube). Another type of social networks is the one that connects users to friends, such as Facebook - a social network created in 2004. Nowadays Facebook is one of the most accessed sites of Internet, and also the social network with the largest number of users (Alexa, 2012).

Facebook allows users to create profiles and manage a list of users with whom they share connections. Users can view and scroll through their lists, and lists created by other users of the system. Profiles can be accessible to anyone with a Facebook account or can be private, with information available in accordance with the privacy policies defined by the user.

Several features and settings for privacy control and customization of personal information are available on Facebook. These two aspects - user control and user personalization/customization - are very important to HCI (Human Computer Interaction) area, since they can make the systems easy to learn and use, and they are tools that bring effectiveness, efficiency, safety and satisfaction to the system during the navigation. The usable interfaces increase user satisfaction by providing greater comfort in their operation.

As shown, it is observed that there is great importance in analyzing the usability of the system. In this work we provide an extended, more detailed overview of the results introduced by Kimura et al. (2012), where we investigated the usability of Facebook's privacy features and settings in the two available interfaces: (i) web-based interface, accessed by the web browser, and (ii) the mobile interface, accessed by the official application (app) provided by Facebook. For this purpose the procedure adopted for the evaluation was to investigate all features and settings related to the privacy aspects, making the inspection of the entire environment (web-based and mobile), and registering all the privacy settings found. Later, we performed the heuristic evaluation technique proposed by Nielsen (Nielsen & Mack, 1994), and the whole process of evaluation and analysis of encountered problems, highlighting the main problems in each environment. Then, we applied a questionnaire with 605 Facebook's users, focused on the problems identified by the heuristic evaluation. Finally we analyzed the problems encountered by experts and the questionnaire answers to understand what were the major complaints and problems and then, we verified if the problems still appear in the Facebook's features.

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