

# Enabling Informed Decisions with Social Login

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**Abstract.** Our research in this work is focused on enabling informed decision making for users regarding two privacy-related decisions. Confronting two different methods to sign up (manually and social network-based SSO), users need to make a decision whether to select the SSO and consequently give their consents for sharing personal information from their social network accounts with the SP. From a privacy point of view the usage of an existing SSO is not recommended due to privacy reasons, e.g. SSO providers could profile users. This recommendation, however, is accompanied by drawbacks regarding security, usability, and functionality. Guiding users to make informed decisions and give informed consent to sharing information, we identified a number of misconceptions and required knowledge used to improve the sign-up interfaces and developed a tutorial conveying general information about the sign-up methods as well as advantages, and disadvantages of social network-based SSO.

We tested both interventions in a between-subject lab study with 80 participants. The results of the user study conducted to evaluate the new UIs and the tutorial show that using the new UIs improves users' ability to give informed consent. Regarding the tutorial, the study results were ambiguous. Further research is needed to evaluate the tutorial's potential to support users in making informed decisions.

Our results provide several new directions for future research. Investigating how informed consent and usability can be achieved at the same time and other possibilities to measure informed consent are among them. Moreover, since our tutorial was not able to successfully improve the users' ability to make an informed decision about using a sing-up method, ways to ideally communicate the advantages and disadvantages of services that may threaten the users' privacy should be designed and tested.