

Modelling Responses to Privacy-Related Indications

Yefim Shulman¹

Tel Aviv University, Tel Aviv, Israel
efimshulman@mail.tau.ac.il

Abstract. The widespread view, where phenomena related to privacy revolve around the notion of “control” over personal information and its use, informs our research approach. We choose to rely on this view, as it allows operationalization of privacy in the intersection of computer science, psychology and human factors engineering. We put forward a conceptual control-theoretic model to describe a users control over a process that entails privacy-related outcomes. Our research aims to investigate how users make decisions regarding responses to system indications, when these responses may entail consequences for the state of the users privacy. As the indications present feedback information to the users on the outcomes of some privacy-related process, the users responses depend on the properties of the feedback mechanism, the indication, the process and on the individual characteristics of the users. We focus on the timing and display of privacy-related feedback, the users rationality (in terms of economic theory), their perceptions of control and their illusion of control in interactions with online systems that may lead to personal information disclosure. We seek to assist users in making reasonable decisions when privacy-related issues are of matter.

Keywords: Personal Information Disclosure · Perceived Information Control · Privacy Feedback Loop · Privacy Indications

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