

Privacy Through Multiple Lenses: Applying the St. Gallen Multi-Layered Privacy Interaction Framework (SG-PIF)

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Track: Privacy and the Information Society

Abstract:

Nearly all Internet services and applications that simplify everyday life collect and store private information, including sensitive data such as personal preferences, health and location information, or financial information such as bank account or credit card numbers. Given the huge amount of accessible and exploitable data collected by private and public actors alike, the provision of personal information has raised severe concerns on potential misuse, or loss, of data.

Against this background, scholars from various fields have increasingly described and attempted to explain phenomena related to data privacy in the information age. Consequently, different understandings of the nature of privacy exist, ranging from economic (“privacy as a commodity”) and psychological (“privacy as a feeling”) to legal (“privacy as a right”) or philosophical (“privacy as a state of control”) perspectives. Also, researchers have repeatedly alluded to the multi-dimensionality of the privacy construct. Bélanger and Crossler (2011), for example, suggested that privacy concerns may result from complex interactions on different levels, such as government, society, or the economy, while Smith, Dinev and Xu (2011) emphasized the role of culture as a predictor of individual privacy beliefs and attitudes. Still, research adopting a comprehensive understanding of information privacy as a multi-level construct is scarce, raising the need for an integrated framework that allows scholars to understand and study interactions of multiple “privacy layers”.

Rooted in Urie Bronfenbrenner’s (1977) ecological systems theory, the St. Gallen Multi-Layered Privacy Interaction Framework (SG-PIF, Aeschlimann et al., 2015) aims to overcome this research gap by conceptualizing privacy as an outcome of various aspects of life and society on *multiple* levels of investigation. More precisely, SG-PIF (1) defines individual privacy behavior as a decision-making process on whether and why individuals reveal personal information, and (2) systematically includes psychological, economic, social, cultural, and legal aspects that may affect these individual decisions. As such, SG-PIF differentiates between factors on four distinct, yet interacting levels of information privacy: personal, economy/organizations, legal/governmental, and social/normative. Focusing on the reciprocal nature of these layers when driving individual privacy decisions, SG-PIF uniquely complements prior literature and offers a promising new avenue for future research interested in systematically analyzing individual privacy behavior through different lenses.

In the course of the paper, we provide an overview of SG-PIF and apply the framework to two current examples of information privacy invasion. More precisely, the paper is structured as follows: First, the idea of a multi-layered privacy framework as a basis for further investigation is briefly introduced, focusing on the complex interactions between the different layers. Second and most importantly, we aim to underline the suitability of SG-PIF as a toolset for researchers and practitioners who strive to analyze privacy-related phenomena from multiple perspectives. For this purpose, we will apply SG-PIF to two current examples of individual privacy invasion that have far-reaching consequences for individuals, corporations, government and society alike: (1) E-Mail-Tracking (i.e., the identification of users when they are accessing a particular e-mail sent by an organization’s newsletter service, Fabian et al., 2015) and (2) robots and privacy (i.e., the privacy implications of (social) robots, such as the increased potential of surveillance of users or enabling data-processing-tools to access personal environments such as one’s home and private rooms, thereby gathering more personal information, Calo, 2012). Applying SG-PIF to these cases, we show how individual privacy decisions are affected by the other layers of the framework and why a multi-layered view on privacy is a necessary and appropriate approach when attempting to explain privacy-related phenomena. Propositions to address privacy issues that arise from these examples are made, considering the different layers as proposed in SG-PIF as well as their interactions.

Word Count: 599 words (without references and title page)

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