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The value of privacy: concerns, attitudes, behaviors online, and information protection measures

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Abstract

Most of our lives takes place on-line. Our on-line activities, affect directly or indirectly the way other people perceive us. One have to careful decide what to expose and what not. There are a lot of personal and sensitive information that people could unintentionally disclose.

Indeed an enormous amount of data is being generated and can be disclosed by an increasing number of people on the Web, often without know who is recording what about them. The odds of being tracked without full acknowledge is growing mainly because of two reasons: the exorbitant number of company in the behavioral advertising field and a market overfilled with free services to attract users.

This thesis focus on the study of the value of privacy, as intended by people. Learning the value of privacy is of great importance. How people value their own privacy affects the way relationships among individuals are created and maintained. Not only, it have implications on how an individual relates himself with the world, it influences user behaviors and attitudes.

The mechanisms responsible for how people value their own privacy are bounded to the perception of risks and perceived level of fairness of the outside world. That component is the *awareness*. The way an individual perceives the risks around him/her, represent one of the big challenge in order to fully understand the way people value their privacy. A better understand of those mechanisms and an increased awareness will help to design and build privacy by design systems.

Increased awareness can help users to understand how and why their privacy is mined, and to become more informed about what silently happens during their navigation. *Learning from disclosure* of personal information may help to discriminate potential harmful activities from daily and regular activities that can be performed. Awareness could help people to make informed decision about privacy online, and adopt countermeasures if necessary. Protecting users on-line from privacy risks is a difficult task. Task made even more difficult by users' attitudes. Users are not fully aware of the risks of privacy leaks, even after the increasingly number of press reports about privacy leakage and personal information disclosure on the Web. They ignore that their data can be collected, aggregated and linked with ambient information for various purposes.

Anyway, even if awareness is not the only mechanism involved in evaluating privacy, it can be used to study if a privacy tool can help users to make informed decision to reduce their exposure while on the Web. To this aim, we conducted a study to analyze general perceptions, attitudes, and beliefs about privacy online, with a focus on the mutual influence with users skills.

We discovered mechanisms responsible for how a person value its own privacy: a) skills influence the perception of privacy risks b) privacy is worth the price if it is a

side effect of another well-recognized benefit.