

Abstract

Trust and user experience (UX) play a crucial role for the holistic view of the human-computer interaction with websites and cloud services. The dissertation thesis examines the relationship and modes of action between the two variables. It generates new insights for the understanding of both theoretical constructs and their empirical operationalization.

In the theoretical part the interpersonal aspects of trust are adopted for the context of technological systems, online environments (e.g. websites), and cloud computing. Moreover, empirical and theoretical links to UX are presented. Cloud computing as a new form of data processing and storage on the Internet takes a superior role. The state of research is combined by a quantitative meta-analysis of the correlations between UX components and user's trust in the online context. The effect of the usability on UX and user's trust is examined in two successive laboratory experiments. UX components and trust for cloud storage services were analyzed in structural equation models in two other studies. In addition, two online experiments (factorial surveys) dealt with more specific UX aspects such as third-party certificates and social presence as trust building features.

The results of the different studies show that the user's trust can be assigned to particular perceived instrumental UX components. Together they represent a basic characteristic (hygiene factor) of the interaction. The various models show that trust in the initial use will be affected by specific UX characteristics of the system. However, in the further course of the interaction trust may also have an influence on UX. It becomes clear that the inclusion of trust takes an important role in the analysis and design of UX online and in cloud-based systems.

Keywords: Cloud Computing, Human-Computer Interaction (HCI), Trust, Usability, User Experience (UX), Websites