Opening up the Black Box – The Importance of Different Kinds of Trust in Recommender System Usage

ABSTRACT

Researchers have shown the importance of trust in numerous domains such as e-commerce, technology acceptance, strategic alliances, and virtual teams. They emphasize the importance of creating insights on trust building for deriving effective design implications for technical systems or organizations. Until now, most researchers have viewed trust as a single construct and did not separately study the trust relationships between different stakeholders in a single study. We argue that the trust relationships between different stakeholders need to be studied separately in order to derive more precise and effective design implications. Thus, this paper aims at opening up the trust black box, and identifying the importance of different trust relationships a user is engaged in when using a recommender system. To achieve this, we address two research questions: a) What are the different trust relationships existent when using a recommender system? and b) How important are the different trust relationships regarding a user’s intention to use a recommender system in the future? To answer these research questions, we first build upon trust networks for the Human Computer Interaction community to identify the different trust relationships existent in recommender system usage, after which we use a laboratory experiment to gather empirical insights on the importance of the different trust relationships. The results of the laboratory experiment show that the users’ trust in the system itself and in the designers of the system both have the a high impact on users’ perceived usefulness and their intention to use the recommender system in the future. To the best of our knowledge, this study is the first to investigate the importance of different trust relationships prevalent in recommender system usage, and to introduce trust networks to trust research in management and IS research.
Keywords: trust, trust networks, laboratory experiment, trust in different stakeholders, recommender systems.

REFERENCES


