Did they all get it wrong?

Towards a better measurement model of trust

ABSTRACT

The existence of trust in an IT-based service and its providers is an important basis for e.g. the decision to adopt and continuously use such services. Furthermore it improves the chances for the successful collaboration in virtual teams and forming strategic alliances. Due to its importance this research area has drawn much attention and has been intensively researched in recent years. We therefore thought it is necessary to analyze the current state of the art in quantitative trust research guided by two research questions: a) Which distinct antecedents of the various kinds of trust have been quantitatively examined? b) How did the researchers measure trust, and how reliable are these measurements? Based on the results of this literature review we decided to include a third research questions c) How can current trust measurement models be enhanced to strengthen the impact of the results?

In order to answer those questions we conducted a systematic literature review analyzing the top 5 journals listed in impact factor ranking (ScienceWatch.com, 2009) in the years from 2002 to 2009, identifying a total of 44 relevant articles. We found that most antecedents studied there are related to system trust. Concerning the measurement of trust we found that all but one contributions reviewed used reflective measurement models, even though the used theory suggest using a formative measurement approach. This questions the reliability of the measurements and consequently the reliability of the found antecedents. Furthermore the theoretical base of trust is questioned since the biased results were usually integrated into the theory. Additionally the lack of formative measurement leads to a lack of insights about the impact of single factors for

building and supporting trust. We therefore developed a formative first-order, formative second-order measurement model for trust using trust theory and a logic that is easily transferable to other areas of interest.

According to our findings, future research should more rigorously discuss the appropriateness of the measurement models used and stop adapting previous measurement models without discussing their suitability. Additionally the formative measurement of trust should be used in the future to gain insights about the success factors for building and supporting trust.

Keywords: trust, antecedents, measurement.

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