TRUSTING REVIEW MECHANISMS IN KNOWLEDGE MANAGEMENT SYSTEMS: ANTECEDENTS, OUTCOMES, AND THE ROLE OF PERCEIVED RISK

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Research in Progress

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Abstract

In recent years, the success of social media in the private realm has entailed an increasing awareness of opportunities that are linked to user-generated content in knowledge management systems. Alongside the benefits in terms of knowledge quantity, new quality risks arise from an unregulated knowledge contribution. Considering that, review mechanisms have been implemented to monitor the content and provide a basis to distinguish between good and poor quality knowledge assets. This paper proposes a model to uncover the role of trust in expert and peer reviews during the knowledge application process by considering its antecedents, its outcomes, and the influence of perceived risk. The model suggests that trust in expert and peer reviews is based on the ability, benevolence, and integrity of the respective group and is positively influenced by a higher trustor's propensity to trust. Perceived risk in a particular situation influences the decision whether to apply knowledge based on trust in expert or in peer reviews. It is assumed that high-risk decisions are based on expert reviews more likely because the organizational and individual risk is perceived to be lowered, whereas peer reviews can only mitigate organizational risk.

Keywords: Trust, Perceived risk, Knowledge application, Review mechanisms.

1 Introduction

Knowledge management systems (KMS) have been designed to support knowledge creation, storage/retrieval, transfer, and knowledge application in organizations (Alavi and Leidner, 2001). The first three processes are necessary but not sufficient to gain competitive advantages: an enhancement of organizational performance only arises from an effective knowledge application (Grant, 1996). Given the importance of knowledge application, research has found a surprisingly huge gap between accumulated knowledge in electronic repositories and its re-use (Davenport et al., 2003; Desouza, 2003). In the search for an explanation, several barriers can be identified which prevent organization members from applying this knowledge including distrust in the knowledge source and risk aversion of knowledge recipients (Davenport and Pruzak, 1998).

Trust is identified as the most important factor to overcome these barriers and thereby to contribute to a more efficient knowledge management (Davenport and Pruzak, 1998). Addressing the issue of distrusting knowledge sources, source credibility has been modeled to directly influence knowledge application (also described as information adoption or knowledge re-use) in recent research on electronic knowledge repositories (Boh, 2008; Zhang and Watts, 2008). However, both studies develop their hypotheses under the premise that source credibility can be clearly assessed by knowledge recipients. This assumption must be adjusted at least since the success of social media has entailed an increasing use of user-generated knowledge in organizations (which is referred to as Enterprise 2.0 (McAfee, 2006)). Assets from user-generated knowledge repositories cannot, or can

only with considerable effort, be attributed to a specific origin (Jarvenpaa and Majchrzak, 2010). On the one hand, the number of potential sources (and thus also potential unknown sources) rises rapidly when enabling all organizational members to contribute and, on the other hand, knowledge assets can be altered incrementally by various sources (cf. Metzger, 2007).

KMSs must be designed in a way that knowledge workers are able to rapidly identify high-quality content (Thomas et al., 2001) without being overburdened by the evaluation of source credibility. A more efficient approach to evaluate knowledge assets than relying solely on the ability, time, and desire of organization members to scrutinize change logs or user profiles can be seen in review mechanisms (Kayhan et al., 2013; Poston and Speier, 2005). Due to the favorable role of trust in knowledge management, these mechanisms can only foster knowledge application if they are executed by trustworthy institutions. In view of the fact that many attempts to set up trust enhancing components fail (Leimeister et al., 2005), it is important to understand the dynamics of trust in review mechanisms within KMSs starting with antecedents of trust and ending with the effect of trust on knowledge application.

Apart from the consideration of antecedents and outcomes of trust, it is important to take into account that trust cannot be detached from situational characteristics (Gefen and Pavlou, 2006). Whereas uncertainty regarding the source and the quality of content can be controlled via review mechanisms, contextual factors that are linked to knowledge application (e.g., risk) are exogenous. Identifying risk aversion as one of the biggest obstacles to knowledge application (Davenport and Pruzak, 1998) implies that knowledge recipients weigh potential positive or negative outcomes of applying the knowledge before the actual behavior. Thus, perceived risk should be considered when modeling knowledge application.

Although review mechanisms have been already deployed in user-generated knowledge repositories (Bughin et al., 2008), little is known about the underlying effects of knowledge application based on trust in these mechanisms. Uncovering both the factors determining the trustworthiness of review mechanisms and the influence of risk on the choice of a reviewing institution can help to overcome the barriers to knowledge application and to bridge the gap between existing knowledge and its re-use. Therefore, the objective of this paper is to provide an integrated examination capturing the role of trust in review mechanisms within KMSs in the knowledge application process. The following research questions are addressed in particular: (1) which factors influence trust in review mechanisms in KMSs? (2) How does perceived risk influence the decision whether to apply knowledge based on trust in expert reviews or peer reviews?

The paper is organized as follows: in the next section the hypotheses are developed on the basis of extant literature on trust in KMSs and trust in the online environment. This section introduces the factors influencing trust in review mechanisms and addresses the role of risk during the knowledge application process. The following section discusses the research method by describing the study design and the measurement. In the last section, the paper is concluded with a discussion about the expected contributions.

2 Theoretical Development

2.1 Drivers of trust in review mechanisms

An integrative framework to explain trust, its antecedents, and its outcomes in organizations by considering the role of context (especially risk) as well as characteristics of the trustor and the trustee was developed by Mayer et al. (1995). Ability, benevolence, and integrity are identified as constituent parts of trustworthiness in organizational settings on the basis of an extensive literature review. Ability describes problem solving competencies within a specific area. Benevolence addresses the motivation of the trustee to help a trustor without considering potential personal benefits. The perception that the

trustee follows a similar set of social rules and principles as the trustor is called integrity. The model suggests that if a trustor perceives the trustee's trustworthiness to be sufficient, it results in trust toward the trustee. However, this trust will only be followed by an action (e.g., knowledge application) if the level of trust surpasses the risk perceived in a situation. From this, the following definition of trust is derived: trust is "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995). When transferred to the current research, this means that knowledge recipients trust in the review mechanisms in KMSs and implicitly accept the risk that potential negative outcomes are inherent when applying knowledge.

In contrast to situations where the trustee is clearly identifiable, the perceived trustworthiness of intangible and faceless online information made by multiple authors can hardly be described using each of the human characteristics ability, benevolence, and integrity. In KMSs, knowledge recipients are confronted with multimedia (e.g., text, numbers, images) instead of persons. Where no context is given, the question can be raised whether one should trust client-based, website-based, or organizational antecedents of trust in an online environment (Beldad et al., 2010). However, the consideration of each of the potential trustees and trusted objects might lead to different perceptions of trustworthiness. Trusting a third party which has evaluated the content can serve as an alternative and more efficient approach for knowledge recipients since judging the trustworthiness on the basis of other's evaluations requires less cognitive effort than elaborating all possible cues in the decision-making process (e.g., change logs or user profiles). In personal relationships one might ask a colleague if s/he knows whom to trust when facing new or unfamiliar knowledge that cannot be evaluated with one's ability (Jøsang et al., 2007) – the analogs in KMSs are trust signals from reviewing institutions. In contrast to information in knowledge repositories itself, ability, benevolence, and integrity may well be attributed to identifiable intermediaries. Figure 1 summarizes the concept of mediated trust introduced in this section.
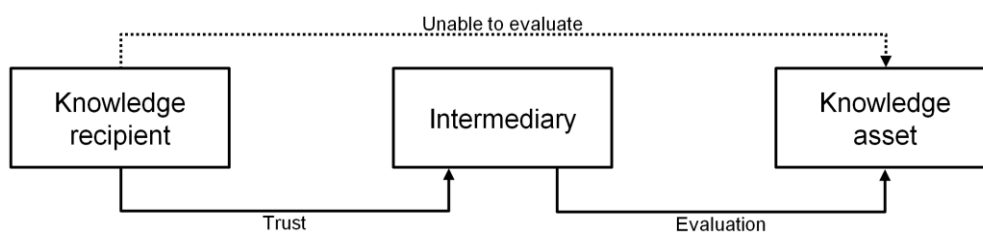

Figure 1.   Mediated trust

On the Internet, an evaluation of content on a website can be executed by two different entities: users and experts. In the context of e-commerce, user reviews indicate others' opinions of the quality of products or services. Third parties are requested to put a seal on a website as part of trust-building strategies (Kimery and McCord, 2002) and they are expected to have a positive effect on the expectations of consumers toward online transactions (Kovar et al., 2000). A similar distinction can be made within organizations where fellow users become peers and third party endorsements are represented by hierarchically legitimated experts who evaluate user-generated content in KMSs (Kayhan et al., 2013).

The ability of the trusted party to evaluate information accurately is hypothesized to be an important antecedent of trust (Mayer et al., 1995). Evaluation of content has no value for knowledge recipients in case the trustee is not knowledgeable in the particular field. Along with this, French and Raven (1959) state that, when ability is given, it is necessary to be sure that trustees act according to their best of knowledge and belief. Transferred to online reviews in KMSs, this means that trustors should be able to rely on the benevolence of experts or peers to build trust. Integrity as the third part is also assumed to be very important in the context of trust in expert and peer reviews. In absence of similar organizational values and an identical understanding of information quality, trusting in a review can be

unintentionally counterproductive (Jarvenpaa and Majchrzak, 2010). Since all of the mentioned components lead to a higher trust as a part of perceived trustworthiness, it can be hypothesized:

Hypothesis 1: A higher perceived trustworthiness of experts consisting of (a) ability, (b) benevolence, and (c) integrity will positively influence the trust in expert reviews.

Hypothesis 2: A higher perceived trustworthiness of peers consisting of (a) ability, (b) benevolence, and (c) integrity will positively influence the trust in peer reviews.

In a dyadic relationship both the trustee's and the trustor's characteristics should be borne in mind. In accordance with the assumption of Mayer et al. (1995) that the individual propensity to trust in an organizational setting influences the transition from perceived trustworthiness to trust, a higher general propensity to trust is embodying a higher level of trust in the evaluation of experts and peers in KMSs. People might vary in their willingness to trust due to different cultural backgrounds (Hofstede et al., 1991; Vance et al., 2008). Even within cultural areas this trait might differ depending on the organizational information culture (Davenport and Pruzak, 1998). Nevertheless, it can be assumed that a higher propensity to trust leads to an enhancement of the positive effect of trustworthiness signals on trust.

Hypothesis 3: A higher propensity to trust has a positive moderating effect on the relationship between (a) ability, (b) benevolence, and (c) integrity and trust in expert reviews.

Hypothesis 4: A higher propensity to trust has a positive moderating effect on the relationship between (a) ability, (b) benevolence, and (c) integrity and trust in peer reviews.

2.2 Knowledge application based on trust in review mechanisms

Chaiken (1980) suggests that heuristic processing results in people relying on general rules which were developed during experiences and observations in their past. Potential rules are, for example, that experts are generally credible or that a consensus of a group of people can be trusted. Unlike technology-based peripheral cues, trust in experts and peers can also be attributed to different manifestations of social power. French and Raven (1959) identify five bases of power which can be applied in this context: expert power, legitimate power, referent power, reward power, and coercive power.

Trust in expert reviews can be primarily associated with expert power which is caused by the skills of an expert in a specific situation. A demonstration of expertise is required to trust in the knowledge source. In organizations which anchor expert review systems in their hierarchical structure, legitimate power is conceivable as an additional mechanism. Legitimate power describes the power derived from a formal authority within a social or organizational structure. In this context both powers can cause knowledge recipients to perform an action based on trust in expert reviews. A combination of reward and coercive power can occur when experts are equipped with the rights to reward applications of the expert review or to punish misuse. Empirical studies have shown that sources of feedback with a high expertise have a higher effect on the behavior of the knowledge recipients than low expertise sources (Barnett White, 2005; Brown et al., 2007).

Hypothesis 5: A high level of trust in expert reviews has a positive effect on knowledge application.

The influence of peer reviews on behavior can be linked to referent and expert power. Referent power describes the phenomenon that individuals tend to be closely associated and hold similar opinions with reference groups and persons to attain satisfaction by conformity. A second mechanism which underlies a behavior based on trust in peer reviews can be assumed when conformity based on identification is not the trigger of the behavior. French and Raven (1959) argue that conformity with a group opinion can also be caused by expert power. For this, the knowledge recipient must perceive aggregated wisdom as a form of expertise. Since peers represent a powerful social system within

organizations, reviews based on their elaboration are likely to influence the desire to conform with the group (Angst and Agarwal, 2004).

Hypothesis 6: A high level of trust in peer reviews has a positive effect on knowledge application.

Previous studies which consider trust as a driver for different behavioral outcomes such as software usage or information contribution and retrieval (e.g., Gefen et al., 2003; Kügler et al., 2012; Ridings et al., 2002) almost exclusively simplify the effect of trust on behavioral outcomes by assuming a linear relationship between both variables and not considering contextual factors (cf. Gefen et al., 2008). However, Gefen and Pavlou (2006) have shown that situational characteristics can moderate the impact of trust on behavioral outcomes. Therefore, different behavioral outcomes of trust may occur due to contextual factors that cause trustors to feel vulnerable (Gefen et al., 2008), even if the level of trust based on ability, benevolence, and integrity is constant. The consideration of context includes predicting the potential positive or negative consequences (perceived risk) of the behavioral outcomes of trust in review mechanisms (Coleman, 1994). In the context of this research, perceived risk refers to the potential positive or negative outcomes of knowledge application. For example, applying new instructions on how to calculate a key performance indicator from an user-generated knowledge repository may lead to faster processes (positive outcomes) or to a miscalculation of the indicator and misguided subsequent decisions (negative outcomes). If the knowledge recipient is embedded in an organizational structure, the perceived risk of applying knowledge from KMSs can consist of an organizational risk (e.g., financial loss, performance loss) and an individual risk (e.g., social loss, job loss) (Jacoby and Kaplan, 1972; Lazo, 1960; Mitchell, 1995; Roselius, 1971).

A rational choice would be to trust the third party which promises the lowest potential negative outcomes (Friedman et al., 2000). Since the perceived organizational risk remains constant on condition that both experts and peers are perceived equally trustworthy, reducing the perceived individual risk is left as a mechanism to enhance the relationship between trust in intermediaries and knowledge application. While reviews of peers offer no guarantee, experts with a legitimated power can efficiently achieve this aim within an organization since knowledge recipients can regard expert reviews as implicit work instructions and must assume that the information is in accordance with organizational values. A misguided action on the basis of erroneous expert reviews can be assigned to higher hierarchical levels instead of the individual who applied poor quality knowledge. This sense of safety provided by expert reviews can lead to basing the application of knowledge on expert reviews rather than peer reviews in situations with a high perceived risk.

Hypothesis 7: A higher perceived risk has a positive moderating effect on the relationship between trust in expert reviews and knowledge application.

Hypothesis 8: A higher perceived risk has a negative moderating effect on the relationship between trust in peer reviews and knowledge application.

2.3   Control variables

The presented research model is aiming to uncover one important facet of the knowledge application process in detail. Several factors that have been shown to influence the dependent variable and moderate the path between trust intermediaries and knowledge application in previous research were intentionally omitted from the model for clarity. Nevertheless, they must be controlled for their influence to get a comprehensive view.

Research across various technologies and settings has found information quality to be the most important predictor of knowledge application (e.g., Bhattacherjee and Sanford, 2006; Sussman and Siegal, 2003). Since the quality of the presented information comprises objective and subjective dimensions (Lee et al., 2002), the perceived information quality of identical knowledge assets may differ from person to person. Therefore, it will be controlled for its influence on knowledge application.

Whereas perceived information quality is assumed to influence the dependent variable directly, the knowledge user's elaboration likelihood of the knowledge asset will be controlled for its moderating effect on the relationship between trust in intermediaries (peripheral cues) and knowledge application. Elaboration likelihood captures relevant expertise and involvement of the knowledge recipient following Sussman and Siegal (2003).

Figure 2 provides an overview of the variables and relationships of interest and shows the research model.
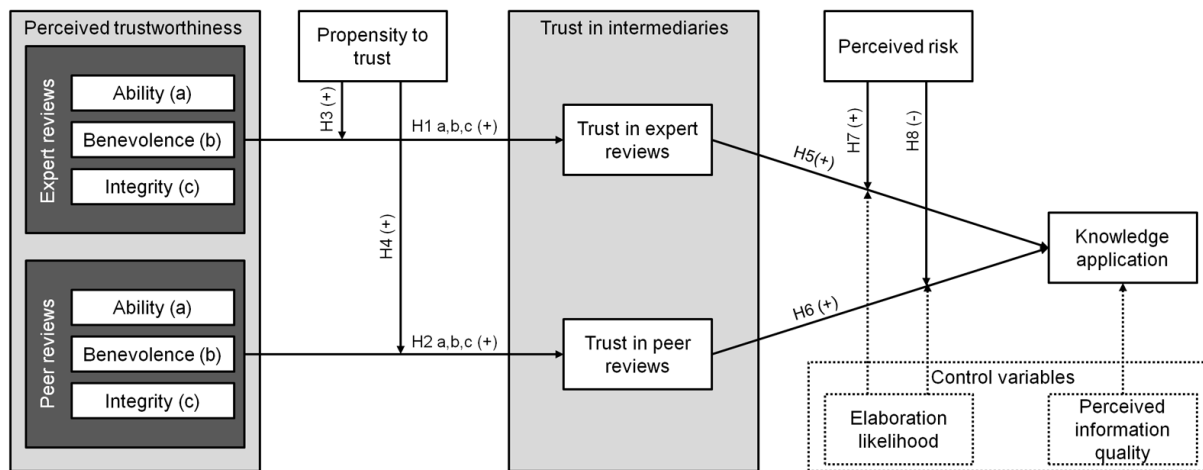

Figure 2.   Research model

3   Research Methodology

3.1   Study design

In order to test the proposed research model, two independent experimental studies will be conducted. First, the study design including measurement models and distinctness of manipulations will be tested by an exploratory study using a student sample. Second, the final study will be conducted targeting knowledge workers within an organization to enhance the external validity.

Since manipulating real data could have serious consequences and a situation should be created where no relationships exist between the knowledge source and knowledge recipients (which could affect the results in an undesired way), a 2x2x2 factorial experiment will be employed. A factorial design is well suited to test this research model since it is more efficient than one-factor-at-a-time experiments, effects of the independent variables are tested at different levels of the other factors, and unanticipated interaction effects can be detected to avoid misinterpretations (Montgomery, 2008).

Mockups of a user-generated knowledge asset have been built with all combinations that arise from displaying and hiding favorable expert and peer reviews. The fictitious knowledge asset contains a comparison of an official instruction and an alternative proposal which is supported by the knowledge source. Both approaches remain ambiguous (there is no wrong or right approach) since trust is especially relevant for uncertain situations (Gambetta, 2000). Participants will be asked to solve a task based on the displayed knowledge asset. Thereby, solving the task based on the supported approach will be regarded as knowledge application.The risk manipulation will be described in the introduction and is conducted as follows: under the high risk condition, participants will be promised a prize for the correct answer. In addition, it will be announced that names of participants with a wrong answer will be disclosed after the study. Both stimuli address individual risk. Additionally, it is stated that every

incorrect answer reduces the total prize volume to address organizational risk. Under the low risk condition, no prizes or punishments are announced.

The schedule of the studies will be set up as follows: (1) an invitation mail will be sent out to participants including a task to evaluate a user-generated knowledge asset (which is actually unrelated to the study) on the universities' web-based learning platform /in a corporate KMS on a 5-star rating scale in a brief web-based survey. (2) On the day of the experiment, groups of students/employees will be seated in front of computer terminals. One of the eight scenarios will be randomly assigned to each participant. An introduction (low /high risk) will be shown followed by the knowledge asset and the task. Authentic institutions will be employed as expert reviewers (professor /department head). Peer reviews are announced as the results of the knowledge asset evaluation included in the invitation mail from another group of students/employees (a high rating will be used instead of measured data). (3) After solving the task, participants are requested to fill out a questionnaire containing items which cover the constructs summarized in figure 1. (4) Since there are no correct answers to the task, names will not be disclosed and prizes will be raffled among participants.

3.2   Measurement and data analysis

The empirical investigation of the research model requires an operationalization of the constructs using appropriate measurement models. Apart from the choice of suitable items, the direction of relationships in the measurement model has to be considered (reflective or formative). Established and reliable instruments were drawn from prior research and tailored to the specific research context. The scales of ability, benevolence, integrity, and propensity to trust are taken from Gefen and Straub (2004). Trust in expert and peer reviews will be measured using items from Gefen (2000). Risk will not be calculated using the dichotomous manipulation variable (high risk /low risk). Instead, it will be measured separately to address differences in the perception of risk. In line with the definition of perceived risk in this paper, organizational risk and individual risk will be taken into account by applying a formative measurement model to capture the two aspects of the construct (Petter et al., 2007). For this, items concerning organizational risk are drawn from Houghton et al. (2000) and the items of individual risk are taken from Featherman and Pavlou (2003). The measurement items regarding the control variables perceived information quality, expertise, and involvement are adopted from Sussman and Siegal (2003). All items will be measured using a seven-point Likert scale with the anchors being "strongly disagree" and "strongly agree". The manipulations will be captured by dummy-coded dichotomous variables using 0 for no expert review /peer review and 1 for a displayed expert review /peer review.

Data collected during the experiments will be computed using partial least squares (PLS). This method is chosen to test the presented research model because of four advantages compared with traditional (co)variance-based approaches (e.g., AN(C)OVA): measurement errors can be controlled, PLS is less demanding regarding the sample size and distributional characteristics, reflective and formative indicators can be considered simultaneously, and it can handle complex research models (Streukens et al., 2010). The measurement model will be validated following the guidelines from Straub et al. (2004). After initial manipulation checks, a two-step approach will be applied to validate the structural model. First, the direct effects will be computed and second, moderating effects will be included in the calculation.

4   Conclusion

The present work is aiming to uncover the role of trust in expert and peer reviews during the knowledge application process in KMSs by considering its antecedents, its outcomes, and the influence of perceived risk. Two major questions remain unanswered in existing literature: (1) which factors influence trust in review mechanisms in organizational electronic knowledge repositories? (2)

How does perceived risk influence the decision whether to apply knowledge based on trust in expert reviews or peer reviews? To answer these questions an integrative model was developed which suggests that trust in expert and peer reviews is based on the perceived trustworthiness (ability, benevolence, and integrity) of the respective group and is positively influenced by a greater trustor's propensity to trust. Perceived risk in a particular situation influences the decision whether to apply knowledge based on trust in expert reviews or in peer reviews. It is assumed that high risk decisions are based on expert reviews more likely because organizational (e.g., financial loss) and individual risk (e.g., social loss, job loss) are perceived to be lowered, whereas peer reviews can only mitigate organizational risk.

Bridging the mentioned research gaps can contribute to both the theoretical and the practical field. By separating trustworthiness and trust, and considering perceived risk as a moderating variable, the study seeks to develop an understanding for underlying effects of how trust in reviews functions and how situational characteristics influence the effect of trust on behavioral outcomes. With this approach, the need for a closer examination of knowledge application under the premise of not knowing the knowledge origin (Alavi and Leidner, 2001) and the call to examine the dimensionality of trustworthiness and the influence of context on trust (Gefen et al., 2008) are addressed.

In the practical field, the results of this study can have tangible implications for design and management of KMSs in organizations. Potential differences between the effects of ability, benevolence, and integrity on trust in intermediaries regarding their strength can serve as guidance for the setup of peer and expert review mechanisms and their concrete representation. Those review mechanisms in turn can be deployed for certain fields of knowledge or individual knowledge assets depending on the potential risk of applying knowledge from these sources. In summary, this study will provide the basis to establish an efficient review-content-fit.

References

Alavi, M. and Leidner, D.E. (2001). Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues. MIS Quarterly, 25 (1), 107–136.

Angst, C. and Agarwal, R. (2004). Central and Peripheral Routes to Sustained Technology Usage. DIGIT Proceedings, Paper 4.

Barnett White, T. (2005). Consumer Trust and Advice Acceptance: The Moderating Roles of Benevolence, Expertise, and Negative Emotions. Journal of Consumer Psychology, 15 (2), 141–148.

Beldad, A., de Jong, M. and Steehouder, M. (2010). How Shall I Trust the Faceless and the Intangible? A Literature Review on the Antecedents of Online Trust. Computers in Human Behavior, 26 (5), 857–869.

Bhattacherjee, A. and Sanford, C. (2006). Influence Processes for Information Technology Acceptance: An Elaboration Likelihood Model. MIS Quarterly, 30 (4), 805–825.

Boh, W.F. (2008). Reuse of Knowledge Assets from Repositories: A Mixed Methods Study. Information & Management, 45 (6), 365–375.

Brown, J., Broderick A.J. and Lee N. (2007). Word of Mouth Communication within Online Communities: Conceptualizing the Online Social Network. Journal of Interactive Marketing, 21 (3), 2–20.

Bughin, J., Manyika, J. and Miller, A. (2008). Building the Web 2.0 Enterprise. McKinsey Quarterly, 7.

Chaiken, S. (1980). Heuristic Versus Systematic Information Processing and the Use of Source Versus Message Cues in Persuasion. Journal of Personality and Social Psychology, 39 (5), 752–766.

Coleman, J.S. (1994). Foundations of Social Theory. 2nd Edition. Harvard University Press, Cambridge.

Davenport, T.H. and Pruzak, L. (1998). Working Knowledge: How Organizations Manage What They Know. Harvard Business Press, Boston.

Davenport, T.H., Thomas, R.J. and Desouza, K.C. (2003). Reusing Intellectual Assets. Industrial Management, 45 (3), 12–17.

Desouza, K.C. (2003). Facilitating Tacit Knowledge Exchange. Communications of the ACM, 46 (6), 85–88.

Featherman, M.S. and Pavlou, P.A. (2003). Predicting E-Services Adoption: A Perceived Risk Facets Perspective. International Journal of Human-Computer Studies, 59 (4), 451–474.

French, J.R.P. and Raven, B. (1959). The Bases of Social Power. In Studies in Social Power (Cartwright, D. Ed.), 150–167, Institute for Social Research, Ann Arbor.

Friedman, B., Khan, Jr. P.H. and Howe, D.C. (2000). Trust Online. Communications of the ACM, 43 (12), 34–40.

Gambetta, D. (2000). Can We Trust Trust? In Trust: Making and Breaking Cooperative Relations (Gambetta, D. Ed.), 213–237, University of Oxford, Oxford.

Gefen, D. (2000). E-Commerce: The Role of Familiarity and Trust. Omega, 28 (6), 725–737.

Gefen, D., Benbasat, I. and Pavlou, P. (2008). A Research Agenda for Trust in Online Environments. Journal of Management Information Systems, 24 (4), 275–286.

Gefen, D., Karahanna, E. and Straub, D.W. (2003). Trust and TAM in Online Shopping: An Integrated Model. MIS Quarterly, 27 (1), 51–90.

Gefen, D. and Pavlou, P. (2006). The Moderating Role of Perceived Regulatory Effectiveness of Online Marketplaces on the Role of Trust and Risk on Transaction Intentions. ICIS 2006 Proceedings, Paper 81.

Gefen, D. and Straub, D.W. (2004). Consumer Trust in B2C e-Commerce and the Importance of Social Presence: Experiments in e-Products and e-Services. Omega, 32 (6), 407–424.

Grant, R.M. (1996). Toward a Knowledge-Based Theory of the Firm. Strategic Management Journal, 17, 109–122.

Hofstede, G., Hofstede, G.J. and Minkov, M. (1991). Cultures and Organizations - Software of the Mind. McGraw-Hill, London.

Houghton, S.M., Simon, M., Aquino, K. and Goldberg, C.B. (2000). No Safety in Numbers: Persistence of Biases and Their Effects on Team Risk Perception and Team Decision Making. Group & Organization Management, 25 (4), 325–353.

Jacoby, J. and Kaplan, L.B. (1972). The Components of Perceived Risk. Advances in Consumer Research, 3 (3), 382–383.

Jarvenpaa, S.L. and Majchrzak, A. (2010). Research Commentary - Vigilant Interaction in Knowledge Collaboration: Challenges of Online User Participation Under Ambivalence. Information Systems Research, 21 (4), 773–784.

Jøsang, A., Ismail, R. and Boyd, C. (2007). A Survey of Trust and Reputation Systems for Online Service Provision. Decision Support Systems, 43 (2), 618–644.

Kayhan, V.O., Davis, C.J., Collins, R.W. and Bhattacherjee, A. (2013). Verification of Knowledge Assets in Electronic Repositories: Expert- and Community-Governance. Information Systems Management, 30 (2), 168–178.

Kimery, K.M. and McCord, M. (2002). Third Party Assurances: Mapping the Road to Trust in Eretailing. Journal of Information Technology Theory and Application, 4 (2), 7.

Kovar, S.E., Burke, K.G. and Kovar, B.R. (2000). Consumer Responses to the CPA WEBTRUSTTM Assurance. Journal of Information Systems, 14 (1), 17–35.

Kügler, M., Smolnik, S. and Raeth, P. (2012). Why Don't You Use It? Assessing the Determinants of Enterprise Social Software Usage: A Conceptual Model Integrating Innovation Diffusion and Social Capital Theories. Proceedings of the 33th International Conference on Information Systems, Paper 65.

Lazo, H. (1960). Emotional Aspects of Industrial Buying. In Proceedings of the American Marketing (Hancock, R.S. Ed.), 265–270, AMA, Chicago.

Lee, Y.W., Strong, D.M., Kahn, B.K. and Wang, R.Y. (2002). AIMQ: A Methodology for Information Quality Assessment. Information & Management, 40 (2), 133–146.

Leimeister, J.M., Ebner, W. and Krcmar, H. (2005). Design, Implementation, and Evaluation of Trust-Supporting Components in Virtual Communities for Patients. Journal of Management Information Systems, 21 (4), 101–135.

Mayer, R.C., Davis, J.H. and Schoorman, F.D. (1995). An Integrative Model of Organizational Trust. Academy of Management Review, 20 (3), 709–734.

McAfee, A.P. (2006). Enterprise 2.0: The Dawn of Emergent Collaboration. MIT Sloan Management Review, 47 (3), 21–28.

Metzger, M.J. (2007). Making Sense of Credibility on the Web: Models for Evaluating Online Information and Recommendations for Future Research. Journal of the American Society for Information Science and Technology, 58 (13), 2078–2091.

Mitchell, V.-W. (1995). Organizational Risk Perception and Reduction: A Literature Review. British Journal of Management, 6 (2), 115–133.

Montgomery, D.C. (2008). Design and Analysis of Experiments. 7th Edition. John Wiley & Sons, New York.

Petter, S., Straub, D. and Rai, A. (2007). Specifying Formative Constructs in Information Systems Research. MIS Quarterly, 31 (4), 623–656.

Ridings, C.M., Gefen, D. and Arinze, B. (2002). Some Antecedents and Effects of Trust in Virtual Communities. The Journal of Strategic Information Systems, 11 (3–4), 271–295.

Poston, R.S. and Speier, C. (2005). Effective Use of Knowledge Management Systems: A Process Model of Content Ratings and Credibility Indicators. MIS Quarterly, 29 (2), 221–244.

Roselius, T. (1971). Consumer Rankings of Risk Reduction Methods. Journal of Marketing, 35 (1), 56–61.

Straub, D., Boudreau, M.-C. and Gefen, D. (2004). Validation Guidelines for IS Positivist Research. Communications of the Association for Information Systems, 13, 380–427.

Streukens, S., Wetzels, M., Daryanto, A. and de Ruyter, K. (2010). Analyzing Factorial Data Using PLS. In Handbook of Partial Least Squares: Concepts, Methods and Applications (Vinzi, V.E., Chin, W.W., Henseler, J. and Wang, H. Eds.), 567–587, Springer, Berlin.

Sussman, S.W. and Siegal, W.S. (2003). Informational Influence in Organizations: An Integrated Approach to Knowledge Adoption. Information Systems Research, 14 (1), 47–65.

Thomas, J.B., Sussman, S.W. and Henderson, J.C. (2001) Understanding "Strategic Learning": Linking Organizational Learning, Knowledge Management, and Sensemaking. Organization Science, 12 (3), 331–345.

Vance, A., Elie-Dit-Cosaque, C. and Straub, D.W. (2008). Examining Trust in Information Technology Artifacts: The Effects of System Quality and Culture. Journal of Management Information Systems, 24 (4), 73–100.

Zhang, W. and Watts, S.A. (2008). Capitalizing on Content: Information Adoption in Two Online Communities. Journal of the Association for Information Systems, 9 (2), 73–94.