What Builds System Troubleshooter Trust the Best: Experiential or Non-Experiential Factors?

D. Harrison McKnight, Michigan State University, USA
Norman L. Chervany, University of Minnesota, USA

ABSTRACT

System troubleshooters keep important organizational systems operating. This study examines factors influencing system troubleshooter trust in their supervisors, contrasting experiential and non-experiential factors. Traditional research suggests that trust forms through interactional experience. Recent research indicates that initial interpersonal trust develops through non-experiential factors that are dispositional (individual differences-related) or institutional (structural/situational). We found that both institutional and dispositional factors affected troubleshooter trust in the supervisor even after parties gained experience with each other. Quality of experience with the supervisor affected interpersonal trust, while quantity of experience did not. Surprisingly, institutional trust predicted trusting beliefs as strongly as did quality of experience. The study shows that both experiential and non-experiential factors are important to troubleshooter trust when parties know each other well.

Keywords: IS operations activities; IS problems; IS staffing; IS training and development; systems manager activities; trust

INTRODUCTION

Trust is defined as the willingness to depend upon another with a feeling of relative security, even though negative consequences are possible and one cannot control the other (Mayer et al., 1995). Researchers have found trust to affect performance in many information systems (IS) tasks (Hart & Saunders, 1993; Jarvenpaa, Knoll & Leidner, 1998; Nelson & Cooprider, 1996). This paper investigates the factors that lead to the development of trust in one IS environment—troubleshooting—that is increasingly important to the ongoing performance of mission-critical information systems. The organization of the paper is as follows. The remainder of the Introduction overviews two general theories of trust building, defines the troubleshooting task, and introduces the research questions. The second section presents two versions of a trust-building model. In the next two sections, the methods and results are presented and discussed.
Two General Theories of Trust Building

While there is widespread agreement on the importance of trust in the workplace (Kramer, 1999; Zand, 1972), less agreement exists about the factors upon which trust is built. Two general theories of trust-building factors compete at the center of the trust-building debate today.

- **Experiential Trust Building**: The most dominant general theory posits that trust grows through positive interaction and experience with the trustee (Blau, 1964; Gefen et al., 2003; Jarvenpaa & Leidner, 1998; Kramer, 1999; Ring & Van de Ven, 1994). This makes sense, because people build a mental image of the other’s trustworthiness via interactions over time. The more one interacts with another, the more information one gains about their attributes and the more confidence one has about predicting their actions, which translates into trust. What are the managerial implications of this theory? The supervisor controls the interactional relationship with the employee. Supervisors can develop a positive relationship with the employee over time through interactive steps that reveal the supervisor’s trustworthiness.

- **Non-Experiential Trust Building**: The second general theory, which we call non-experiential trust building, posits that non-experiential factors like institutional context or personality traits are important in building trust, especially when parties are so new to each other that they have no experiential basis for trusting (McKnight et al., 1998; Meyerson, Weick & Kramer, 1996). Institutional context factors are perceived situational/structural features that provide confidence in the organizational and work context, thus encouraging trust among parties in that context. One institutional construct is structural assurance, defined as a belief that structures make the workplace safe or secure. Institutional factors are important because they can be managed. For example, developing a work environment that employees feel is structurally secure and fair should increase employee trust in management.

Managers also need to be cognizant of the effects of dispositional (personality) issues on trust. One personality factor is disposition to trust, defined as how much one generally trusts others. Although personality issues cannot be managed per se, the manager who is aware of their effects can take action. For example, the manager of an employee with low disposition to trust can spend more time winning this skeptical employee’s trust. Since trust and influence are highly correlated concepts (Nelson & Cooprider, 1996; Zand, 1972), trust is key to managerial success, because employee trust will determine how amenable the employee is to supervisory influence and coaching. The above two general theories of trust building form the basis of the research models presented in the Trust and Trust Building section.

The IS Troubleshooting Task

Information systems troubleshooting is an important task. It involves reacting, often under extreme time pressure, to find and fix both software and hardware problems that have caused a system to crash. The research reported in this paper studied troubleshooters in two Fortune 500 companies in the computer services industry. In one of the companies, troubleshooters maintained a large computer reserv-
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