

Advances in Trust Research

Sirkka L. Jarvenpaa
The University at
Texas Austin
sirkka.jarvenpaa@mcombs.texas.edu

Gene Alarcon
Airforce
Gene.alarcon.1@us.af.mil

Kirsimarja Blomqvist
LUT University
Kirsimarja.blomqvist@lut.fi

Mareike Mohlmann
Bentley University
MMoehlmann@Bentley.edu

Abstract

Within the Hawaii International Conference on System Sciences (HICSS), we organize for the eighth time a mini-track on trust and information technologies. This year, the mini-track on Advances in Trust Research focuses on “Does trust matter in advanced technology contexts? How, Why, and When?”

Keywords: trust, distrust, digital technology, artificial intelligence, context.

1. Introduction

Due to advances in digital technologies such as artificial intelligence and increasing access to vast amounts of data, organizations continue to innovate to enhance or augment various internal and external activities and work processes such as management, decision-making, coordination, and control. Advanced technology contexts include but are not limited to flexible work arrangements, algorithmic management and control of the workforce, face-recognition tools, security applications, predictive analytics, the usage of blockchain technology, people analytics, the wide spread of digital platforms, and sophisticated general artificial intelligence tools. These developments can be observed across industries such as health care, transportation services, the financial industry, and in policing.

For a long time, trust has been seen as pivotal to effectively and efficiently manage novel digital technologies. Researchers have approached advanced technologies as tools (Barley, 1996; Anthony, 2021) augmenting human cognition and requiring the human trust to be adopted. Advanced technologies

can also be seen as mediums supporting collaboration and related communication (Bechky, 2003), and more recently also as broader systems where technologies, developers, users, and partners have various relationships (Anthony, Bechky, and Fayard, 2023) impacting technology adoption and use. Increasingly, in addition to multi-referent and multi-level views on trust in advanced technologies (van der Werff et al. 2021), temporal issues and process research can also enlighten information systems research on the role of trust in advanced technology contexts.

Trust is the positive expectation of the conduct of the referent in a specific situation involving perceived risk or vulnerability. But does trust remain relevant in the advanced technology contexts with surmounting challenges? What role does trust play in addressing digital responsibility? Is trust necessary and or sufficient to address the dark side and the critical ethical, legal, and moral dilemmas of advanced digital technologies? Can trust have downsides and result in misspecifications? Whose trust matters, what type of trust and trust processes, how, why, and when? How does trust change over time? Some scholars argue that the system- or institution-based trust provided by digital technologies at least partly replaces the need for interpersonal trust (Lumineau, et al. 2023). Digital platforms such as Uber and Airbnb already enhance trust between unfamiliar individuals (Möhlmann 2021), and blockchains automate contracts with unknown partners (Lumineau et al. 2021). The opaque nature of some advanced technologies like artificial intelligence, which are often perceived to be “black-boxes” that are difficult to understand for users and managers alike, makes trusting them challenging. Artificial intelligence has been described as invisible, inscrutable, and constantly evolving (Anthony et al. 2023; Lebovitz et al., 2022). How is trust in artificial intelligence context different? What

trust questions should be raised but are missing or ignored in the context of advanced technologies?

We need more research to increase our understanding about whether trust matters and how and why at different levels of analysis, i.e., individuals, teams, organizations, meta-organizations, and society.

2. Accepted Mini-track Papers

The minitrack has three accepted papers.

The paper entitled “Amongst a Multitude of Algorithms: How Distrust Transfers Between Social and Technical Trust Referents in the AI-Driven Organization” has been co-authored by Rebecka Ångström, Magnus Mähring, Martin Wallin, Eivor Oborn, and Michael Barrett. The authors investigate how distrust in AI unfolds in an organizational setting shaped by several distrust dynamics. They conducted an in-depth study of a large organization and employ grounded theory techniques to analyze their data. They find that (1) distrust in AI is situated and involves both social and technical trust referents; (2) distrust is misattributed when a trust referent is rendered partly invisible to the trustor; and that (3) distrust can be transferred between social and technical trust referents.

The paper entitled “Investigation the Role of Self-Awareness on Trust-Relevant Criteria in Distributed Ad Hoc Dyads” is co-authored by August Capiola, Krista Harris, Izz Aldin Hamdan, Gene Alarcon, and Sarah Jessup. The paper titled “Investigating the role of self-awareness on trust-relevant criteria in distributed ad hoc dyads” explores the role of self-awareness on trustworthiness perceptions and trust in a novel experimental task. The paper incorporates performance and non-performance aspects of trust to explore how newly formed distributed teams perceive trust. Self-awareness in the task was significantly related to benevolence and integrity perceptions. The research adds to the increasingly important trust literature by manipulating both performance and non-performance aspects of trust in dyads.

The paper entitled “Unleashing Employee-Employer Trust: The Uncharted Influence of Responsible Leadership in Technology-Permeated Workplaces” is co-authored by Alice Rickert, Simon Schafheitle, and Antoinette Weibel presents two polar cases on employer-employee trust in the technology-mediated workplace. Based on qualitative interview data, the authors find that leaders in the identity-based trust case communicate employers'

values and purpose during technology deployment more effectively compared to the calculative trust case. They also find that a stakeholder-oriented approach to responsibility strengthens trust in technology-permeated workplaces while prioritizing an instrumental responsibility orientation undermines it.

Together these papers enrich our knowledge about trust and digital technologies. We welcome everyone to the session.

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