

The Evolution of Trust

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Abstract. In this paper I discuss the evolution of trust from early studies of interpersonal trust to current research on the role of trust in computer-mediated communication. I reflect on the ways in which the context for the investigation of trust has led to very different views about just what trust is and how it changes over time and I conclude with examples from my own work about the development of trust online and the potential for new trust tools.

Keywords: Trust, credibility, privacy.

1 Introduction

Trust... is not a commodity which can be bought very easily. If you have to buy it, you already have some doubts about what you've bought [1, page 23].

A story appeared in the news a few years ago about a circus touring in Scotland that posted an advert for a knife-throwers assistant in a local town. Twenty-three people applied for the post, but only six were brave enough to turn up for an audition, when they were asked to stand against a board while 10 knives were hurled at them at speeds of up to 45 miles per hour. The knife-thrower – a Mr Hanson – said he had never inflicted major injury although he had given people nicks and cuts in the past. He said was looking for someone who was willing to have a laugh but who also had serious qualities and trusted him. Seonaid Wiseman, a 29-year-old post-graduate student at Aberdeen University was the first of the candidates to audition. Following the ordeal she said she had been “blank with terror” when the first knife hit the board, but added: “It wasn’t bad after the first one. After the first one I had every confidence in him.”

Understanding the development of just this kind of interpersonal trust was one of the first challenges for early trust researchers where the focus was on the critical dimensions by which people evaluate how others will behave. In early contexts trustworthiness was defined as “the extent to which people are seen as moral, honest and reliable” [12] – a definition which while perfectly valid (although defining ‘moral’ is not an enviable task) says little about what trust is, nor why its perception will vary between individuals.

The term trust can imply so many different things, because it presupposes some risk, but isn’t explicit about the nature of that risk. Inevitably, then,

over time, different approaches to trust research have evolved, depending upon the trust context. Within the workplace trust presupposes risks such as loss of reputation and self-esteem, damage to career and loss of salary. Yet trust between colleagues is vital. Robert Levering, author of ‘A great place to work’ [4] and co-author of ‘The 100 best places to work for in America’ [5] has argued that “trust between managers and employees is the primary defining characteristic of the very best workplaces” and Dennis and Michelle Reina [9] described the betrayals that undermine modern working relationships – the colleague taking credit for your work, the boss failing to deliver on a promise, the assistant passing on confidential information – and have concluded that we live in an era where corporate leaders have lost the loyalty, trust and commitment of their workforce, to devastating effect.

Political philosopher Onora O’Neill has argued that trust can be lost by the very systems set up to preserve it. In delivering the 2002 Reith Lectures [8, lecture 3], O’Neill describes the ways in which various systems of public accountability have provided consumers and citizens with more information and more complaints systems, but which have ultimately built a culture of suspicion and low morale likely to generate professional cynicism and ultimately public mistrust. Thus the trend towards audit and transparency which is evident in indicators such as school league tables, University research ratings, hospital waiting lists and transport punctuality figures means that workers gear their actions towards the accountable targets, and have less time to spend on those aspects of the work that cannot be explicitly measured. In this way some of the metrics that can be used (rather unsuccessfully) as proxies for trust can start to drive organisational behaviour.

A different approach to trust was discussed by Francis Fukuyama who set trust in the context of vastly different societies and cultures [3]. He identified to ‘high trust’ societies like Japan, where, he argued, life can be much easier on the individual as a result of the strong social ties binding Japanese citizens together, and observed that these, coupled with relatively low instances of deviance, meant that the enhanced sense of trust within that society is palpable. However, crucial to Fukuyama’s argument was that many societies are suffering an erosion of trust that is having devastating effects on both individuals and society. He cited America as an example of a society previously high in trust, in which individualism grew at the expense of community, creating a crisis of trust signalled by a huge increase in litigation and a corresponding fortress mentality. He described the effects of such a decline: ‘people who do not trust one another will end up cooperating only under a system of formal rules and regulations, which have to be negotiated, agreed to, litigated, and enforced, sometimes by coercive means. This legal apparatus, serving as a substitute for trust, entails what economists call “transaction costs”. Widespread distrust in a society, in other words, imposes a kind of tax on all forms of economic activity, a tax that high-trust societies do not have to pay.’ [3, pg. 28].

Against this background – of interpersonal, workplace and societal trust – what can we learn from current studies of trust that take place in the con-

text of computer-mediated communication? Certainly, in the wake of significant amounts of e-commerce research, we know that it is meaningful to talk about trust online and that there are arguably high-trust cultures that flourish online (such as early versions of eBay, where there were fewer guarantees and a greater willingness to trust in a transaction).

Furthermore the context for trust online has become extremely diverse with the rise of social networks and an increased tendency for people to use Internet-based information to inform important life decisions across a number of domains (in my own work I have explored trust decisions in the contexts of e-government [7], privacy[6] and health [10]).

Such domains of trust enquiry have led to the proliferation of trust models that capture different aspects of online trust or that model the dynamics of trust development. In my own work I have tried to capture the evolution of trust over time and consider the role of different contextual factors at early and late stages of the trust relationship [11] including an analysis of the impact of those factors – such as personalised communication – that can help cement longer-term trust.

Yet perhaps the most exciting new developments in trust research are moving beyond this simple transactional model of trust in information offered to capture a more complex set of parameters in relation to the ways in which we might use technology in the form of a trusted companion. To this end I have been working towards refining the idea of an electronic life partner – the Biometric Daemon [2] – which would be capable of not only authenticating identity across a number of different platforms, but also acting as a trust agent. Intrinsic in the Daemon model is the notion that a relationship must be sustained over time and that both parties – Daemon and individual – are capable of learning about trust from each other and are similarly capable of seeking different forms of reassurance from each other.

References

1. Arrow, K.J.: *The Limits of Organization*. Norton, New York (1974)
2. Briggs, P., Olivier, P.L.: Biometric daemons: authentication via electronic pets. In: *Proceedings of CHI 2008*, pp. 2423–2432. ACM, New York (2008)
3. Fukuyama, F.: *Trust: The Social Virtues and the Creation of Prosperity*. Simon and Schuster, New York (1996)
4. Levering, R.: *A Great Place to Work*. Plume (1994)
5. Levering, R., Moskowitz, M.: *The 100 Best Companies to Work for in America*. Plume (1994)
6. Little, L., Marsh, S., Briggs, P.: Trust and privacy permissions for an ambient world. In: Song, R., Korba, L., Yee, G. (eds.) *Trust in e-services: Technologies, Practices and Challenges*, ch. XI, pp. 259–292. Idea Group Publishing, USA (2007)
7. Marsh, S., Patrick, A., Briggs, P.: Trust in digital government – social issues. In: Anttiroiko, A., Malkia, M. (eds.) *The Encyclopedia of Digital Government*. IGI Publishing (2006)
8. O'Neill, O.: *A Question of Trust: The BBC Reith Lectures*, Cambridge (2002), available from the BBC, <http://www.bbc.co.uk/radio4/reith2002/>

9. Reina, D.S., Reina, M.L.: Trust and NBetrayal in the Workplace: Building Effective Relationships in Your Organization. Berret-Koehler Publishers, San Francisco (1999)
10. Sillence, E., Briggs, P., Harris, P., Fishwick, L.: Going online for health advice: Changes in usage and trust practices over the last five years. *Interacting with Computers* 19(3), 397–403 (2007)
11. Sillence, E., Briggs, P., Harris, P., Fishwick, L.: How do patients evaluate and make use of online health information? *Social Science and Medicine* 64(9), 1853–1862 (2007)
12. Wrightsman, L.S.: Measurement of philosophies of human nature. *Psychological Reports* 14, 743–751 (1964)