

Chapter 8

Technology: A Bane or Boon for Cross–National Levels of Generalized Trust?

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ABSTRACT

The country-level determinants of generalized trust that usually command the most research are ethnic homogeneity, institutional performance, civic culture, and economic development. Despite the popularity and insight of this research, there is little quantitative empirical evidence that explores the impact of technology—a necessary and exogenous condition for many of these determinants—on generalized trust. In this chapter, technology measures from the World Bank are combined with a generalized trust measure from the World Values Survey and other country-level predictors from various data sources to test two competing theories of generalized trust across 57 countries. One theory, new institutional economics, argues that technology will yield formal institutions, which structure incentives and reduce uncertainty, that, in turn, increase generalized trust. The other perspective, overjustification and crowding theory, argues that actors constrained by extrinsic motivators, such as technology and institutional incentives, will attribute trust to the incentive rather than to the individual, and generalized trust, as a result, will decrease. Structural equation model results confirm the new institutional economics claim that the positive effects of technology on generalized trust are positively mediated by formal institutions. The authors conclude by outlining various managerial implications and directions for future research.

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INTRODUCTION

In his foundational text *The Division of Labor in Society*, Emile Durkheim ([1893] 1984) famously argued that the evolution from a traditional and personal community to a modern and impersonal society would not necessarily lead to the eventual demise of social solidarity, as Tönnies ([1887] 1963) and other communitarians forebode. Instead, this evolution would lead to a new social solidarity founded not on likeness and similarity, but on interdependence and trust. This is because a complex division of labor activates social processes, such as trust, that emerge to resolve problems of solidarity brought about by individualistic social relationships. Durkheim rendered a radical and counterintuitive conclusion: as individuals ostensibly become more autonomous and liberated from their community bonds, they become ever more dependent on society. The key to this dependence is trust.

Since *The Division of Labor in Society*, research within sociology (e.g., Blau, 1964; Coleman, 1990; Yamagishi & Yamagishi, 1994), psychology (see Kurzban, 2003; Tyler & Kramer, 1996), economics (see Arrow, 1974; North, 1990; Williamson, 1985), and political science (e.g., Hardin, 2006; Levi, 1998; Putnam, 1993) reveals that a number of general determinants and consequences of trust exist beyond those outlined by Durkheim (see Nannestad, 2008; Welch, Rivera, Conway, Yonkoski, Lupton, & Giancola, 2005 for a review). Institutions (Delhey & Newton, 2005; Knack & Keefer, 1997), social relationships (Putnam, 2000), homophily (Brewer, 1981; Putnam, 2007), and cultural values (Uslaner, 2000) are often cited as determinants of trust, while lower rates of corruption (Uslaner, 2002), economic performance (Zak & Knack, 2001), “good government” (Knack, 2002; Putnam, 1993), and life satisfaction (Bjørnskov, 2003) are recognized as its consequences.

Although the role of technology in generating or undermining trust remains empirically underexplored, existing theoretical literature provides

two competing models of technology and trust that can be tested to fill this empirical void. In the first model, new institutional economics, technology is often treated as an exogenous variable—a dimension or concept lacking explanation—that is used as the catalyst for larger, more complex models. For instance, in Douglas North’s (1990) model, technologies provide effective standardized measurements that better assess the price and quality of goods, and increase monitoring capacity of institutions and organizations, which results in swifter enforcement and greater constraint on individual action. This reduces uncertainty and increases information that results in greater trust. Technology, then, has a theoretically indirect and historically distant, although necessary, positive effect on trust.

In the second theoretical perspective, the overjustification and crowding model, the motivation to trust is derived from intrinsic and extrinsic sources. According to the theory, extrinsic motivators, such as technologies and institutions, undermine and *crowd out* intrinsic reasons to trust (Bohnet, Frey, & Huck 2001; Enzle & Anderson, 1993; Fehr & Falk, 2002; Malhotra & Murnighan, 2002; Mulder, van Dijk, De Cremer, & Wilke, 2006). This occurs because individuals attribute trust to the external motivation rather than to the internal disposition of the trustee (Deci, Koestner, & Ryan, 1999). Recent investigations in administrative science support this notion. Economic organizations often adopt information technologies, such as surveillance devices, to increase employee trustworthiness and enhance productivity. Ironically, the increased monitoring and sanctioning capacity brought about by these technologies undermines the intrinsic motivation to trust (Cialdini, 1996). Resulting in distrust of the organization and fellow coworkers as well as heightened employee malfeasance.

As of yet, very few research efforts have attempted to resolve the debate over trust and technology. A primary goal of the current volume is to rectify this issue. The present study, therefore, addresses the role that technology has on cross-

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