

## Chapter 9

# Trust in Technology: A Status Value Approach to Understanding Technology Adoption

**Celeste Campos-Castillo**  
*The University of Iowa, USA*

### ABSTRACT

*The notion of trust in technology has recently flourished through translating what researchers know about interpersonal trust into the realm of technology. What has been missing from this movement is a sociological perspective on trust in technology, an understanding of how the social and cultural framework in which one is embedded can shape outcomes like trust. To fill this void, the author develops a framework for understanding how these macrostructures can become imported into the local context (e.g., the workplace) to influence trust in technology. Specifically, this framework takes a status value approach (Berger & Fisek, 2006) to explain how the status of social actors (e.g., people, organizations) can transfer to the technologies to which they are associated and be used as a basis for trust. The author focuses the discussion of this theory around implications for technology adoption and offers suggestions for future applications of the theory in other domains.*

### INTRODUCTION

A recent observation about two popular social networking sites – MySpace and Facebook – is that their customers are divided along social class lines, with the working class individuals concentrated in MySpace and the middle class individuals gathering on Facebook (boyd, 2007). What might account

for this differential adoption of technologies that mediate social networking?

In a world increasingly reliant on technologies to mediate tasks like social networking, there has been a growing interest regarding trust in technology (Lee & See, 2004), which I am defining here as the belief that the technology will perform a set of delegated tasks with minimal risk. Essentially, the probability that a person will adopt a technology depends on the person's trust in that technology (Lee & Moray,

DOI: 10.4018/978-1-61520-901-9.ch009

1992, 1994; Lewandowsky, Mundy, & Tan, 2000; Muir, 1987; Parasuraman & Riley, 1997). Weber (1947) saw technology as a means to move beyond finite human capacity and rationalize a process; if a human controller does not trust technology, then how can technology increase productivity? Can you trust that the directions from your car's GPS unit will lead you to the correct destination and not a dead end road? How do you determine if you will spend your money, for instance, on the books that Amazon.com recommends while you peruse around their website? Or how about trusting websites like eHarmony.com to match you and the person with whom you will be presumably spending the rest of your life?

A number of explanations for the extent to which technologies are trusted exist in the literature. Some have focused on how stable individual differences in the propensity to trust (Rotter 1971) influence trust in technology (e.g., Parasuraman, Singh, Molloy, & Parasuraman, 1992). Others have looked at how the design of the technology might alter trust (e.g., Lee & Moray, 1994). While much has been written on the role of trust in technology, there is a missing piece to the picture – a sociological perspective. I build on Lee and See's (2004) suggestion that macrostructures shape the evolution of trust in technology by providing a theory of *how* larger macrostructures can become imported into the local context (e.g., workplace) and have influence over trust in technology. A primary emphasis in sociology is that the local context is influenced by the larger social and cultural framework in which it is embedded. The social structure and personality perspective within sociology (McLeod & Lively, 2003), for instance, focuses on the multiple, interconnected layers of social milieu that shape individual outcomes such as which social networking site to use. Of course, a sociological understanding of technology is not new. For example, sociology has provided explanations for the digital divide, which is a term used to describe differential access to and ownership of technology. A variable often used in sociological

models – socioeconomic status – has been shown to be a primary correlate of access to computer technology (Bimber, 2000; Calvert et al., 2005; Wilson, Wallin, & Reister, 2003).

These two literatures – trust in technology and the sociology of technology – have for the most part evolved separately from one another. I merge together these two literatures to initiate a sociological perspective on trust in technology. I use status value theory (Berger & Fisek, 2006) from the expectation states program (Berger & Webster, 2006), a family of theories that explains how inequalities in the larger social structure get imported into the local context. Several of these theories (including status value theory) revolve around status, which is the prestige, honor, and esteem conferred to a social actor by a particular culture. As an example, many cultures tend to confer more status to men than women, all else being equal (Pugh & Wahrman, 1983).

Status has been recently discussed as a signal for trustworthiness (Cook, 2005; Cook, Hardin, & Levi 2005). A working paper (Campos & Schultz, 2009) suggests that a model of trust by Mayer and his colleagues (Mayer, Davis, & Schoorman, 1995) can be used to understand how status influences trust, shaping mobility in the workplace. I suggest that we can use a similar logic when discussing trust in a technology. Technologies that have higher status value than others will be trusted more and have a higher rate of adoption. At the same time, the designation of status value in technology is a social construction. Status value theory (Berger & Fisek, 2006) posits that initially unvalued objects, like new technologies, can become imbued with status value when they are associated with elements that hold status value (e.g., individuals or organizations); the status value of these elements spreads to the unvalued objects.

I suggest how this status value approach to understanding trust in technology can be used to predict technology adoption. Explanations from classic economic theories highlight the rational decision-making of autonomous agents in adop-

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/trust-technology-status-value-approach/42905](http://www.igi-global.com/chapter/trust-technology-status-value-approach/42905)

## Related Content

---

### Social Networks and Trust in e-Commerce

G. Scott Erickson, Kurt Komaromiand Fahri Unsal (2010). *International Journal of Dependable and Trustworthy Information Systems* (pp. 45-59).

[www.irma-international.org/article/social-networks-trust-commerce/43581](http://www.irma-international.org/article/social-networks-trust-commerce/43581)

### Reality Crisis and Securitisation: The Security Dimension of Disinformation

Özlem Acar (2026). *Navigating Public Security in the Age of Post-Truth: Challenges and Implications* (pp. 305-364).

[www.irma-international.org/chapter/reality-crisis-and-securitisation/404983](http://www.irma-international.org/chapter/reality-crisis-and-securitisation/404983)

### Information Technology, Political Institutions, and Generalized Trust: An Empirical Assessment Using Structural Equation Models

Blaine Robbinsand Maria Grigoryeva (2010). *International Journal of Dependable and Trustworthy Information Systems* (pp. 55-69).

[www.irma-international.org/article/information-technology-political-institutions-generalized/46938](http://www.irma-international.org/article/information-technology-political-institutions-generalized/46938)

### An Interpretive Study of Critical Issues in Electronic Health Information Exchange

Sherrie Drye Cannoy (2011). *International Journal of Dependable and Trustworthy Information Systems* (pp. 1-17).

[www.irma-international.org/article/interpretive-study-critical-issues-electronic/53128](http://www.irma-international.org/article/interpretive-study-critical-issues-electronic/53128)

### Russian Information Warfare and 9/11 Conspiracism: When Fake News Meets False Prophecy

Michael Bennett Hotchkiss (2021). *Research Anthology on Fake News, Political Warfare, and Combatting the Spread of Misinformation* (pp. 346-369).

[www.irma-international.org/chapter/russian-information-warfare-and-911-conspiracism/269103](http://www.irma-international.org/chapter/russian-information-warfare-and-911-conspiracism/269103)