



Security vs. Privacy – Is There a Trade-Off and Can the Trade-Off be Avoided?

In the months, perhaps even the first couple of years following 9/11, Americans seemed willing to prioritize security over privacy—even willing to achieve security *at the expense of* privacy. Prevailing opinion was that a trade-off exists between privacy and security, as evidenced by a significant drop in privacy expectations in America (Taylor, 2003).

Shortly after the attacks, Bruce Schneier, a leader in the information security field, concluded that people seemed to view the trade-off as a *fait accompli* – a fact, or condition that cannot be undone (Schneier 2001).

What caused this shift in privacy expectation? Is it truly that Americans believe concerns for personal security and safety trump privacy, as the above discussion suggests? Is it that less privacy is simply an irreversible by-product of life in the twenty-first century?

In a contrasting view, a 2007 poll suggests the drop in privacy expectation is due to technological advancement and generational effects (Government Technology, 2007). Ninety-one percent (91%) of respondents agreed privacy expectations have declined with increased technological advancements. The survey also showed age is highly and inversely correlated with the perception of what constitutes a privacy invasion. Another view suggests that the nature of this change is economic. A 2008 Consumer Reports Poll (Kelsey and McCauley, 2008) indicates consumers' privacy expectation on-line is *increasing*. According to the poll, “82 percent of consumers are concerned about their credit card numbers being stolen online, while 72 percent are concerned that their online behaviors were being tracked and profiled by companies.”

Based on this evidence, it seems that expectations of privacy are highly dependent upon contextual factors – personal security, technological convenience, social vs. professional vs. commerce environments, etc. So, just what is important to people when it comes to ‘privacy?’ Further, why do we want to keep our information private?

“Information forms the intellectual capital from which human beings craft their lives and secure dignity... [That] capital is impaired whenever [people] lose their personal information without being compensated for it, when they are precluded access to information which is of value to them, when they have revealed information they hold intimate, or when they find out that the information upon which their living depends on is in error” (Mason, 1986).

Based on this, we identify five issues central to privacy concerns in the information age. The issues include: (1) extensive collection of personally identifiable information, (2) internal, unauthorized secondary use of personal information, (3) external, unauthorized secondary use of personal information, (4) errors in personal information stored, and (5) improper access to personal information stored (Smith et al., 1996).

Last, we should ask, is a trade-off even necessary? In the same talk where Schneier said people viewed the trade-off as a *fait accompli*, he was quick to caution Americans against accepting this trade-off too eagerly, suggesting there are ways to achieve privacy and security simultaneously. He argues these concepts are not mutually exclusive and both can be achieved if considered early on and designed into the

system from the beginning. When security is 'tacked-on' to an already fully designed and operational system, the method for achieving it is often more invasive from a privacy perspective. Designing both security and privacy in from the beginning can lead to a more mutually reinforcing system from the perspective of operations, security, and privacy (Clark et al.).

References:

Clark, Jan Guynes, Nicole Lang Beebe, Karen Williams, and Linda Shepherd, "Security and Privacy Governance: Criteria for Systems Design," *Journal of Information Privacy and Security* (forthcoming).

Government Technology (2007) <http://www.govtech.com/gt/articles/103678>

Kelsey, Joel and Michael McCauley (2008)
http://www.consumersunion.org/pub/core_telecom_and_utilities/006189.html

Mason, Richard O. 1986. "Four Ethical Issues of the Information Age." *Management Information Systems Quarterly* 10(1): 5-12

Schneier, Bruce. 2001. "Protecting Privacy and Liberty—The Events of 11 September Offer a Rare Chance to Rethink Public Security." *Nature* 413(Oct):773

Smith, H. Jeff, Sandra J. Milberg, and Sandra J. Burke. 1996. "Information Privacy: Measuring Individuals' Concerns About Organizational Practices." *Management Information Systems Quarterly* 20(2):167-196

Taylor, Humphrey. 2003. "Most People are 'Privacy Pragmatists' Who, While Concerned about Privacy, Will Sometimes Trade It Off for Other Benefits." *The Harris Poll* © 17(March)