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Chapter XI

Emerging Technologies, Emerging Privacy Issues

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Abstract

With each new technology, new ethical issues emerge that threaten both individual and household privacy. This chapter investigates issues relating to three emerging technologies—RFID chips, GPS, and smart motes—and the current and future impacts these technologies will have on society. The outcome will be issues for social discussion and resolution in the coming decades relating to use of these technologies.

Background

New data losses of millions of individuals' personal information occur almost daily (Albrecht, 2002; Clarke, 1999; CNet, 2006). As losses amass, the realization grows that personal information privacy (PIP) is no longer managed by either individuals or the companies that collect the data. Research to date proposes that PIP is the

Table 1.

priva-ry (http://www.dictionary.com based on <i>Random House Unabridged Dictionary</i> , 2006)	1. the state of being private; retirement or seclusion. 2. The state of being free from intrusion or disturbance in one's private life or affairs: <i>the right to privacy</i> . 3. SECRECY. 4. <i>Archaic.</i> a private place.
priva-ry <i>The American Heritage® Dictionary of the English Language, Fourth Edition</i> Copyright © 2000	1. a. The quality or condition of being secluded from the presence or view of others. b. The state of being free from unsanctioned intrusion: <i>a person's right to privacy</i> . 2. The state of being concealed; secrecy.
priva-ry <i>WordNet® 2.1, © 2005 Princeton University</i>	1. The quality of being secluded from the presence or view of others 2. The condition of being concealed or hidden

responsibility of individuals' forging contracts with corporations for protection of their data (Smith, 2004), that it is the responsibility of government to protect the individual from corporate abuses (OECD, 2000, 2003, 2006; Swire, 1997), or the responsibility of corporations to manage internal use (Cheung et al., 2005; Culnan, 1993; Culnan & Armstrong, 1999; Smith et al. 1996). These views are all corporate-centric but threats have expanded beyond the corporation to its data-sharing partners, resulting in data aggregation and sales that are largely unregulated and uncontrolled (Conger, 2006; Conger et al., 2005).

Dictionary.com has several definitions of privacy as shown in Table 1.

These definitions leave one with a clear expectation that individuals control their own physical visibility to the world. The legal definition further includes privacy in "personal matters."

Privacy can be thought of from several points of view (cf., OECD 1998; Smith 2004). On the one hand, the question is how the individual's inherent *right* to privacy can be protected, for example, by legislation. On the other hand, the individual has a *contractual* right of privacy, to control interactions with the world, including the release of private information such as address and social security number.

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