

Radio Frequency Identification (RFID)

RFID: The “EZ-Pass” of goods in the marketplace, from producer through to consumer.

Just as drivers have grown to depend upon EZ-Pass technology to breeze through toll booths, manufacturers, retailers, and government agencies envision similar benefits in RFID technology, ultimately increasing choices and lowering costs. These small tags can be affixed to goods at the bulk or unit level to convey information such as product type (like a Universal Product Code), production date, and other data relevant to the movement of goods from the manufacturer to store shelves and on to consumers.

Wal-Mart, far and away the world’s largest retailer with \$285 billion in sales, is driving adoption in its supply chain by requiring suppliers to use RFID tags. This biggest of big-box retailer seeks to manage distribution, warehouse, and in-store inventories to lower logistical costs, translating into lower costs and a more dependable supply of goods for consumers. Yet RFID’s potential goes well beyond retail and consumer packaged goods applications. For example, the US Department of Defense (DOD) makes extensive use of RFID tags to track goods and military materiel used by the armed forces around the globe -- all to ensure proper battle readiness and support.

Focus on *what* information is collected, not *how* it’s collected.

Although RFID reached widespread use just this year, some state and federal lawmakers are already rushing to regulate the technology. Citing overblown fears of “big-brother” invading our privacy and tracking consumers, legislators seek to exert undue and often unworkable regulation on a nascent technology. Thus far, RFID is used primarily at the level of shipping containers, pallets, and supply chain movement of goods. Wal-Mart and the DOD insist that only their biggest suppliers use the technology today.

RFID isn’t yet being used at the individual item level – and with tags currently costing twenty to fifty cents each, widespread use of tags at the product level could be years off. Theoretically, RFID technology can track products that a consumer is carrying, but tag transmission distances are less than 30 feet, so there is little possibility of any information being transmitted once you’ve left the store. In-store, however, RFID tags can speed checkouts by identifying what items a shopper has in their cart. RFID data collection at the register would provide the same information that is currently collected by bar code scanners, which is often merged with customer loyalty card programs already used by millions of American consumers. Regulatory efforts should focus on a strong national standard accomplished through targeted, enforceable policies regarding the nature of the data collected rather than the means of collection. It would be unfortunate if sweeping state or federal privacy regulation created unintended consequences and diminished the promising benefits of RFID technology.

Policy recommendations for radio frequency identification (RFID) technologies

ACT policy recommendations to foster innovation and adoption of RFID technologies:

- **Allow the technology to mature before regulating.** RFID is just starting to enjoy extensive use by businesses and governments seeking greater efficiency and lower costs. Avoid the rush to legislate and regulatory policies that put too much emphasis on the way data is collected.
- **Discourage a patchwork of state privacy laws and regulations.** Establish a strong national standard that prohibits states and local governments from enacting multiple and conflicting regulation that will inevitably create impossible compliance conflicts for businesses. A Patchwork of regulations will surely impede investment, innovation, and adoption of promising RFID technologies.
- **Ensure a strong technological backbone for the RFID network.** The business and consumer benefits of RFID will never be realized without proper investment and management of the underlying RFID communications network. This means ensuring the network is entrusted to and managed by a capable administrator who can effectively maintain the critical high-levels of functionality, security, and privacy.