

RFID Reconsidered

What you need to know before investing in the latest self-check
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Issue: Radio Frequency Identification (RFID) technology has the potential to revolutionize library services. However – not unlike the internet – RFID technology is evolving faster than the guidelines to guard against misuse. What effect will eventual RFID legislation have on North American Libraries? Will potential benefits be overshadowed by security and privacy concerns? Is RFID a blessing or a curse?

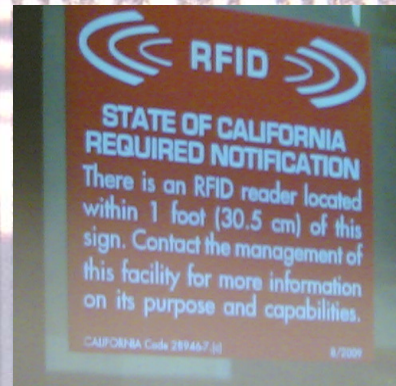


There are over 500 RFID tags in use worldwide. The example shown to the left is a “passive” tag – not unlike the item tags placed in books – used for retail applications.

A more controversial tag type is the “embedded” RFID shown in this x-ray photo.



Bills to control specific uses of RFID have also been introduced in South Dakota, Rhode Island, Massachusetts, New Hampshire and New Mexico.



In April 2004, Senate Bill 682 (later known as The Identity Information Protection Act of 2005) was approved in California by a vote of 22 to 8. The act prohibited state, county, and municipal governments from issuing identification documents with RFID tags that transmit personal information or enable such data to be scanned remotely. On August 15th 2005, an amendment to the bill labeled library cards as being “identification documents.” Less than a month later, the American Electronics Association was able to persuade California legislators to set the bill aside for at least a year while RFID security and privacy technologies improved.

Objectives: The wide-reaching applications of RFID has lead to misconceptions and confusion. Privacy concerns have inspired legislation – most notably in California – proposing a widespread ban on the technology. This research paper examines current policy formation surrounding the use of RFID. The objective of this investigation is to make recommendations for libraries considering RFID.



RFID is used in libraries through the use of three devices: tags, readers, and sensors. RFID tags do not have to be seen by the readers. This enables tasks like shelf-reading and checkout to be achieved with greater efficiency than ever before. Library cards also use RFID to transfer information about patrons to the library server.



Education about RFID in Libraries

David Molnar and David Wagner discuss the need to introduce “protocols for privacy-friendly symmetric-key authentication,” which would ensure that both tag and reader would recognize one another before information could be transferred. This would protect against third parties reading confidential patron information.

- Molnar, D., & Wagner, D. (2004). *Privacy and security in library RFID: Issues, practices and architectures*. Available at <http://www.cs.berkeley.edu/~dmolnar/library.pdf>

For general guidelines about use of RFID in Canadian libraries see below

- Cavoukian, A. Information and Privacy Commissioner Ontario. (2004, June). *Guidelines for using RFID tags in Ontario Public Libraries*. Available at <http://www.ipc.on.ca/docs/rfid-lib.pdf>

Major Findings: There may be no better chance to monitor the early implementation of item-level RFID tagging than at the local library. Information professionals have an opportunity to comment on the appropriateness of being able to scan and identify any object in the world. Dialogue about RFID and privacy should not only take place between libraries and their patrons, but between libraries and their governments.