



BERKELEY PUBLIC LIBRARY
2090 KITTREDGE ST
BERKELEY, CA 94704
510-981-6100

June 2005

Community Informational Forum On Radio Frequency Identification (RFID)

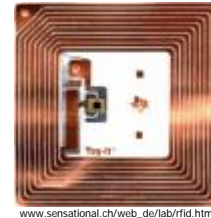
**Monday, August 1, 2005
6:30 - 9:00 P.M.**

**South Berkeley Senior Center
2939 Ellis Street**

**Sponsored by Berkeley Public Library
Board of Library Trustees**

How does RFID work?

Radio frequency identification (RFID) is a method of remotely storing and retrieving data using devices called RFID tags/transponders that can be attached to or incorporated into a product. RFID tags contain antennae to enable them to receive and respond to radio-frequency queries from an RFID transmitter/receiver. en.wikipedia.org/wiki/RFID



www.sensational.ch/web_de/lab/rfid.html

How does RFID work in a library?

In the library context, RFID works by placing a one-inch passive tag, without power supply, in each library item (book, CD, DVD, or etc.). Each tag contains only barcode information for that item. When library patrons place items to be checked out on or near a receiver pad and insert their library card, the items are checked out to them. This occurs when the minute electrical current induced in the antenna by the incoming radio frequency scan (from the transmitter/receiver) provides enough power for the tag to send a response to the receiver. Items can also be checked back in easily, saving time and energy, and simplifying up-to-date inventory tasks.

Where is RFID currently used?

RFID is presently used in many U.S. public and university libraries and in many libraries worldwide. Many libraries in Northern Europe have used RFID for several years. RFID is also being used for purposes such as vehicle identification and medical-errors avoidance and by a number of retailers, both large and small.

Why is the Berkeley Public Library using RFID technology?

Over five years ago the Library observed increasing library staff injuries, workers compensation costs, and concerns for safety due to repetitive stress, especially to staff checking out and checking in library materials. Moreover, in 2002, it became clear that no additional funds would be available to increase staff resources at the newly-renovated and enlarged Central Library, so technologies like RFID were more carefully evaluated to help decrease injuries and to improve Library efficiency without increasing staff. Board of Library Trustees (BOLT) meetings included a number of public discussions about RFID during late 2003 and early 2004. The Library issued a Request for Proposals for RFID, and BOLT approved the Checkpoint Systems, Inc., contract and financing by June 2004.

How does RFID benefit the Berkeley Public Library and the public it serves?

RFID is expected to reduce staff injuries, thus reducing the Library's worker's compensation costs, and will promote Library efficiency by self-check-out and faster check-in service. RFID will also save money by providing an effective, integrated security system for all the Library branches for the first time. RFID will help Berkeley Public Library focus on service to our patrons for many years, and will be completely paid for in 2009.

Is RFID a substitute for a library worker?

No, RFID in the check-out / check-in system is intended to promote efficiency and help free library workers to have more contact with the public. By allowing patrons to check out their own materials and by making the Library's check-in process more efficient, RFID allows Library workers, who formerly checked out materials, to be able to help patrons seek information, find materials, and use Library equipment like Internet computers and copy machines. Those friendly conversations across the check-out desk will now take place, throughout the library.

How does RFID protect privacy?

Because there is only barcode information in the RFID tag, it is not possible to retrieve other information from the tag. No book title, author, or publisher data, no patron name, or use pattern is available through the RFID tag. Furthermore, the range from which these tags can be read is quite limited – approximately 18 inches. In contrast, it is easy to discern what a patron is reading by looking at the physical materials. Berkeley Public Library believes that the use of the RFID self-check-out system will increase patrons' privacy.



www.checkpointsystems.com/default.aspx?page=ils

Selected Bibliography

- Bhuptani, Manish and Moradpour, Shahram. *RFID Field Guide: Deploying Radio Frequency Identification Systems*. Prentice Hall, 2005. On order for Berkeley Public Library.
- Shepard, Steven. *RFID: Radio Frequency Identification*. New York: McGraw-Hill, 2005. Central New Books 658.787 Sh47r
- RFID Journal's Frequently Asked Questions -- <http://www.rfidjournal.com/faq/28>
- American Library Association Resolution on Radio Frequency Identification (RFID) Technology and Privacy Principles
<http://www.ala.org/Template.cfm?Section=ifresolutions&Template=/ContentManagement/ContentDisplay.cfm&ContentID=85331>

For additional information, call the library at 510-981-6100.