# 3M and HKUL Synergy on RFID Implementation: Views of the End User

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#### **RFID Solutions in Libraries**



#### Radio Frequency Identification (RFID)

A durable, reliable and cost-effective technology that can help librarians better manage their collection.

Libraries place RFID tags in library items (book, DVD, CD, etc.). The tags are used to check materials in and out and can also be used in the library's detection system.

It helps libraries increase efficiency and productivity while maintaining security.

## Why RFID?

- Growing acceptance of the RFID system
- Its ability in maximizing staff productivity by reducing the amount of time needed to manage timeconsuming routine tasks
- Enhance customer services with the use of technology
- Need to prudently use its resources and not let soaring staff costs squeeze its materials budget















## Background

- Successful implementation of RFID at the Main Library of the University of Hong Kong Libraries in 2008
- 1.3 million books tagged in 6 months
- Decided in 2010 to extend the use of RFID in the branch libraries and in audiovisual materials

### Key Issues

- Seamless integration between the Main Library and branch libraries / audiovisual materials RFID systems
- Problems with tagging audio-visual materials
- Increase patron self check-in and check-out activities

### Seamless Integration

- The 3RFID system can read the 1.3 million books tagged in 2008
- No need to re-tag the books, which is a very expensive task that the library will try its best to avoid
- A good case for RFID interoperability

## Tagging Audiovisual Materials

- A variety of formats the most popular ones being CDs/DVDs and videocassettes
- Metallic surface of CDs/DVDs reflects and detunes RF energy → interference → decrease read rates
- Multi-disc CD/DVD sets pose further challenges in (a) manual handling in re-packaging them in 2 or 3 cases (b) exact alignment of tags

#### **Our Solution**

- Avoid re-packaging multi-disc sets additional costs and upsetting our loan policy
- Exploit the capabilities of the 3tags: CD8 (aka donut) and Stingray full disc tag
- Read capability stack test

	2 tags	3 tags	4 tags	5 tags	6 tags	7 tags	8+ tags
Donut	Yes (1s)	No	No	No	No	No	No
Stingray	Yes (1s)	Yes (1s)	Yes (2-3s)	Yes (2-3s)	Yes (3-4s)	Yes (3-4s)	No

## **Preferred Option**

No. of Discs	RFID Tag	Case	Cost
1	Donut	Original	Material + Labour
2	Donut	Original	Material + Labour
3	Stingray	Original	Material + Labour
4	Stingray	Original	Material + Labour
5	Stingray	Original	Material + Labour
6	Stingray	Original	Material + Labour
7	Stingray	Original	Material + Labour
8+	Re-packaging; donut / Stingray	CD Jewel Case	Additional Repackaging Cost

Note: use Stingray tags for CDs produced by labels, such as Archik, Decca and Deutsche Grammophon.



#### Increase Self-Check Kiosks Usage

- Customers tend to go to the counter for services that can be delivered by selfcheck kiosks
- Substitute manned counters with desktop self-check kiosks
- Change library practice / workflow to encourage self-service





#### Now

- Completed conversion tagging
- The 3RFID system is now up and running
- Deploy self-check kiosks before the beginning of the new semester in September
- Teach new students how to use the self-check kiosks during orientation tours
- Publicize and promote

#### Pains & Gains

- Completed implementing RFID at HKU Libraries the first in Hong Kong to have done almost the entire circulating collection
- Very efficient, cost-effective tagging programme
- Knowledge and understanding in tagging books and audiovisual materials
- Increase staff productivity and work ergonomics
- An example for other libraries in Hong Kong and the region in adopting RFID technology

Pains – in the short run, every time we make payment authorization ...

Thank you!