RFID Implementation Checklist

RFID – Which applications? How and why?

RFID can be applied to library work in many different ways, but the main objective underlying its introduction is usually improvement in customer service. If that’s not your aim, why are you doing it?

There may well be other reasons. Perhaps you’re opening a new library? Or simply want your service to be at the technological cutting edge? Maybe you need to respond to a Gershon agenda? Or resolve a specific local problem? Whatever the aim, however, it will usually be secondary to making the library more customer-focused and easier to use.

Regardless of your starting point, you will soon find that the pervasive nature of RFID and its potential applications offer you the opportunity to fundamentally review most of the processes in your library. Will you simply automate your existing procedures, or completely re-engineer them?

This RFID implementation checklist has been specially produced by the BIC / CILIP RFID in Libraries Committee, chaired by Martin Palmer of Essex County Council Libraries. This committee has been set up to provide guidance for libraries planning to implement RFID and to develop guidelines that will increase the interoperability of different RFID systems used in libraries. For further information please contact Brian Green at brian@bic.org.uk

This RFID Implementation Checklist was prepared by the BIC/CILIP RFID in Libraries Group for distribution to delegates at the RFID in Libraries Conference 2005 organised by CILIP Enterprises.

Compiled by Martin Palmer

How will you use RFID to help improve your service to customers? Will it include:

- Self Service? yes no
- Return chutes/book drops? yes no
- Extended opening hours? yes no
- Unstaffed service points? yes no
- Security? yes no
- Improved ease of use? yes no
- Alternative ways of presenting stock? yes no
- Navigating the library? yes no
- Other (please specify)
What do you intend to use RFID for?

Stock:
- Books
  - yes
  - no
- Audiovisual
  - yes
  - no
- Other (please specify)

Users:
- Smart cards
  - yes
  - no
- Smart cards including electronic cash
  - yes
  - no
- If opting for smart cards are there other considerations (see also “parent organisation” section below) e.g:
  - Can your cards be used in a wider internal organisation context such as Access Control?
    - yes
    - no
  - Can you use cards already used in an external context e.g. Oyster cards?
    - yes
    - no
  - If either is possible, who “owns” them?

- Other (please specify)

Do you need to ensure that any resulting changes conform to policies your parent organisation (local authority, university etc) may have for:

ICT?
- yes
- no
Human Resources?
- yes
- no
Finance?
- yes
- no
Procurement?
- yes
- no
Other (please specify)

How will it affect staffing and procedures? Will you include:

Stock management:
- Circulation?
  - yes
  - no
- Editing?
  - yes
  - no
- Other (please specify)
Automatic sorting:
• Of “exceptions” e.g. requests, interloans? yes no
• Of all stock for shelving? yes no

Acquisitions (internally):
• Tagging of all new stock? yes no
• Review of stock processing/servicing e.g. date labels, barcodes? yes no
• Effect on delivery points? yes no
• Other (please specify)

Acquisitions (externally):
• Review of supply chain implications? yes no

Handheld device for:
• Stocktaking? yes no
• Shelf tidying? yes no
• Locating requests, etc.? yes no

Culture change:
• Staff roles? yes no
• Job profiles? yes no
• Structures? yes no

Following on from this – how will you calculate Return on Investment? Will it include:
Staff savings? yes no
Staff redeployment? yes no
Other (please specify)?

How will RFID work with your Library Management System (LMS)?
Will you keep your existing LMS? yes no
Does your current (or prospective) LMS supplier also provide RFID? yes no
If so, do they insist on their own solution? yes no
If not, will the systems use SIP2 (developed by NISO into NCIP (Z39.83) in 2003)? yes no
Is your LMS fully SIP2 compliant? yes no
Is someone responsible for managing relationships between LMS and RFID suppliers? yes no

Does the solution fully implement library lending policies as defined by item and borrower status within the LMS? yes no

Will future LMS releases impact on RFID? yes no

And vice versa? yes no

Does your LMS deal with payment of fees and charges? yes no

If not, will this impact on the take-up of Self Service? yes no

Can RFID screens be used on staff stations? yes no

Do you know what happens:

• If LMS goes into backup? yes no
• When LMS returns from backup? yes no
• To stations for both staff and self-service? yes no

Will you need back office RFID stations? yes no

• If so, do you know how many? yes no
• Do you know what the staff interface will be? yes no
• Do you know what equipment and connections will be required? yes no
• Do you know which operating system will be used? yes no

Choice of RFID system

Is the system compatible with any standards? yes no

Do you know which standards? yes no

Are tags "standard"? yes 'no' if they are proprietary

If RFID is not being used for security, do you know how it interacts with the security system? yes no

Do you know how the tag’s data is structured? yes no

Is the tag an EAS tag? yes no

Answer ‘no’ if it is an AFI tag

Are tags:

• Only unique identifiers (“licence plates”)? yes no
• Or do they hold more data? yes no
• Is there a choice? yes no
• Interoperable? yes no
Do you know the read range (actual, rather than claimed) of:

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tags?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security gates?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anything else relating to the “security corridor” for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>checkout (issue)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>check-in (return/discharge)?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do you know how effective the system is? yes no
Does the system deal with multiple items simultaneously? yes no
Do you know how many items? yes no

Do the self service units cater for:

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self issue?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self return?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renewals?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enquiries?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservations?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration with security gates?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management information?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anti-Virus protection?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Does the furniture meet:

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your requirements?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and Safety legislation?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability Discrimination Act requirements?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is it flexible/adaptable?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do the terminals:

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet the needs of users with visual or learning impairment?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offer a choice of language?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offer immunity to interference?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Does all equipment (including handheld devices) meet requirements of:

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health &amp; Safety?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ergonomics?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is it flexible/adaptable?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the system customer-/user-friendly?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the system produce receipts?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If so:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are they legible?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do they omit personal data?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can the customer control production?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you know what kind of printer(s) are used?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you know who supplies the paper?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you know how much it costs?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If your service has more than one library:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will RFID be installed in all of them?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If not, how will RFID and non-RFID libraries work together?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Is your system interoperable with different suppliers’ equipment?         |     |    |

Similarly, if RFID is used in only part of a library, do you know how that affects the remainder of the building? |     |    |

Do you know:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much staff training is needed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who will provide it?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How much it costs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How long it takes to tag an item?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whether tagging units can be re-deployed for other purposes after initial tagging has been completed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are CDs/DVDs dealt with?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are VHS/Audio tapes dealt with?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are multi-part formats dealt with?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are multiple disc or tape sets dealt with?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are maps dealt with?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are picture books dealt with?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If so, do you know how?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Is the tag adhesive effective for:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VHS/Audiotapes?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDs/DVDs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there archival/preservation implications in the use of tag adhesive?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are all new tags usable?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is a failure rate quoted for new tags?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If so, do you know how replacements are provided?  yes  no

Handheld device
  • Does it interface with LMS?  yes  no
  • Do you know its read range?  yes  no

Will your stock suppliers be able to tag new stock for you?  yes  no

If so, will they also be able to write to tags:
  • Only if access to LMS is available?  yes  no
  • Without need for LMS access?  yes  no

Tag supply: is there scope for cooperation with other RFID users (e.g. retailers) to reduce price?  yes  no

Timeframe

Do you need to tender?  yes  no

Do you have a strategic ICT partner?  yes  no

Do you know how much stock you have to tag?  yes  no

Do you know how many staff you can devote to it?  yes  no

Do you know how many tagging stations are required?  yes  no

Will the supplier provide extra stations during initial tagging process?  yes  no

Does RFID need to link to building or refurbishment work?  yes  no

Do you need planning permission?  yes  no

Do you need listed building permission?  yes  no

Are there any other implications for the library layout?  yes  no

Do you need to close?  yes  no

Will you get tags and hardware or software from the same supplier?  yes  no

If separately, and the system doesn't perform, do you know how you will resolve queries about whether the tags are to blame?  yes  no

Ultimately, do you know who makes the final decision regarding choice of system?  yes  no

Is there a test environment for the system?  yes  no

Do you have a start-up budget?  yes  no

Do you have sufficient revenue budgets for future purchase of tags?  yes  no
## Support and maintenance

**Do you know:**

- What’s included? yes no
- How much it costs? yes no
- The effective life of the system? yes no
- The effective life of the tags? yes no

## Staff

**Will RFID affect:**

- Ways of working/work culture? yes no
- Job profiles/structure? yes no
- Training/Development? yes no

**Do you need to consult unions?** yes no

## Data Protection and Privacy

**Will the system enable you to fulfil your obligations under the Data Protection Act?** yes no

**Will tags contain any personal data?** yes no

**If you have RFID customer cards/tickets, will they contain any personal data?** yes no

**Does your LMS allow identification by customers of items from item number via OPACs?** yes no

**Will tag data include ISBNs?** yes no

## Promotion and Public Relations

**Do you have information for customers on:**

- Background info: what RFID is/how it works? yes no
- Privacy concerns? yes no
- Cost-effectiveness? yes no
- User training? yes no

## Monitoring

**Do you have a plan for monitoring the effectiveness of RFID?** yes no