Breakfasts 2015

Welcome to October's BIC Breakfast: Embracing the Library Communication Framework (LCF)

This BIC Breakfast, and the ongoing marketing and promotion of LCF, is funded by The LCF Consortium

The LCF Consortium

This BIC Breakfast and the ongoing marketing and promotion of LCF is being funded by the following organisations who are all part of the LCF consortium

What is a BIC Breakfast?

BIC

Book Industry Communication Ltd

BIC Committees

Libraries

Print

Digital

Metadata

Training, Events & Communications

Regular BIC Events

BIC Breakfasts (monthly)

BIC Networking Events

    - Events at the British Library

    - BIC Bash (18th November 2015)

LBF Supply Chain Seminar (April 2016)

New Trends Seminar
(September 2016)

BIC

BIC

New website coming soon

New Training Programme

 - Digital Book Production Explained – 10th Nov 2015

 - Producing Children's Books

Social Media

@BIC1UK

@BIC_LCF

@KarinaLuke

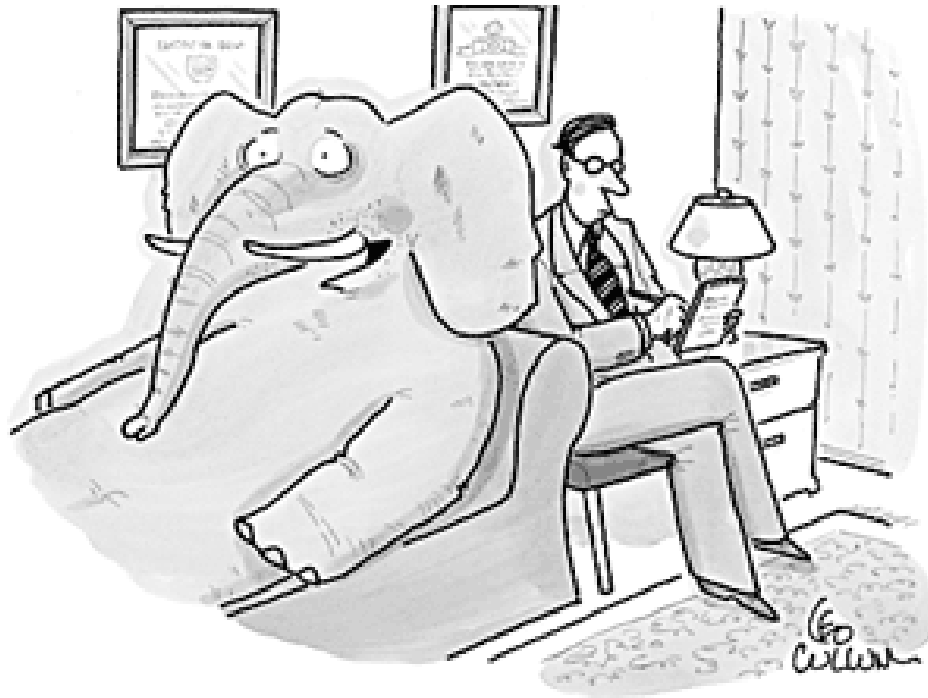LinkedIn & Facebook

Over to Mick…

Embracing the Library Communication Framework

Episode one – Why did we do it?

Mick Fortune - Consultant

First - a word about SIP

"I'm right there in the room, and no one even acknowledges me."

"Standard Interchange Protocol" (SIP)

- Published by 3M® in 1993.

- Became a *de facto* standard for LMS/3rd party communications.

- Originally developed to promote 3M's self-service solutions.

- Modified to accommodate new technologies and "non-standard", unregulated data exchange.

- Circulation remains its main focus.

SIP still dominates the RFID library landscape…

22 13

297

- ■ SIP
- ■ API
- ■ SIP and API
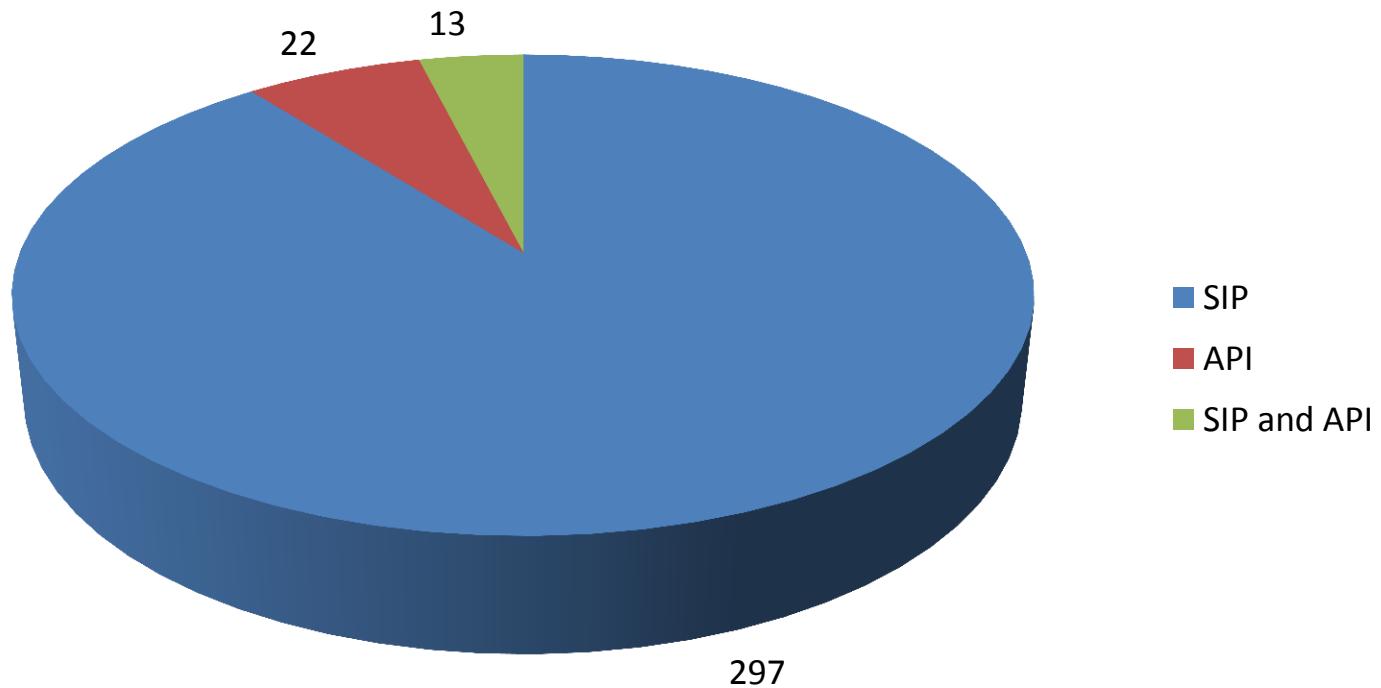
Numbers of libraries in 2014 survey using SIP, API or both

Changing Libraries

...and limits innovation in the RFID market.
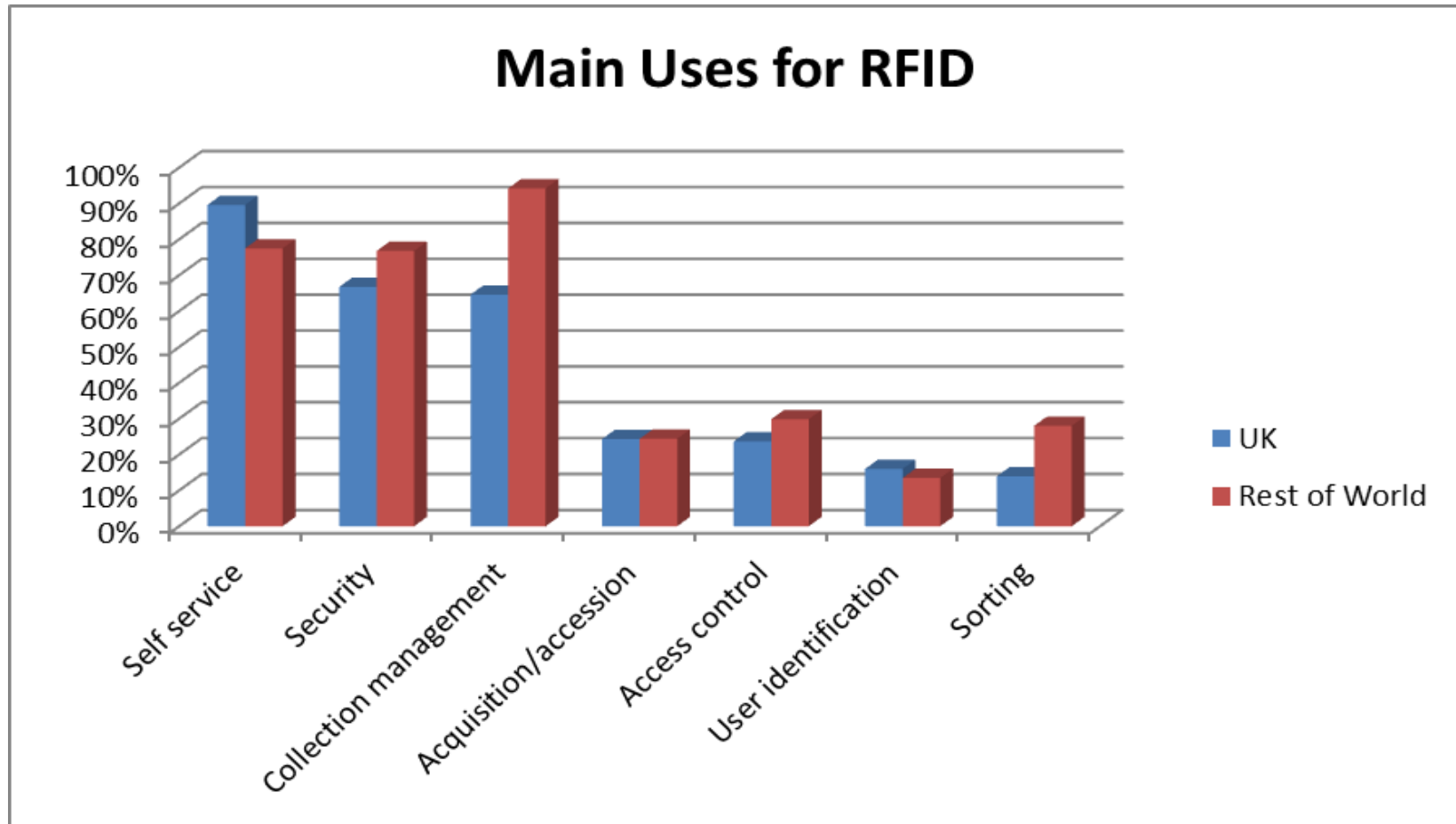
The need for change

- SIP's lack of regulation has made it unwieldly and difficult to use over its 20+ year history.

- The adoption of a standard UK data model for RFID offered an opportunity to use more data more creatively.

- New devices like smartphones and tablets – undreamed of in 1993 – have appeared that can interact directly with RFID tags.

Finding a solution

- SIP's longevity and the many legacy systems that use it make its wholesale change very difficult.

- Many providers, frustrated by SIP's limitations have already developed bilateral communications between a LMS and 3rd party applications.

- The triple challenge was to find a way to accommodate legacy systems while encouraging innovation – all in an open environment.

The Answer!

- The Library Communication Framework

- Developed by an independent body - BIC

- Extends the capabilities of SIP2..

- (Hopefully) Dissuades the growth of proprietary solutions.

- Open to all.

Over to Anthony...

BIC Breakfast
Embracing the Library Communication Framework (LCF)

Anthony Whitford
Head of Development, Capita libraries

What is the Library Communication Framework?

Functional

Emerging Standard
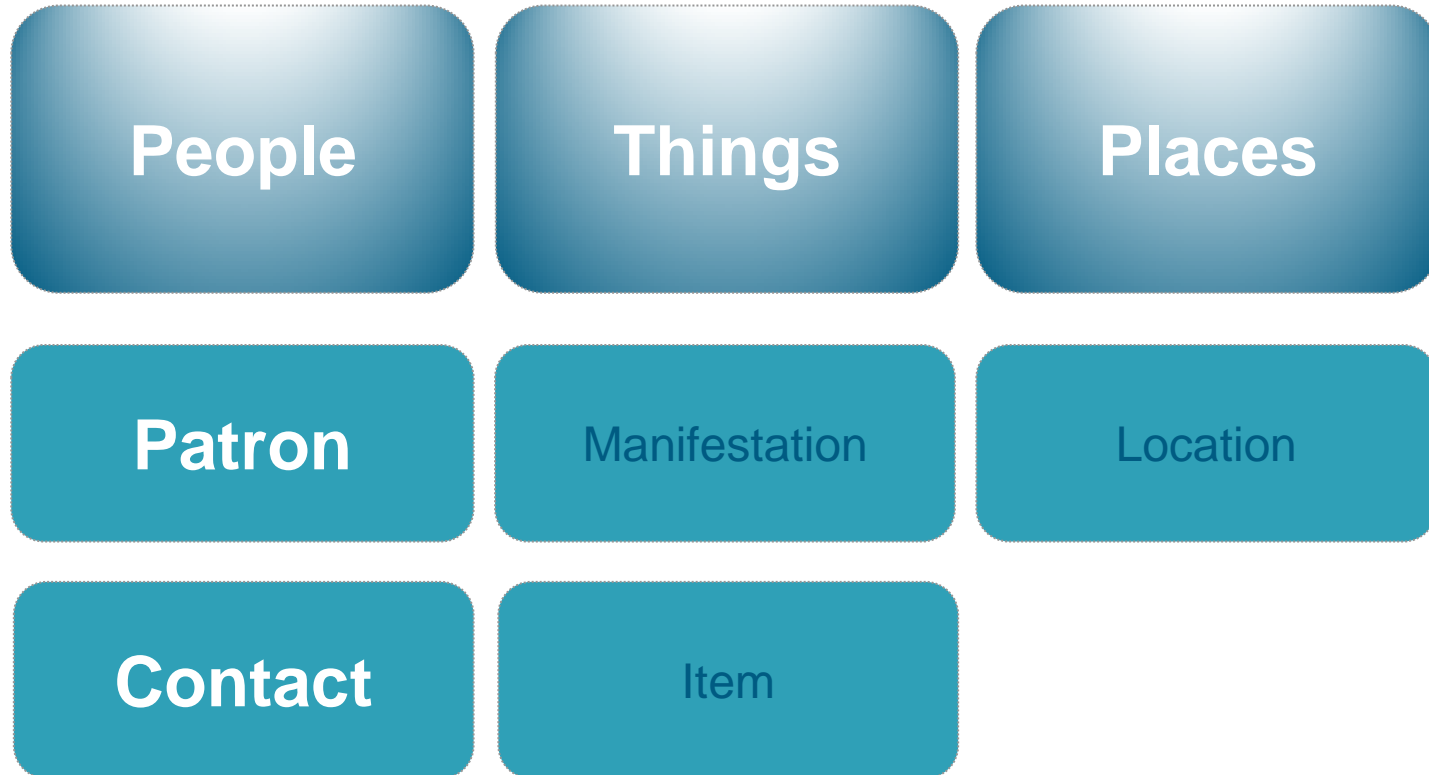
Internet Standards
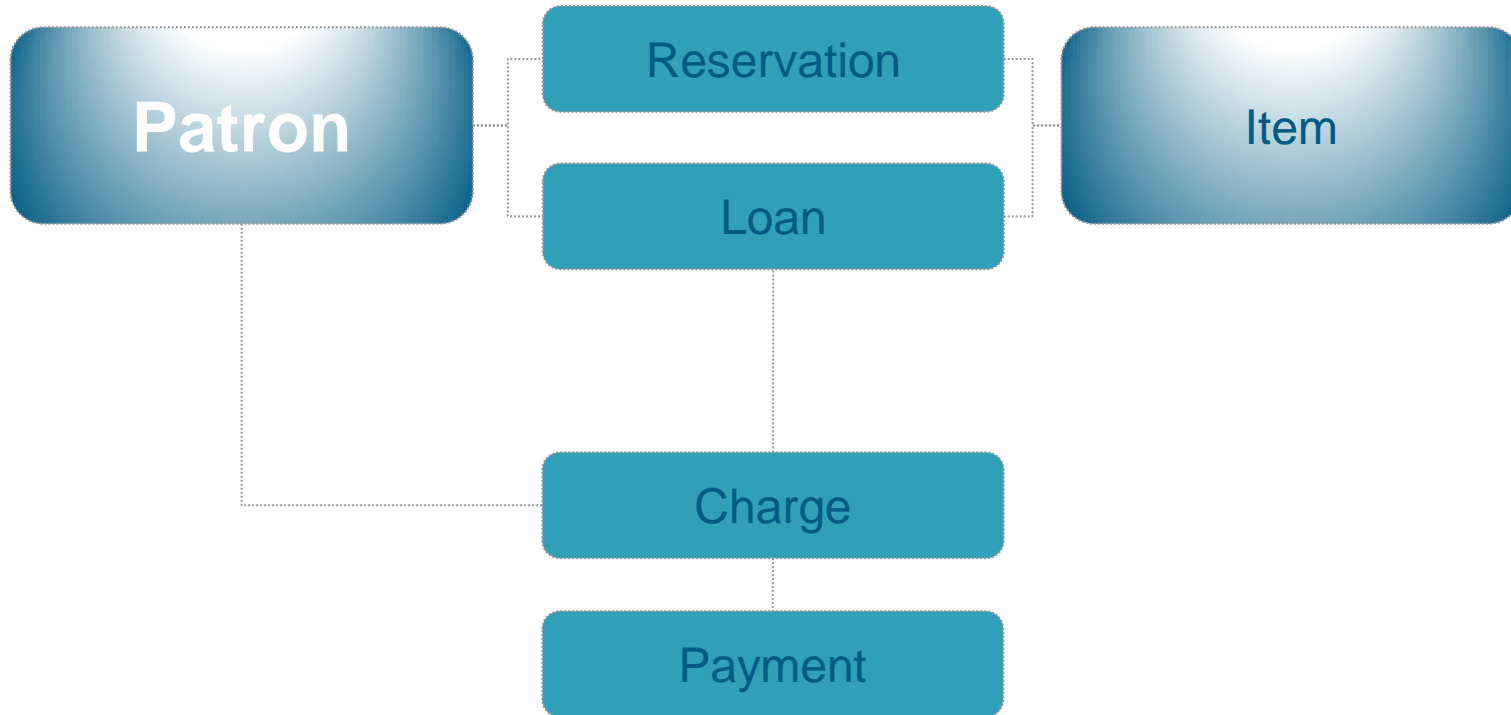
Opportunity

Logical Entities

Flexible

Well Documented

CAPITA

A touch of design

- **LCF Entity Model**
    - Describes the library ecosystem
    - Draws on previous experience
        - SIP2
        - ONIX
        - NCIP

CAPITA

A touch of design – primary entities

People	Things	Places
Patron	Manifestation	Location
Contact	Item	

A touch of design - relationships

CAPITA

A touch of implementation

- **Web Service or web service**
  - SOAP vs. REST

- **REST**
  - Making the most benefit from Internet Technology
  - Low technical barrier for use
  - Graph of connected entities
  - Secure
  - Proven

CAPITA

A touch of implementation

- **An example URL to GET a list of Contacts**
    - http://dev-ci.kc.caplib/TalisSOA/protocols/lcf/1.0/contacts
- **Results in XML describing the available Contacts, by URI**

```xml
<lcf-entity-list-response xmlns:ns2="http://a9.com/-/spec/opensearch/1.1/"
xmlns="http://ns.bic.org.uk/lcf/1.0" version="1.0">
  <entity-type>contact</entity-type>
  <ns2:totalResults>0</ns2:totalResults>
  <ns2:itemsPerPage>50</ns2:itemsPerPage>
  <ns2:startIndex>0</ns2:startIndex>
  <entity href="http://dev-ci.kc.caplib/TalisSOA/protocols/lcf/1.0/contacts/DEFAULT"/>
  <entity href="http://dev-ci.kc.caplib/TalisSOA/protocols/lcf/1.0/contacts/00000001"/>
  <entity href="http://dev-ci.kc.caplib/TalisSOA/protocols/lcf/1.0/contacts/00000003"/>
  <entity href="http://dev-ci.kc.caplib/TalisSOA/protocols/lcf/1.0/contacts/00000002"/>
</lcf-entity-list-response>
```

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A touch of implementation

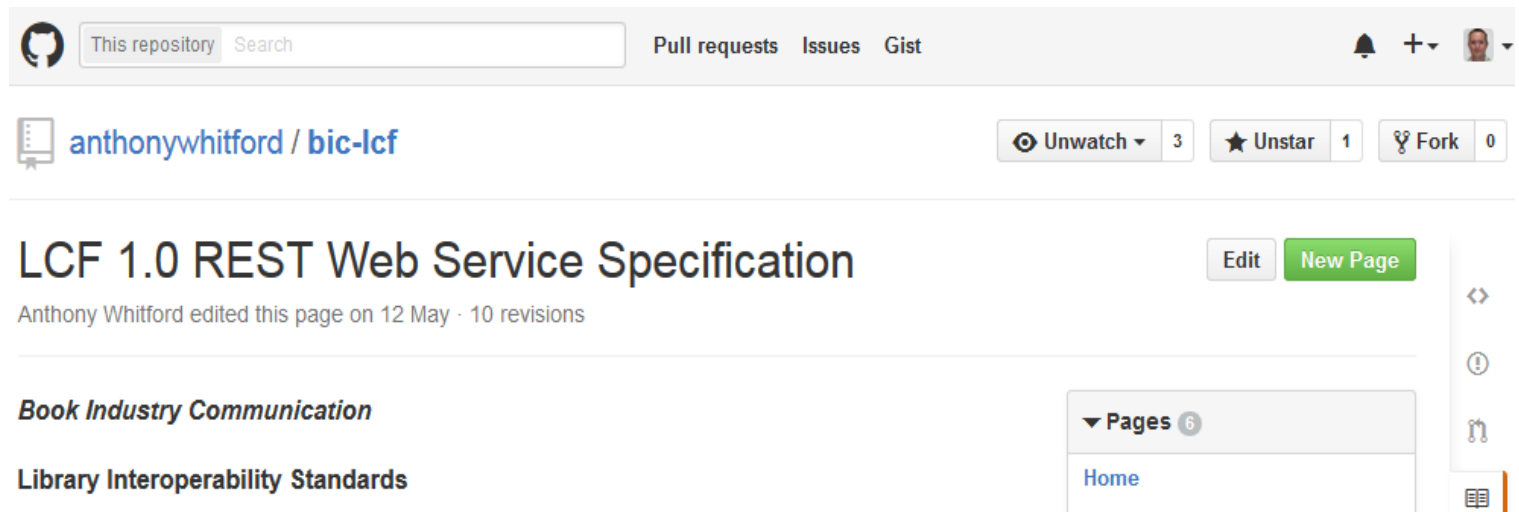- **To get the detail of one Contact, just invoke the URI you were given**

  http://dev-ci.kc.caplib/TalisSOA/protocols/lcf/1.0/contacts/00000001

```xml
<contact xmlns:ns2="http://a9.com/-/spec/opensearch/1.1/"
xmlns="http://ns.bic.org.uk/lcf/1.0">
  <identifier>00000001</identifier>
  <name>Borrower</name>
  <patron-ref>
    http://dev-ci.kc.caplib/TalisSOA/protocols/lcf/1.0/patrons/00000001
  </patron-ref>
  <address-line>20 Cherry Road</address-line>
  <address-line>Islington</address-line>
  <address-line>Wolverhampton</address-line>
  <address-line>Greater Birmingham</address-line>
  <communication-detail>
    <communication-type>05</communication-type>
    <locator>broken.borrower@university.ac.uk</locator>
  </communication-detail>
  <language>eng</language>
</contact>
```
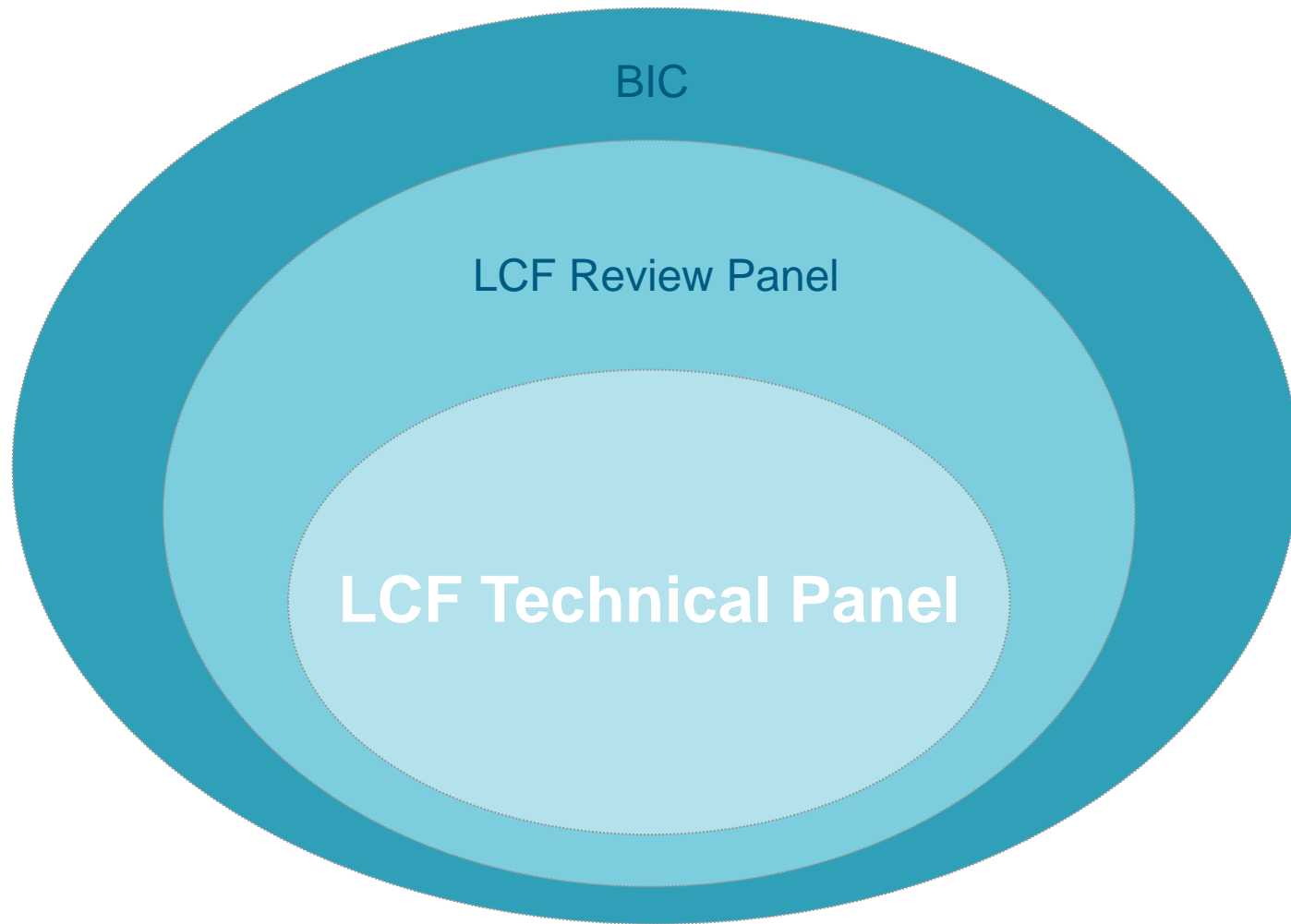
A touch of implementation

- **The RESTful web service scheme is documented**
- **Describes the interactions for each entity**
  - How you should create, read, update and delete
  - How you should create interaction entities
  - Includes common interaction patterns

CAPITA

Governance

BIC

LCF Review Panel

LCF Technical Panel

CAPITA

Resources

- **Full Details are available on the BIC web site**
  - http://www.bic.org.uk/114/LCF/

CAPITA

Resources

- **The development resources are available here:**

  - http://github.com/anthonywhitford/bic-lcf

Vendor support

What's next?

OpRealitynity

Over to Catherine...

City of Westminster

BIC Breakfast
Embracing the Library Communication Framework (LCF)

Now What?

Catherine Cooke, Westminster Libraries

ccooke@westminster.gov.uk

Thursday 22nd October 2015

- ## What does it actually mean for the library customer?

PC Booking System

Print Management

Intranet

Electronic Resource Management

LMS

Discovery System

Stock Management
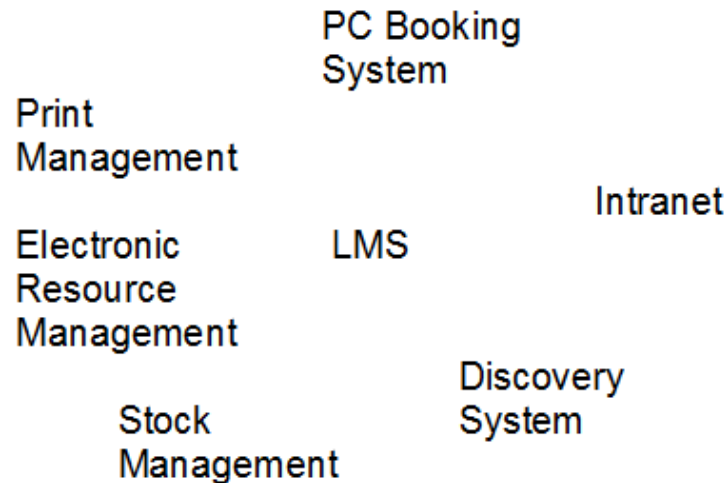
- ## Track customers' usage, provide specific facilities to specific groups of users, encourage people actually to join to access your services

SIP2   Extensions

APIs

Proprietary

City of Westminster

- The Library Communication Framework (LCF)
  - concentrates on the functionality required to deliver a service
  - ensures the data and values that need to be exchanged are standardised
  - establishes common terms of reference

- Libraries are at the mercy of their suppliers again!

- Now is the time for Libraries to stand up for LCF and beg, *desire*, ***demand*** it

City of Westminster

- Insisting our suppliers use the framework is our best guarantee of the continuing functionality of our systems into the future
- Procuring
  - a new LMS?
  - new RFID system?
  - new PC Booking?
  - e-book service?
- Ensure your new system is using the up-to-date, comprehensive and widely recognised standard
- Include LCF compliance as a mandatory requirement

City of Westminster

Questions to ask - General

- Please state your level of commitment to the Library Communication Framework (LCF)

- Please show how this is demonstrated in your future product development plans

- What specific functionality are you currently offering that uses LCF?

- Please provide details of sites using these

City of Westminster

Questions to ask - Specific

- What specific functionality have you achieved using integration unique to *<insert current LMS / RFID system as required>* (i.e. using APIs and / or custom code as opposed to open standards)?

- What services and costs might we have to budget for should we migrate to a different *LMS / RFID system* in the future?

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- Coming in quarter 1 2016 - the new
  Accreditation Scheme –
  replacing the old e4Libraries
  scheme

- Aimed at Libraries, Suppliers and Aggregators
- Basic questions about suppliers' policy towards and compliancy with LCF
- Ask that your prospective suppliers have BIC Accreditation

City of Westminster

- Are you asking for a new service from your existing suppliers?
  - Your e-book service authenticating to your LMS?
  - Fees and charges from your PC Booking or Print Management system into your LMS?
  - Messages from your LMS to your PC Booking system
    - Welcome Mr. Smith – your books are due back today
    - – the book you requested is ready for you
    - – you owe £2.50
- Ask for the integration to be done using LCF

City of Westminster

- The development of new services will be easier and therefore faster

- Hopefully therefore cheaper!

- If suppliers haven't got to rewrite the same functionality for every LMS their customers use, they can spend more time developing new functionality and enhanced services

- Open systems represent Best Value. They give us freedom of choice, we aren't locked into one solution set, and that drives down costs. It keeps suppliers on their toes!

- We will protect our investment in technology, maximise the return on it and ensure its continuing functionality

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- LCF is intended to support a much needed rationalisation of the interoperation between disparate IT solutions. In a time of scarce resources libraries are actively seeking to improve both their existing solutions and to offer new services without the risk of buying into solutions that cannot be developed or transported to a new platform. LCF provides that possibility.

  http://www.bic.org.uk/114/LCF/

City of Westminster

Thank you for attending October's BIC Breakfast 2015: Embracing the Library Communication Framework (LCF)

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