

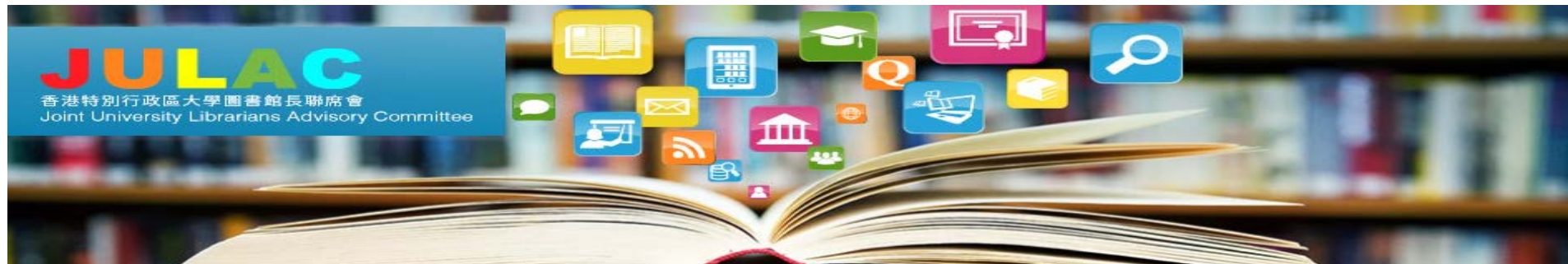
Climbing up the Unfathomable Mountain of Shared ILS: Experience Sharing from JULAC (Panel Discussion)

Diana Chan, HKUST Library

Lisa Kwan, CityU Library

Peter Sidorko, HKU Library

Pacific Rim Research Libraries Alliance 2018 Meeting, UC Berkeley, Sept 16-18, 2018



Outline

Qs to address	Topic and Content	Who
1. How did it work?	Management of the Project: Why and How?	Peter
2. Three major challenges we have gone through	3 Resolved Challenges: <ul style="list-style-type: none"> • Merging 18 million bibliographic records, • Data migration issues, • User account authentication, • Technical support issues 	Lisa
3. Two critical issues we are not happy with	2 Critical Issues: <ul style="list-style-type: none"> • CJK, HKCAN, multilingual authority control, • User-initiated borrowing (HKALL) 	Diana Peter
4. What worked well?	Achievements: <ul style="list-style-type: none"> • Deep collaboration • Change Management 	Diana
5. What are the gaps?	Prospects and gaps from institutional and consortium perspectives: <ul style="list-style-type: none"> • Gaps in expectation and actual outcome 	All 3
Q&As		10 minutes ²

Outline

How did it work?

Peter

3 Major challenges

Lisa

2 Critical issues

Diana & Peter

What worked well?

Diana

What are the gaps?

All 3

Let's start with the WHY?

JULAC

JULAC

香港特別行政區大學圖書館長聯席會
Joint University Librarians Advisory Committee

Collaboration

- HKALL
- JULAC Card
- HKCAN
- Consortial
- Information literacy
- etc.
- Strategic planning day (June 2013)

“Deep”ness



How? (The hard stuff)

Consultant

(Feb-Jun 2014)

- Tell us what we don't know
- Tell us what we know

Tendering

(Sep 2014-Aug 2015)

- Does 8 go into 1?
- HKU leads
- 5 Functional Sub-groups formed

Vendor presentations

(Sep 2015-Apr 2016)

- Everybody welcome
- Pre-interviews and score sheets
- Demo Scripts
- Presentations
- Presentations
- Presentations...
- Evaluation reports consolidated
- Announcement of Tender Award



How? (The hard(er) stuff)

Getting started

(May-Jun 2016)

- Need Project Organization and a Governance Structure
- Need an Implementation Team
- Need a Chair (sigh!)
- Need an Implementation Manager (Sep 2016)
- Need 6 (7th added later) Functional Working Groups (FWGs)

Implementation

(Jun 2016 - Jul 2017)

- Kick Off!!
- Weekly Webex with Chairs
- Regular issue based Webex
- Visits by ExL programmers/management
- Data migration test load – failed
- 2nd test load in March 2017
- Primo performance and indexing issues, slowness
- Authentication problems...

It's Alive!

(July 2017-)

- Go live (Jul 17 – 2 weeks late)

Outline

How did it work?

Peter

3 Major challenges

Lisa

2 Critical issues

Diana & Peter

What worked well?

Diana

What are the gaps?

All 3

Challenges in Merging Bibliographic Records

Targets

- To share bibliographic records in Alma Network Zone
- Need to merge 18 million records from individual Millennium databases of 8 member libraries
- To select only one record for Alma Network Zone → de-duplication of bibliographic records needed

Challenges in Merging Bibliographic Records

What
we
have
done

Defined what to include in NZ Alma

Print books, AV materials, serials and selected e-resource packages

Designed the de-duplication or merging key

Based on the key data, incl. author, title, publisher, year, etc.

Cannot rely on MARC field 035 OCLC control number as not all our bib records carry such field

Developed program to generate the key for each bib record for mapping

Selected the master/priority records

Based on the collection size, availability of Romanization fields, etc.

Enabled better de-duplication of CJK records

By flipping romanization data to parallel fields where necessary → to ensure all records adopt the same type of data for mapping

Challenges in Data Migration

Migrating from one system to a differently designed system

Difficulties in data mapping

- Misunderstanding/confusion in the definitions of tags and labels in Alma
- Corresponding fields not found in Alma
 - Loss of data or incorrect placement of data (esp. in order, patron and holding records)
- Lack of guidance from EXL

Tight migration time frame

- insufficient time for thorough data migration planning and testing, especially having spent much time in first test load
- Underestimated the difficulty in field mapping and migrating all data

Huge volume of bib data for publishing to Primo

Challenges in Data Migration

How we overcame?

Two rounds of full test load + full data load for production

EXL adopted a better data loading tool in the 2nd round of data load

EXL changed the Primo publishing methods a few times → finally using a two-environment model

Individual institutions needed to conduct post-migration data cleanup → took some time to clean up

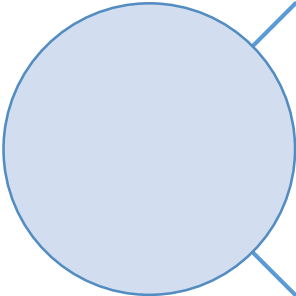
HKUST: duplicated SFX bib data; consolidate “bound with items”, i.e. items linking to multiple bib

CityU Library: duplicated SFX bib data, consolidate “bound with items”, incorrect codes on material types in item records, etc.

Challenges in User Authentication



EXL required JULAC to use external identity sources for user authentication



Individual libraries did not have such a single identity source that could cover all users (staff, students, alumni, library registered users, self-finance program students, etc.)



HKALL Primo requires a cross-institution authentication solution.

Challenge in User Authentication

SAML 2.0 Authentication

– *Adopted*

Individual libraries worked with their institutions' IT dept to integrate SAML 2.0 based IdP to Primo (and Alma), to cover all users

Successfully implemented within tight implementation time frame

HKALL Primo Authentication

– *Being explored*

Hong Kong Access Federation (HKAF) for cross-organization single sign-on authentication

- Project started by Joint Universities Computer Center in 2016

Unable to implement HKAF for HKALL Primo

- Primo did not have the capability to communicate with HKAF's discovery service

EXL need to adopt PDS technology to implement cross-institutional authentication

Challenges in Long Term Technical Support

(for NZ Alma and HKALL Primo)



When is the appropriate time to shift from Project Team Support to Service Support



Which party to report problem cases to EXL



Which party to look after NZ Alma and HKALL Primo – long term system administration (incl. API key)



Who should own the system administration right



Which party to make final decision/approval on proposed system changes



How to handle enhancement requests that can maximize the benefits of the consortium

Challenges in Long Term Technical Support

(for NZ Alma and HKALL Primo)

JULAC's Arrangement

Long term system administration by JULAC Technology Committee (JTECH) since May 2018

- JULAC took over the system administration after the system has been launched for 10 months and after most critical issues have been solved and come down from over 100 to 17 issues (as of Jun 2018)
- JTECH members of two libraries served as the system administrators to share the system admin work.
- 8 JULAC libraries will rotate for the duty every two years.
- System administrators to raise issues for discussions in JTECH meeting when needed
- General System Administrator role and User Administrator role in Alma NZ restricted to system administrators only → all systems configuration and setting of Alma NZ can only be updated by the system administrators.
- Only BSC keeps the Catalog Administrator role for cataloging management, configuration and testing

Endorsement for system changes

- Sub-committees need to seek JULAC Shared ILS Steering Committee's final endorsement before making any changes to the systems setting of Alma NZ and HKALL Primo.
- System administrators to provide technical support for those changes endorsed by Steering Committee.

Challenges in Long Term Technical Support

(for NZ Alma and HKALL Primo)

EXL's Arrangement

Project shifted to EXL Support Team since July 2018

SalesForce accounts
 - for reporting problem cases

Institutional and JULAC level

All account holders can view all SalesForce cases within the consortium

Monthly customer care calls
 - by EXL Support Team

To manage case escalation and support status

Calls with individual libraries and JULAC

Challenges in Long Term Technical Support

(for NZ Alma and HKALL Primo)

Handling Enhancement Requests

8 JULAC libraries join as consortium member of IGeLU
→ 9 votes

To adopt the strategy of voting collectively at NERS
(New Enhancement Request System)

Voting strategy subject to review

Outline

How did it work?

Peter

3 Major challenges

Lisa

2 Critical issues

Diana & Peter

What worked well?

Diana

What are the gaps?

All 3

A Critical Issue on CJK

Problem One

- Conventional MARC tags contain Romanization, e.g. Pinyin. CJK content in 880 parallel fields not properly supported

Solution

- Flipping MARC tag 880 parallel fields

Issues

- Tokenization, indexing, searching and ranking of CJK string
- Searching Chinese terms in TSVCC
- Auto-Romanization on a record, to transliterate all Chinese characters in MARC tags to Pinyin in one shot

Demanded ExL to commission software development to fix these issues
Still outstanding issues in transliteration, punctuation, extra space, corrupted characters

Flipping MARC Tag 880 parallel fields

LC MARC:

```
LEADER 00000cam 2200000Ia 4500
001 23330745
008 890713s1975 hk 000 0bchi
010 76838960
040 DLC|cEYM|dOCL
045 w9x7
049 HNKA
050 1 PL2791.N2|b37 1975
245 00 |6880-02|aLin Yutang lun /|cYide bian
260 |6880-03|a[Xianggang? :|bs.n.] ;|anong Kong :|bWan you tu
shu gong si,|c[1975?]
300 14, 309 p. ;|c19 cm
500 |6880-04|aOriginally published: Lin Yutang si xiang yu
sheng huo. Hong Kong : Xin wen hua chu ban gong si, 1954
600 10 |6880-06|aLin, Yutang,|d1895-1976
700 0 |6880-01|aYide
700 12 |6880-07|aLin, Yutang,|d1895-1976.|tWorks.|kSelections.
|f1975?
740 0 |6880-05|aLin Yutang si xiang yu sheng huo
880 00 |6245-02/$1|a林語堂論 /|c一得編
880 |6260-03/$1|a[香港? :|bs.n.] ;|anong Kong :|b萬有圖書公司,
|c[1975?]
880 |6500-04/$1|aOriginally published: 林語堂思想與生活. Hong
Kong : 新文化出版社, 1954
880 0 |6700-01/$1|a一得
880 0 |6740-05/$1|a林語堂思想與生活
880 10 |6600-06/$1|a林語堂,|d1895-1976
880 12 |6700-07/$1|a林語堂,|d1895-1976.|tWorks.|kSelections.
|f1975?
```

In JULAC Alma, the pair is flipped:

```
245 0 0 $$6 880-02/$1 $$a 林語堂論 / $$c 一得編
...
0 0 $$6 245-02 $$a Lin Yutang lun / $$c Yide bian.
```

- JULAC Systems Committee in collaboration Bibliographic Services Committee, Metadata FWG and System FWG made this drastic recommendation, i.e. flipping content of 880 parallel fields
- This was proved to be a significant implementation decision that helped reducing number of CJK issues

A Critical Issue on CJK

Problem Two

- Hong Kong Chinese Authority Name (HKCAN)
- Multi-lingual authority control

Issues

- Alma does not support Authority MARC tag 7XX (containing CJK names equivalent to the established heading)
- Alma does not fully support multi-lingual authority control workflow
- Need to merge HKUST's authority record to HKCAN
- HKCAN content needs refreshing

Solution

- Migrated HKCAN database to NZ and published it to CZ
- HKUST developed the HKCAN+HKUST+LCNAF merging program

Demanded ExL to commission software development to support multi-lingual authority control
Expect new HKCAN will become an authoritative source of Chinese names for Alma community

HKCAN Architecture with Alma



A Second Critical Issue on HKALL

- HKALL is (was)
- ... a **Real-time Resource Sharing System** that allows unmediated borrowing & lending physical materials among consortial member libraries. It contains 4 major components:
 - Union catalogue
 - Discovery application
 - Requesting and circulation system
 - Statistics module.

Issues with Alma's "Resource Sharing"

- Not Real Time. Can't tell if an item is "available". No indication of a successful request. Need to wait for a confirmation or rejection email often leading to multiple requests. ✓ ✓
- A title available in one's home library but is not for loan, the user cannot request another copy via HKALL. ✓ ✓
- Cannot request a specific volume within a multi-volume set. ✓
- No reasons given when requests are rejected. ✓
- Titles appear as 'available' but may not be HKALL 'requestable'. ✗
- HKALL request button may not appear for no given reason (e.g. ineligibility, exceed quota etc.). ✗

The Decline of HKALL

Year	Transactions	Percentage change
2009/10	213,207	+9
2010/11	197,754	7.5
2011/12	170,094	14
2012/13	149,632	12
2013/14	135,103	9.7
2014/15	120,372	10.9
2015/16	112,542	6.5
2016/17	93,712	16.7
2017/18	63,853	31.9

Outline

How did it work?

Peter

3 Major challenges

Lisa

2 Critical issues

Diana & Peter

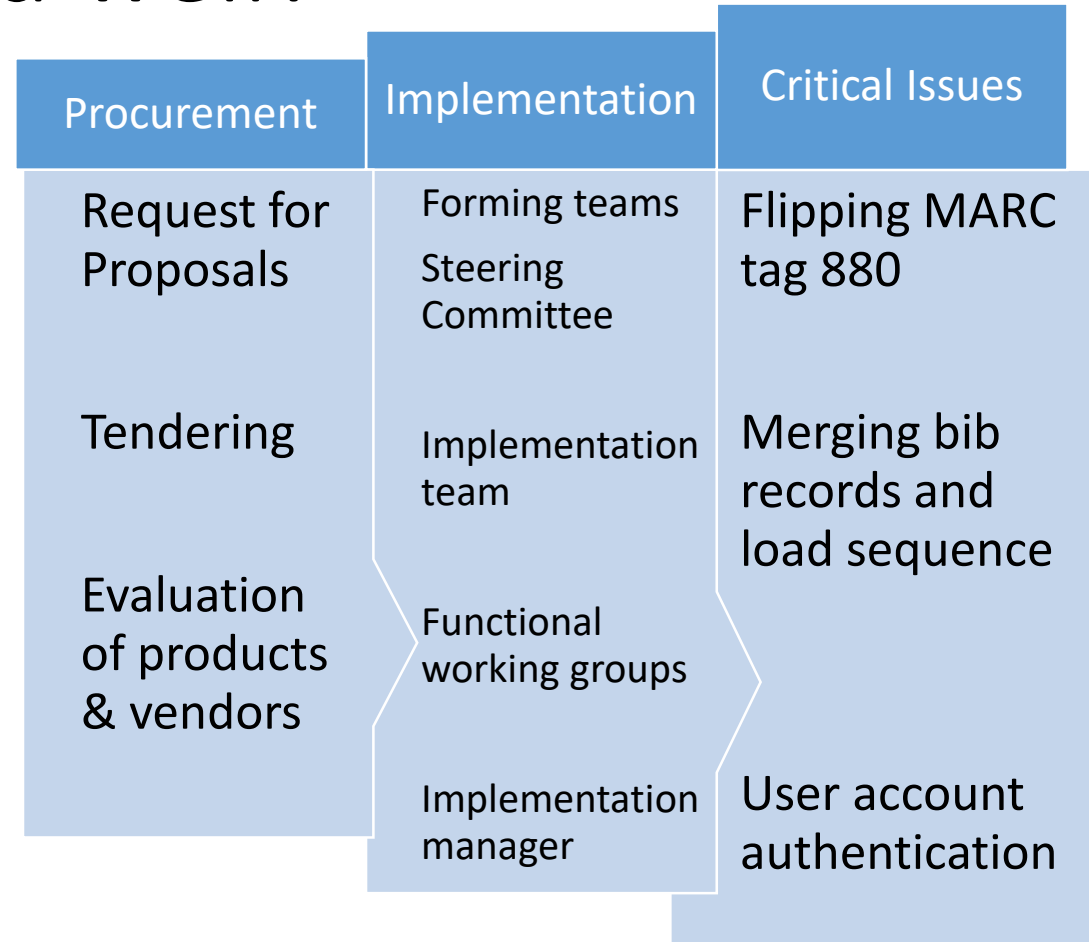
What worked well?

Diana

What are the gaps?

All 3

What worked well?



Deep Collaboration among 8 JULAC libraries

Sharing responsibilities, workloads, experiences, expertise, practices, programs, APIs, configurations
 Coming to consensus on differences

What worked well?

Constant Communication

- Within JULAC – wiki, email mailing lists, group meetings, WhatsApp groups
- With Ex Libris – Basecamps, Salesforce website, onsite training, WebEx, weekly project calls, Knowledge Center website (some not effective), **product experts on f2f discussions (very effective)**

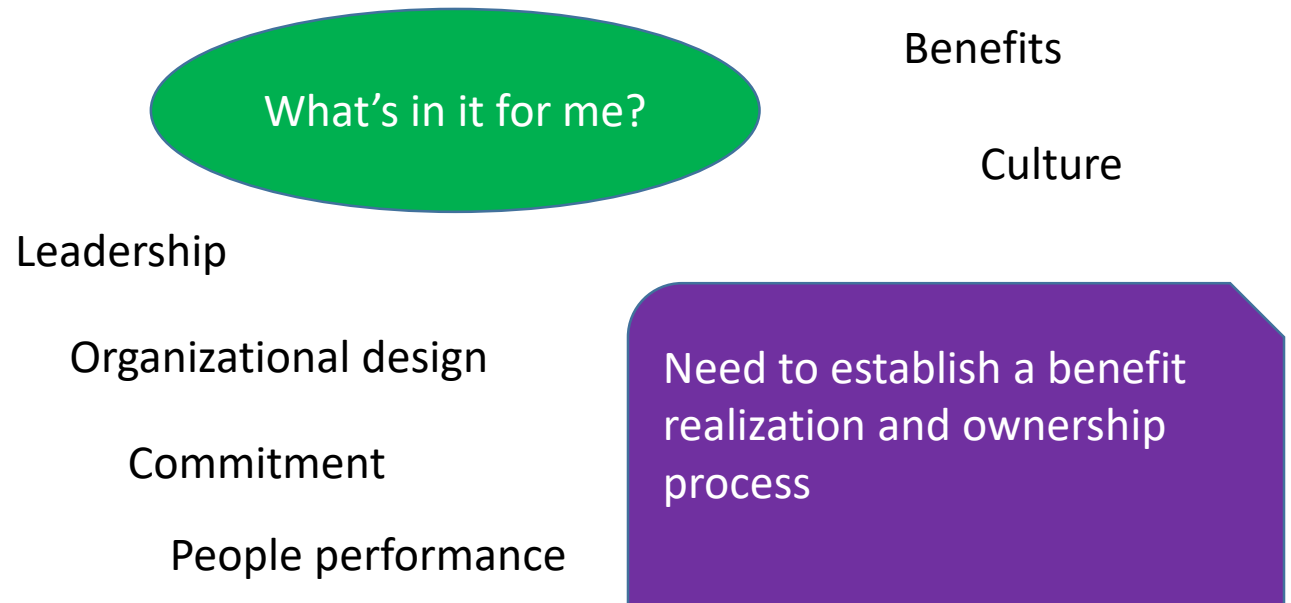
United Front on Critical Issues

- Bargaining power
 - Bigger discounts
 - a second Primo environment to hold HKALL Primo data
- Additional resources
 - Change Manager & admin staff
- Cooperative cataloging and contribute to global community

What worked well?

- **Change Management**

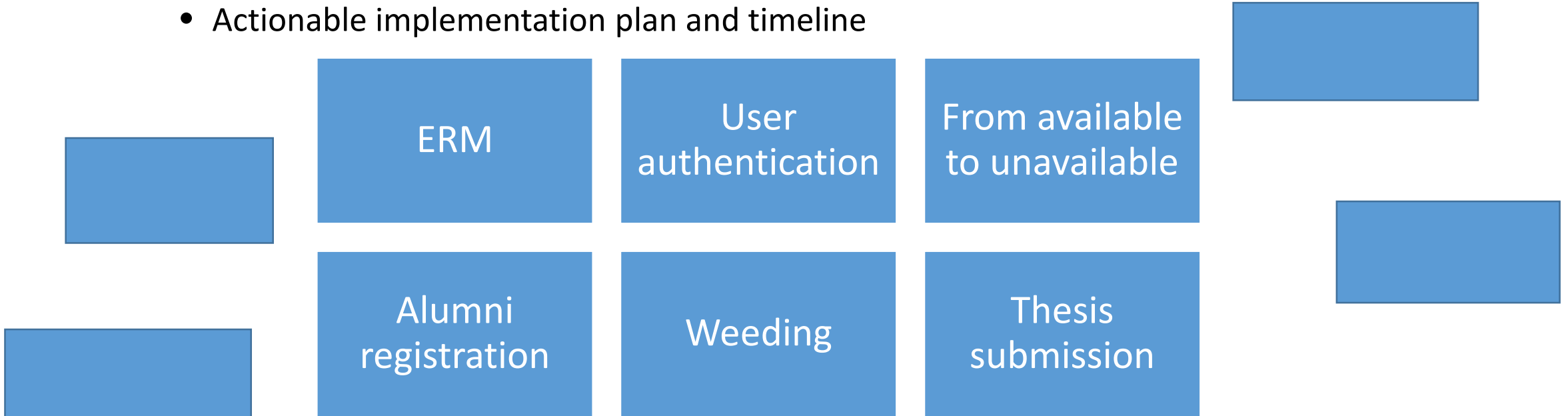
- Coordinated by a Change Manager and an Executive Officer
- Interviewed 80 staff, **Change Diagnostic Review** and **Communication sessions**



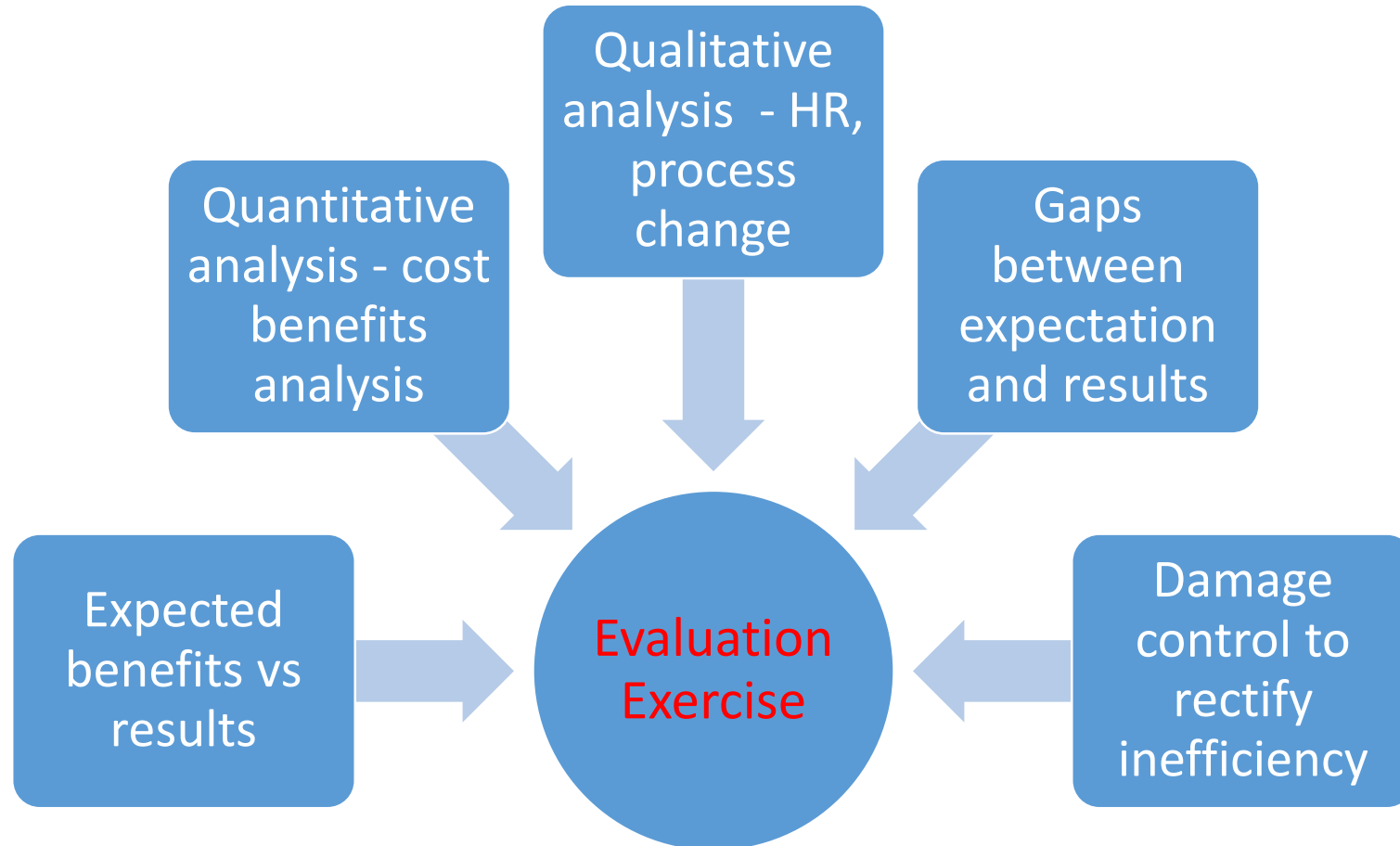
What worked well?

- **Change Management**

- Process re-engineering training
- As-is-analysis and Should-be-redesign on **20** workflow processes
 - Improve effectiveness and efficiency
 - Actionable implementation plan and timeline



Don't know yet?



Outline

How did it work?

Peter

3 Major challenges

Lisa

2 Critical issues

Diana & Peter

What worked well?

Diana

What are the gaps?

All 3

What are the gaps ?

What do we **like** about Alma?

- No need to swap between modules
- Integrate a library catalog with link resolver
- Easier to link e-resources to reading lists
- Real time notices (pick-up, recall)
- Able to view history of bib records
- Easier to create sets
- Auto-Romanization provided

What are the **pain points** with Alma?

- Slow and too frequent down time
- Matching reports not accurate
- Cannot batch remove portfolios from Collection/Service
- Update of bib records not real time
- Difficult to create sets using specific MARC tags and subfields
- Enhance further MD Editor
- Central Knowledge Base's coverage and holdings
- Better integration of ALMA with ILLiad

What are the prospects?

- **HKALL** not ideal yet
- **Consortial ERM** not fully functional
- **Consortial shared cataloging on e-resources** cannot be done yet
- Multi-lingual **authority control** not fully supported
- Integrate with **campus systems**
- **Linked Data**
- Use **APIs** for more automation, data extraction
- Able to share **HKCAN** in Community Zone

Key data @ a glance



JULAC	Number	Ex Libris
# of libraries	8	Weekly project calls with the dedicated Project Manager
# of bib records	~20 million	Weekly functional WebEx sessions for demonstrations and issues clarification
# of registered users	382,175	Bi-weekly integration WebEx sessions to track third-party integration statue during implementation
# of student users - Oct 18, 2017	154,370	13 Onsite meetings / workshops
# staff in Implementation & FWGs	~70	Irregular WebEx sessions with Ex Libris Senior Management
# of sales force cases - Aug 3, 2018	3,709	
# of critical issues - Sept 2017	116	
# of critical issues – June 2018	15	

Q&As

