

香港八高等院校邁向新一代图书馆 集成管理系统 A SHARED ILS FOR JULAC

陈丽霞 Diana L.H. Chan 林纪达 Ki-tat Lam

香港科技大学

Hong Kong University of Science & Technology

「大学图书馆发展趋势与服务创新论坛」- 西安交通大学, 2016-4-1

1. JULAC 如何决定? How did JULAC **Decide**?
2. 什么是新一代图书馆集成管理系统 ? What is **next-generation** Integrated Library System (ILS)?
3. **过程**如何 ? What is the **Process**?
4. 有何**机遇** ? What are the **Opportunities**?
5. 有何**挑战** ? What are the **Challenges**?

OUTLINE



<http://strategicdecisions.stanford.edu/images/home/decision-analysis.jpg>

1. JULAC 如何决定? HOW DID JULAC DECIDE?

- ▶ 香港八大学图书馆的联席平台 - 讨论、协调、协作、**服务交流、资源共享**； A forum to discuss, coordinate, and collaborate on library **information resources and services** among the 8 HE libraries funded by the University Grants Committee

- ▶ 八大总学生人数约100,000； Total student body ~100,000

香港特别行政区大学图书馆联席会
JOINT UNIVERSITY LIBRARIANS ADVISORY COMMITTEE
JULAC



中大
CUHK



城大
CityU



浸会
HKBU



教育
HKIED



科大
HKUST



理大
PolyU



岭南
LN



港大
UHK

▶ 分组功能委员会 JULAC Sub-committees

- ▶ 借书服务,书目服务,联购, 联校储存, 学习策略, 馆员培训, 统计, 系统 ...
- ▶ Access Services, Bibliographic Services, Consortial, JURA, Learning Strategies, Staff Development, Statistics, Systems...

▶ 资源共享项目 Resource sharing projects

- ▶ 信息素养项目, JULAC卡, HKALL, 合作采购, 合作馆员培训等
- ▶ JULAC Information Literacy Project, JULAC Card, HKALL, Cooperative purchasing of resources, Shared staff development activities...



香港特别行政区大学图书馆联席会
JULAC

<http://www.julac.org/>

▶ JULAC最重要的策略方向 2013-16 Top Strategic Directions

目标1：协力建立资源和提供创新服务

Goal 1: Build Collection and Deliver Innovative Services Collaboratively

▶ 探索和实施共享 ILS ; **Explore and implement a shared ILS system**

▶ **JULAC 期盼更深入合作** JULAC expects **deeper collaboration**

JULAC 策略计划 2013-16

JULAC STRATEGIC PLANNING 2013-16

- ▶ **7 Millenium**, 1 Sierra
- ▶ III 不再积极发展Millenium, **快将过时**; Millenium is not under active development from III and will **soon become outdated**
- ▶ **局限性** - 不够人性化, 搜索的种类, 提供的数据, 电子资源管理, 资源共享;
Limitations – not user-centered, types of searches, data provided, e-resources management, sharing of resources
- ▶ HKALL 只提供**书本**的资源共享; HKALL, a shared catalog, and Inn-Reach, provide a resource-sharing environment, but mainly on **books**

JULAC ILS 的 现 况
CURRENT JULAC ILS

- ▶ 自动化系统联盟的一般要求; General requirements for consortial automation support
 - ▶ 联合目录 **Union Catalog**
 - ▶ 读者可直接提交服务要求 **Direct patron requests**
 - ▶ 借书条例 Loan rules
 - ▶ 分开各馆的读者资料 Ability to segregate patrons for each member library
 - ▶ 保持各馆品牌特色和界面偏好 Ability to feature the identity of individual libraries and the ability to present local branding on patron-facing interfaces

顾问报告

CONSULTANT'S REPORT – MARSHALL BREEDING

- ▶ 系统性电子资源管理; Systematic electronic resource management
 - ▶ 许可条款 License terms
 - ▶ 机构与联盟条款 Institutional and Consortial licenses
 - ▶ 用量数据与分析 Usage statistics and analytics
 - ▶ 认证管理 Management of authentication mechanisms
 - ▶ 链接的语法 Provide linking syntax, smart links
 - ▶ 表现指标 Performance metrics

顾问报告

CONSULTANT'S REPORT – MARSHALL BREEDING

- ▶ **Orbis Cascade Alliance** – 37 libraries in Washington, Oregon & Idaho
- ▶ University of California – 10 campuses
- ▶ Private Academic Library Network of Indiana (PALNI) – 23 private
- ▶ Academic libraries in Wales
- ▶ BIBSYS – 105 libraries in Norway
- ▶ UNILINC consortium in Australia

图书馆联盟推行共享ILS

CONSORTIA IMPLEMENTING A SHARED ILS



<http://www.ifpri.org/>

2. 什麼是新一代图书馆集成管理系统? WHAT IS NEXT GENERATION ILS?

传统的ILS



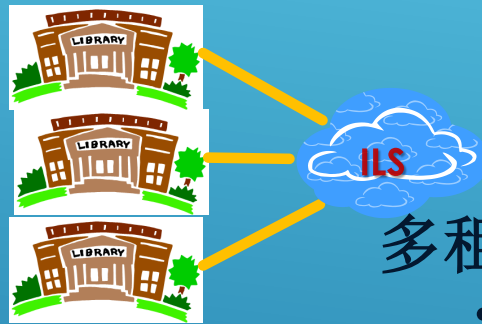
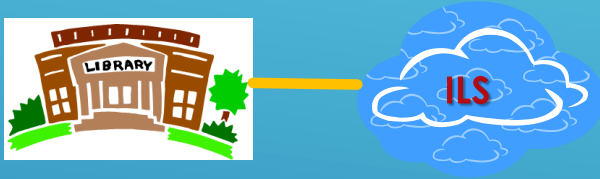
下一代的ILS

图书馆自动化 (Library automation)

- 流通 (Circulation)
- 编目 (Cataloging)
- 采购 (Acquisitions)
- 期刊管理 (Serials control)
- 电子资源管理 (ERM - electronic resource management)
- 联机公众检索目录 (OPAC - online public access catalog)

建基云端 (Cloud-based)

- 远程托管 (ILS software remotely hosted)
- 伺服器虚拟化 (server virtualization)



软件即服务 (SaaS - software as a service)

- 服务主导 (ILS vendor provides “service”)
- 订阅模式 (subscription based)
- 软件更新程序简化 (software update processes simplified)

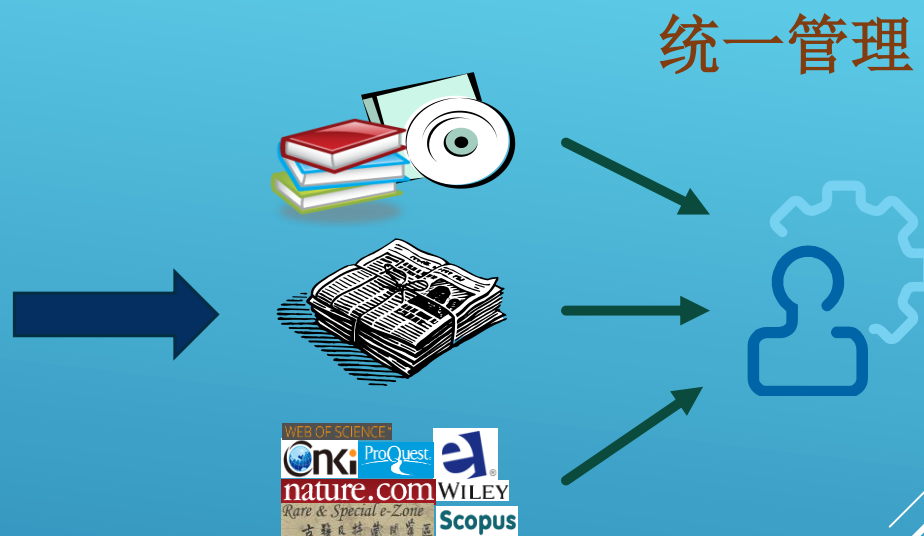
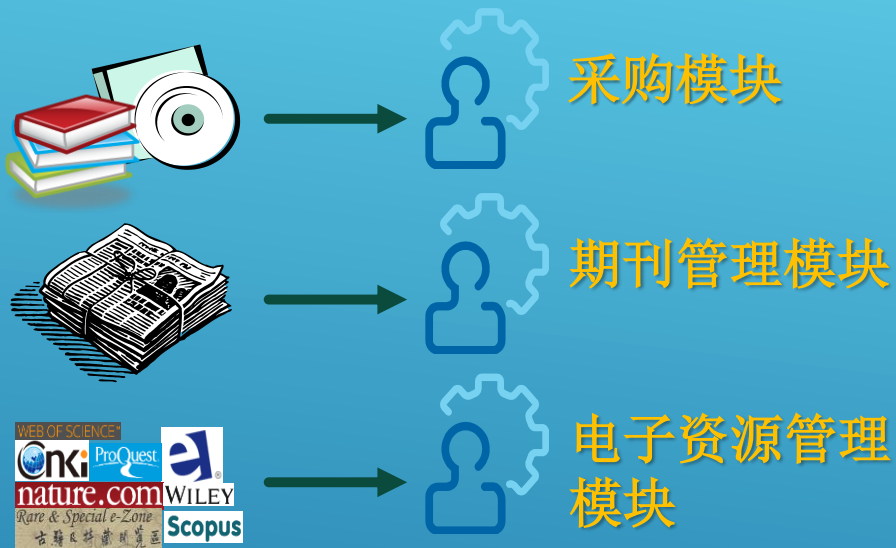
→ 图书馆服务平台
(Library Service Platform)

多租户 (Multi-tenant)

- 单一平台 (single ILS software instance)
- 多个图书馆共用同一平台 (used by multiple number of libraries)
- 每个图书馆都可以有自己的设定和数据 (each library has its own settings and data)
- 有利共享 (allow sharing of content)

建基云端(CLOUD-BASED),
软件即服务(SAAS),
多租户(MULTI-TENANT)

传统的
ILS



统一管理不同资源类型

UNIFIED WORKFLOW AND MANAGEMENT OF PRINT
AND ELECTRONIC MATERIALS

一站式检索 (one-stop search)

无缝存取 (seamless access to the discovered objects)

- Library held physical items
- Library held electronic items and digitized objects
- Subscribed electronic resources
- Free web resources

开放式架构 (open architecture)

- Direct users to external content
- Bring in external content (e.g. cover arts, table of contents, summary, reviews, etc.)
- Incorporate social media



重点是获得原文，而不是它们的编目/索引记录 **Focus on accessing the discovered objects, not the cataloguing records**

与资源发现平台整合

INTEGRATE WITH INFORMATION DISCOVERY
PLATFORM

传统的读者服务的重点 (traditional access service)

- 流通 (circulation)
- 馆际互借 (interlibrary loan)
- 文献传递 (document delivery)

下一代的重点放在满足读者需求 (next generation access service emphasizes on fulfillment)

- 通过各种方法满足读者需求 (Fulfillment means satisfying users' need by all means)

满足读者需求
FULFILLMENT

通过资源发现平台满足读者需求 (seamless access and request via Information Discovery Platform)

- Access physical items
 - 流通 (circulation)
 - for items held in library
 - 非中介性借阅 (user initiated borrowing) – for items held elsewhere
- Access online items
 - 在线/离线阅读 (online/offline reading)
 - for library subscribed / accessible resources
 - 送到桌面 (delivery to desktop)
 - for resources requiring ILL request or online purchase



内置知识库
KNOWLEDGEBASE

电子资源可用知识 (knowledge of availability of **electronic resource**)

- ✓ Profiles
- ✓ Coverages

链接全文知识 (knowledge to link to **full-text** of articles and e-books)

✓ 权威记录 (**authority** metadata)

- ✓ Names
- ✓ Subjects
- ✓ Places



Link / Harvest

财务 Finance system

学生/教员 Student/staff records

书商 Vendors, aggregators

书目工具 Bibliographic utilities

权威数据库 Authority databases

- ✓ OCLC's VIAF
- ✓ LC Linked Data Service

丰富素材 (enrichments)

- ✓ 封面图片 (cover images)
- ✓ 评论 (reviews)
- ✓ 目录 (table of contents)
- ✓ 网上关注 (online attentions)
- ✓ 键連資料 (linked data)

學習管理系統 (Learning Management System)

- ✓ To ILS
 - ✓ Reading lists
 - ✓ Course materials objects
 - ✓ Put on reserve
- ✓ From ILS
 - ✓ Discover information objects relevant to courses

與外部系統無縫連接

SEAMLESS LINKING TO THIRD-PARTY SYSTEMS

书目数据的重复导入问题

(duplication of effort to **load e-journal and e-book packages** to individual catalog)

- 可导入共享书目库(just load bibliographic metadata to a “shared” database)
- 各馆只需加注馆藏记录 (individual libraries just attach holdings to these records)

合作编目 (collaborative **cataloging**)

- Long-standing concept
- Must have seamless workflow integration

合作馆藏建设 (collaborative **collection development**)

- Benchmarking, collection analysis
- Consortial purchases

促进共享和协作

FACILITATING SHARING AND COLLABORATION

传统报表工具

(traditional **reporting tools**)

- 静态报表(static report)
- 导出报表,在外部进行分析 (have to export tables and run analysis externally)

内置数据分析工具，以支持决策

(**build-in data analysis tools** to support decision making)

- 实时数据 (real time access to data)
- 动态制表 (cross table/database tabulation)
- 拖放设计 (drag and drop design)
- 过滤和提取选项 (filter and extract options)

决策支持工具

DECISION SUPPORT TOOLS, NOT JUST REPORT
GENERATION

传统 Traditional ILS

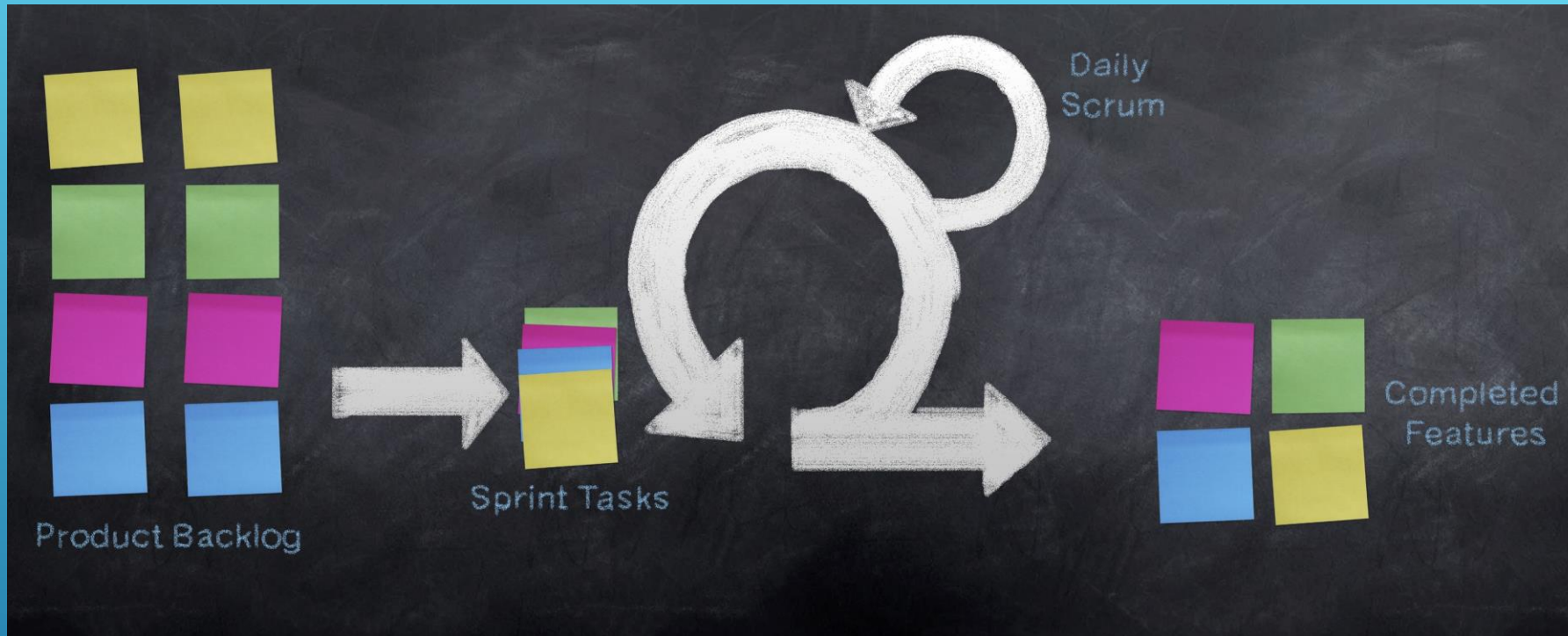
- 密封数据
(data is in black box – not openly accessible)
- 有限的应用程式接口
(limited APIs to access data, usually require purchases)
- 不利外挂
(impossible to develop external programs to extend functionalities)

开放式架构 Open architecture

- 非专有的数据库
(**non-proprietary databases** and search engines)
 - Oracle, MySQL, PostgreSQL, Solr, etc.
 - System staff know how to query them
- 丰富的**应用程式接口**
(rich set of **open APIs** to access the data)
 - Allow both viewing and updating
- 全面**支援**第三者程式开发
(full **support** of third party programming)
 - Developer forums
 - Community repositories of source codes

开放架构

OPEN ARCHITECTURE FOR DATA QUERYING AND UPDATING



<http://raikes.unl.edu/images/process.jpg>

3.过程如何?

WHAT IS THE PROCESS?

- ▶ 岭南大学馆长领导； Chaired by University Librarian of Lingnan University
- ▶ 每校一代表； Representative from each library
 - ▶ 系统，公共服务，技术服务的资深馆员； Senior librarian from Systems, Public Services, Technical Services,
- ▶ 13 次开会； Met 13 times in 14 months to discuss issues on
 - ▶ 预算，时序，投标，征求建议书，成立投标评审小组，备忘录，产品示范，评分，执行经理； **Budget, timeline, tendering, RFP, forming Tendering Evaluation Group, MOU, Product Demos, Scoring, , Implementation Manager**

共享 ILS 工作小组
SHARED ILS WORKING GROUP

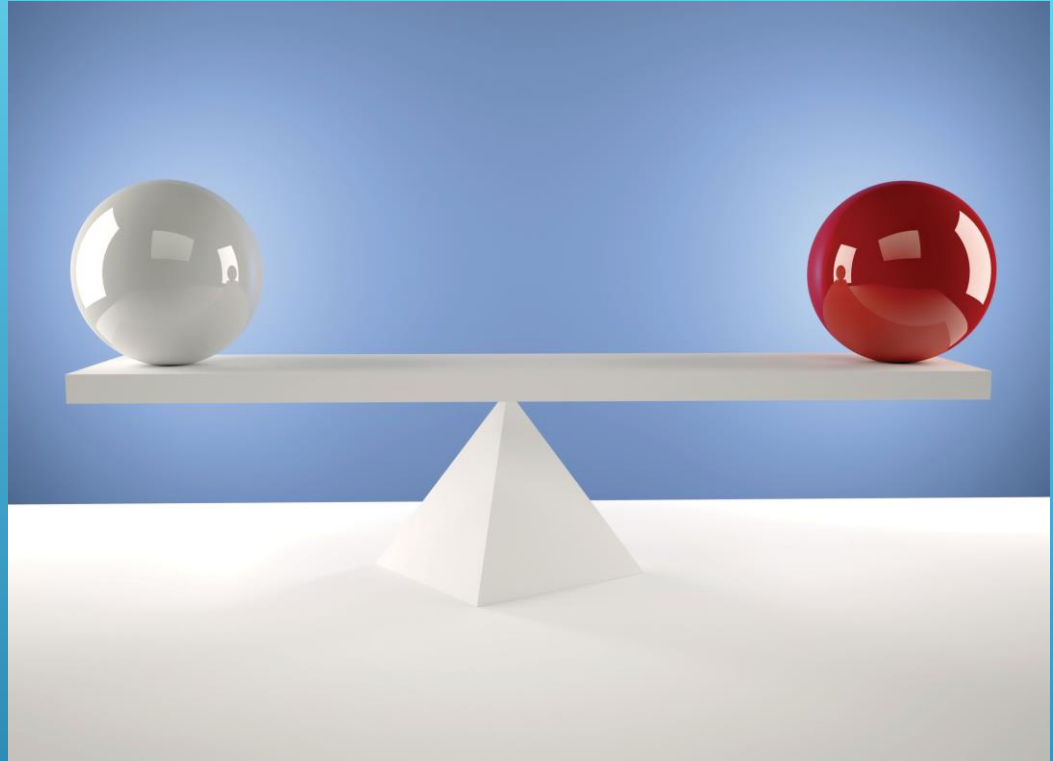
- ▶ 香港大学作联合投标; Tendering by Finance & Enterprise Office of HKU on behalf of 8
- ▶ **征求建议书; Request For Proposals (RFP)**
 - ▶ 合同结构 Contractual Structure
 - ▶ 必要条件和服务范围 Requisites and Scope of Services
 - ▶ 评核标准 Evaluation Criteria
 - ▶ RFP 过程和时序 RFP Process and Key Dates
 - ▶ 参考 OCA References from Orbis Cascade Alliance

联合投标 JOINT TENDERING

- ▶ **Innovative Interfaces – Sierra**
- ▶ **Ex Libris – Alma**
- ▶ Kuali – OLE
- ▶ OCLC – WorldShare
- ▶ ProQuest – Intota
- ▶ **SirsiDynix – BLUEcloud**

供应商和产品
VENDORS AND PRODUCTS

- ▶ 技术性 Technical Evaluations
- ▶ 价格性 Pricing Evaluations



http://images.flatworldknowledge.com/portolesedias/portolesedias-fig01_006.jpg

双信封评审程序 2 ENVELOP EVALUATION

- ▶ JULAC 馆长 Directors
- ▶ 共享 ILS 工作小组 Shared ILS Working Group – voting members
- ▶ 系统功能小组 System Functionality Sub-groups – voting members
 - ▶ 馆藏与资源管理 Collections & Resource Management (CRM)
 - ▶ 编目与元数据 Cataloguing & MetaData (CATM)
 - ▶ 访问传递与资源共享 Access, Delivery & Resource Sharing (ADRS)
 - ▶ 发现与用者体验 Discovery & User Experience (DUE)
 - ▶ 系统架构和技术 System Architecture & Technology (SAT)
- ▶ 7 套评审标准 7 sets of evaluation criteria (score sheets)

技术性评审

TECHNICAL EVALUATION

- ▶ 征求建议书的起草； Drafting the RFP
- ▶ 设立评审标准； Setting Evaluation Criteria
- ▶ 参与产品示范； Participating in Demos
- ▶ 评审过程； Evaluating the results

馆员的高度参与
HIGH STAFF INVOLVEMENT

时序 Date	事件与行动	Event and Action
2013-6	JULAC 订下2013-16 策略计划	JULAC Directors' Strategic Planning Day
2014-2	顾问到访	ILS Consultant Marshall Breeding's Visit
2014-9	成立工作小组, 与委员会共同计划	Shared ILS Working Group Formed, Worked with Sub-committees
2015-4	成立5个功能小组	5 Functional Sub-groups Formed
2015-7	征求建议书	RFP Finalized
2015-8	投标关闭	Tender Closed
2015-9	示范前的会面	Pre-demo Interviews and Score Sheets Confirmed
2015-11	产品示范	Demo Scripts Ready and Product Demos
2016-1	工作小组第13次会议	Shared ILS Working Group 13 th Meeting
2016-1	接纳审核报告	Evaluation Report Endorsed by JULAC Directors & HKU FEO
2016-4	宣布结果	Announcement of Awarded Product
2016-9	开始实施	Day 1 of Implementation
2017-7	共享ILS上线	Shared ILS Goes Live



<http://www.yale.edu/yalecollege/international/images/opportunities1.jpg>

4.有何机遇?

WHAT ARE THE OPPORTUNITIES?

馆藏发展
Collection
development

联合采购
Joint consortia
purchasing

电子资源管理
Electronic resource
management

共享编目
Shared cataloging

运营效率
Operational
efficiencies

增加资源对读者的影响
Increase the impact
of collections for
library customers

更深入合作的可能
POSSIBLE DEEP COLLABORATION



- ▶ 不可分享 What cannot be shared?
 - ▶ 财政数据 Financial information
 - ▶ 读者数据 Certain Patron information

可分享与不可分享
SHARED AND NOT SHARED

- ▶ 可分享 What can be shared?



- ▶ 资源 Collection (print, electronic, digital)
- ▶ 人力资源 Human resources (cataloging, acquisitions, technical services)
- ▶ 服务 Services
- ▶ 学科购书计划 Approval plans
- ▶ 重新设计工序 Redesigned workflows
- ▶ 电子资源的启动 E-resources Activation
- ▶ 数据分析 Analytics
- ▶ 编目 Cataloging



减少重复工序 **Reduce repetitive works**



http://www.prinksies.com/uploads/2/6/1/8/26181880/7345396_orig.jpg

5.有何挑战 ?

WHAT ARE THE CHALLENGES?

- ▶ 如何**鉴定**8院校的书目记录 **Identifying** bib records in 8 libraries for merging
- ▶ 如何**配对** How to **match**?
- ▶ 没单一**钥匙** No single **key** matches all
 - ▶ OCLC #
 - ▶ ISBN/ISSN
 - ▶ Derived keys
 - ▶ ???

删除重复书目记录 DE-DUPLICATION OF BIB RECORDS

- ▶ 合并重复的记录成为一个记录 Combining duplicate records to become one record
- ▶ 如何做 How?
 - ▶ 预定的**优先次序** predefined **priority**?
 - ▶ 最完整的**编目水平** completeness of **cataloging** level?
 - ▶ **馆藏**的大小? Collection **size**?
 - ▶ 混合方法 a mix?

书目记录的合并 MERGING BIB RECORDS

- ▶ 工作流程分析和重新设计 **Workflow** analysis and redesigned
- ▶ 政策与程序的审核 Review of **policies** and practices
- ▶ 编目程序的审核 Review of **cataloging** practices
- ▶ 电子资源管理的程序审核 Review **electronic resource management** procedures
- ▶ 工作人员的调动和重新部署 **Staff re-assignment** and re-deployment
- ▶ 5C
 - ▶ 承诺 Commitment
 - ▶ 文化 Culture
 - ▶ 沟通 Communication
 - ▶ 能力 Capability
 - ▶ 後果 Consequence

改变管理

CHANGE MANAGEMENT

- ▶ 整合不同的编目实践和习惯； Different cataloging practices to shared cataloging practices

- ▶ E.g. CJK 如何显示 How CJK are displayed
- ▶ 拼音 (245, 100) 中文 (880) – 5 院校
- ▶ 中文 (245, 100) – 3 院校
- ▶ KT Lam, “Sharing Bibliographic Data, possible issues and some suggestions for JULAC Shared ILS Project” JULAC Shared ILS Seminar, Aug 6, 2015

综合政策 COMBINED POLICIES

Author Chen, Changheng
陳長蘅

Title Zhongguo ren kou lun / Chen Changheng zhu. Zhongguo ren kou wen ti / Xu Shilian zhu. Xian dai ren kou wen ti / Ke Xiangfeng zhu. Zhongguo xian
Chen Caizhang zhu
中國人口論 / 陳長蘅著. 中國人口問題 / 許仕廉著. 現代人口問題 / 柯象峰著. 中國鄉村人口問題之分析 / 言心哲著. 中國歷代人口變遷之研究 / 陳彩章著

Imprint [Shanghai]: Shanghai shu dian, [1991]
[上海]: 上海書店, [1991]

Edition [Di 1 ban]
[第1版]

Description 1 v. (various pagings) : ill., maps ; 19 cm

Rating ☆☆☆☆☆

BOOK COLLECTION	LOCATION
	AC149 .M55 1989 ser. 3, v. 16

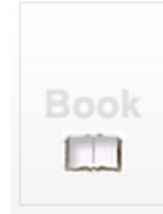
Series Minguo cong shu. Di 3 bian, She hui ke xue zong lun lei ; 16
民國叢書. 第三編, 社會科學總論類 ; 16
Minguo cong shu. Di 3 bian, She hui ke xue zong lun lei
民國叢書. 第三編, 社會科學總論類
Minguo cong shu. Di 3 bian ; 16
民國叢書. 第三編 ; 16

Note Reprint of 5 works
Includes bibliographical references

Subject China -- Population
Rural population, -- China

Additional Author Xu, Shilian. Zhongguo ren kou wen ti
許仕廉. 中國人口問題
Ke, Xiangfeng. Xian dai ren kou wen ti
柯象峰. 現代人口問題
Yan, Xinzhe, 1899- Zhongguo xiang cun ren kou wen ti zhi fen xi
言心哲, 1899- 中國鄉村人口問題之分析
Chen, Caizhang. Zhongguo li dai ren kou bian qian zhi yan jiu
陳彩章. 中國歷代人口變遷之研究

Additional Title Zhongguo ren kou wen ti
中國人口問題



中國人口論
陳長蘅著. 中國人口問題 / 許仕廉著. 現代人口問題 / 柯象峰著. 中國鄉村人口問題之分析 / 言心哲著. 中國歷代人口變遷之研究 / 陳彩章著
[第1版]. 上海書店, 1991
● Library item

Availability **Details** Reviews & Tags Virtual Browse

Title:
中國人口論

Statement of Responsibility:
»陳長蘅著. 中國人口問題 / 許仕廉著. 現代人口問題 / 柯象峰著. 中國鄉村人口問題之分析 / 言心哲著. 中國歷代人口變遷之研究 / 陳彩章著

Edition:
»[第1版].

Imprint:
»[上海]: 上海書店, 1991

Physical Description:
»1 v. (various pagings) : ill., maps ; 19 cm.

Format:
»Book

Notes:
»Reprint of 5 works

Subjects:
Population; China; Rural population

Authors:
Chen, Changheng; 陳長蘅; Xu, Shilian; Ke, Xiangfeng; Yan, Xinzhe, 1899-; Chen, Caizhang; 許仕廉; 柯象峰; 言心哲, 1899-; 陳彩章

Series Title:
Minguo cong shu. Di 3 bian, She hui ke xue zong lun lei ; 16;
民國叢書. 第三編, 社會科學總論類 ; 16;
Minguo cong shu. Di 3 bian, She hui ke xue zong lun lei;
Minguo cong shu. Di 3 bian ; 16;
民國叢書. 第三編, 社會科學總論類,
民國叢書. 第三編 ; 16

Additional Titles:
»Zhongguo ren kou lun
»Zhongguo ren kou wen ti
»Xian dai ren kou wen ti
»Zhongguo xiang cun ren kou wen ti zhi fen xi
»Zhongguo li dai ren kou bian qian zhi yan jiu
»中國人口問題
»現代人口問題
»中國鄉村人口問題之分析
»中國歷代人口變遷之研究

- ▶ \$\$\$\$ in subscription, implementation, provisioning, etc.
- ▶ 职员 Staff
- ▶ 培训 Training
- ▶ 政府和大学额外资金 Additional funding from government, from universities?

资源
RESOURCES

- ▶ **执行委员会 Implementation Committee (IC)**
 - ▶ 联合主席 Co-chairs of IC – CUHK & HKU
 - ▶ 执行经理 New Implementation Manager (IM) - HKUST
 - ▶ 每校一委员 Committee member from each library
- ▶ **与功能委员会合作 IC will work with JULAC Sub-committees**
 - ▶ Access Services, Bib Services, Consortiall, Learning Strategies, Media, Staff Development, Statistics, Systems

管治与执行

GOVERNANCE & IMPLEMENTATION

- ▶ 安全与隐私 Security and Privacy
- ▶ 与大学其他系统接轨 Integration with campus applications
 - ▶ 财务 Finance
 - ▶ 学习管理系统 Learning Management System
 - ▶ 认证 Authentication
 - ▶ 学生记录 Student Systems
 - ▶ 人事记录 HR Systems

更多挑战

MORE CHALLENGES

- ▶ 林纪达. “下一代图书馆集成管理系统”. 广东省高等学校图书情报学术交流会, 广东技术师范学院, 2015年5月15日.
- ▶ Alan Cornish, Richard Jost, Xan Arch. “Selecting a Shared 21st Century Management System”, *Collaborative Librarianship* 5(1):16-28, 2013.
- ▶ Marshall Breeding. *Report to the JULAC on Issues and Options for Its Next Generation of Library Automation*. June 2014.

REFERENCES