



**LOOKING BACK, MOVING FORWARD:
ASIAN LIBRARIES IN THE WORLD OF INFORMATION**
4th - 5th November, 2008 The Hong Kong Central Library

Tagging One Million Volumes in a 2.0 Environment: Lessons and Experiences of Implementing RFID Technology at the Main Library, The University of Hong Kong

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Hong Kong Central Library, November 4, 2008**

This Presentation

- **Focus on the tagging exercise – how we planned and managed the project.**
- **The exercise is now 99% complete. This has enabled us to update information we provided in our paper one month ago.**

Agenda

- **Overview of the HKU Main Library RFID project**
- **Scope of the tagging project**
- **Preparation work before starting to tag**
- **The tagging exercise**
- **Lessons and experiences**
- **Q & A**

RFID Project Overview

- **A HKUL Working Group recommended to the Library Senior Management to adopt RFID technology in library operations in 2004.**
- **The Senior Management decided to proceed with the tendering exercise in 2006.**
- **The first product demonstration was held in November 2006**

- **It was decided to awarded the contract to ETI Consulting Limited (ETIC) in late 2007**
- **The library implementation team comprises Peter Sidorko (chair), Y.C. Wan, David Palmer, Thomas Hung and Ruth Wong**
- **Tagging exercise – an Access Services Department project**

Tagging Project Scope

- **Main Library open stack books and bound journals**
- **Fung Ping Shan Library open stack books and bound journals**
- **> 1 million volumes, or some 80% of the open stack collection of the entire library system**

Not Included

- **AV & Reserve Collection**
- **Special Collections**
- **Current periodical issues**

Limitations

- **Space – the Main Library was full before the project started**
- **Time – changing over to RFID before 9/2008**
- **Staff – very busy, cannot afford to deploy existing staff to do the tagging**
- **Vendor – limited knowledge about how the Main Library works**
- **Workflow – mobile tagging was not possible**
- **RFID is new to everyone in the library**

Preparations

- **Ease of space**
- **Purchase of tags**
- **Determine what data will be stored in the tag**
- **Test of tagging workflow**
- **Devise tagging software incorporating the chosen workflow**

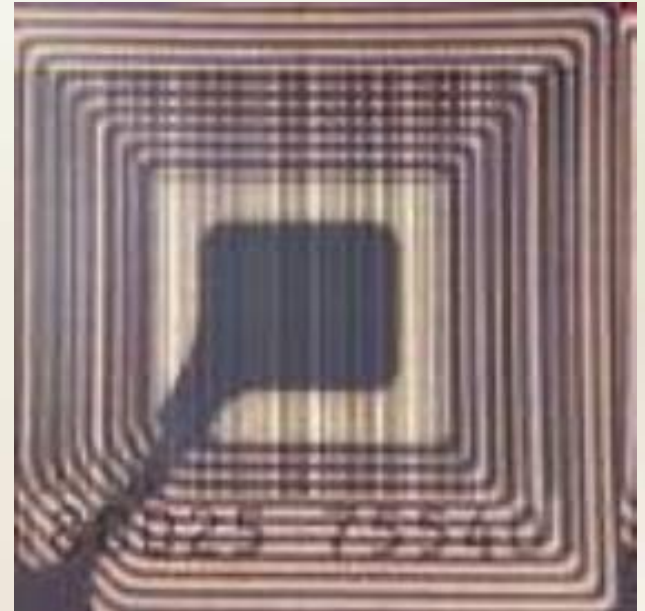
Ease of space

- less used materials moved to remote store
- vigorous criteria used
- 63,000 volumes relegated in two months
- done by three temporary contract staff



Purchase of tags

- **Based on existing size of collection of the Main Library and projected growth of newly purchased materials**
 - 1.3 million RFID tags of high frequency is purchased**

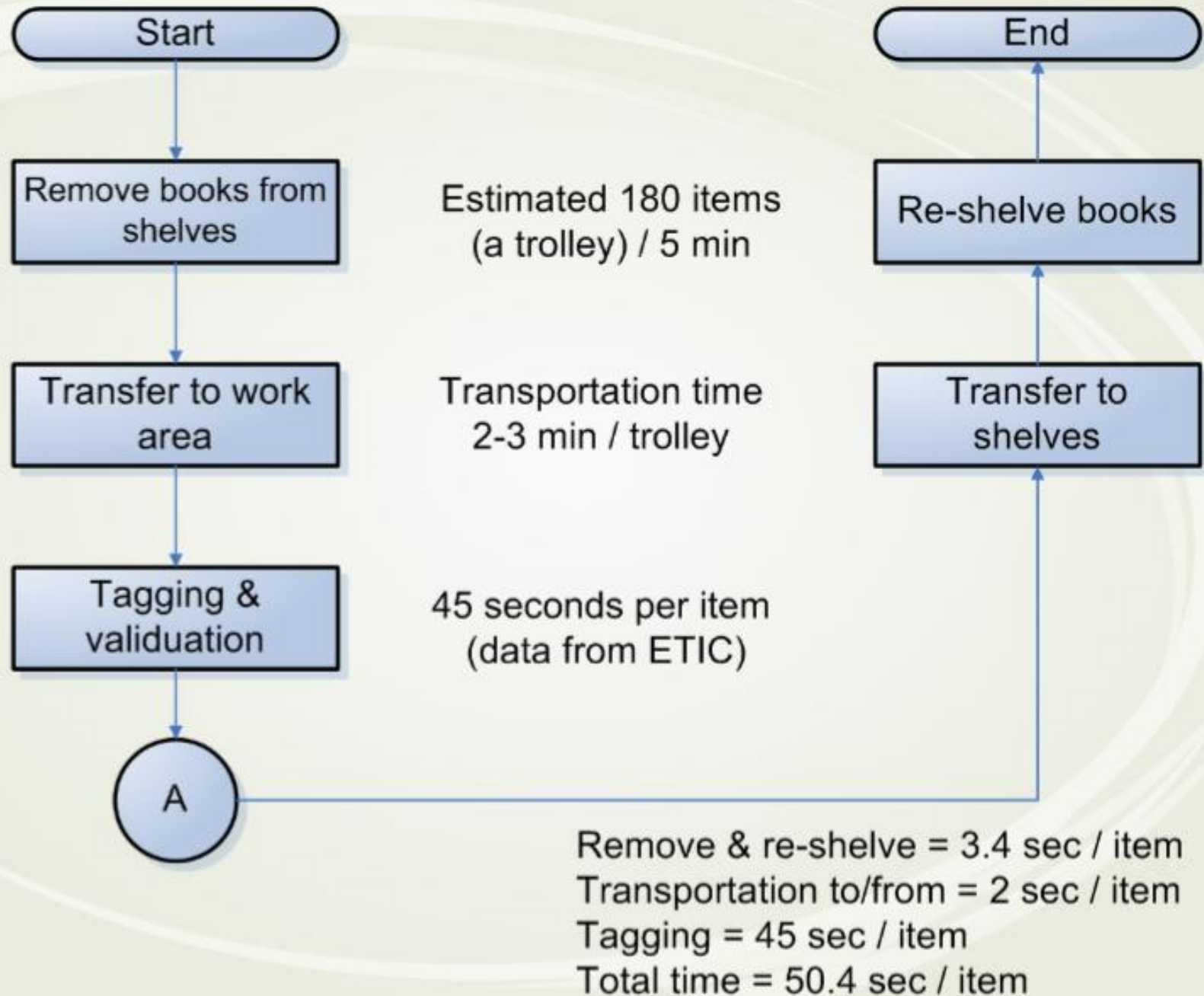


Data stored in the RFID tag

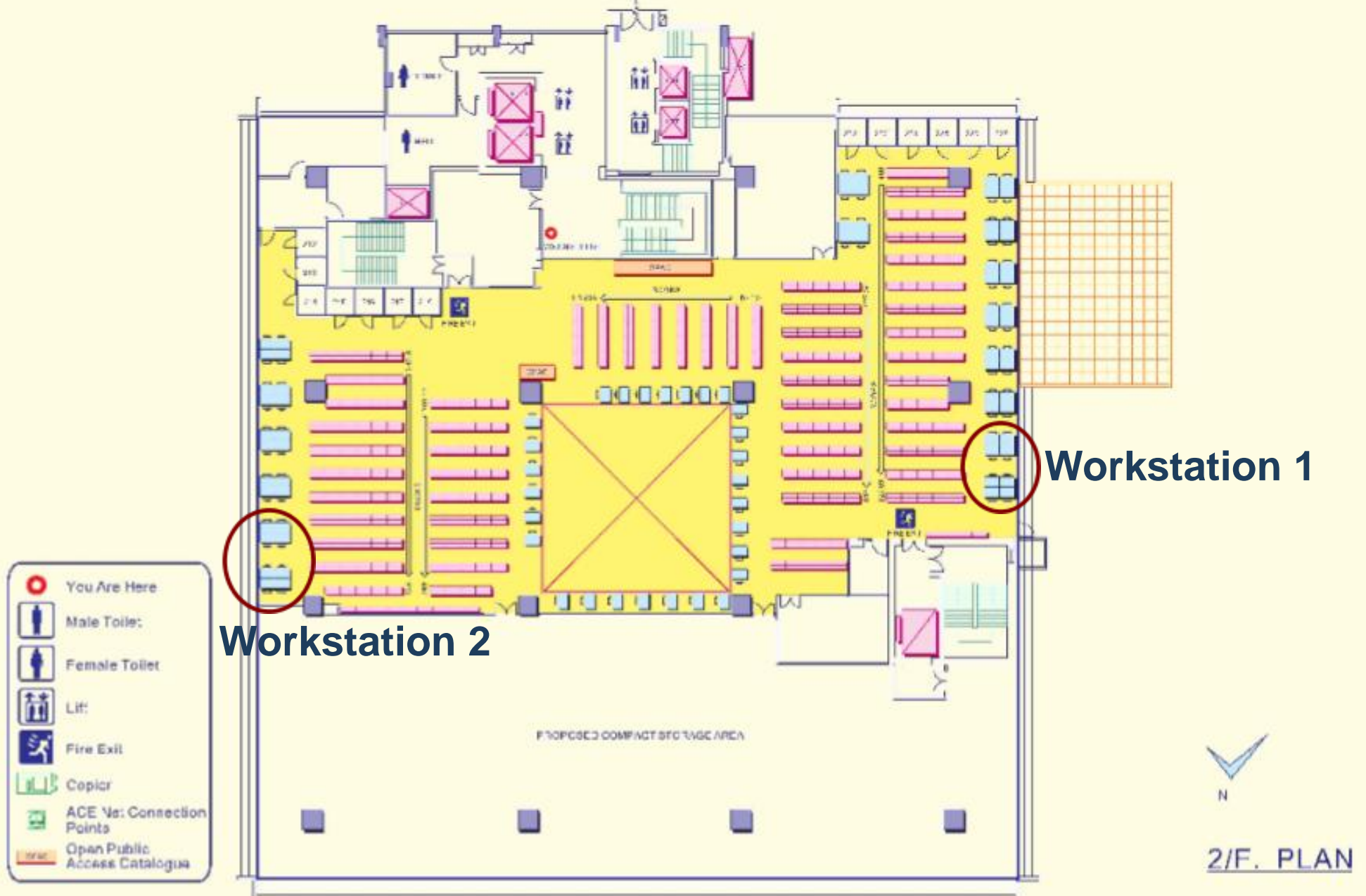
- **Privacy issue
Ownership &
Primary Item ID
(barcode) only**



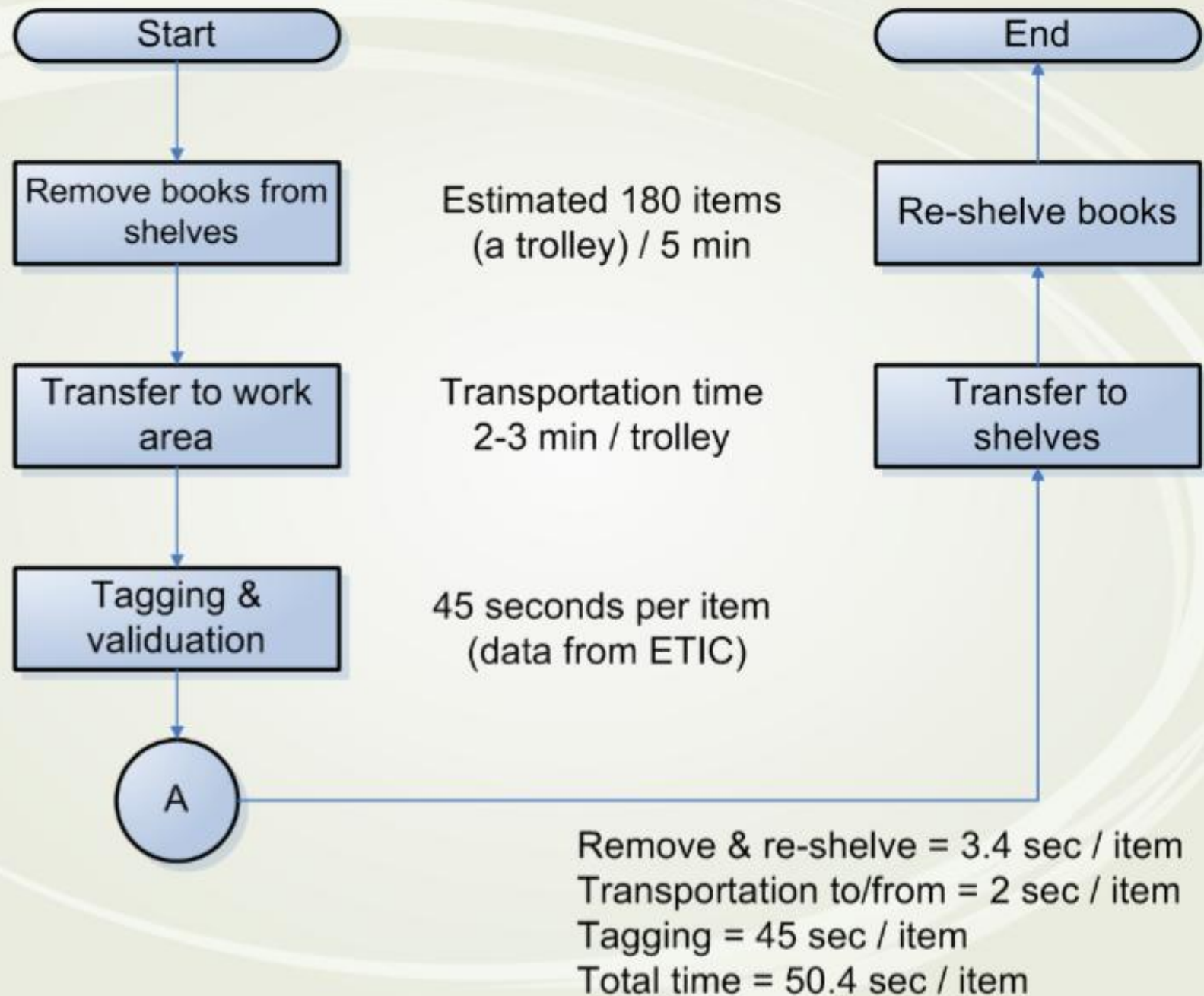
Test of tagging workflow



Location of workstations



Test of tagging workflow



Devise tagging software incorporating the chosen workflow

- **Original procedures**

Write

- **Scan barcode**
- **Retrieve item details**
- **Write barcode to RFID tag**

Validate

- **Scan barcode**
- **Retrieve item details**
- **Check details from screen against details on physical items**
- **Press enter to lock data**

Devise tagging software incorporating the chosen workflow

- **Revised procedures**

Write, check and validate data in one step

- **Scan barcode**
- **Retrieve item details**
- **Check details from screen against details on physical items; and**

Press enter to lock data

9.2 seconds per item are saved



Tagging resources

Equipment & furniture

- **Conversion workstations**
 - 1 PC with LCD monitor,
 - 1 RFID antenna,
 - 1 RFID reader,
 - 1 barcode scanner and
 - 1 RFID tag dispenser
- **Trolleys**
- **Desks, chairs and partitions**



Tagging resources

Equipment & furniture



Tagging resources



Temporary staff

- **Supervisors x 3**
 - Relieve workload from regular library staff from circulation
 - Relegate less used books from the Main Library to remote storage to prevent from frequent shifting of books
 - Solve simple problems on the spot
 - Provide day to day supervisions to tagging helpers

Supervisors

- **One is a retired staff who had been working for the Main Library for more than 30 years**
- **Two had been participated in relegation and LC re-labeling projects**

Supervisors

- **Started one month before the tagging helpers**
 - To familiarize themselves with the tagging workflow and;
 - To help relegate less used materials to a remote store

Supervisors

- **Briefing on standardizing sup patterns**



All three understand that they have to

- Ensure all helpers followed uniform procedures;
- Ensure tagged items are re-shelved within 3 hours;
- Ensure no untagged books were left on trolleys overnight;

Supervisors

- **Briefing on standardizing supply patterns**



- Ensure a constant productivity of tagged items;
- Ensure sufficient manpower on all floors even if some helpers are sick or on leaves;
- Ensure simple problems were solved immediately;

Supervisors

- **Briefing on standardizing su
patterns**



- Ensure complicated problems were reported to the Access Services Department;
- Keep daily statistics on outputs and used RFID tags.

Tagging resources

- **Temporary staff**
- **Tagging helpers x 22**
 - Shelving and tagging
- Most of them are students from universities, community colleges or secondary schools.



Measures to enhance productivity

- Shelves are sequentially numbered



Measures to enhance productivity

- Trolleys are marked “start” and “end” and a co-ordinate chart in the front



Measures to enhance productivity

- **Helpers marked an arrow on the exact place on shelf where the last book on the trolley was located**



Measures to enhance productivity

- **Take and tag one book at a time**



Measures to enhance productivity

- Verify the call number only



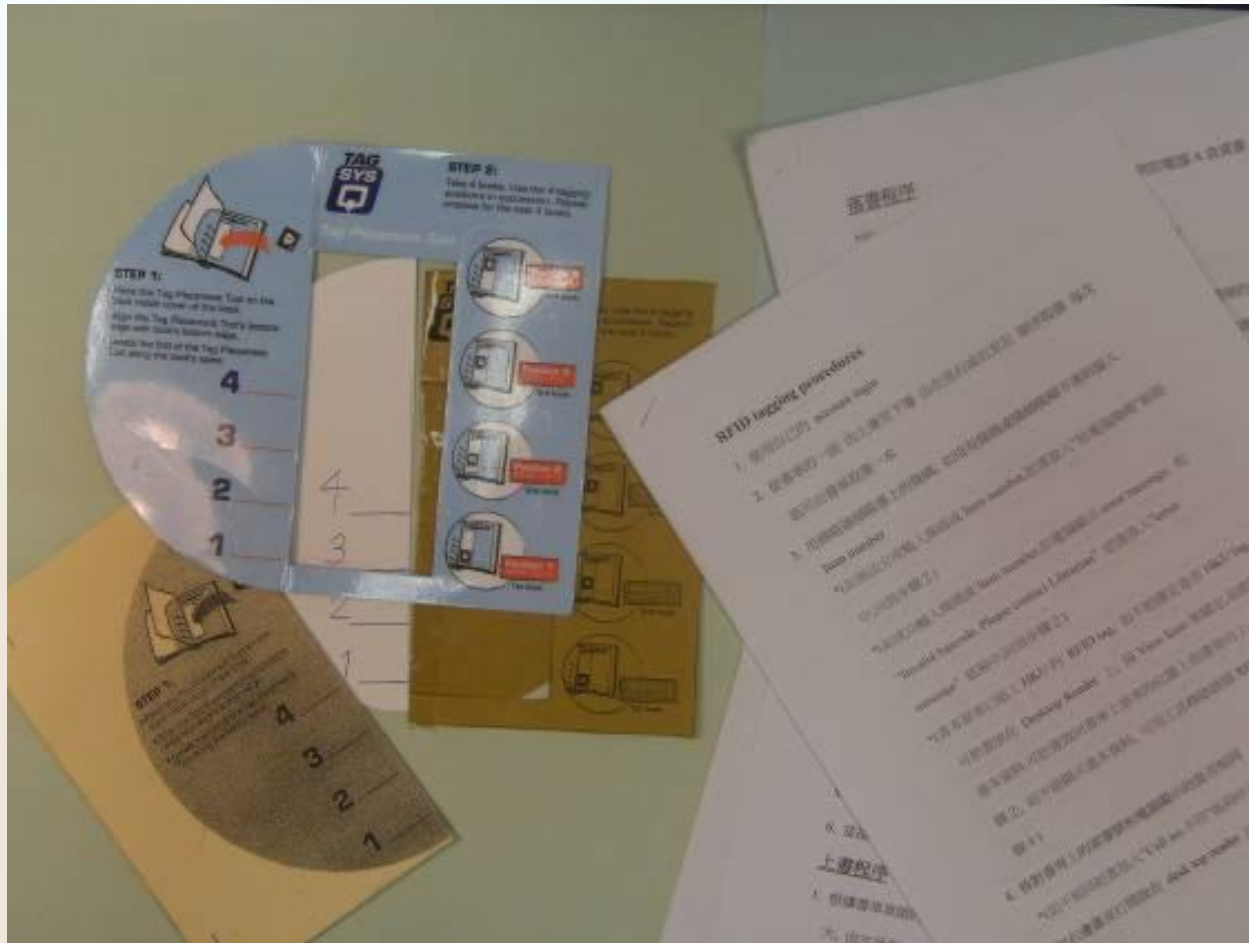
Measures to enhance productivity

- **Marked boxes for problematic books**



Measures to enhance productivity

- Documentations of tagging procedures and self-devised tools are given



Tagging exercise kick-off

- **2 May 2008**
- **22 helpers reported for duty in two batches**

Tagging exercise kick-off

- **All staff received half day briefing & training on**
 - Project missions and expectations;
 - Tag's positions, tagging procedures and shelving safety.



Projected vs. actual productivities

ETIC RFID Library System - Windows Internet Explorer

http://147.8.31.181:8080/HKU_LLAdminWeb/pages/common/main/main.action

HKU Libraries RFID Conversion System

Administration Statistics & Report

2008/9/12 8:31 AM
User: CCW Logout

Staff Performance Conversion Summary

Click "Export" button to output the report to file.

Staff Performance

Staff ID:
anita
asd_chanmk
asd_chansy

Report Type: Daily Hourly

From: To:

[Submit](#)

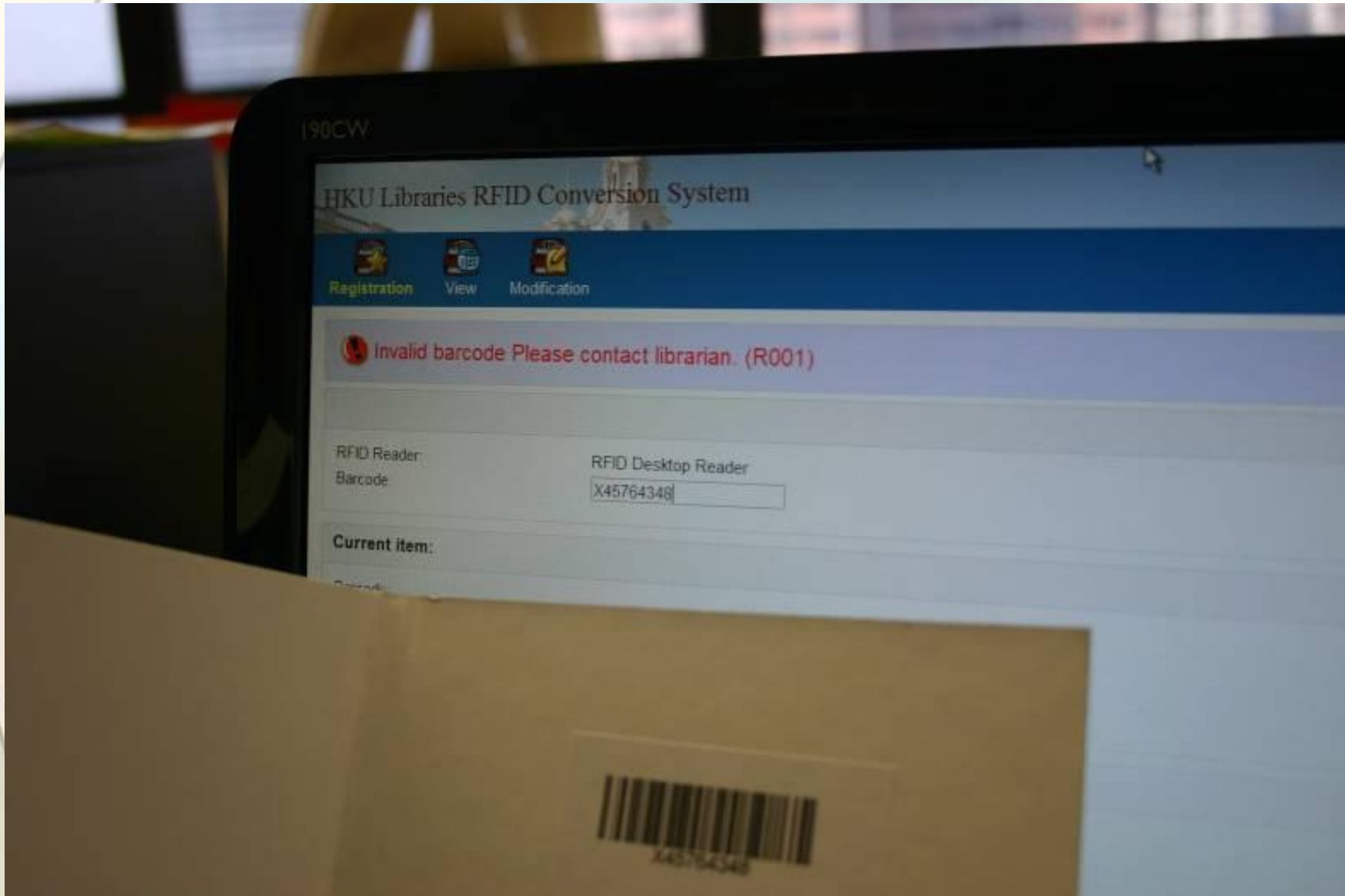
Date	Staff ID	Station ID	Action	Successful Count	Fail Count
2008-09-02	asd_yimky	8	Registration	122	0
2008-09-03	asd_yimky	8	Registration	159	3
2008-09-04	asd_yimky	8	Registration	220	4
2008-09-05	asd_yimky	8	Registration	217	16
2008-09-08	asd_yimky	8	Registration	108	21
2008-09-09	asd_yimky	8	Registration	306	7
2008-09-10	asd_yimky	8	Registration	249	7
2008-09-11	asd_yimky	8	Registration	199	14

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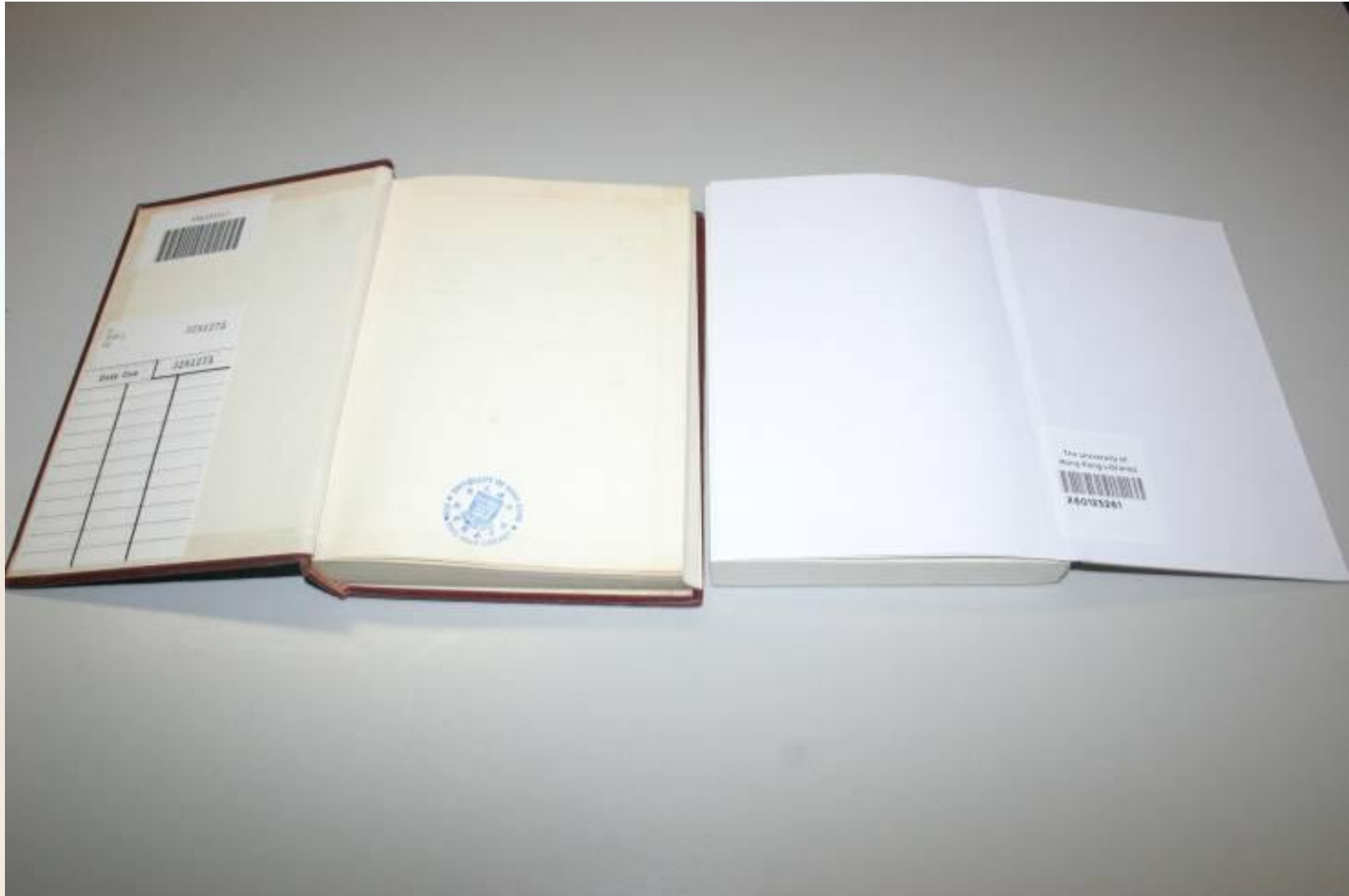
Start ETIC RFID Library Sys... Welcome to HKU Librari... Desktop CRSTAFF 8:31

Problems encounters



Problems encounters

- Books in different orientations



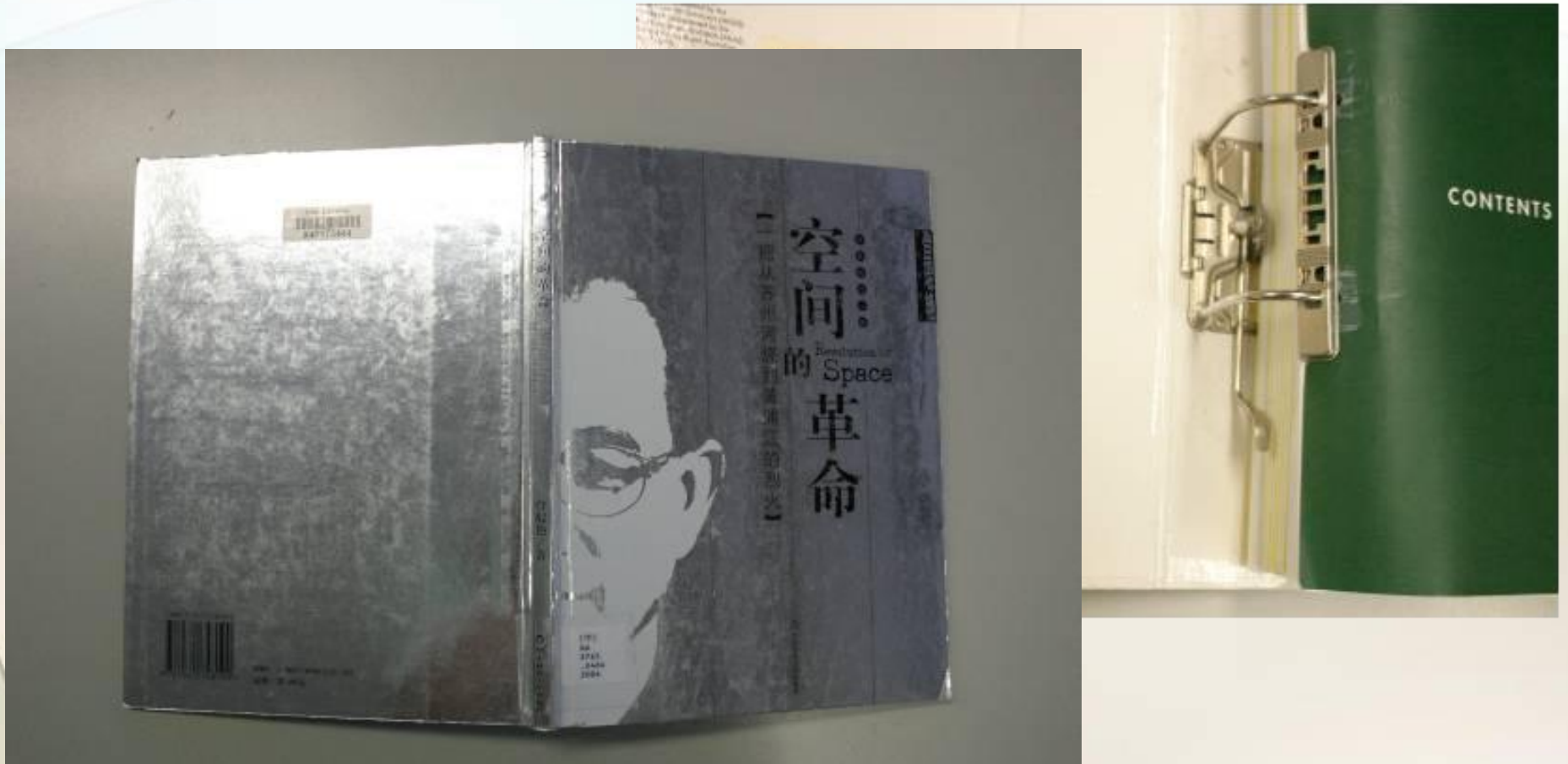
Problems encounters

- E
O



Problems encounters

- **Books with metal covers / are in ring binders**



Problems encounters

- **Network problem**
 - **Sloooooooooow**
 - **Innopac upgrade**



At Last – 28/8/2008

- **800,000 items were tagged**
- **RFID circulation service was launched**



Lessons & experiences

- **Planning and preparations is important**
- **Right time & right support**
- **Roles of supervisors**
- **Temp staff?**
- **Communications**
- **Just do it!**





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**Thank you
Q & A**